

## ABSTRACT

Title: THE PRIVATE LIFE OF PUBLIC HEALTH:  
MANAGING CHRONIC DISEASE IN AN  
ERA OF NEOLIBERAL  
GOVERNMENTALITY

Sara Mae Glasgow, Doctor of Philosophy, 2005

Directed By: Professor Dennis Pirages  
Department of Government and Politics

Noncommunicable diseases (NCDs) such as heart disease and cancer account for over half of the global mortality burden, and are the leading cause of death in every region of the world except Sub-Saharan Africa. Despite this, they remain off the analytical radarscope in political science. This silence has been coupled with the tendency of public health researchers to frame NCDs as apolitical—largely a product of an individual’s risk behaviors. Such an accounting depoliticizes NCDs, as well as public health approaches to their analysis and prevention. This project’s central aim is to introduce a political analysis of chronic disease, demonstrating that public health approaches to NCDs exhibit political rationality.

To that end, I explore several questions. How are NCDs accounted in behavioral terms, and how are their risks constructed as apolitical in the public health discourse? Additionally, if public health is presented as a domain of neutral science, how is it that its practices increasingly display market values, including a limited role

for the state, a preoccupation with cost efficiency and choice, and the cultivation of the entrepreneurial self who sees her health as a site of investment?

To answer these, I employ a discursive approach, specifically Foucault's framework of government rationality, or "governmentality." It is through the deployment of neoliberal governmentality in three spheres – knowledge, power, and subjectivity – that public health reveals itself not a neutral science, but rather one brimming with the values and logic of the private sector. I develop this argument through a critique of the discipline and practices of public health in three cases: the United States, United Kingdom, and Sweden. Despite exhibiting historically different approaches to health and social welfare, all three show a marked manifestation of neoliberal rationality in public health approaches to chronic disease. The consistency of these findings, in addition to the more general features of the public health discourse, thus allow a conclusion that public health approaches to NCDs are not value-neutral, and are indeed a political phenomenon.

THE PRIVATE LIFE OF PUBLIC HEALTH:  
MANAGING CHRONIC DISEASE IN AN ERA OF NEOLIBERAL  
GOVERNMENTALITY

By

Sara Mae Glasgow

Dissertation submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy  
2005

Advisory Committee:  
Professor Dennis Pirages, Chair  
Professor Martin Heisler  
Associate Professor Ken Conca  
Assistant Professor Jillian Schwedler  
Associate Professor Robert Sprinkle

© Copyright by  
Sara Mae Glasgow  
2005

## Acknowledgements

As with many large projects like a dissertation, one sometimes wonders if it will ever end. That I am able to write acknowledgements at all is a testament to the people who have been so generous and supportive these past years. First, to all my family, most especially Mama and Papa for putting books in my hands at a young age, for cultivating a love of learning, and most of all, for their unconditional love; and to Grandma and Grandpa, who, though they have passed on, always took an interest and supported me throughout these past years of graduate school. Thanks are also due my committee, for taking the time to go through drafts and offer helpful suggestions. Most especially, I am grateful to Dennis Pirages; it is one thing to have a helpful advisor, it is something even more to have been able to count on that person to be a mentor – thank you for that. Last, but certainly not least, my husband Seán – a consummate scholar in his own right, he graciously read every chapter draft and offered comments; more importantly, he has been cheerleader, confidant, counselor, and best friend throughout a long and arduous process. I could not have done this but for him, and it is to him that I dedicate this book, with much love.

## Table of Contents

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables.....	iv
List of Figures.....	v
Chapter 1: Contemporary Problematics of Chronic Disease.....	1
Chapter 2: The Twin Silences.....	57
Chapter 3: NCDs and the Risk Discourse of Public Health.....	96
Chapter 4: The Evolution of Government Rationality.....	135
Chapter 5: Public Health as Neoliberal Government.....	171
Chapter 6: The Disciplinary Knowledge of Public Health.....	217
Chapter 7: Technologies of Public Health Practice.....	299
Chapter 8: The Production of Healthy Subjects.....	371
Chapter 9: The End of It All.....	449
Appendix 1: Publishing Trend Data.....	467
Bibliography.....	470

## List of Tables

Table 1. Global Mortality Trends 1993-2000: Infectious and Noncommunicable Diseases.....	10
Table 2. Mortality in the Developing World, 1985-1997 .....	12
Table 3. Different Approaches to Welfare Capitalism .....	40
Table 4. Global Burden of Noncommunicable Diseases, 2002 .....	99
Table 5. Risk Factors in Cancer Incidence .....	105
Table 6. Top Journals in General Public Health and Epidemiology.....	222
Table 7. Trends of Risk-Article Publishing in the <i>JAMA</i> .....	229

## List of Figures

Figure 1. Prevalence of Risk Articles in Health Databases .....	226
Figure 2. Prevalence of Risk Articles in Health Journals, 1992-2004.....	228
Figure 3. Prevalence of Articles on NCDs in the <i>Annual Review of Public Health</i>	232
Figure 4. Behavior(s) Identified as Proximate Risk(s) in NCD Articles .....	233

# Chapter 1: Contemporary Problematics of Chronic Disease

## Research Questions

Since the mid 1990s, chronic, noncommunicable diseases (NCDs) such as cardiovascular disease (CVD), cancer, and diabetes have displaced traditional enemies such infectious diseases as the leading cause of death and disability in the world. This health transition, as it has been termed, has become a globally entrenched phenomenon. Between 1993 and 2000, the percentage of total deaths attributed to infectious diseases *decreased* even as the percentage attributed to NCDs skyrocketed – nearly 30% in only seven years - such that NCDs now account for a clear majority of the global mortality burden, at nearly 60%.<sup>1</sup> They are the leading cause of death in every region of the world except Sub-Saharan Africa and the Middle East, and kill more people annually than infectious disease, armed conflict, and accidents and injuries combined.<sup>2</sup>

Consequently, as the health profile of populations change, the shift toward longer lives and increased morbidity and mortality from these degenerative diseases becomes more of an issue for scholars and policymakers alike. However, it has been the tendency of public health researchers to frame these degenerative illnesses as apolitical; they are largely if not exclusively the product of an individual's risk behavior – particularly in the form of tobacco usage, sedentary lifestyle, and poor diet. Thus, so too, does their solution primarily exist in the individual body and the

---

<sup>1</sup> World Health Organization, The World Health Report 2001 (Geneva: World Health Organization, 2001).

<sup>2</sup> World Health Organization, The World Health Report 2001.

choices one makes. This depoliticization is complemented by the frequent characterization of public health, and especially epidemiology - the branch of public health involved in the identification of disease determinants in populations – as engaged in neutral science. As Savitz, et al note:

Epidemiologic research derives from theory and uses rigorous methods to yield results that should be described as objectively as possible. Investigators should strive to interpret accurately, and when biases intrude, their colleagues should help with constructive criticism.<sup>3</sup>

An approach that both frames the sources of chronic disease in the behavioral choices of individuals, and casts that knowledge in the language of objective science functions to treat such illnesses as apolitical phenomena. That such problems are depoliticized by those whose attention is most immediately directed toward them also, perhaps, lends us insight as to how this issue has eluded political scientists as a topic for study. Such silence, however, does suggest some intriguing avenues for inquiry, three of which are the concern of this project. First, how is the pandemic of NCDs accounted for in behavioral terms, and how are the behavioral risk factors constructed as apolitical in the public health discourse? In the context of answering these questions, it is argued that such depoliticization cannot be substantiated as public health – its discourse and practices - becomes increasingly transformed into a

---

<sup>3</sup> David A. Savitz, Charles Poole and William C. Miller, "Reassessing the Role of Epidemiology in Public Health," American Journal of Public Health 89.8 (1999): 1158. Although this characterization of epidemiological and public health work is not universally held, it has been articulated by a number of practitioners as an aim or ideal to work toward. See for example, the American Public Health Association's "Public Health Code of Ethics," <http://www.apha.org/codeofethics/ethics.htm>; K.J. Rothman and Charles Poole, "Science and Policymaking," American Journal of Public Health 75.4 (1985).; K.J. Rothman, H.O. Adami and D. Trichopoulos, "Should the Mission of Epidemiology Include the Eradication of Poverty?" Lancet 352 (1998).; and Paul B. Thompson, "Risk, Consent and Public Debate: Some Preliminary Considerations for the Ethics of Food Safety," International Journal of Food Science and Technology 36 (2001).

project of neoliberal governmentality.<sup>4</sup> This argument directs us to two additional questions. Conceptually, how do the discourse and practices of public health exemplify the key elements of neoliberal governmentality with regard to the treatment and prevention of chronic disease? And finally, in three case countries where NCDs are the overwhelming source of morbidity and mortality in the population, to what extent are specific public health systems oriented toward combating these problems in a manner consistent with a program of neoliberal governmentality? Exploring these additional questions serves two purposes beyond the development of the central thesis; namely, it enables a more detailed examination of how *publihealth* is increasingly transformed into the *private* sphere, and enables one to make concrete abstract theoretical precepts through their application to real-world cases.

The exploration of these questions culminates in the general argument that far from being apolitical, the construction of chronic disease risk as well as risk management strategies in public health are intensely political manifestations of a uniquely neoliberal governmentality. These arguments will be developed and substantiated not only through more general critiques of the assumptions and processes of public health, but also through detailed analysis of public health practices in three case countries: the United States, the United Kingdom, and Sweden.

---

<sup>4</sup> The concept of governmentality, and specifically neoliberal governmentality, is treated in much greater detail in subsequent sections. To familiarize the general reader at the outset, however, one may understand neoliberal governmentality in the context of extending market logic and principles to areas and spheres of life that are not primarily economic – such as medicine, nursing, law, and education.

*The Privileging of Infection: Trends in the Political Analysis of Health and Disease*

Since the end of the Cold War, the international relations literature has been marked by a heightened diversification of themes and objects for analysis, from the critical assessment of the discourse and practice of security, to the call for an expanded security agenda, to the phenomenon of globalization.<sup>5</sup> Such areas of inquiry have opened up research programs far removed from the more traditional concerns of international relations focusing on “high politics” – the protection from external military threat a territory and population bounded to a sovereign state – and have increasingly focused on such nonmilitary, transborder issues as organized crime, environmental decline, and more recently, disease.

That disease phenomena are gaining credibility as a viable area of inquiry in international relations and political economy is attested to by the burgeoning scholarly and policy attention paid to them in this regard. At the U.S. policy level, this interest has been manifest in a number of government publications: executive

---

<sup>5</sup> The sheer volume of publications on these issues is staggering. For evolving concepts and practices of security, see Jessica Tuchman Matthews, "Redefining Security," Foreign Affairs 68.2 (1989).; Norman Myers, "Environment and Security," Foreign Policy 74 (1989).; Edward A. Kolodziej, "What Is Security and Security Studies? Lessons from the Cold War," Arms Control 13.1 (1992).; Peter J. Katzenstein, ed., The Culture of National Security (New York: Columbia, 1996).; and Keith Krause and Michael Williams, eds., Critical Security Studies: Concepts and Cases (Minneapolis: University of Minnesota Press, 1997). Furthermore, while much of the writing in these two areas has occurred since 1989, several seminal pieces appeared years earlier, namely Barry Buzan, People, States, and Fear (London: Wheatsheaf Books, 1983).; and Richard A. Ullman, "Redefining Security," International Security 8.1 (1983). For discussions on the globalization phenomenon, see, for example: Susan Strange, The Retreat of the State: The Diffusion of Power in the World Economy (Cambridge: Cambridge University Press, 1996).; Saskia Sassen, Globalization and Its Discontents (New York: The New Press, 1998).; and Paul Hirst and Grahame Thompson, Globalization in Question, 2nd ed. (Malden, MA: Blackwell, 1999).

branch reports, congressional hearings, intelligence estimates, as well as a general reorientation of strategic goals to include the threat of disease.<sup>6</sup>

Scholarly research has also increasingly turned an interested eye to the challenges posed by infectious disease to economic performance, sociopolitical stability, and military and state capacity.<sup>7</sup> While these interested parties emphasize different analytical foci – some scrutinize sources of threat with regard to specific agents, others more intently address patterns of potential consequences, or the means to prevent or control outbreaks – there is a significant amount of convergence along two lines. First, that disease phenomena are an important, yet under-evaluated threat to national security and economic development, particularly in developing countries. The emerging literature on this issue has explicitly framed disease as a unique challenge to conventional notions of security. Chow, for example, points out that traditional military and diplomatic approaches to security have historically excluded the threat of disease because of its very nature: diffuse, costly, and often controlled

---

<sup>6</sup> For example, in 1996 President Clinton issued a Presidential Directive that asserted the challenge posed by infectious disease to U.S. national security interests. The U.S. Department of State's Strategic Plan for International Affairs (2000) identifies the promotion of human health and the reduction of the spread of infectious disease as two important strategic goals for the U.S. Since 1997, the House International Relations Committee has convened several hearings exploring the threat of infectious disease to U.S. national security. These concerns finally culminated in the U.S.'s April, 2000 declaration of HIV/AIDS as a national security threat.

<sup>7</sup> See especially S. Cross and A. Whiteside, Facing up to AIDS: The Socio-Economic Impact in Southern Africa (New York: St. Martin's Press, 1993).; Jack C. Chow, "Health and International Security," The Washington Quarterly 19.2 (1996).; William C. Fox, "Phantom Warriors: Disease as a Threat to U.S. National Security," Parameters, Winter (1997/1998).; Merrill Singer, ed., The Political Economy of AIDS (Amityville, NY: Baywood Press, 1998).; G.R. Copley, "National Security in a Pandemic Situation," Defence and Foreign Affairs Strategic Policy (1999).; Dennis Pirages and Paul Runci, "Ecological Interdependence and the Spread of Infectious Disease," Beyond Sovereignty: Issues for a Global Agenda, ed. Maryann Cusimano (New York: Bedford/St. Martin's, 2000).; Andrew T. Price-Smith, "Ghosts of Kigali: Infectious Disease and Global Stability at the Turn of the Century," Plagues and Politics: Infectious Disease and International Policy, ed. Andrew T. Price-Smith (New York: Palgrave, 2001).; Andrew T. Price-Smith, The Health of Nations: Infectious Disease, Environmental Change, and Their Effects on National Security and Development (Cambridge, MA: MIT Press, 2002).; and Jim Whitman, ed., The Politics of Emerging and Resurgent Infectious Diseases (London: Macmillan, 2000).

only through long-term management of the problem.<sup>8</sup> This view is echoed by Fox, who asserts “with rapid global connectivity a reality, these warriors [viruses, bacteria, and parasites] are a danger to the United States and mankind. Previous U.S. security strategies have inadequately addressed this rapidly emerging threat.”<sup>9</sup>

The second point of convergence in the literature is that widespread epidemics can and do compromise economic performance, state or government capacity, and sociopolitical stability. Expanding on the groundbreaking work done in the 1970s by historian William McNeill, Pirages and Runci, for example, focus on historical epidemic/pandemic episodes where the introduction of disease into a previously unexposed population leads to the destruction of the prevailing authority structure and government.<sup>10</sup> Additionally, Chow has made the argument that collapses in health infrastructure and delivery systems, in conjunction with an increased disease burden in many developing countries, function to create a tangible strain on state-society relations. He notes, “to the extent that authorities lapse in their duties [to provide for safety and well-being of their citizens], unmitigated health burdens will add to discontent, conflict, and the desire for political change.”<sup>11</sup>

By no means do only those in the academy share this assessment. A 2000 National Intelligence Council report explicitly frames the consequences of ill health for socioeconomic/political stability by asserting that:

---

<sup>8</sup> Chow, "Health and International Security," 75. Chow here is specifically referring to unintended outbreaks and epidemics; clearly, the threat posed by biological and chemical weapons has been a concern of U.S. national security policy and that of other countries, as well. Even so, that concern historically has not even approached the emphasis given to nuclear and conventional buildups, particularly during the Cold War.

<sup>9</sup> Fox, "Phantom Warriors: Disease as a Threat to U.S. National Security," 21.

<sup>10</sup> See, for example, the effects of smallpox on Amerindian populations; Pirages and Runci, "Ecological Interdependence and the Spread of Infectious Disease," 178.

<sup>11</sup> Chow, "Health and International Security," 63.

The severe social and economic impact of infectious diseases, particularly HIV/AIDS, and the infiltration of these diseases into the ruling political and military elites and middle classes of developing countries are likely to intensify the struggle for political power to control scarce state resources. This will...increase pressure on democratic transitions in regions such as the former Soviet Union and Sub-Saharan Africa, where the infectious disease burden will add to economic misery and political polarization.<sup>12</sup>

Framed in a more positive light, threats are minimized to the extent that health is maximized. A 1999 White House report asserts that good health and the prevention of disease are paramount to ensuring democratization, economic development, and political stability.<sup>13</sup>

#### *Noncommunicable Diseases and the Health Transition*

This shared concern about the threat of infectious disease is not ill placed. In developing countries especially, communicable illnesses such as HIV/AIDS are still a major cause of death; and in the industrialized countries of the North, resistance to antibiotics has made diseases like tuberculosis and staph infections a recurrent challenge. In 1998, deaths due to infectious disease accounted for approximately one third of total deaths worldwide, with the majority of those occurring in the developing world.<sup>14</sup> Additionally, the porosity of borders, and the facility and rapidity of global travel, mean that no population is isolated from the possibility of experiencing a major epidemic.

---

<sup>12</sup> National Intelligence Council, The Global Infectious Disease Threat and Its Implications for the United States (Washington, D.C.: National Intelligence Council, 2000).

<sup>13</sup> White House, "A National Security Strategy for a New Century," (Government Printing Office, 1999), 13.

<sup>14</sup> National Intelligence Council, The Global Infectious Disease Threat and Its Implications for the United States, 6.

But while health experts are skeptical that the challenge of infectious diseases will be completely resolved in the near future, many nevertheless point to the greater toll that noncommunicable diseases are exacting in global morbidity and mortality trends.<sup>15</sup> This “double burden” of disease means that policymakers and populations will need to contend “with the emerging epidemics of noncommunicable diseases and injuries, which are becoming more prevalent in industrialized and developing countries alike, and second, some major infectious diseases which survived the 20<sup>th</sup> century.”<sup>16</sup>

Thus, even though infectious disease remains a significant problem, an epidemiological transition – or shift in the major causes of death and disability from communicable to noncommunicable diseases – is becoming a focal point of concern for many health practitioners and policymakers. Already in the industrialized countries of the North, noncommunicable diseases account for a vast majority of the disease burden. This burden is measured in disability adjusted life years (DALYs), or the number of lost years of healthy life based on projected life expectancy data. As of 1999, 81% of all DALYs in industrialized countries were attributed to NCDs.

While the figure was significantly lower for less industrialized countries (39%), the World Health Organization points out that improvements in the control of infectious disease, as well as changes in diet and other lifestyle choices are contributing to a change in the health profile of populations. As a result, “in the

---

<sup>15</sup> For the purposes of this paper, I follow the World Health Organization’s classification scheme World Health Organization, Global Burden of Diabetes (Press Release) (Geneva: World Health Organization, 1998b).: noncommunicable diseases specifically include cardiovascular diseases, cancers, and neuropsychiatric conditions (e.g.; depressions, psychoses, alcohol and tobacco dependence). Injuries and violence are not included.

<sup>16</sup> World Health Organization, The World Health Report 1999 (Geneva: World Health Organization, 1999), 14.

developing regions, noncommunicable diseases such as...heart disease are fast replacing the traditional enemies, in particular infectious diseases and malnutrition, as the leading causes of disability and premature death.”<sup>17</sup> This shift in the developing regions is projected to swiftly continue, such that by 2020, NCDs will account for 73% of global DALYs, up from 43% in 1998.<sup>18</sup>

#### Dynamics of the Health Transition

It is impossible to adequately assess trends in the health transition without attending to the broader demographic trends of which they only a part. Overall, major demographic trends indicate a scenario where global population has continued to increase rapidly over the last decade; the United Nations Population Division estimates that between 1993 and 2000, the global population increased by approximately 718 million<sup>19</sup>, reaching a total of 6.1 billion in mid-2000. This growth far outpaces the negligible rise in the total number of annual deaths over the same period (Table 1).

---

<sup>17</sup> World Health Organization, The World Health Report 1999, 14.

<sup>18</sup> World Health Organization, The World Health Report 1999, 14-15.

<sup>19</sup> United Nations Development Program, World Population Prospects: The 2000 Revision, Volume Three (New York: United Nations Development Program, 2000), 157-58.

**Table 1. Global Mortality Trends 1993-2000: Infectious and Noncommunicable Diseases<sup>20</sup>**

	1993	1996	2000
# Deaths	51 million	52 million	56 million
% Infectious Disease	39.2	32.7	31.9
% NCD	37.2	46.2	59.8

Even as absolute mortality levels have remained relatively stable, however, the past decade has witnessed a significant shift in the mortality structure, or the relative distribution of deaths due to infectious and noncommunicable diseases. Overall, the health transition has accelerated globally. In 1993, infectious and noncommunicable diseases contributed nearly equally in terms the total mortality burden; however, since that time, the prevalence of total deaths attributed to infectious diseases has decreased slightly even as those attributed to NCDs has increased rapidly – a 22 percentage point increase only seven years - such that NCDs now account for a clear majority of the global mortality burden, at nearly 60%.

Moreover, an assessment of recent cause-of-death figures for the world regions suggests that the health transition is indeed a *global* phenomenon, well entrenched in every part of the world except Africa. In Europe, the Americas, and the

---

<sup>20</sup> All figures taken from editions of the World Health Report (2001, 1997, and 1995). These are the two major categories of disease included in reported mortality distributions; other categories include, among others, violence, injuries, and maternal causes. The growing weight of NCDs in the overall distribution of mortality is placed in context not only of a slow, gradual decline in the prevalence of deaths due to infectious disease, but also by the phenomenon of population aging. The 1997 World Health Report on chronic disease noted that these diseases are gradually representing a larger share of the morbidity and mortality burden as populations continued to age – since so many of these diseases strike later in life. To provide a sense of the aging phenomenon, the report noted that between 1990 and 1995, the population aged 65 and over increased 14% globally. Moreover, in 1997, 380 million people world-wide were over the age of 65 (220 million in developing countries); by 2020, that figure was expected to jump to 690 million (460 million for the developing countries). For additional information, see World Health Organization, The World Health Report 1997 (Geneva: World Health Organization, 1997), 4 and 10.

Western Pacific region, noncommunicable diseases account for over 75% of all deaths; in Southeast Asia and the Eastern Mediterranean, the distribution of deaths between infectious and noncommunicable diseases is more balanced, yet in both these cases, too, NCDs account for a clear majority of the total number of deaths – over 50% in both cases.<sup>21</sup>

That NCDs now contribute to the majority of death in nearly every region of the world may come as surprising; cardiovascular disease, cancer, and diabetes have traditionally stood out as diseases primarily affecting only the wealthiest societies. However, given that they are increasingly a problem globally, a closer examination of chronic disease phenomena and public health approaches to them is warranted.

In industrializing or developing countries, where the “double burden” imposed by the health transition is a more recent phenomenon, trends indicate continued rapid population growth<sup>22</sup>, and relative stability, though a slight increase over time, in the total number of deaths (Table 2). This increase in total deaths appears to be more a product of increased population as opposed to attributes of the mortality structure, as an assessment of the actual death rate, which enables cross-temporal comparisons exclusive of population growth effects, indicates that the death rate in the developing world decreased from 20 persons per 1000 to 9 persons per 1000 between 1960 and 1995.<sup>23</sup>

---

<sup>21</sup> World Health Organization, The World Health Report 2000 (Geneva: World Health Organization, 2000).

<sup>22</sup> United Nations Development Program, World Population Prospects: The 2000 Revision, Volume Three, 161.

<sup>23</sup> World Health Organization, The World Health Report 1996 (Geneva: World Health Organization, 1996).

**Table 2. Mortality in the Developing World, 1985-1997<sup>24</sup>**

	<b>1985</b>	<b>1990</b>	<b>1997</b>
<b>Total Deaths</b>	37 million	38 million	40 million
<b>% Infectious</b>	45.0	44.0	43.0
<b>% NCD</b>	28.0	31.0	38.0

In the context of these larger demographic trends, the mortality burden posed by noncommunicable diseases in the developing world has increased both in absolute and relative terms. Even as the overall death rate has declined, the number of those dying because of NCDs has risen - from 10.4 million in 1985 to 15.2 million in 1997.<sup>25</sup> While these figures in and of themselves are not overwhelming, there has been a notable increase in the percentage of total deaths due to NCDs – especially relative to those due to infectious disease - in a fairly narrow time frame. As Table 2 indicates, deaths due to infectious disease remained fairly constant, and even decreased by 2% between 1985 and 1997, while at the same time the proportion of deaths due to NCDs increased by 10% - not only a notable difference in the direction of change, but in the rate, as well.

Of course, it is necessary to recognize that any assessment of such trends must be accompanied by an important caveat: there still exists a certain degree of variation in the morbidity and mortality structures between different developing countries and regions, as well as between different subsets of the population within those countries.

---

<sup>24</sup> All figures from World Health Organization, The World Health Report 1998 (Geneva: World Health Organization, 1998).

<sup>25</sup> World Health Organization, The World Health Report 1998.

The experiences of many in Sub-Saharan Africa, who are dying at an alarming rate from AIDS and other infectious diseases, do not mirror those of populations in places like Latin America, where CVD and cancer are major causes of death and disability.

Even given these variations, however, the epidemiological transition stands out as a key feature of the global health landscape. And while it is far from complete – many industrializing countries will continue to contend with unresolved burdens posed by infection, even as they come face to face with the so-called “Western diseases” – it is a phenomenon that shows no immediate signs of abating. Thus, attending to its dynamics, its drivers, its effects and consequences, will be a necessary endeavor to facilitate health care delivery, and ultimately to alleviate the burdens of disease on all societies.

While some may cast a skeptical eye toward projections extending far into the future, recent trends suggest that the projections’ aim may not be that far off the mark. Indeed, current morbidity and mortality statistics reflect a shift already under way. James Marks, Director of the National Center for Chronic Disease Prevention and Health (NCCDPH) and an Assistant Surgeon General, and David McQueen, Director of Global Health Promotion at NCCDPH, have stressed this in a recent volume on the state of global public health.

At the dawn of the new century, deaths from chronic diseases outpaced deaths from communicable diseases in every part of the world except Sub-Saharan Africa and the Middle East, and now account for 60% of all deaths globally.<sup>26</sup>

---

<sup>26</sup> James S. Marks and David V. McQueen, "Chronic Diseases," Critical Issues in Global Health, ed. C. Everett Koop (San Francisco: Jossey Bass, 2001), 117.

## The Twin Silences

Clearly, NCDs constitute a tremendous share of the global disease burden, entail significant treatment and management costs, and are likely to pose an even greater burden in developing countries should the aforementioned trends continue. However, a comprehensive political analysis of chronic disease phenomena, and the public health approaches to their analysis and intervention, has heretofore remained elusive due to “twin silences” in the political science and public health literatures.

### Political Science and Policy

Despite a recent spate of publications on the causes and consequences of the global disease burden, a code of silence about the health transition characterizes these analytical efforts, whether through lack of interest or awareness or other reasons. For example, in perhaps the most comprehensive text to date on the political economy of disease, Price-Smith’s *The Health of Nations*, the author attempts to highlight the burden posed by infectious disease by contrasting its mortality statistics with those of accidents and injuries; citing evidence from the World Health Organization’s 1995 report, he points to the fact that of the 51 million deaths that occurred in 1993, 32% were caused by emerging and resurgent infectious diseases (ERIDs), while 1.7% were caused by motor-vehicle and other accidents and 0.6% were caused by violence. WHO reports that that same year, NCDs claimed the lives of over 10 million people in *developing countries alone*.<sup>27</sup> However, Price Smith fails to include this information in his comparisons; given the demonstrated prevalence of and burdens

---

<sup>27</sup> World Health Organization, Noncommunicable Diseases: WHO Experts Warn against Inadequate Prevention, Particularly in Developing Countries, 1996, Available: <http://www.who.int/inf-fs/en/fact106.html>, November 12 2003.

posed by NCDs globally – especially relative to trends in infectious disease prevalence and mortality – this is a noticeable oversight.

This lack of attention to the magnitude of the NCD burden extends even unto the operationalization of variables in the book’s quantitative analysis of the relationship between infectious disease and state capacity. Given that reliable data are difficult to acquire for certain diseases or in certain regions, Price-Smith employs several proxy indicators for the infectious disease burden. The one he employs to assess the burden posed by later-onset infectious diseases such as AIDS is life expectancy. He acknowledges that life expectancy “unfortunately does not replicate infant mortality’s extreme sensitivity to infectious disease, as it includes deaths resulting from accidents, suicides, and violence.”<sup>28</sup> As Price-Smith fails to mention, it also includes mortality resulting from noncommunicable illnesses such as cardiovascular disease, cancer, and diabetes - illnesses which account for a significant percentage of the morbidity and mortality burden in a number of his twenty case countries: Brazil, Colombia, Iceland, Italy, Japan, Netherlands, and Norway, just to name a few.

Price-Smith is not alone in focusing exclusively on infectious disease; recent publications in the areas of political economy, international security, and public policy are directed toward explaining the political origins and consequences of infectious, as opposed to noncommunicable disease. In *The Politics of Emerging and Resurgent Infectious Diseases*, contributing authors explore migration patterns and other factors conditioning the spread of infectious diseases, the legal dimensions of

---

<sup>28</sup> Price-Smith, *The Health of Nations: Infectious Disease, Environmental Change, and Their Effects on National Security and Development*, 36.

infectious disease control, and the prospects for international cooperation on the issues of control and eradication.<sup>29</sup> So, too, are similar contributions made in *Plagues and Politics: Infectious Disease and International Policy*, an edited volume that addresses not only the political-economic and environmental drivers conditioning the spread of infectious diseases (migration, technological change, and climate change, to name a few), and the consequences of infectious disease for economic development and state capacity, but also how infectious disease epidemics like cholera and tuberculosis helped to shape modern public health policy and law.<sup>30</sup>

These more general treatments of the politics of infectious disease are eclipsed, however, by a literature that has bloomed around one specific disease: HIV/AIDS. The majority of recent analyses of the politics of infectious disease have examined the various political and economic dimensions of the pandemic, particularly in the context of Sub-Saharan Africa, where it is most deeply and widely entrenched.<sup>31</sup>

---

<sup>29</sup> Whitman, ed., *The Politics of Emerging and Resurgent Infectious Diseases*.

<sup>30</sup> Andrew T. Price-Smith, ed., *Plagues and Politics: Infectious Disease and International Policy* (New York: Palgrave, 2001).

<sup>31</sup> See, for example, Leon Gordenker and et al., *International Cooperation in Response to AIDS* (London: Pinter Publishing, 1995), an assessment of international cooperation in response to the spread of HIV; Elizabeth Reid, ed., *HIV and AIDS: The Global Inter-Connection* (Bloomfield, CT: Kumarian Press, 1995), an edited volume addressing the features of globalization and their relevance for the spread of HIV/AIDS; Steven Epstein, *Impure Science: AIDS, Activism, and the Politics of Knowledge* (Berkeley: University of California Press, 1996), an analysis of the interactions between activists and scientists in the construction of knowledge around HIV; T. Barnett and A. Whiteside, *The Social and Economic Impact of HIV/AIDS in Poor Countries: A Review of Studies and Lessons* (Geneva: UNAIDS, 2000), an evaluation of the social and economic impact of HIV/AIDS in developing countries; Solomon R. Benatar, "South Africa's Transition in a Globalizing World: HIV/AIDS as a Window and Mirror," *International Affairs* 77.2 (2001), an assessment of South Africa's transition from apartheid to new democracy in the context of the AIDS crisis; Robert L. Ostergard, "Politics in the Hot Zone: AIDS and National Security in Africa," *Third World Quarterly* 23.2 (2002), an analysis of the national security implications of AIDS in the African context; Richard Parker, "The Global HIV/AIDS Pandemic, Structural Inequalities, and the Politics of International Health," *American Journal of Public Health* 92.3 (2002), a treatment of the role of structural inequalities in facilitating the spread of HIV; Nana K. Poku, "Poverty, Debt and Africa's HIV/AIDS Crisis," *International Affairs* 78.3 (2002), an examination of poverty and debt relief on HIV response

Despite this increased attention, it has been asserted that the issue of infectious disease, especially in the form of HIV/AIDS, is still of only fledgling concern to political scientists. In their 2002 analysis of the political-economic dimensions of the African AIDS crisis, Boon and Batsell point out that:

Political science as a discipline, including the branch of international relations, has been slow to grapple with the AIDS crisis. It seems that the HIV-AIDS issue has been conceived of as too private, too biological, too microlevel and sociological, too behavioral and too cultural to attract the attention of many political scientists.<sup>32</sup>

The authors raise a valid point; prior to the mid 1990s, infectious diseases more generally, and HIV specifically, were not of significant concern to most political scientists, and even today do not command the attention that more traditional areas of research like armed conflict and democratization do. However, if this claim can still be made today with regard to a health issue that has dominated all others in the political analysis of disease, how much more off the investigative radar-scope must the challenges posed by NCDs be?

Indeed, of the recent publications in the academic and policy realms, only McMurray and Smith take as a focal point the political and economic dynamics of the rise of NCDs; specifically, they address how modernization in the Western Pacific region has facilitated the recent increases there in heart disease and diabetes.<sup>33</sup> In a less detailed treatment, the National Intelligence Council has tangentially addressed the concept of the epidemiological transition, but has summarily rejected it as a “too

---

in Africa; and Helen Schneider, "On the Fault-Line: The Politics of AIDS Policy in Contemporary South Africa," *African Studies* 61.1 (2002), an analysis of the political drivers of HIV policy response in South Africa.

<sup>32</sup> Catherine Boone and Jake Batsell, "Politics and AIDS in Africa: Research Agendas in Political Science and International Relations," *Africa Today* 48.2 (2001), 4.

<sup>33</sup> Christine McMurray and Roy Smith, *Diseases of Globalization: Socioeconomic Transitions and Health* (London: Earthscan, 2001).

optimistic scenario.”<sup>34</sup> Their rejection stems from an assertion that future epidemiological conditions reflecting this transition are too uncertain, whereas many disease phenomena are of more immediate concern: HIV and tuberculosis to name a pair.

Notwithstanding that these conditions are extremely important health challenges, and are likely to remain so for the foreseeable future, the National Intelligence Council’s sanguine assertion is flawed in that it ignores the demonstrated downward trend over the last ten years in morbidity and mortality from infectious disease worldwide, and the concomitant upward trend in illness and death caused by noncommunicable diseases. A 1998 Institute of Medicine report highlighting the overwhelming problem of cardiovascular disease in the developing world makes clear that there is no “uncertainty” about these trends:

Given the falling rates of infectious and parasitic diseases and the increasing rates of CVD in developing countries, CVD was most likely the developing world’s leading cause of death by the mid-1990s...Evidence shows that in 1990, CVD contributed to three times as many deaths worldwide in 30-69 year old men and women as did infectious and parasitic diseases.<sup>35</sup>

It is not the purpose here to speculate at any great length on the motivations of some for discounting the burden posed by noncommunicable diseases. Nor does this project in any way dispute the tremendous toll that many infectious diseases continue to exact. But while infectious diseases remain an important health challenge, it may be argued that it is the very blindness of scholars and policy analysts to the burdens

---

<sup>34</sup> National Intelligence Council, The Global Infectious Disease Threat and Its Implications for the United States.

<sup>35</sup> Christopher Howson, K. Reddy, Thomas Ryan and Judith Bale, Control of Cardiovascular Diseases in Developing Countries: Research, Development, and Institutional Strengthening (Washington, D.C.: Institute of Medicine, 1998), 77.

posed by NCDs that allows one to conceptualize the health transition as an equally, if not more serious challenge to the prosperity and stability of many developing countries. If issues of health and disease are to be opened up to the purview of political science, and particularly to its sub-fields such as international security, then one opens up the susceptibility of policymakers in particular to make the same errors that have characterized security and military strategy in the past. Military historian Geoffrey Regan has argued that several interrelated blunders account for many of history's most stunning military defeats: the phenomenon of "painting the wrong picture," or acting from an inadequate/incorrect assessment of the situation or threat; conservatism, or preparing to fight the last war; and an inability to adapt to changing conditions or technologies.<sup>36</sup>

It might be argued that those who are intent upon framing infectious disease as the most preeminent health challenge of the developing world are no less susceptible to these dangers; attending to *how* ill-health may act as a stressor on economic, political, or social stability must be, if it is to be at all, pursued with a recognition of the dynamics of changing demographic and epidemiological patterns of illness. Infectious disease, while perhaps ill-nomered as "the last war," is no longer the only one.

As much as this phenomenon of focusing so extensively on infectious disease heralds an analytical preparation to "fight the last war," it also directs our attention to the implications of such a focus for discussions of NCDs. To the extent that heart disease, cancer, and other chronic illnesses are not considered objects of political analysis, their origins, explanations, and implications remain closed to critical

---

<sup>36</sup> Geoffrey Regan, Brassy's Book of Military Blunders (Dulles, VA: Potomac Books, 2000).

inquiry. The lack of such an inquiry effectively functions to depoliticize the phenomena of NCDs – relegating them to the realm of the technical: a problem to be solved in the context of medicine and public health programs. Such a depoliticization in this disciplinary context is coupled, as we shall see, by a corresponding one in public health; one that exhibits different dynamics, to be sure, but that functions in a very similar way – to frame chronic illness as an unfortunate experience, but with little reflection as to the political implications associated with its analysis, treatment, and prevention.

#### Epidemiology and Public Health

If the international relations and policy literatures are silent on the subject of the burdens of NCDs, many analysts in epidemiology and public health are silent on the political dimensions of chronic disease and its analysis and prevention. Increases in morbidity and mortality due to NCDs tend to be explained either in purely demographic terms – focusing on the output result of fertility decline and population aging in developing countries, with little attention paid to the political and economic processes conditioning those demographic trends – or, more commonly, in terms of shifting behavioral patterns that encompass more “risky” activities. In her discussion of the evolution of epidemiological analysis, Diez-Roux points out:

In this century...emphasis shifted from environmental factors to individual-level factors, and research focused on behavioral and biological characteristics as risk factors for chronic disease...This individualization of risk has perpetuated the idea that risk is individually determined rather than socially determined, discouraging research into the effects of macro-level or group-level variables on individual-level outcomes. “Lifestyle” and “behaviors” are regarded

as matters of free individual choice and disassociated from the social contexts that shape and constrain them.<sup>37</sup>

This trend toward behavioralism and the individualization of risk has become a hallmark feature of contemporary public health, and by no means is Diez-Roux alone in this assessment of the trajectory of health analysis over the last few decades. Pearce, for example, asserts that the shift from a population-focused to individual-focused public health has been the key issue in the transformation of the field in recent years.<sup>38</sup>

That such complex phenomena as population health outcomes would be analytically reduced to individual behaviors has understandably led some to critique prevailing public health models and approaches. In their assessment of some of the weaknesses of contemporary public health, epidemiologists Beaglehole and Bonita assert that:

The most challenging criticisms of epidemiology stem from its individualist philosophical underpinnings and its reluctance to place individuals in their social context. In particular, the risk factor approach to epidemiology and prevention does not give adequate weight to the role of social factors...This individualistic approach also

---

<sup>37</sup> Ana V. Diez-Roux, "Bringing Context Back into Epidemiology: Variables and Fallacies in Multi-Level Analysis," American Journal of Public Health 88.2 (1998): 216.

<sup>38</sup> Neal Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," American Journal of Public Health 86.5 (1996): 679. The shift towards a public health emphasis on individual action and responsibility is well documented. In addition to Diez-Roux and Pearce, see also: Nancy Krieger, "Epidemiology and the Web of Causation: Has Anyone Seen the Spider?" Social Science & Medicine 39.7 (1994).; Peter Davis and Philippa Howden-Chapman, "Translating Research Findings into Health Policy," Social Science & Medicine 43.5 (1996).; Richard Levinson, "Issues at the Interface of Medical Sociology and Public Health," Modernity, Medicine and Health: Medical Sociology toward 2000, eds. Graham Scrambler and Paul Higgs (London: Routledge, 1998).; Sharon Schwartz and Kenneth M. Carpenter, "The Right Answer for the Wrong Question: Consequences of Type Iii Error for Public Health Research," American Journal of Public Health 89.8 (1999).; Allan M. Brandt and Martha Gardner, "Antagonism and Accommodation: Interpreting the Relationship between Public Health and Medicine in the United States in the Twentieth Century," American Journal of Public Health 90 (2000).; John McKinlay and Lisa Marceau, "Upstream Health Policy: Lessons from the Battle of Tobacco," International Journal of Health Services 30.1 (2000).; and Hugh D. Spittler, "Medical Sociology and Public Health: Problems and Prospects for Collaboration in the New Millennium," Sociological Spectrum 21 (2001).

runs the risk of blaming the victim and encouraging health education strategies at the expense of social, economic, and environmental changes. The result is the medicalisation of prevention rather than its socialisation.<sup>39</sup>

The medicalization of prevention that Beaglehole and Bonita point to is especially evident with regard to noncommunicable diseases, which are understood as emerging largely as a result of risky behavioral choices. Smoking, poor diet, and physical inactivity top the list of risk factors contributing to the onset of a number of NCDs. In a 2002 report, the WHO stressed that, “even though there has been great progress in the treatment of noncommunicable diseases and in the pharmacological control of many risk factors, from a public health point of view, *the greatest potential is influencing the risk-factor distribution in the population through general lifestyle changes, notably in diet and physical activity*” [emphasis added].<sup>40</sup>

Given the tremendous emphasis placed upon the individualization of risk and responsibility, it is critical to attend to the mechanisms by which this individualization occurs, as well as the greater ideological imperative that conditions the creation of knowledge in public health, as well as the promotion of particular strategies for prevention and intervention.

Even as public health is by its very definition concerned with the promotion of healthy populations, the population is in the health discourse reduced to its atomistic constituents, both in terms of the production of knowledge as well as the promotion of appropriate behaviors and activities. Furthermore, in these spheres the infiltration of a distinctly neoliberal ideology is evident, in terms of the privileging of a

---

<sup>39</sup> Robert Beaglehole and Ruth Bonita, Public Health at the Crossroads (New York: Cambridge University Press, 1997) 119.

<sup>40</sup> World Health Organization, Diet, Physical Activity and Health (Geneva: World Health Organization, 2002), 4.

subjectivity predicated upon the rational calculation of costs and benefits, and the privatization of risk and risk management; additionally, in the case of the reorganization and reform of public health systems and the health promotion strategies and campaigns they implement, the neoliberal imperative manifests itself in reform strategies based on market-principles, programs aimed the education of private citizens, and on efficiency as a major criterion of health program evaluation. A brief sketch of several theories underlying the body of health promotion discourse, the kind of subject or actor this discourse assumes and caters to, and the technologies or elements associated with health promotion programs provides a better semblance of how these features operate in the public health discipline.

#### Producing Healthy Subjects: Foundations of Health Promotion Theory

Since the 1950s and '60s, theories of health promotion have had as their most prominent feature a privileging of the psychological foundations of health promotion and disease prevention. Lupton notes:

The very names of the models of behaviour – the Health Belief Model, the Theory of Reasoned Action, Subjective Expected Utility Theory, Protective Motivation Theory – denote a focus upon rationality, the weighing of costs and benefits, conscious thought which progresses in a linear fashion from A to B.

The assumptions of health promotion which underlie these models of behaviour include that its primary goal is behavior change and that beliefs and attitudes mediate this behaviour change.<sup>41</sup>

Not only do these models identify as the locus of risk and risk management the individual body, they are predicated upon the assumption and construction of a particularly privileged kind of individual subjectivity: the rational, utility-maximizing

---

<sup>41</sup> Deborah Lupton, The Imperative of Health: Public Health and the Regulated Body (London: Sage, 1995) 55-56.

actor, whose calculated choices are the ultimate product of the consistent acquisition and evaluation of information. These assumptions of individual rationality and cost-benefit calculation become evident upon closer examination of the models themselves. For example, the Theory of Reasoned Action is predicated upon the assumption that behavior is a function of individual attitudes toward that behavior, and that these attitudes are shaped as a calculation of costs and benefits derived from what “important others” think of the behavior in question.<sup>42</sup> In addition, the Health Belief Model, which seeks to explain the likelihood that a person will take recommended action to improve their health, is predicated upon an individual’s calculation of his or her susceptibility to disease, the threat of the disease to overall health, the perceived benefits of action, as well as the barriers (costs) to that action.<sup>43</sup>

#### Technologies of Governance: the Structure and Nature of Public Health Programs

In serving as the theoretical foundation for knowledge-generation in the area of public health, these models are also intimately linked to the transmission of that knowledge and the cultivation of “appropriate” behaviors in at-risk individuals and populations. Information, legitimized in the form of “scientific” studies, functions as both evidence for theories predisposed on the basis of their assumptions to recognize

---

<sup>42</sup> The key text explicating the Theory of Reasoned Action is I. Azjen and M. Fishbein, Understanding Attitudes and Predicting Social Behavior (New Jersey: Prentice-Hall, 1980). Other prominent texts on the theoretical and empirical dimensions of the subject include K. Lorig and J. Laurin, "Some Notions About Assumptions Underlying Health Education," Health Education Quarterly 12.3 (1985).; H. Salt, M. Boyle and J. Ives, "HIV Prevention: Current Health Promoting Behaviour Models for Understanding Psycho-Social Determinants of Condom Use," AIDS Care 2.1 (1990).; B.H. Sheppard, J. Hartwick and P.R. Warshaw, "The Theory of Reasoned Action: A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research," Journal of Consumer Research 15.3 (1988).; and W.J. Severin and J.W. Tankard, Communication Theories (New York: Addison Wesley Longman, 2001).

<sup>43</sup> For a discussion of the Health Belief Model, see I.M. Rosenstock, V.J. Strecher and M.J. Becker, "Social Learning Theory and the Health Belief Model," Health Education Quarterly 15 (1988).; and N. Oldridge and D. Steiner, "The Health Belief Model: Predicting Compliance and Dropout in Cardiac Rehabilitation," Medical Science and Sports Exercise 22 (1990).

as valid only those outcomes predicted by them, as well as the yardstick by which individuals may measure their own performance. Information, in addition, becomes a key output of public health programs that are increasingly restructured in such a way as to de-emphasize the role of the state in the securing of its citizens' health. There is a

common theme among national health care reform strategies: countries with traditionally state-dominated health care are now reshaping them in the image of the market. Governments throughout Europe have aimed to cultivate the virtues of the private sector – increased efficiency and consumer choice – while shunning its vices, through careful planning and management of these “quasi-markets.”<sup>44</sup>

These market “virtues” – outright privatization, increased public-private cooperative endeavors, decentralization, health programs centered around the education and empowerment of the individual rather than interventions at the community or national levels – are specific technologies by which health institutions govern and manage the health of populations. Furthermore, these technologies exist at the intersection of knowledge and practice: how do we recognize the health threat, and what does our body of knowledge tell us about how best to organize and implement a solution for it? Once we have put the solution into practice, what does our body of knowledge tell us about how to evaluate it? Such technologies of governance demonstrate the intimate link between “objective” science and interested advocacy, and reveal themselves in how health systems are organized, and the general nature of the public health programs that are adopted.

To illustrate these principles, it is helpful to consider examples of ongoing efforts to combat chronic disease. Even at the international level, public health

---

<sup>44</sup> Alan Jacobs, "Seeing Difference: Market Health Reform in Europe," Journal of Health Politics, Policy, and Law 23.1 (1998).

programs are emphasizing technologies such as health programs that educate the individual. In a March, 2002 report on the prevention of NCDs, the WHO Secretariat affirmed that the organization, “in order to step up prevention efforts...will continue to provide up-to-date evidence on the links between diet, nutrition, physical activity and noncommunicable diseases, including guidelines for appropriate action for individuals.”<sup>45</sup> The knowledge produced in this regard, far from being the disinterested product of an objective “science,” both reifies those models predisposed to only focus on individually-generated risk, as well as delimits the aims, levels, and outcomes towards which individuals should work in their own practice. In other words, because it is known that risk exists in individual bodies, that knowledge directs the institution to implement a program or set of practices that educate the individual about how to reduce that risk.

Because of the close relationship between the production of knowledge and the practice of “good health,” these tendencies toward behavioralism and the individualization of risk in the public health discourse are quite evident in the health promotion campaigns undertaken by particular institutions and agencies.

This is especially the case with “lifestyle” illnesses like NCDs. As McMurray and Smith note, “the reduction of NCDs is largely the responsibility of individual citizens. Health authorities can do little more than provide health education and promote healthy lifestyles.”<sup>46</sup> Not surprisingly, therefore, as the number of NCD-attributed deaths and disabilities rise throughout the world, there has been a

---

<sup>45</sup> World Health Organization, Diet, Physical Activity and Health, 4.

<sup>46</sup> McMurray and Smith, Diseases of Globalization: Socioeconomic Transitions and Health 10.

concomitant increase in education and outreach efforts at local, national, and international levels to combat the perceived sources of NCD emergence.

In Sao Paulo, Brazil, for example, where it is estimated that over 75% of the city's residents are physically inactive, the "Agita Sao Paulo" campaign has promoted the need to take individual responsibility for health through regular exercise. The Agita (which means "move" or "shake" in Portuguese) campaign received enough prominence that in 2002, the WHO adopted it as the theme for their annual World Health Day, focusing on the risks posed by physical inactivity. At its core, the Agita movement "will give particular visibility to ways in which individuals and communities can influence their own health and well being."<sup>47</sup>

By focusing on individual responsibility, the Agita platform echoes the entrepreneurialism toward health that the WHO and national public health systems have advocated in previous health promotion campaigns. In 1999, for example, the World Health Day theme focused on "Active Ageing," or the need to encourage appropriate actions to facilitate health throughout the lifecourse, from youth through older age. These actions included such things as participating in child immunization programs, avoiding smoking during pregnancy, maintaining a moderate intake of alcohol, exercising regularly at all ages, and eating a balanced diet low in fat and cholesterol. Even the suggested actions at the policy level still directed policymakers to focus on programs that facilitated proper behaviors among individuals; these included programs to increase awareness about proper nutrition, programs to ensure

---

<sup>47</sup> World Health Organization, World Health Day 2002, September 14, 2002 2002, Available: <http://www.who.int/world-health-day/package.en.shtml>.

access to immunization, the incorporation of exercise into school curricula, and campaigns encouraging sports participation for seniors.<sup>48</sup>

Having established how technologies of governance exist at the nexus of knowledge and practice, it is appropriate to clarify that a core body of knowledge also serves as the means by which those technologies are evaluated. Increasingly, the body of knowledge primarily used to evaluate public health campaigns is economic, not medical. While effectiveness is of course important, a major criterion by which these health promotion and disease prevention campaigns are evaluated is cost efficiency; within the public health discourse, this tendency is most evident in the relative emphasis placed on prevention as a means to maximize one's longevity and productivity, and to minimize expensive treatment costs.<sup>49</sup> Prevention, especially in the form of lifestyle changes, is not only more cost-effective for the patient and for the health system as a form of intervention, but also facilitates greater economic productivity on the part of those actively seeking to reduce their risk of NCD onset. Such an emphasis on efficiency is evidenced in a recent health report on the role of diet and exercise in preventing NCDs; in it, it is asserted that lifestyle changes are the most "cost-effective and sustainable way for controlling such diseases. Successful

---

<sup>48</sup> World Health Organization, World Health Day 1999, 1999, 02/19/2005 2005.

<sup>49</sup> For discussions of efficiency and the role of prevention, see: O.O. Akinkugbe, "Lifestyle and Cardiovascular Disease: Emerging Problems of Health Development in the Third World," The Health of Nations: Medicine, Disease and Development in the Third World, eds. B. Iyun, Yola Verhasselt and J. Anthony Hellen (Brookfield: Avebury, 1995).; World Health Organization, Positioning Prevention in Health System Reform: A Focus on Integrated Noncommunicable Diseases Prevention (Geneva: World Health Organization, 1995).; World Health Organization, Obesity: Preventing and Managing the Global Epidemic (Geneva: World Health Organization, 1998).; and Sheri Pruitt and et al., Innovative Care for Chronic Conditions: Building Blocks for Action (Geneva: World Health Organization, 2001).

primary intervention not only reduces human suffering and increases economic productivity, but also limits the growing cost of treatment.”<sup>50</sup>

### Public Health and Neoliberal Governmentality

The prevalence of analytical models focusing on the behavioral patterns of rational subjects, the privileging of strategies targeted toward entrepreneurial action, and the evaluation of these strategies in terms of efficiency gains all direct us to consider how these elements are not the randomly configured products of chance. Rather, together they comprise a systematic program linking the production of knowledge, the ethos of subjectivity, and the technologies of governance that is a striking manifestation of neoliberal governmentality. Before elaborating more explicitly how this is the case, a few preliminary clarifications are in order. First, governmentality may be understood as:

...any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through our desires, aspirations, interests and beliefs, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects, and outcomes.<sup>51</sup>

Governmentality, then, is a rationality of government that is decoupled from the exclusive province of the state, but rather is directed more broadly toward the “conduct of conduct,” or the deliberate molding of private behavior in accordance with specific norms and towards specific ends.<sup>52</sup> In so doing, it operates through

---

<sup>50</sup> World Health Organization, Diet, Physical Activity and Health, 4.

<sup>51</sup> Mitchell Dean, Governmentality: Power and Rule in Modern Society (London: Sage, 1999) 11.

<sup>52</sup> For further discussions of governmentality and the “conduct of conduct,” see Michel Foucault, “The Subject and Power,” Critical Inquiry 8 (1982). and Michel Foucault, “Governmentality,” The Foucault Effect: Studies in Governmentality, eds. G. Buchell, C. Gordon and P. Miller (London: Harvester,

three interrelated spheres, or axes: *episteme* (systems of knowledge and expertise), *techne* (the technologies of power and rule), and *ethos* (the privileging and cultivation of a particular kind of ethical subject).<sup>53</sup> The decision by governmentality scholars such as Dean to use the Greek referents for concepts such as “knowledge,” “technologies,” and “ethics” is to communicate their broader scope; thus, *episteme* refers not only to knowledge as a manifestation of “truth,” but also to how systems of rules and norms governing knowledge production yield “truth.” Moreover, *techne* refers not only to the technologies or tools used to achieve particular ends, but how those are arrayed as “art” in a system of practices directed toward government. Finally, *ethos* signals not only a general concern with ethics, but also a particular focus on the ethical subject, and what values and norms are associated with such a subject.<sup>54</sup>

Having established the general framework of governmentality, and its three interrelated spheres, it is important to clarify what is meant by neoliberalism – which reflects a particular style of governmentality. While the term is commonly understood to entail particular modes of economic practice – free trade, deregulation, privatization, and the like – it is not reducible to set a of policy prescriptions, but may also be understood more broadly as a style of governance that, in turn, guides such actions in the economy and other spheres. Unlike earlier incarnations such as classic

---

1991).; C. Gordon, "Introduction," The Foucault Effect: Studies in Governmentality, eds. G. Buchell, C. Gordon and P. Miller (London: Harvester Wheatsheaf, 1991).; and Dean, Governmentality: Power and Rule in Modern Society.

<sup>53</sup> Dean, Governmentality: Power and Rule in Modern Society. Though Dean applies the Greek terms to these axes, Foucault’s general development of the governmentality framework includes all three elements. See, for example, Foucault, "Governmentality.", as well as Nikolas Rose and P. Miller, "Political Power Beyond the State: Problematics of Government," British Journal of Sociology 43.2 (1992).

<sup>54</sup> Dean, Governmentality: Power and Rule in Modern Society. Chapter 4 includes an additional discussion and clarification of these concepts.

liberalism, in which the market is understood as a separate and distinct sphere, neoliberal government is a unique reformulation that involves the extension of market logic and values to all spheres, as Dean describes:

The market has ceased to be a kind of ‘fenced-off-nature reserve’ kept at arm’s length from the sphere of public service; instead, the contrivance of markets becomes the technical means for the reformation of all sorts of provision. To be sure, the point of doing this is to prevent excessive government by ensuring the most efficient use of resources. *But it is also, and perhaps more importantly, to reform institutional and individual conduct so they both come to embody the values and orientations of the market, expressed in notions of the enterprise and the consumer* [emphasis added].<sup>55</sup>

In this regard, the neoliberal impulse involves not only attempts to reinvigorate classic liberal principles pertaining to cost and operational efficiency and a limited role for the state – as evidenced in particular policies of privatization, decentralization, and deregulation, it extends them to new spheres, such as the family, the school, and the clinic.<sup>56</sup> For these principles to operate effectively in such spheres, several assumptions are made that speak not only to the centrality of the individual actor under this political rationality, but also to three additional features of neoliberalism. These are: 1) choice is the key human faculty “that overrides all social determinations”; 2) the rational individual making these choices can be educated to make the “appropriate” ones, insofar as “modifications in behaviour follow from remodeling the environment according to this market rationality”; and 3) that the individual approaches herself as an entrepreneur, as human capital, in an endeavor “to obtain both monetary earnings and psychic and cultural satisfactions.”<sup>57</sup>

---

<sup>55</sup> Dean, Governmentality: Power and Rule in Modern Society 172.

<sup>56</sup> Dean, Governmentality: Power and Rule in Modern Society 57.

<sup>57</sup> Dean, Governmentality: Power and Rule in Modern Society 57.

This brief sketch of the key elements of neoliberalism is augmented in more detail in Chapter 4, with specific application to the rationality of government. From this sketch, however, we can ascertain the basic orientation of neoliberal governmentality; it is one that seeks “to extend the rationality of the market, the schemes of analysis it proposes, and the decisionmaking criteria it suggests to areas that are not exclusively or not primarily economic.”<sup>58</sup> Moreover, it is characterized by concrete connections between the construction of subjectivity, the production of knowledge, and the technologies of governance. Dean and Hindess, for example, note that neoliberal rationalities of government “depend on forms of agency and autonomy that are represented in, and in this sense, constituted by, specific forms of knowledge of the governed and mobilized through particular techniques and technologies.”<sup>59</sup>

In the case of public health, we witness the operation of a neoliberal governmentality in the extension of market logic to various dimensions of the health experience, already discussed: the construction and production of individual, rational subjects whose decisions regarding behavioral modification are predicated upon cost-benefit analysis; the production of knowledge in accordance with theoretical models that assume such a subjectivity, and as such, focus primarily on behavioral predictors of health outcomes; and the promotion of health strategies, targeted at individuals, that have been directed toward the cultivation of self-governing subjects who take an entrepreneurial approach to the management of their health and well-being.

---

<sup>58</sup> Michel Foucault, "Sex, Power, and the Politics of Identity," Ethics: Subjectivity and Truth, ed. P. Rabinow (New York: New Press, 1997) 79.

<sup>59</sup> Mitchell Dean and Barry Hindess, "Introduction: Government, Liberalism, and Society," Governing Australia: Studies in Contemporary Rationalities of Government, eds. Mitchell Dean and Barry Hindess (New York: Cambridge University Press, 1998) 15.

This intimate connection between public health and neoliberal governmentality is not difficult to conceptualize, as Lupton notes:

The endeavours of health promotion are easily recognizable as the strategies of liberal governmentality. That is, they are directed at the level of the population, they constitute individuals and groups as 'problems' and domains of governance needing the assistance of health promotion 'experts', they are systematic, calculated and directed at defined ends, they emerge from the state but are also articulated by associated independent institutions and agencies, they are constantly subject to evaluation and revision, they are not crudely repressive of rights but are directed at productive purposes (the health and happiness of the population).<sup>60</sup>

However, and significantly for this project, the very fact that public health manifests itself as an arena of neoliberal governmentality disables those within that community from exploring *how* the project of NCD prevention and management – from the construction of risk to treatments and interventions - is a political event.

Skeptics may raise an eyebrow at this assertion, and already the possibilities of doubt appear: "there is nothing political here – disease risk is largely private phenomenon, and to a great extent, an agent chooses to be healthy or no." There is no doubt that an individual person's choices and behaviors play an important part in explaining the onset of noncommunicable disease; however, to the extent that these decisions and choices have an impact on disease outcomes does not direct our inquiry toward any *a priori* qualities or faculties of the individual in question. In this regard, Foucauldian analysis seeks "to challenge the idea of a sovereign subject which arrives from elsewhere to enliven the inertia of linguistic codes, and sets down in discourse

---

<sup>60</sup> Lupton, The Imperative of Health: Public Health and the Regulated Body 49. The literature on the links between neoliberalism and public health offer additional insightful discussions. See Paul Joyce, "Governmentality and Risk: Setting Priorities in the New NHS," Sociology of Health and Illness 23.5 (2001).; Alan Petersen and Deborah Lupton, The New Public Health: Health and Self in the Age of Risk (London: Sage, 1996).; and Pat O'Malley, "Risk, Power, and Crime Prevention," Economy and Society 21.3 (1992).

the indelible trace of its freedom.”<sup>61</sup> Thus, from a governmentality perspective on the public health of chronic disease, we are more interested in how particular identities come to be privileged and constructed:

What forms of person, self, and identity are presupposed by different practices of government and what sorts of transformation do they seek? What statuses, capacities, attributes and orientations are assumed of those who exercise authority (from politicians and bureaucrats to professionals and therapists) and those who are to be governed (workers, consumers, pupils and social welfare recipients)? What forms of conduct are expected of them? What duties and rights do they have?...How are certain aspects of conduct problematized? How are they then to be reformed? How are certain individuals and populations made to identify with certain groups, to become virtuous and active citizens, and so on?<sup>62</sup>

Thus, with the framework employed by this project, we are called to interrogate how particular subject positions and identities are fostered, encouraged, and produced – an interrogation that displays an inherently political character. And while concepts such as “identity” and “agents” are thus under such a rubric de-centered, they still constitute an important element in the exploration of public health as a domain of neoliberal government.

Moreover, as we proceed in the following chapters with this exploration in context with the two other axes of government – *episteme* and *techne* – one witnesses multiple dimensions of neoliberal rationality infusing public health. These include such phenomena as a risk mentality focusing on behavioral factors in the production of knowledge and training of professionals, domestic economic policies in the reform of health care that valorize the market and scale back state responsibility, and the

---

<sup>61</sup> Foucault, "Governmentality," 61.

<sup>62</sup> Dean, Governmentality: Power and Rule in Modern Society 32.

valorization of individual self-management and choice in the context of NCD prevention programs.

The consistent theme of the responsabilization of the individual is particularly relevant in assessing the extension of neoliberal rationality to disciplines such as public health and epidemiology. Such an agentic and behavioral focus creates analytical problems especially acute in the public health field, where the array of structural forces conditioning behavioral patterns are downplayed in the execution of public health programs. In effect, the experience of disease, especially so-called “lifestyle” illnesses like cancer and heart disease, are constructed as apolitical – a problem to be solved by individuals in the main, in consultation with health experts. Furthermore, it is argued that the construction of NCDs as an apolitical phenomenon is not surprising given that public health itself is evolving in a manner that is consistent with a neoliberal governmentality at whose core is the transformation of the public into the private.

These are broad claims firmly anchored in the theoretical realm, and to justify them necessitates that they be developed and substantiated in a systematic manner. This project does so by applying them and the key questions that guide them to real-world cases of countries currently experiencing a heavy NCD burden in the context of evolving public health systems.

### *The Cases*

Before detailing more specifically the content of the cases used in this study, a few preliminary remarks are necessary to clarify the purpose and goals of the cases as

they relate to the overall project. Because case studies have been employed in a number of different contexts – theory building, hypothesis testing, and analysis of deviation from the norm, just to name a few – it is important to articulate their function in the context of this dissertation.<sup>63</sup> Thus, at the outset, it should be stressed that these cases function as a means to illustrate a theoretical argument: specifically, the argument that public health systems in their understanding, prevention, and treatment of NCDs are structured as projects of neoliberal governmentality, and that such structuring is ignored by a dominant approach to public health analysis and promotion that finds refuge in “neutral science” and “objectivity.”

Cases are in this regard designed, as Odell notes, “to put concrete flesh on the bare bones of an abstract idea in order to help readers see its meaning more clearly, and to convince them that the idea is relevant to at least one significant real-world instance.”<sup>64</sup>

Because these case studies are employed to concretely develop a theoretical proposition, it is also worth noting that they exhibit a marked degree of similarity in terms of the outcome, that is, the structuring of knowledge (*episteme*), technologies of governance (*techne*), and subjectivity (*ethos*) in a way that is consistent with the elements of neoliberal governmentality. This approach is a critical element of theory-building. In their discussion of case methodology applied in the comparative historical context, Skocpol and Somers point to the fact that building theory through case analysis requires this degree of similarity in outcome in order to demonstrate

---

<sup>63</sup> A. Lijphart, "Comparative Politics and the Comparative Method," American Political Science Review 65 (1971).

<sup>64</sup> John Odell, "Case Study Methods in International Political Economy," International Studies Perspectives 2 (2001): 163. Odell himself is building upon Lijphart's observation that case studies can help develop or refine theoretical specifications where no theory exists or where concepts are vague.

how the relevant process or factor(s) produce a particular effect across the different cases.<sup>65</sup>

In deciding which cases to analyze, two considerations are important. Because of the project's focus on the public health dimensions of NCDs, it is important to direct attention toward countries where morbidity and mortality are predominantly attributed to chronic diseases such as cardiovascular illness, cancer, and diabetes. Second, given that a key concern of this project is the *practice* of public health – from the creation of knowledge to the implementation and evaluation of programs – it makes sense to select cases where these practices are well-established and institutionalized. By this I mean cases where a systematic public health infrastructure exists, and not in an informal or haphazard fashion; one would expect it to be organized into established institutions, and funded to the extent that it can perform basic health surveillance and data collection, as well as conceptualize and implement population health initiatives.

With these two criteria in mind, I have selected three case countries – the United States, the United Kingdom, and Sweden – all of which meet these basic requirements. I explore through them the extent to which public health manifests itself as an example of neoliberal governmentality in the treatment of NCDs. While more detailed analyses of their systems and public health programs follow in later chapters, some preliminary comments are required to highlight the prevalence of NCDs in the case countries, as well as recent trends with regard to their health care and welfare systems.

---

<sup>65</sup> Theda Skocpol and Margaret Somers, "The Uses of Comparative History in Macrosocial Inquiry," Comparative Studies in Society and History XXII (1980).

## Chronic Disease in the United States, United Kingdom, and Sweden

It would be an understatement to say that chronic disease is a major challenge for the case countries under consideration here. NCDs such as heart disease, stroke, diabetes, and cancer cause 70 percent of all deaths in the United States each year. A large proportion of these deaths, affecting millions of Americans and their families, are preventable.<sup>66</sup> Furthermore, the cost of these illnesses is quite high. CDC noted that for 2003, “the cost of heart disease and stroke [was] projected to be \$351 billion: \$209 billion for health care expenditures and \$142 billion for lost productivity from death and disability.”<sup>67</sup> The United States is not alone in experiencing the mortality burden posed by chronic illness. In 2000, 68% of deaths in Sweden were attributed to heart disease and cancer, with these same two NCDs accounting for 65% of mortality in the U.K. for the same year.<sup>68</sup>

It should be noted that the burden of NCDs in industrialized countries does not end with mortality figures. Because these are diseases that are often managed, and affect individuals over the course of their lives (hence, the often-used term of “chronic” disease), it is helpful to gain a perspective on the long-term care (usually a year or more) of major NCDs in the case countries. In Sweden, for example, 22% of the population is undergoing long-term treatment for these chronic illnesses, while the

---

<sup>66</sup> Centers for Disease Control and Prevention, Programs in Brief: Chronic Disease Prevention, 2003, Centers for Disease Control and Prevention, Available: <http://www.cdc.gov/programs/chronic.htm>, 02/19/2005 2005.

<sup>67</sup> Centers for Disease Control and Prevention, Preventing Heart Disease and Stroke, February 14, 2004, Available: [http://www.cdc.gov/nccdphp/bb\\_heartdisease/index.htm](http://www.cdc.gov/nccdphp/bb_heartdisease/index.htm), March 28 2004.

<sup>68</sup> World Health Organization, European Health for All Database, 2003, World Health Organization, Available: <http://hfadb.who.dk/hfa/>, 02/19/2005 2005.

UK has one of the highest long-term care percentages in Europe – 31%.<sup>69</sup> The management of these diseases over time is also a significant issue in the U.S. The Centers for Disease Control (CDC) estimates that 61 million Americans (approximately 20% of the population) have some form of CVD; additionally, cerebrovascular diseases such as strokes account for the permanent disability of more than 1 million people.<sup>70</sup>

In sum, traditional killers such as infectious disease have been largely displaced in these (as in many other) industrialized countries by “lifestyle” illnesses such as cancer, CVD, and diabetes. They account for the majority of annual deaths, and also pose a significant burden in terms of their management over time; a burden that certainly has economic components, but also takes an emotional and psychological toll on the patients and their loved ones.

#### Health Care Systems in the United States, United Kingdom, and Sweden

It is impossible to speak of distinctions in the health care systems of the three case countries without speaking of differences in their larger structures of welfare provision. In the social policy and specifically welfare state literature, the United States, United Kingdom, and Sweden have historically been presented as cases existing along a continuum of state involvement in the provision and funding of such services as health care, social security and pensions, and unemployment benefits. In his recent analysis of different models of welfare capitalism in industrialized countries, Aspalter highlights the spectrum along which these three cases have

---

<sup>69</sup> European Opinion Research Group, Health, Food and Alcohol and Safety (European Opinion Research Group, 2003), 7.

<sup>70</sup> Centers for Disease Control and Prevention, Preventing Heart Disease and Stroke.

existed. The United States is categorized as the most neoliberal, emphasizing individual responsibility – particularly in the arena of health care, where services are largely financed through private welfare mechanisms such as savings and insurance policies. In addition, social assistance for minimum security provision is subject to means-testing. At the opposite end of the spectrum, Sweden serves as a collectivist model with universal insurance programs for health and unemployment and a more publicly directed pension program. As noted in Table 3, Britain is characterized as mid-point between the two along several dimensions.

**Table 3. Different Approaches to Welfare Capitalism<sup>71</sup>**

<b>Representative Country</b>	<b>Type of Responsibility Emphasized</b>	<b>Type of Security Offered</b>	<b>Major Fields of Social Security Covered</b>
United States	Individual	Minimum security (means tested social assistance) Living standard (pensions, unemployment)	Pensions, unemployment
United Kingdom	Limited collective	Minimum security (universal insurance schemes)	Health, pensions
Sweden	Collective	Minimum security (universal insurance schemes) Living standard (second-tier pensions; and partly by universal insurance programs, e.g. unemployment, health)	Health, pensions, unemployment

To demonstrate how entrenched this spectrum has been in terms of the dominant conceptualizations in the welfare state and health policy literature, it is worth noting that the country placements along it are consistent despite differing explanations for the reasons why. These explanations are conceptualized as arising from various sources – ideology and regime type, to name two. Klass’ analysis of

<sup>71</sup> Source: Christian Aspalter, *Different Worlds of Welfare Capitalism: Australia, the United States, the United Kingdom, Sweden, Germany, Italy, Hong Kong and Singapore* (Australia National University, Asia Pacific Schools of Economics and Government, 2001), 15.

American welfare state exceptionalism highlights the prevalence of the ideological dimension:

Whether employed as part of the phenomenon to be explained, or as part of the explanation, social values and popular ideology are typically arrayed along a dimension parallel to policy performance – contrasting an American ideological preference for limited government, individualism, self-reliance and *laissez-faire* economics with European collectivism and statism.<sup>72</sup>

Another common explanation for difference is that of regime type; Esping-Andersen's quantitative, comparative welfare state analysis developed a three-fold typology of welfare state regime types: liberal, corporatist, and social democratic. As a prototypical liberal country, the United States was identified as having an approach to welfare that emphasizes private, market-oriented strategies, while the paradigmatic example of a state-dominated, social democratic regime was Sweden.<sup>73</sup> Britain, while ultimately categorized by Esping-Andersen as a liberal welfare state, had an overall

---

<sup>72</sup> Gary Klass, "Explaining America and the Welfare State: An Alternative Theory," British Journal of Political Science 15.4 (1985): 428. While Klass highlights a broad spectrum of comparative social policy literature, he especially addresses the ideological value distinctions highlighted by Harold L. Wilensky, Welfare State and Equality: Structural and Ideological Roots of Public Expenditures (Berkeley, CA: University of California Press, 1975).; and Anthony King, "Ideas, Institutions, and Policies of Government: A Comparative Analysis: Parts One and Two," British Journal of Political Science 3.3 (1973). King further develops his argument in a third analytical installment; see Anthony King, "Ideas, Institutions, and Policies of Government: A Comparative Analysis: Part Three," British Journal of Political Science 3.4 (1973).

<sup>73</sup> Gosta Esping-Andersen, Three Worlds of Welfare Capitalism (Cambridge, MA: Polity Press, 1990). This regime typology has been influential in comparative social policy research; see also R.E. Goodin, B. Headey, R. Muffels and H.J. Dirven, The Real Worlds of Welfare Capitalism (Melbourne: Cambridge UP, 1999). Their analysis of the U.S. (liberal), Germany (corporatist), and Netherlands (social democratic) welfare states follows Esping-Andersen's model; and Rebecca A. Van Voorhis, "Different Types of Welfare States? A Methodological Deconstruction of Comparative Research," Journal of Sociology & Social Welfare 30.4 (2002). This latter piece serves as a detailed critique of the Esping-Andersen model. Other regime typologies developed from this seminal work include the northern and southern European context. See Stephan Leibfried, "Towards a European Welfare State?" Social Policy in Changing Europe, eds. Z. Ferge and J.E. Kolberg (Frankfurt: Campus Verlag, 1992).; and Maurizio Ferrera, "The Southern Model of Welfare in Social Europe," Journal of European Social Policy 6.1 (1996).

ranking well between the extremes of Sweden and the United States.<sup>74</sup> Thus, as with the ideological explanation – the U.K. finds itself as a midpoint between the hyper-liberal orientation of the U.S. welfare system and the more collectivist, social democratic model of Sweden.

Despite these entrenched characterizations, and while there is no doubt that each of the health care systems in the case countries retains highly unique characteristics, a consensus emerged by the late 1990s that market-oriented health care reform trends particularly in the United Kingdom and Sweden had yielded a move toward more neoliberal policies such as those the United States pursued in the structure, funding, and delivery of health care.<sup>75</sup> This shift has been identified with several specific market-oriented reforms: a move toward efficiency through the introduction of provider competition and cost-cutting measures in health delivery services; encouragement of private providers in insurance and delivery; and the expansion of patient choice.<sup>76</sup>

In 1994, the Organization for Economic Cooperation and Development (OECD) published a report on health care reform across seventeen countries, including the United States, United Kingdom, and Sweden. The report concluded that “the most remarkable feature of health care system reform across the 17 countries

---

<sup>74</sup> In light of the distinct differences between the United States and case countries such as Britain and Australia, Castles and Mitchell propose a modified typology that adds a fourth category: radical liberal welfare states, which are more redistributive in nature. See Francis G. Castles and Deborah Mitchell, Three Worlds of Welfare Capitalism or Four? (Australian National University, 1991).

<sup>75</sup> Organization for Economic Cooperation and Development, The Reform of Health Care Systems: A Review of Seventeen OECD Countries (Paris: Organization for Economic Cooperation and Development, 1994).; Chris Ham and Mats Brommels, "Health Care Reform in the Netherlands, Sweden, and the United Kingdom," Health Affairs Winter (1994).; S.E. Bergman, Purchaser-Provider Systems in Sweden: An Overview of Reforms in Swedish Health Care Delivery System (Stockholm: Swedish Institute for the Development of the Health Services, 1994).; H. Glennerster, "Internal Markets: Context and Structure." In Health Care Reform through Internal Markets, eds. M. Jerome-Foget, J. White and J.M. Wiener (Washington, D.C.: Brookings Institution, 1995).

<sup>76</sup> Jacobs, "Seeing Difference: Market Health Reform in Europe."

is the degree of emerging convergence.”<sup>77</sup> While one of the most wide-ranging analyses of health care reform, its conclusions were consistent with more in-depth analyses of case countries. Ham and Brommel’s analysis of British, Swedish, and Dutch reforms, for example, also identified growing similarities between the systems, with the greatest distinction among them being the pace of reform – but not its content or orientation.<sup>78</sup>

The implication of this convergence was to narrow the spectrum along which the United States, Britain, and Sweden were historically distinguished with regard to welfare provision writ large, and health care provision specifically. As Jacobs notes: “Many of these ideas [of market-style reforms] derived originally from the U.S. literature on competitive health reform, as well as actual developments in U.S. health care in the late 1970s and 1980s.”<sup>79</sup>

#### Convergence at the Micropolitical Level: The Practice of Public Health

One of the themes to be gleaned from these studies is that all of the discussion about the convergence of public health and other welfare provision in industrialized countries has focused our attention on the level of macro-social policy. While explanations vary as to *why* we are seeing growing similarities – the pressures of globalization, value change, graying populations, to name a few – there is remarkable consistency in terms of the objects of analysis: the institutional structure of the health care systems, and changes as to their form and funding.

---

<sup>77</sup> Organization for Economic Cooperation and Development, The Reform of Health Care Systems: A Review of Seventeen OECD Countries.

<sup>78</sup> Ham and Brommels, "Health Care Reform in the Netherlands, Sweden, and the United Kingdom."

<sup>79</sup> Jacobs, "Seeing Difference: Market Health Reform in Europe," 3.

This project follows a different investigative strategy. Rather than proffering a political explanation of policy convergence at the macro-level, it turns our attention to the *micropolitical* manifestations of neoliberalism within the everyday practice of those public health policies themselves. In other words, this project asks not the question: “*Why* have Britain and Sweden adopted many neoliberal policies consistent with the U.S. model?”; but rather, “*How* have public health practices adopted in all three countries exemplified the production of knowledge, subjectivity, and power structures consistent with a program of neoliberal governmentality?” The reason for adopting such a micropolitical perspective stems from the recognition that the exercise of power – and hence, government - is not a phenomenon constrained to the “high politics” of the state; it is not limited by official policies in the economy, or in the provision of social welfare – though these elements are investigated in the context of public health in Chapter 7. They must, however, be augmented by an evaluation of *how* power operates in the everyday practices of daily life and professional activity. In the context of public health, it directs our attention to a range of questions, all explored in the context of this project: what knowledge is privileged, who is granted the authority and right to generate it, and how are these experts trained; to what end are public health programs on NCDs directed, and on what systems of knowledge are they based; and what kinds of subjects are valorized and how do NCD programs facilitate the production of such subjects?

The answers to these specific questions, and the more general question of “how,” ultimately points to the remarkable consistency of neoliberal public health strategies across all the case countries. Moreover, it emerges out of a detailed

analysis of the ways in which the three elements of neoliberal governmentality described earlier – *episteme*, *techne*, and *ethos* – are brought to life in the understanding, prevention, and treatment of chronic diseases in the three countries. What follows is a brief outline of those specific elements with regard to the plan for the rest of the project.

#### Knowledge (*Episteme*)

One of the key mechanisms for assessing the extent to which public health knowledge exhibits political rationality is to take a closer look at two aspects involved in the production of knowledge and expertise. The first concerns how the phenomenon of disease is approached in the scientific literature – what general concept(s) are privileged across the board, and also in the specific context of NCDs? The second dimension explores how public health experts are produced; who is granted the authority to speak as an expert, and by what qualification? In the context of chronic disease, how are public health experts trained in their academic programs to understand and respond to it?

With regard to the first dimension, two immediate questions present themselves: how to decide which health literature to examine, and how to accomplish the task? The overall approach derives from Skolbekken, whose analysis of publishing trends between 1967 and 1991 ascertained the extent to which a concept such as “risk” manifested itself in the health database MEDLINE and a series of specific medical journals.<sup>80</sup> As we will see in subsequent chapters, “risk” is indeed a

---

<sup>80</sup> John-Arne Skolbekken, "The Risk Epidemic in Medical Journals," *Social Science & Medicine* 40.3 (1995).

key concept of public health and especially epidemiological knowledge. And while his framework provides a useful means of garnering a snapshot of the extent to which a concept like “risk” is a dominant theme, this assessment updates and extends it in several ways: 1) by updating his study to include MEDLINE publishing trends from 1992-2004; 2) by augmenting the health databases to include all of PUBMED, as well as a PUBMED restrictor that returns only results pertaining to cancer (the only NCD restrictor available) – thus facilitating an examination of whether articles on this NCD were more likely to be constructed around risk; 3) by substituting public health journals for medical journals; 4) and by performing a detailed analysis of explanations for chronic disease in a public health journal’s articles over the time frame.<sup>81</sup>

The decision of which public health literature to analyze was based on a recent assessment of the most influential public health journals in the world. In a 2003 report, the Evidence-Based Practice for Public Health Project issued a ranking of these top journals. They were sorted by impact factor (IF), which is a “measure of the frequency with which the ‘average article’ in a journal has been cited in a particular year.”<sup>82</sup> While the rankings list includes journals outside the scope of this study (such as those dealing with toxicology and infectious disease) I focus on the top ten journals in the fields of general epidemiology and public health, which are listed in detail in Chapter 6.<sup>83</sup>

---

<sup>81</sup> Additional details regarding the framework for this analysis and its justifications appear in Chapter 6.

<sup>82</sup> Evidence-Based Practice for Public Health Project, Top 25 Public Health Journals by Impact Factor (University of Massachusetts Medical School, 2003).

<sup>83</sup> Evidence-Based Practice for Public Health Project, Top 25 Public Health Journals by Impact Factor.

While this project is concerned with the patterns of knowledge production in the case countries, it is difficult to establish in the field of public health a body of knowledge or publications which are “purely” American, Swedish, or British. As is evidenced from the rankings list, certain journals are expressly international in origin – the *WHO Technical Reports Series* and the *International Journal of Epidemiology*, for example. However, even in journals such as the *American Journal of Epidemiology*, the editorial staff includes members from Scotland, England, Australia, Canada, and Sweden, and receives article submissions from researchers all over the world.<sup>84</sup> Recognizing this limitation, I augment these top journals with three additional ones, which exist more-or-less to speak to knowledge production and health issues specific to each country: for the United States, the *Journal of the American Medical Association*; for the United Kingdom, the *British Medical Journal*; and for Sweden, the *Scandinavian Journal of Public Health*.

In addition to charting the prevalence of a risk discourse in these journals and in the major health databases, the analysis takes a more in-depth look at chronic disease risk through an evaluation of the titles and abstracts of all articles published in the *Annual Review of Public Health (ARPH)* between 1992 and 2004. The *ARPH* was primarily selected because it afforded the most manageable number of results for hand-coding (307), in comparison with other publications, which frequently generated over 1000 articles during the time frame. In addition, it is a respected journal, identified as the third most influential in the field of public health, according to the impact factor (IF) rankings.

---

<sup>84</sup> American Journal of Epidemiology, *Editorial Board*, 2004, Available: <http://www3.oup.co.uk/jnls/list/aje/edboards/>, 02/19/2005 2005.

Each article was hand-coded on the basis of whether it was directed to the substance of chronic disease as either a specific condition (e.g. cancer) or as a broad category of illness. Moreover, for all articles dealing with NCDs, each was coded as to whether it identified as a proximate risk associated with the illness one or more behavioral factors; “proximate risk” should not be misconstrued as the *only* relevant factor, merely the primary one under consideration in the context of the study. Through an analysis of how articles identify the major sources of NCD risk and risk management, it is possible to discern the extent to which these are located in the individual bodies and habits of the patient.

A second dimension of public health knowledge that I examine is how those who are granted the authority to “speak” in a public health context – the experts who not only produce knowledge but also actualize practices in a programmatic context – are brought to their expertise. In other words, I explore how the chronic disease epidemiologists and public health experts are trained, and evaluate the extent to which that training demonstrates values and norms associated with neoliberal governmentality. To achieve these ends, I analyze several elements: the general M.P.H. curriculum used at the leading public health graduate programs in the case countries – that is, the general body of knowledge and fields deemed essential for mastery of the discipline; the specific curricular content of options or courses offered in chronic disease analysis or prevention; and the spectrum of research programs directed toward NCDs executed under the auspices of the respective institutions.<sup>85</sup>

---

<sup>85</sup> The decision to focus on the M.P.H. curriculum was informed by the fact that this is considered a terminal, professional degree within the discipline (although Dr.P.H.’s are offered for those wishing to pursue academic public health), and that the majority of graduate students enrolled in public health

The decision to complement the analysis of academic training and preparation with attention to the research initiatives pursued at the institutions is informed by a recognition of the mutually reinforcing nature of these dimensions of graduate education; moreover, discerning the content and orientation of these programs toward NCDs communicates what those responsible for the training of new experts believe to be important or worthy of analysis.

Because the United States has a much more decentralized educational system than either the United Kingdom or Sweden, I will be examining the three top public health programs, as ranked by *U.S. News and World Report* in 2003: Johns Hopkins University, Harvard University, and the University of North Carolina at Chapel Hill.<sup>86</sup> For the United Kingdom, I analyze the curricula at the single national school of public health - the London School of Hygiene and Tropical Medicine at the University of London. In Sweden, there is no single national school, but a cooperative suprastate institution, the Nordic School of Public Health, that is managed and staffed by experts from all Nordic countries. While this would have been an interesting institution to explore in detail, the limited availability of curricular and research materials – especially in English – presented a difficult challenge. Thus, the decision was made to assess public health education at the Karolinska Institutet, the country’s premier institution of health education, but one more directed toward

---

programs pursue this degree. For additional details regarding these enrollment patterns for the specific schools, see Chapter 6.

<sup>86</sup> U.S. News and World Report, *Health Disciplines: Public Health*, 2003, Available: [http://www.usnews.com/usnews/edu/grad/rankings/hea/brief/pub\\_brief.php](http://www.usnews.com/usnews/edu/grad/rankings/hea/brief/pub_brief.php), 02/19/2005 2005. Attempts to gauge the rankings by the National Research Council were unsuccessful; while medical school programs were ranked, graduate programs in public health and epidemiology were not.

clinical practice. Where possible, however, reference to the Nordic School is included.

#### Technologies of Governance (*Techne*)

In addition to knowledge production, neoliberal governmentality manifests itself in institutional power structures – in this case, those of the public health sectors of the three case countries. To demonstrate the extent to which we see neoliberal convergence across them, I analyze the transformation of the public health systems prior to and through the health care reform initiatives of the 1990s in all three countries. Specifically, I examine changes in the macrotechnologies of governance that health institutions employ – especially in the arenas of funding, organization, and operational procedure. More specifically, I assess the degree to which decentralization, privatization, and other neoliberal reforms have occurred in these arenas, and how public-private partnerships have emerged to combat health problems like NCDs. In addition to these elements, I also introduce an analysis of the microtechnologies of public health in the case countries – specific strategies such as social marketing and the particular health education and promotion programs directed toward combating chronic disease. A brief sketch of these microtechnologies is augmented in much more detail in Chapter 8, which delves into how three specific health promotion programs are implicated in the construction of particular kinds of subjects.

#### Subjectivity (*Ethos*)

Finally, one of the key elements of neoliberal governmentality is that of subjectivity and the production of identity. As discussed earlier, education (and where appropriate, re-education) is a critical component of transforming one's subjectivity into a particularly neoliberal one. In the case of NCDs in the United States, Britain, and Sweden, I establish how specific *public* health education campaigns designed to reduce the risk of chronic disease emphasize the realm and primacy of the *private* – that is, how they produce and reinforce the idea of individuals being the entrepreneurs of their own health. While any number of programs could be analyzed, the decision to focus on the three outlined below was informed by several factors. First, it was necessary to select programs that were broad in scope, all funded and coordinated through national institutions of public health; as we shall see in subsequent chapters, public health activities are often executed in decentralized settings, and without an element of state coordination, may not constitute a representative program of a national public health system.

Second, the three programs under consideration are useful for identifying the analysis and intervention of NCDs at different stages of the disease process – with two geared toward prevention, and the British program directed toward management of illness already manifest. Finally, the programs are directed toward either the entire population of those experiencing chronic disease or its risks (as in the British case), or toward vulnerable populations: poor, un- and underinsured, older women in the United States, and pregnant and new mothers and their children in Sweden. In order to examine how public health practices are implicated in the production of healthy subjects, one should evaluate programs either universal in scope, or directed towards

those who are most vulnerable, and thus have the most to gain from a transformation in how they relate to and manage themselves.<sup>87</sup> What follows is a brief outline of the three programs that I examine in greater detail in the chapter on subjectivity and neoliberalism.

*United States - WISEWOMAN*

As has already been discussed, the burden of chronic diseases in the United States is staggering, and the management and treatment of them can be particularly difficult for the impoverished and uninsured. As the Centers for Disease Control notes, “uninsured women may be especially vulnerable to such diseases because they are less likely than their insured counterparts to receive breast cancer screening, hypertension screening, cholesterol screening and weight loss and smoking cessation advice from health professionals.”<sup>88</sup>

In 1995, the Centers for Disease Control created the WISEWOMAN program, a health education and service initiative designed to assist low-income, uninsured women screened in CDC’s National Breast and Cervical Cancer Early Detection Program. This screening system also tracks other NCD risk factors and aims to educate women as to reducing their risk of NCDs through the control of such risk

---

<sup>87</sup> In addition to these general justifications, Chapter 8 provides additional detail on the relevance and importance of each program, in terms of its service to vulnerable populations, priority as a national strategy, etc. Despite such justifications, some might continue to proffer objections on the basis of selection criteria. But since the aim of this project is to critique the conventional wisdom that public health is aimed at the level of the population, and is an apolitical realm – and hence is a project not directed toward an overarching, generalizable causal argument – when engaging in analysis which is meant to undermine generalized assertions such as these, the standards for case selection are not as stringent as when performing causal analysis. On this point, see J.H. Hexter, “The Historical Method of Christopher Hill,” *On Historians: Reappraisals of Some of the Masters of Modern History* (Cambridge: Cambridge UP, 1979) 241. Analogous to the work of a defense attorney, I take it to be the role of the critical theorist to proffer evidence that may lead to a “reasonable doubt” in the conventional wisdom of hegemonic discourse.

<sup>88</sup> Centers for Disease Control and Prevention, *Programs in Brief: The WISEWOMAN Program: Capitalizing on Opportunities to Improve the Health of Women*, 2002, Centers for Disease Control and Prevention, Available: <http://www.cdc.gov/programs/health13.htm>, 06/22/2003 2003.

factors as diet, physical inactivity, and tobacco usage. Currently, twelve WISEWOMAN service sites are in practice across the U.S.<sup>89</sup>

#### *United Kingdom - Expert Patients*

The idea of an “expert patient” is centered on the recognition that patients suffering from chronic diseases such as CVD, diabetes, and cancer have an understanding of their own illness that is an untapped resource.<sup>90</sup> In its 1999 White Paper, *Saving Lives: Our Healthier Nation*, the British government first outlined a health education initiative designed around expert patients. An Expert Patients Task Force was set up in late 1999 to develop specific programmatic elements that would educate individuals suffering from chronic diseases to pursue “self-management initiatives.”<sup>91</sup>

#### *Sweden - Smoke-free Children*

A nationwide health education campaign begun in Sweden in 1992 to reduce minors’ exposure to the health risks posed by tobacco, and to reduce smoking prevalence among women. It is a cooperative partnership program between the state public health agency, the National Swedish Institute of Public Health, and two private health advocacy organizations – the Swedish Heart- Lung Foundation and the Swedish Cancer Society.<sup>92</sup>

#### *Dissertation Plan*

---

<sup>89</sup> Centers for Disease Control and Prevention, Programs in Brief: The WISEWOMAN Program: Capitalizing on Opportunities to Improve the Health of Women.

<sup>90</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century (London: UK Department of Health, 2001).

<sup>91</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 3.

<sup>92</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years (Stockholm: 2003).

Having established the general arguments and case method for the project, it is useful to briefly outline its organization, in terms of the goals and content of each chapter. Chapter 1 provides an overview of the project, and elucidates core research questions and arguments. Chapter 2 presents and critiques the state of the literature, and focuses especially on providing an account of the “twin silences” in the political science and public health discourses. Chapter 3 provides an overview of the major NCDs, their scope in the three case countries, as well as several major behavioral risk factors associated with them. Chapter 4 provides a detailed discussion of the theoretical approach, elucidating key concepts such as governmentality and tracing its evolution through various incarnations, including its contemporary neoliberal form. Chapter 5 develops the general theoretical links between neoliberal governmentality and the public health of NCDs; specifically, it demonstrates how the evolution of NCD risk analysis in epidemiology has manifested itself as a dimension of neoliberal governmentality, and provides a general critique of the dominant modes of risk assessment and intervention.

Chapters 6-8 are developed around the three axes of governmentality – *episteme*, *techne*, and *ethos* – incorporating and applying the general insights and arguments advanced in the first several chapters to a more in-depth and focused study of how the public health of chronic disease manifests itself as a project of neoliberal governmentality in the three case countries. Chapter 6 demonstrates how public health knowledge in the United States, United Kingdom, and Sweden is structured as specifically neoliberal knowledge in the identification, treatment, and prevention of NCDs. Chapter 7 assesses the transformation of the structures of power or

governance – specifically formal institutions – in the three case countries, while Chapter 8 demonstrates how public health programs targeting NCDs in all three cases are engaged in the project of creating uniquely neoliberal subjectivities. Chapter 9 offers some concluding thoughts and suggestions for additional research. Most especially, it stresses the need to evolve a public health that is able to counter the hegemonic rationality of neoliberalism and to reclaim its commitment to the public – both as an object and as a means of securing citizens’ health. The means by which this may be accomplished are not written in stone; however, by reinvigorating the analytical commitment to political and socioeconomic influences on health, and by actualizing that commitment at the level of practice and specific programs, we may witness the evolution of such a resistance. It is imperative that public health evolve a more nuanced approach that seeks solutions beyond the level of the individual, and does not see in the potential of behavior a panacea for all the ills of body and mind. For the very processes that condition the behavior so crucial for chronic disease origins are also implicated in the patterns of other disease phenomena: globalization, urbanization, and the policies that reify the strictures of poverty and social exclusion that hinder the health and welfare of so many.

Even as this project opens up many new possibilities into such investigation, the specific trajectory of it has yet to be fixed; however, the cue that this project suggests is the affirmation of the vital nature of cross-disciplinary work. In its conceptualization and development this project marries disparate fields, including poststructural theory, public health, comparative politics, and political economy. Working not at the margins of these fields, but at their intersection, we are afforded a

glimpse into the unique questions and revealing answers that spring from such a union.

## Chapter 2: The Twin Silences

Hence, public health is, inescapably, a political activity.

- John McKinlay and Lisa Marceau

To traverse a path of critique necessitates an accounting of the conditions that enable one to begin upon it in the first place. The conditions germane to the critique generated by this project center on a common feature shared by both the political science and public health discourses: silence on the political implications of chronic disease and the strategies developed to prevent it. In the case of one discipline, NCDs are off the proverbial radarscope of either high or low politics, even as infectious disease comes to be analyzed in a political context. In the case of public health, a rich body of literature and disciplinary practices have emerged that address the subject of chronic disease in general, as well as specific ailments like cancer or diabetes; however, these construct the problems, and solutions, in terms that are primarily the province of the private sphere: individual risk factors, especially behavioral ones. In such a view, there is little place for political analysis of either the determinants of disease, or the way in which public health as a discipline responds to it. Therefore, the following analysis demonstrates how these discourses function to depoliticize NCDs, and in doing so, sets the stage for a political critique to be articulated.

*Political Science: The Legacy of Traditional Security Models and the Privileging of Infectious Disease*

One of the most effective means by which we can ascertain the relative exclusion of NCDs from the analytical arena of political science to is to highlight how

the general treatment of ill-health has typically been approached – as I argue, the problem that infectious diseases pose to the security and stability of states. In so doing, it is possible to illuminate not only the general premise that infectious diseases are privileged objects of analysis in the politics of health, but why their features, as opposed to those of NCDs, have made them so conducive to inquiry in political science, and especially international relations.

While disease has been an omnipresent phenomenon since time immemorial, it has only recently found itself ensconced in political science debates as an issue other than its ramifications as a weapon or as a policy topic germane to the organization and distribution of health care. Since the end of the Cold War, the security studies literature of international relations in particular has been marked by a heightened diversification in themes and topics addressed, from the critical assessment of the discourse and practice of security, to the call for an expanded “human” security agenda.<sup>93</sup> Such an agenda is designed to move away from “conventional” notions of security--the protection of a territory and population bounded to a sovereign or semi-sovereign state from an external military threat<sup>94</sup>-- and move toward the inclusion of such non-military, transborder issues as disease, as well as environmental decline and crime.

---

<sup>93</sup> See, for example: Tuchman Matthews, "Redefining Security."; Myers, "Environment and Security."; and United Nations Development Program, "Redefining Security: The Human Dimension," Current History 94.592 (1995). For both a critical appraisal of the security discourse and a treatment of the expansion of the security agenda, see chapters in Krause and Williams, eds., Critical Security Studies: Concepts and Cases.

<sup>94</sup> That modern states are not completely sovereign is suggested Krasner in *Organized Hypocrisy* (1999). He furthermore articulates that the Westphalian model of state sovereignty is an “institutional arrangement for organizing political life that is based on territoriality and the exclusion of external actors from domestic authority structures” Stephen Krasner, Sovereignty: Organized Hypocrisy (Princeton: Princeton University Press, 1999) 20. This definition is the context in which the “state” and “state sovereignty” are referred to in this project.

In focusing on these transborder problems, scholars frequently point to two dimensions that make such problems unique and fundamentally perplexing for security studies. The first concerns a shift in the object of security, in that *individual* welfare, not the state, becomes the object to be secured, and the second pertains to the inadequacy of a territorially bounded state to address and redress these problems. With regard to this first dimension, Krause and Williams argue that shifting the focus from state survival as the object of security to the survival of the individual paradoxically facilitates an engagement with the “broadest global threats.”<sup>95</sup> In addition to a purported shift in the object of security, other scholars have articulated the functional incapacity of the state to address transborder issues. Cusimano notes in reference to the inadequacy of the existing institutional architecture: “as presently constructed, states have less ability to respond to transborder problems because their realm of activity and infrastructure do not permit it.”<sup>96</sup>

Despite the claim from human security scholars that threats posed by transnational problems like disease are fundamentally distinct from traditional enemies, the construction of disease as a security threat in the discourse does little to validate this argument. Rather, it is the compatibility of infectious diseases with the traditional security paradigm that has made them a more conducive object of analysis than NCDs.

---

<sup>95</sup> Keith Krause and Michael Williams, "From Strategy to Security: Foundations of Critical Security Studies," *Critical Security Studies: Concepts and Cases*, eds. Keith Krause and Michael Williams, Borderlines (Minneapolis: University of Minnesota Press, 1997) 45.

<sup>96</sup> Maryann Cusimano, "Beyond Sovereignty: The Rise of Transborder Problems," *Beyond Sovereignty: Issues for a Global Agenda*, ed. Maryann Cusimano (New York: Bedford/St. Martin's, 2000) 32.

A critical element of elucidating this argument is first the establishment that infectious diseases are indeed privileged. Thus, to the extent that health and disease are objects of analysis in political science and especially the sub-field of international relations, they are approached in a narrow context that highlights the dangers posed by transmissible illnesses like HIV/AIDS, “re-emerging” diseases like tuberculosis, cholera, and emerging infections like SARS.<sup>97</sup> As objects of analysis, these dominate the health security literature, and are the prototypical examples used to clarify the concept. To illustrate this, one need only consider Murphy’s call for the expansion of the international relations teaching and research agenda to focus on “the new global health politics.” He characterizes this issue in terms that reify infectious diseases as the privileged objects of analysis:

These are health problems of the world’s poor that have penetrated enclaves of the world’s rich. Drug-resistant tuberculosis from a newly impoverished Siberia rapidly moves to every continent and the disease becomes nearly as great a killer at the end of the twentieth century as it was at the beginning. Cholera moves from Andean barrios to suburbs of Boston. New strains of AIDS are following the routes of the international sex trade to the homes of its wealthiest consumers. There

---

<sup>97</sup> Holly Burkhalter, "The Politics of AIDS," *Foreign Affairs* 83.1 (2004). While Burkhalter provides a macrolevel policy perspective on the political impediments to reducing the burden of AIDS in the region, Ostergard (2002) focuses more specifically on how HIV/AIDS negatively impacts defense capacity and preparedness in the region, as well as prospects for economic stability Ostergard, "Politics in the Hot Zone: AIDS and National Security in Africa." Boone and Batsell, using Africa as a regional backdrop to highlight the grievous impact that HIV/AIDS can exact, provide more of a critique of political science as a discipline that heretofore has been ill-equipped to handle political issues (such as AIDS) that are not immediately recognizable as having a genesis in interstate politics Boone and Batsell, "Politics and AIDS in Africa: Research Agendas in Political Science and International Relations." Other publications that address the sociopolitical dimensions of HIV/AIDS include Sara Glasgow and Dennis Pirages, "Microsecurity," *Plagues and Politics: Infectious Disease and International Policy*, ed. Andrew T. Price-Smith (New York: Palgrave, 2001).; and Price-Smith, ed., *Plagues and Politics: Infectious Disease and International Policy*. On reemerging infectious diseases like cholera, see K. Lee and R. Dodgson, "Globalization and Cholera: Implications for Global Governance," *Global Governance* 6 (2000).. And on the subject of SARS, see Curley and Thomas’s (2004) study of its implications for stability and prosperity in Southeast Asia Melissa Curley and Nicholas Thomas, "Human Security and Public Health in Southeast Asia: The Sars Outbreak," *Australian Journal of International Affairs* 58.1 (2004).; and Tan’s (2003) perspective on the implications of SARS for Taiwanese sovereignty Perry Tan, "Sars Brings out Taiwan's Sovereignty Issue," *Asia Pacific Biotech News* 7.10 (2003).

is a new international politics that surrounds these new disease patterns, a politics that links the world's rich and the world's poor.<sup>98</sup>

While Murphy and other scholars are correct in pointing to the dissemination of infectious diseases across borders, and in some cases across classes, they ignore the far more common phenomenon of so-called “lifestyle” diseases of industrialized countries spreading to the world's poorer regions. Even recognizing that HIV/AIDS exacts devastating consequences for a number of countries, far more people die annually of CVD or cancer than it, tuberculosis, cholera, or SARS. Yet these infectious diseases dominate the political science discourse on health. How might we account for this phenomenon? Three reasons suggest themselves: that sudden, violent, and widespread epidemics of infectious disease can be a powerful catalyst for social and political change; that the agents responsible for infectious disease can be targeted and eliminated; and that there is an immediacy to them that necessitates response. In conjunction, these reasons illuminate how the “novel” threat of infectious disease is compatible with traditional notions of security, and hence easily shadow NCDs as the dominant object of analysis in the discourse on health politics.

#### Infectious Disease as a Catalyst for Transformation

To say that communicable illnesses are privileged in the discourse on health security is to recognize that they, far more than NCDs, have been framed in such a way as to be compatible with existing modes of conceptualizing and providing for security. There are multiple ways in which this compatibility manifests itself; one of the most relevant is that infectious disease has been noted as having tremendous

---

<sup>98</sup> Craig Murphy, "Political Consequences of the New Inequality," *International Studies Quarterly* 45 (2001): 352.

transformative power that can restructure modes of political and economic organization, as well as patterns of social relations. But in order to radically transform—and even destroy—the political structures and economies of entire societies, diseases have to be capable of replication, usually in and between human hosts. Thus, historians and disease scholars such as Hobhouse, McNeill, Cartwright, and Crosby overwhelmingly turn their attention to infectious, as opposed to non-communicable diseases.<sup>99</sup> In addition to being infectious, the disease must yield an epidemic sufficiently broad in scope. Transformation cannot be achieved through isolated outbreaks with limited mortality. Thus, the literature, in referencing the more historical tomes, has tended to point to the “great plagues” of history—high mortality affairs including the epidemics that besieged both ancient Greece and Rome, the Black Death, and the introduction of smallpox to Amerindian populations in the sixteenth and seventeenth centuries. In all of these cases, morbidity and mortality rates were high, with individual epidemics often persisting from one to three years.<sup>100</sup>

With these great historical plagues as a reference point, the disease/security discourse has turned its attention to contemporary diseases that share similar characteristics. Diseases focused on, therefore, are infectious-- the product of “vast

---

<sup>99</sup> Henry Hobhouse, Forces of Change: An Unorthodox View of History (New York: Little, Brown and Company, 1989).; William McNeill, Plagues and Peoples (New York: Doubleday, 1977).; Frederick Cartwright, Disease and History (New York: Barnes and Noble, 1972).; and Alfred Crosby, Ecological Imperialism: The Biological Expansion of Europe, 900-1900 (New York: Cambridge University Press, 1986). Only Cartwright devotes a chapter to a non-infectious disease—hemophilia, Cartwright, Disease and History 167-96.

<sup>100</sup> Cartwright and McNeill discuss at length the major plagues of ancient Greece and Rome. While data from these eras is not entirely reliable, it is estimated that the plague of Justinian claimed at its height 5000 victims per day McNeill, Plagues and Peoples 104. With regard to the Black Death, both Hobhouse and McNeill devote a significant amount of time to its discussion; the plague claimed a significant portion of the European population Hobhouse, Forces of Change: An Unorthodox View of History 16. Finally, the drastic consequences of smallpox for Amerindian populations are prominently discussed by Cartwright, Crosby, McNeill, and Jared Diamond, Guns, Germs, and Steel: The Fates of Human Societies (New York: W.W. Norton and Company, 1998).

attacks on humans by a vast army of ‘phantom warriors’—viruses, bacteria, and parasites.”<sup>101</sup> Furthermore, the examples most often cited as threats are broad in scope, and are regional epidemics or global pandemics.<sup>102</sup> Finally, a “disease” is characterized by a high degree of intensity, as evidenced by morbidity (the ability of the disease to induce illness) and mortality (the ability of the disease to induce death). Two of the most oft analyzed diseases in the security discourse thus reflect high morbidity and/or mortality: HIV/AIDS, a phenomenon for which treatments are limited and expensive and no cure is available; and tuberculosis, a resurgent disease that no longer responds to conventional antibiotics.<sup>103</sup>

From an assessment of the discursive practices pertaining to the framing of disease, we are left with a fundamental question: how does this particular conceptualization of disease—infectious, large-scale, often with high morbidity and/or mortality—facilitate its construction as a conventional security threat? In other words, how does framing disease in this manner serve to present it as a threat in terms compatible with the security of the sovereign or semi-sovereign state? An examination of the consequences of these transformative episodes suggests a potential answer to these questions.

Although many medical historians have analyzed the socially constructed aspects of disease, it is nonetheless also a biological process that derives its transformative power through its physical interaction with humanity—through its

---

<sup>101</sup> Fox, "Phantom Warriors: Disease as a Threat to U.S. National Security," 121.

<sup>102</sup> See Pirages' and Runci's (2000) assessment of the HIV/AIDS epidemic in Africa (20.7 million infected) and Asia (19.1 million), cholera in Latin America (one million infected), and malaria worldwide (300 million infected), Pirages and Runci, "Ecological Interdependence and the Spread of Infectious Disease," 183.. See also Chow's (1996) assessment of tuberculosis (1.9 billion affected worldwide), Chow, "Health and International Security," 63.

<sup>103</sup> See, for example Pirages and Runci, "Ecological Interdependence and the Spread of Infectious Disease," 183-84.; and Chow, "Health and International Security," 63-65.

power to kill and to depopulate. In this manner, the altering of governmental apparati, patterns of political and/or economic relations, and societal composition are the tangible means by which change is signified. In the case of Athens, for example, an epidemic raged between 430-429 B.C.E. that had profound consequences along these lines. According to McNeill,

...in that single season the disease inflicted a blow on Athenian society from which it never entirely recovered. This unforeseen and unforeseeable epidemiological accident, as Thucydides implies, may have much to do with the failure of Athenian plans for the defeat of Sparta and the Peloponnesian League. Had Athens won that war, how different the subsequent political history would have been!<sup>104</sup>

In another case, the plague that raged during the reign of Justinian not only undermined the power and reach of the Roman state, but also comparatively shifted the locus of world power from the Mediterranean regions to continental Europe.<sup>105</sup>

One thousand years later, the Black Death radically changed the nature and trajectory of European society. Depopulation was responsible to a great extent for the transformation of economic and political practice: the decline of serfdom and the manor system, changes in patterns of land tenure and inheritance, and an increase in technological innovation to mitigate the decline in the labor supply, among others.<sup>106</sup>

While such historical, transformative episodes predate the emergence of the modern state and hence the national security constructs associated with it, they are useful in that they demonstrate the logic that is employed in contemporary analyses that frame disease as a specific threat to national security. More specifically, analytical priority is focused on widespread epidemics capable of producing

---

<sup>104</sup> McNeill, *Plagues and Peoples* 94.

<sup>105</sup> McNeill, *Plagues and Peoples* 113.

<sup>106</sup> Hobhouse, *Forces of Change: An Unorthodox View of History* 15-21.

disruptive effects in both sociopolitical and economic spheres that are still (at least partially) organized in accordance with the architecture of the modern state.<sup>107</sup> Thus, when scholars speak of the breakdown of “security” along this microbial dimension, they frequently frame it in terms of such disruptive effects, and with reference to these grand transformative experiences. Pirages and Runci, for example, focus on historical episodes where the introduction of a disease into a previously unexposed population leads to the destruction of the prevailing authority structure and government.<sup>108</sup> Additionally, Price-Smith focuses on the consequences of infectious diseases such as HIV/AIDS and tuberculosis for state capacity and economic development, and Davis and Kimball address how infectious diseases have undermined national economic stability in the Asia-Pacific region.<sup>109</sup> But it is Ostergard who illuminates this principle particularly well through his treatment of the consequences of HIV/AIDS in sub-Saharan Africa:

In the short run the virus has the potential to compromise military performance because of the chance for opportunistic infections to appear as a result of soldiers’ weakened immune systems. In the long run fewer capable people will be able to join military forces as the number of suitable recruits declines from increasing death rates. At the same time troops incapacitated by the virus and the decrease in suitable recruits will also have an impact on the available corps of experienced military leaders. The decrease in available, experienced military leadership may contribute to a decline in military performance

---

<sup>107</sup> I do not mean to discount here the forces of economic globalization or politico-economic regionalization (i.e. the European Union). Statist patterns of organization are still relevant, however, and individual countries continue to pursue national economic and social policies.

<sup>108</sup> See, for example, the effects of smallpox on Amerindian populations, Pirages and Runci, “Ecological Interdependence and the Spread of Infectious Disease,” 178.

<sup>109</sup> Price-Smith (2002) conceptualizes state capacity as the ability of government to meet basic needs to ensure survival, territorial integrity, economic prosperity, and ideological projection, Price-Smith, The Health of Nations: Infectious Disease, Environmental Change, and Their Effects on National Security and Development 26. See also Robert Davis and Ann Marie Kimball, “The Economics of Emerging Infections in the Asia-Pacific Region: What Do We Know and What Do We Need to Know?” Plagues and Politics: Infectious Disease and International Policy, ed. Andrew T. Price-Smith (New York: Palgrave, 2001).

and even to a further breakdown in military discipline, particularly in war-prone areas.<sup>110</sup>

What is especially salient with regard to Ostergard's analysis, as with Price-Smith's and others', is that he approaches his analysis from a human security perspective – one that focuses on non-territorially delimited, nonmilitary threats that target individuals as opposed to states, and in so doing are conceived as categorically different from traditional security threats. Yet, the framing of the critical danger posed by the pandemic is consistent with more traditional models emphasizing institutional survival and organizational capacity. In so doing, one simultaneously achieves the objective of exploring a “novel” object of analysis while garbing that analysis in the tropes that have achieved longstanding legitimacy in the international relations field.

The enduring emphasis on the consequences of disease that then translate into a perceived or actual threat to the state is arguably consistent with more “conventional” approaches to the security problematique. The norms and conventions of political practice—those lingering ghosts of the Cold War that whisper of “threats” and what it is we are to secure, certainly offer a partial account of why the discourse frames the threat of disease in the way that it does. But there are other relevant dimensions to the privileging of infectious disease; it is to these dimensions that the reading now turns.

#### Infectious Disease as a Target for Containment or Eradication

---

<sup>110</sup> Ostergard, "Politics in the Hot Zone: AIDS and National Security in Africa," 344.

In addition to its potential as a generator of transformation in political, economic, and social spheres, infectious diseases are the products of and transmitted by identifiable organisms, and thus can be at least targeted for containment, treatment, or eradication. Noncommunicable diseases, on the other hand, have historically been framed – even within the public health and medical communities – as a product of the confluence of factors that problematize isolation and treatment.<sup>111</sup> These influences encompass realms both behavioral – lifestyle choices pertaining to diet, level of physical activity, etc. – and structural, as in genetic predispositions, poverty, and environmental conditions. A 1997 World Health Organization report notes:

The history of medicine and public health shows that infectious diseases can be cured – eliminate or destroy the infectious agent, and the disease is defeated. Chronic diseases, however, are another matter. With a few exceptions, they have not so far lent themselves so easily to cure.<sup>112</sup>

As this pertains to the framing of disease as a security threat, the presence of an agent that can be identified, targeted for containment, treatment or vaccination, and if possible eradicated, fits far better into the security establishment's existing modes for the conceptualization and countering of threat. Although the framing of *unintended* epidemics as a security threat is a phenomenon which has emerged only in the last ten years, the military and political security establishments have long cast a wary eye toward the dangers of biological weapons. Moreover, in the contemporary political climate, dominated as it is by concerns about terrorism and the proliferation of biological and other weapons of mass destruction, the implications of disease for

---

<sup>111</sup> Marks and McQueen, "Chronic Diseases."

<sup>112</sup> World Health Organization, The World Health Report 1997, 4.

national security concerns are readily apparent. This is especially the case given the 2001 anthrax attacks in the United States that, while small in scope, nevertheless galvanized concerns about the threat posed by bioweapons. The potential for biological warfare, or “the deliberate spread of disease among an adversary’s population, livestock, or plant life,”<sup>113</sup> has prompted defense doctrine and research that have sought to counter in multiple ways the microbes responsible for anthrax, plague, botulism, and viral encephalitis. Eppright notes that these strategies, which include detection, avoidance, protection (in the form of vaccines, treatments, and containment to protect uninfected populations), and decontamination, provide an excellent template for a broader “medical defense” that can counter a general security threat posed by unintended epidemics.<sup>114</sup>

Thus, the strategies suggested to deal with the broad threat of infectious disease are already intrinsically linked with a previous framework for countering biological weapons: these strategies focus on the agents themselves (or the host infected with the agent), not the structural conditions (poverty, malnutrition, environmental factors) which facilitate the emergence of the infectious disease. As a result, several of the most oft-suggested means by the security community to counter the infectious disease threat include global surveillance networks, vaccinations, and eradication campaigns, all of which are predicated upon co-opting the public health institutions and infrastructure capable of preventing and/or responding to biological attacks into the national security architecture. As Sam Nunn has remarked:

---

<sup>113</sup> Center for Strategic and International Studies, Contagion and Conflict: Health as a Global Security Challenge (Washington, D.C.: Center for Strategic and International Studies, 2000), 36.

<sup>114</sup> Charles T. Eppright, "The U.S. As 'Hot Zone': The Necessity for Medical Defense," Armed Forces and Society 25.1 (1998).

Public health must become an indispensable pillar of our national security framework. We have to link public health and national security as we have never done before. In the event of a biological attack, millions of lives may depend on how quickly we diagnose the effects, report the findings, disseminate information to the health-care communities..., and bring forth a fast and effective response at the local, state, and federal levels. This means that public health and medical professions must be part of our national security teams.<sup>115</sup>

In this context, the development of capabilities for containment and especially eradication become especially salient. A late 1990s hearing held by the U.S. House Committee on International Relations on the threat of infectious disease to national security focused extensively on this last strategy. A series of questions submitted by members of the committee to a representative of the World Health Organization targeted the possibilities for eradicating a number of infectious diseases, and inquired as to candidate agents, timelines, and projected investment costs.<sup>116</sup> As Committee Chairman Benjamin Gilman optimistically noted: “we have a world without smallpox. Let’s try to imagine a world without leprosy or measles and we can do that...I suggest we can do even more. We are fully capable of eliminating whole classes of diseases from our planet.”<sup>117</sup>

---

<sup>115</sup> Sam Nunn, "The Future of Public Health Preparedness," Journal of Law, Medicine, & Ethics 30.3 (2002): 203. Nunn is not alone in addressing the implications of using disease as a weapon. See also, for example: Carter (2004), who addresses institutional reforms needed to improve counterproliferation efforts towards biological weapons Ashton B. Carter, "How to Counter WMD," Foreign Affairs 83.5 (2004).; Leitenberg (2003), who addresses the distinctions between offensive and defensive biological weapons research Milton Leitenberg, "Distinguishing Offensive from Defensive Biological Weapons Research," Critical Reviews in Microbiology 29.3 (2003).; O’Neil’s (2003) analysis of the likelihood of widescale terrorist use of biological weapons and other WMDs – Andrew O’Neil, "Terrorist Use of Weapons of Mass Destruction: How Serious Is the Threat?" Australian Journal of International Affairs 57.1 (2003).; and Wright’s (2002) edited volume on the history of bioweapons use, and the specific biodefense policies employed by actors such as the U.S., India, and Israel. Susan Wright, ed., Biological Warfare and Disarmament: New Problems/New Perspectives (Lanham: Rowan and Littlefield: 2002).

<sup>116</sup> "Threat to the U.S. From Emerging Infectious Diseases," Committee on International Relations (Washington, DC: 1997), House of Representatives, 71-73.

<sup>117</sup> "Threat to the U.S. From Emerging Infectious Diseases," 3.

While Gilman's optimism is not universally shared, the example illustrates how the *general* problem of infectious disease lends itself to securitization: a pre-existing framework designed to address biological weapons is already in place, and the strategies employed there are perceived as useful for monitoring and containing potential epidemics. In the military/security arena, no such framework exists with regard to noncommunicable diseases. Their perceived causes, as previously indicated by the statement from the World Health Organization, do not lend themselves to intervention and targeting as easily as do infectious agents.

#### The Immediacy of Infectious Disease

The final manner in which infectious disease is privileged in its compatibility with preexisting analytical and praxiological dimensions of security, is its immediacy. Put simply, infectious disease is a tremendous problem *now*, in many areas of the world. In 1999, there were 53.9 million premature deaths worldwide. Of these, infectious diseases accounted for 25% (13.3 million).<sup>118</sup> One of the most prevalent and deadly of these, HIV/AIDS, is exacting a devastating toll – particularly in Southeast Asia and Sub-Saharan Africa. Currently, the Sub-Saharan region is the most adversely affected. As of 2001, 28.5 million people in the region were HIV positive—more than two thirds of the world's totals. In Botswana, 36% of the population is currently infected, and South Africa's infection rate exceeds 20%.<sup>119</sup> In terms of longevity, the scope of the AIDS problem is such that it has actually reversed upward life expectancy trends. In the nine countries where more than 10% of the

---

<sup>118</sup> World Health Organization, The World Health Report 1998, 15.

<sup>119</sup> UNAIDS, Report on the Global HIV/AIDS Epidemic (Geneva: UNAIDS, 2002).

population are infected, the average life expectancy estimated for 1995-2000 is 48 years; in the absence of AIDS, that same expectancy would have been 58.<sup>120</sup>

Because infectious diseases such as HIV/AIDS pose a tremendous challenge in the contemporary context, it is compatible with a security framework that is focused on immediate and present challenges to the state, and is ill-equipped to deal with forward projections of a dynamic political or threat environment. Dalby has pointed to the general difficulty that security analysts and scholars have with addressing threats outside their immediate field of vision, due to a preoccupation with control, predictability, and permanence.<sup>121</sup> Such an overwhelming emphasis on these issues does not lend itself well to internalizing awareness of threats not yet or only tangentially on the horizon. Thus, the inability of security analysts to predict the fall of the Soviet Union and the end of the Cold War has remained a testament to the pervasive focus on the status quo, on the immediate threat environment, that has so characterized the security establishment.<sup>122</sup>

If infectious disease can be conveniently encompassed within a security framework that is designed to respond to imminent threats, NCDs have been off the proverbial radar scope for the majority of those in political science analyzing the political and economic dimensions and consequences of ill health. But even for those

---

<sup>120</sup> UNAIDS, Report on the Global HIV/AIDS Epidemic.

<sup>121</sup> Simon Dalby, "Security, Modernity, Ecology. The Dilemmas of Post-Cold War Security Discourse," Alternatives 17.1 (1992): 98.

<sup>122</sup> Wyn Jones (1999) has a substantial treatment on the lack of foresight by security analysts with regard to the end of the Cold War Richard Wyn Jones, Security, Strategy, and Critical Theory (Boulder: Lynne Rienner, 1999). For further discussion on this topic, also see John Lewis Gaddis, "International Relations Theory and the End of the Cold War," International Security 17.3 (1992-1993).; Kenneth Waltz, "The Emerging Structure of International Politics," The Perils of Anarchy: Contemporary Realism and International Security, eds. Michael Brown and et al. (Cambridge, MA: MIT Press, 1995).; and John J. Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," The Perils of Anarchy: Contemporary Realism and International Security, eds. Michael Brown and et al. (Cambridge, MA: MIT Press, 1995).

who recognize the additional burdens that NCDs place on health delivery systems, the very concept of an epidemiological transition implies that NCDs may be deferred as a future scenario, put off until the more immediate problems of infectious disease can be dealt with. Bearing this in mind, infectious disease is privileged because it is compatible, in multiple ways, with the conventional modes for conceptualizing and providing for security, and hence for countering threat: it is capable of generating sudden, dramatic, and indeed transformational change that can threaten the integrity or capacity of the state; it is linked to identifiable agents which can be targeted - microscopic, but still corporeal entities than can be contained or killed; and finally, it is highly visible in its immediacy, all conditions that fit especially well with a national security framework so dominant during the Cold War.

NCDs, on the other hand, have neither the sudden transformative impact on social organization nor are construed as having origins in a source other than the nebulous web of lifestyle choice, genetic predisposition, and other factors. Finally, in a discipline that fetishizes the existential crisis – such as the prospect of mutually assured destruction – the slow, diffuse nature of the threat posed by chronic disease simply fails to arouse the interest and sensibility of traditional security studies.

Hence, chronic illnesses have remained an elusive object of political analysis. While the central aim of this project is devoted to providing a political reading of public health approaches to chronic disease, part of this task involves providing an account of the second silence: the depoliticization of NCDs in the public health discourse.

*Depoliticizing NCDs: Risk and the Primacy of Behavioral Choice*

A feature of the public health discourse that facilitates the construction of NCDs as apolitical is the tendency to frame the origins of such problems in a complicated web of interrelated risk factors – many of them behavioral in nature. Contemporary public health is inextricably linked to risk analysis, where risk is defined as the “probability of an adverse outcome, or a factor that raises this probability.”<sup>123</sup> This emphasis on risk has been charted in Skolbekken’s MEDLINE survey of medical and public health journals from 1967 to 1991. He found that the number of articles with “risk” as either a title or abstract term increased significantly over the time frame, from less than 1000 risk-related articles published in 1967 to over 80,000 published in 1991.<sup>124</sup> This trend, while observed in generalist journals such as *The British Medical Journal*, *The Lancet*, and the *New England Journal of Medicine*, was far more pronounced in specialist publications, most notably in epidemiological journals. While overall the increase in risk articles went from 0.1% in 1967 to 5% in 1991, results for the epidemiological journals indicate a much more pronounced rise: from less than 5% in 1967 to over 50% by 1991, with the majority of the growth occurring in the 1980s. Furthermore, two of the most frequently risk-related illnesses analyzed were the “lifestyle” diseases of coronary heart disease (CHD) and cancer.<sup>125</sup>

To further illustrate this hallmark of contemporary epidemiology, a recent keyword search in a single database - Ebsco Academic Search Premier - for “risk factors and epidemiology” generated more than 2100 hits in peer-reviewed journals,

---

<sup>123</sup> World Health Organization, *The World Health Report 2002* (Geneva: World Health Organization, 2002).

<sup>124</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 296.

<sup>125</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 295.

over a thousand of which were published in the last three years alone. These articles identified risk factors for a range of conditions, such as coronary heart disease, asthma, cancer, AIDS, psychosis and depression, epilepsy, anemia, and many more.<sup>126</sup> Epidemiological risk analysis has become so entrenched as a part of the larger discipline of public health, that some see it transforming that discipline. As Petersen notes, “epidemiology has become so central to the public health endeavor of identifying, reducing exposure to, or eliminating ‘risks’ that it has become almost synonymous with the public health enterprise itself.”<sup>127</sup>

#### Chronic Disease Risk and the Privileging of Behavioral Factors

That assessment and targeting of risk factors is a dominant feature of modern public health – especially when it comes to prevention – is well established, and not without reason. It does, after all, provide direction to global and national health initiatives:

Risk assessment can provide an invaluable, overall picture of the relative roles of different risks to human health; it can illuminate the potential for health benefits by focusing on those risks, and it can help set agendas for research and policy action.<sup>128</sup>

It also facilitates an approach to disease aetiology that emphasizes more nuanced, multifactorial models of causation – a so-called “web” of causation whereby diseases are the product of the interaction of environmental/structural variables, characteristics of the host (patient), and if relevant, the agent (disease organism). For

---

<sup>126</sup> Search performed via Ebsco Host’s Academic Search Premier database – accessed 3/27/04.

<sup>127</sup> Alan Petersen, "Risk, Governance, and the New Public Health," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998) 197. For an elaboration of the dominance of epidemiological thinking to the practice of public health, see Fujimura and et al., "Dissent in Science: Styles of Scientific Practice and the Controversy over the Cause of AIDS," *Social Science & Medicine* 38.8 (1994).

<sup>128</sup> World Health Organization, *The World Health Report 2002*, 4.

the epidemiologist, causation is not only multi-faceted, but itself exists in the dynamic and continuous interactions of different “causative factors,” not in the elements themselves.<sup>129</sup> As epidemiologists McMahon, et al note: “Thus causation is rarely single or simple. Factors of importance operate in concert and their interaction constitutes what has been described as the web of causation.”<sup>130</sup>

Despite the promise of this sophisticated approach to explaining the origins of disease, the health community’s approach to chronic disease has largely directed itself toward a focus on risk factors associated with individual bodies –biological and genetic factors certainly, but most especially behavioral choices. Drawing upon government documents associated with two national health initiatives – Canada’s 1974 Lalonde Report and the United States’ Healthy People (1979, updated 2000), epidemiologists Fairbanks and Wiese conclude that

Public health efforts in disease control evolved from a primary focus on the avoidance of communicable diseases toward one that recognized the role of risk factors, particularly personal risk behaviors, and the responsibility of the individual in preventing illness...from the latter 1970s on, health program planners have placed considerable emphasis on an individual’s ability to choose a healthy lifestyle, and thus reduce the chances of early death from chronic disease.<sup>131</sup>

This change in public health analysis toward risk models of causation and prevention emphasizing behavioral choice, represented a significant break from its historical

---

<sup>129</sup> W. Harding Le Riche and Jean Milner, Epidemiology as Medical Ecology (London: Churchill Livingstone, 1971) 108.; also Robert Beaglehole and R. Bonita, Basic Epidemiology (Geneva: World Health Organization, 1993) 71.; and Krieger, "Epidemiology and the Web of Causation: Has Anyone Seen the Spider?"

<sup>130</sup> Brian McMahon, Thomas F. Pugh and Johannes Ipsen, Epidemiologic Methods (Boston: Little, Brown, 1960).

<sup>131</sup> Jo Fairbanks and William Wiese, The Public Health Primer (New York: Sage, 1997) 88-90. See also Mickey Chopra, "Globalization and Food: Implications for the Promotion of Healthy Diets," Globalization, Diets, and Noncommunicable Disease (Geneva: World Health Organization, 2002).; Robert Beaglehole and D. Yach, "Globalisation and the Prevention and Control of Noncommunicable Disease: The Neglected Chronic Diseases of Adults," The Lancet 362.9387 (2003).; and M. Terris, "Healthy Lifestyles: The Perspective of Epidemiology," Journal of Public Health Policy 13.2 (1992).

commitment to population modes of analysis and intervention. For many years, it was this level of analytical and practical endeavor that distinguished it in part from the clinical practice of medicine.

#### Two Paths Converged: Public Health and the Biomedical Model

As has been documented by medical historians as well as practitioners within the fields of medicine and public health, boundaries between these two disciplines were historically well guarded throughout much of the twentieth century.<sup>132</sup> While points of difference existed on multiple levels, one of the most relevant for this analysis is their professed difference on mechanisms of disease prevention.

According to Bodenheimer and Grumbach:

Chronic disease prevention may be viewed from two distinct perspectives, that of the individual and that of the population. The medical model seeks to identify high-risk individuals and offer them individual protection, often by counseling on such topics as smoking cessation and low-fat diet. The public health approach seeks to reduce disease in the population as a whole, using such methods as mass education campaigns to reduce drinking and driving, taxation of tobacco, and labeling of foods...<sup>133</sup>

Fineberg, writing as a member affiliated with the Association of Schools of Public Health (ASPH), also emphasizes this distinction:

For example, doctors treat individual patients one-on-one for a specific disease or injury...Public health professionals on the other hand, monitor and diagnose the health concerns of entire communities and

---

<sup>132</sup> See, for example: John Duffy, "The American Medical Profession and Public Health: From Support to Ambivalence," Bulletin of the History of Medicine 53 (1979).; Elizabeth Fee and Roy M. Acheson, eds., A History of Education in Public Health: Health That Mocks the Doctors' Rules (New York: Oxford University Press, 1991).; Harvey Fineberg, The Population Approach to Health, 1990, Association of Schools of Public Health, Available: <http://www.asph.org/document.cfm?page=724>, March 27 2004.; G. Rose, "Sick Individuals and Sick Populations," International Journal of Epidemiology 14.1 (1985).; and Thomas S. Bodenheimer and Kevin Grumbach, Understanding Health Policy: A Clinical Approach (New York: Lange Medical Books, 2002).

<sup>133</sup> Bodenheimer and Grumbach, Understanding Health Policy: A Clinical Approach 115.

promote healthy practices and behaviors to assure our populations stay healthy.<sup>134</sup>

A key distinction, then, between the medical (or biomedical) model of disease prevention and that of public health exists at the level of analysis and intervention: individuals or populations. Although Bodenheimer and Grumbach offer a fairly contemporary perspective (2002), and the ASPH continues to make available Fineberg's 1990 piece on its website even now, an examination of the evolution of public health practice over the last fifty years reveals a distinctly different picture: one in which public health has come to embrace the individualist focus inherent in the biomedical model. While it is beyond the scope of this project to go into an extensive evaluation of this historical evolution, it is worth establishing how such a change occurred.

With a mid-twentieth century shift in Western epidemiology and public health focus from infectious diseases to NCDs, and concomitant early studies that established smoking and serum cholesterol as linked with coronary heart disease onset, public health began to adopt models of causation which emphasized risk factors, but more specifically, behavioral risks associated with individuals' lifestyles. Thus, Susser and Susser identify this era as one of "chronic disease epidemiology" characterized by an *analytical* commitment to risk assessment at the individual level in populations, and a *praxiological* commitment to prevention dominated by lifestyle modifications to control risk factors.<sup>135</sup> The effect of these changes in disease

---

<sup>134</sup> Fineburg, *The Population Approach to Health*.

<sup>135</sup> Mervyn Susser and Ezra Susser, "Choosing a Future for Epidemiology: I. Eras and Paradigms," *American Journal of Public Health* 86.5 (1996): 669.

structure and epidemiological models of causation was such that “public health became increasingly accommodationist to the authority of biomedicine”<sup>136</sup>

With the analytical tools and practical means of providing public health becoming much closer to the individualist focus inherent in biomedicine, the field of public health came to be effectively decoupled from its historical focus not only on populations, but also on non-behavioral determinants of disease:

The biomedical paradigm reduced the amount of attention devoted to a wider range of social, behavioral, and environmental forces in the maintenance of health and the production of disease. Issues of socioeconomic status, ethnicity, race and culture, personal psychology and gender were no longer considered significant factors in disease causation as individuals became patients in an expanding tertiary health care system.<sup>137</sup>

While Brandt and Gardner are overzealous in arguing that public health no longer considers these structural factors relevant at all, they do raise a valid point insofar as public health, by adopting one of the foundations of clinical medicine, and by adapting to the changing morbidity and mortality structures in industrialized countries, has come to privilege behavioral risk models of disease and mechanisms for prevention.

Those who would maintain the clear and distinct boundaries of these fields miss the embeddedness of certain elements of the biomedical model in modern public health. Thus, contrary to the assertions of Bodenheimer and Grumbach, Fineberg, and Rose, these are not discrete approaches. Public health, by seeking to transform

---

<sup>136</sup> Brandt and Gardner, "Antagonism and Accommodation: Interpreting the Relationship between Public Health and Medicine in the United States in the Twentieth Century," 711.

<sup>137</sup> Brandt and Gardner, "Antagonism and Accommodation: Interpreting the Relationship between Public Health and Medicine in the United States in the Twentieth Century," 711. Also Elliot George Mishler, Social Contexts of Health, Illness, and Patient Care (New York: Cambridge University Press, 1981).

risk propensities of *individual bodies* through the refinement of their decision processes pertaining to lifestyle choice, adopts a population approach only insofar as it approaches a population as a collection of individuals. Referring to the earlier examples of population-directed prevention strategies suggested by Bodenheimer and Grumbach – health education, taxes on “risky” products like tobacco, mandated food labels – these are all “population” strategies which operate at the site of the individual body, and proceed with the aim of altering one’s decision calculus. This is consistent with those aspects of the medical model whereby a physician, after identifying an at-risk patient, counsels that person to practice behaviors consistent with lowering the risk of disease.

*The Individual and Behavioral Risk in Public Health: Three Sites of Practice*

Having established the general predilection of the public health field to approach chronic disease prevention and management in a manner consistent with a focus on behavioral risk factors, it is important to chart how this privileging manifests itself at multiple sites of public health practice. A closer examination of the public health discourse reveals that the most commonly advocated public health strategies for combating chronic disease operate by “supporting positive behaviour changes and making the healthy choice the easy choice.”<sup>138</sup> Often these strategies are pursued in the context of prevention, a more cost-effective measure than treating acute problems

---

<sup>138</sup> T.P. Gill, V.J. Antipatis and W.P.T. James, "The Global Epidemic of Obesity," Asian Pacific Journal of Clinical Nutrition 8.1 (1999): 80.

once they have manifested.<sup>139</sup> This is evidenced at the global, regional, and state levels of public health practice, both in terms of how the aetiology of chronic disease is explained, as well as how specific programs to combat NCDs are to be implemented.

#### Global

The World Health Organization has been concerned with the burdens posed by chronic disease for some time. Over the past twenty years, efforts to combat NCDs have been predicated upon the recognition of the crucial role of specific, behavioral risk factors in generating disease outcomes:

Epidemiological studies in the 1970s and the early 1980s defined that the major risk factors for CVD (tobacco, unbalanced diet and obesity, physical inactivity, alcohol abuse) may also be associated with other NCD such as some types of cancer, chronic obstructive lung diseases, diabetes, etc. The realization that these risk factors were common to the major NCD and that they are rooted in lifestyles...which can be modified in the community, paved the way for the landmark 1985 Resolution of the World Health Assembly on NCD.<sup>140</sup>

The 1985 resolution charged member states with applying existing scientific knowledge about NCD origins to develop prevention efforts aimed at educating individuals about risk and steps to reduce it.<sup>141</sup> In 1995, recognizing the increased burden that NCDs posed not only in industrialized countries but also globally, it called for integrated prevention of chronic illness in the context of health system

---

<sup>139</sup> Centers for Disease Control and Prevention, "The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease," (Atlanta: Centers for Disease Control and Prevention, 2003), 7.

<sup>140</sup> World Health Organization, Positioning Prevention in Health System Reform: A Focus on Integrated Noncommunicable Diseases Prevention, 3-4.

<sup>141</sup> World Health Organization, Resolution of the World Health Assembly on Ncd (Geneva: World Health Organization, 1985).

reform.<sup>142</sup> In 1997, NCDs provided the theme and substance of the annual *World Health Report*, a publication that puts under the spotlight the most challenging issues facing the health community. In 2001, the WHO developed a series of concrete proposals for treating NCDs in health systems not designed to respond to them.<sup>143</sup> That same year it generated a study that focused on the special burdens NCDs place upon women.<sup>144</sup> And most recently, it has formulated a strategy to combat major risk factors associated with NCD onset, adopted in a resolution in 2004.<sup>145</sup>

With regard to this most recent initiative, the risk factors identified as bearing the brunt of responsibility for NCD onset, and targeted for amelioration, are largely grounded in the private decisions of individuals. The WHO has concluded: “For noncommunicable diseases, the most important risks included high blood pressure, high concentrations of cholesterol in the blood, inadequate intake of fruit and vegetables, overweight or obesity, physical inactivity and tobacco use. Five of these risk factors are closely related to diet and physical activity.”<sup>146</sup>

Toward the end of reducing the prevalence of these risk factors, the strategy calls upon the WHO as well as individual member states to embark upon a series of initiatives to combat NCDs by addressing these risk factors. Specific actions advocated for member states call for:

---

<sup>142</sup> World Health Organization, Positioning Prevention in Health System Reform: A Focus on Integrated Noncommunicable Diseases Prevention.

<sup>143</sup> World Health Organization, Innovative Care for Chronic Conditions (Geneva: World Health Organization, 2002).

<sup>144</sup> World Health Organization, "Women and the Rapid Rise of Noncommunicable Diseases," Noncommunicable Diseases and Mental Health Reader 1.WHO/NMH/02.01 (2002).

<sup>145</sup> World Health Organization, "Global Strategy on Diet, Physical Activity and Health," 57th World Health Assembly (World Health Organization, 2004). It should be noted that these initiatives are representative, highlighting efforts to combat a category of illnesses and risk factors, and do not constitute the full range of research and program initiatives of the WHO, which also pursues similar initiatives for specific NCDs, as well as specific risk factors.

<sup>146</sup> World Health Organization, "Global Strategy on Diet, Physical Activity and Health," 5.

- Establishment of national dietary and physical activity guidelines
- Establishment of national strategies to promote exercise and healthful diets
- Provision of information through education, communication, and public awareness initiatives
- Promotion of “health literacy” in adult education programs
- Labeling of nutrition information on food products

These policy prescriptions, while exercised through public health and other government institutions, still construct the problem of NCDs as one that can only be ultimately remedied through prudent living. Thus, to the extent that these strategies exhibit a political dimension, it is in the framing of a limited and narrowly focused governmental role:

Governments have a primary steering and stewardship role in initiating and developing the strategy, ensuring that it is implemented and monitoring its impact in the long term...Governments need to consider actions that will result in provision of balanced information for consumers to enable them easily to make healthy choices, and to ensure the availability of appropriate health promotion and education programmes.<sup>147</sup>

This role does not extend to intervention or regulation of political, social, and economic processes that give rise to unhealthy behaviors, but in the dissemination of knowledge to make us more informed consumers. From such a perspective, the problem and the solution, therefore, are ultimately grounded in our bodies and choices, and thus not political in themselves. As such, these NCD prevention strategies function to obscure the “public” aspect of public health, devolving it into a series of maneuvers that act on and through individuals, not populations and the political, economic, and social conditions in which they are situated.

The WHO global strategy on diet, physical activity and health holds much promise in the fight against the global epidemic of overweight and obesity and the increasing global chronic disease burden. This

---

<sup>147</sup> World Health Organization, "Global Strategy on Diet, Physical Activity and Health," vol., 11-12.

means that individuals need to be more active and make better and healthier choices for their family; it means that industry needs to provide and promote healthier choices for customers and include better information about their products; and it means that governments need to make sure the public has accurate, science-based information needed to help us better understand the causes and contributing factors to overweight and obesity...<sup>148</sup>

The emphasis on the individual, and on behavioral risk factors, extends not only to how the origins of NCDs are explained and how they are combated, but also in how they are tracked and monitored. The WHO has recently compiled noncommunicable disease information database that “has, for the first time, assembled in one place, country level risk factor data stratified by age and sex, with complete source and survey information.”<sup>149</sup> Currently, it tracks eight major NCD risk factors for 170 countries, compiled from over 2000 sources. These risk factors are overwhelmingly behavioral, and include: alcohol consumption/abstention, fruit and vegetable intake, diabetes prevalence, raised cholesterol, physical inactivity, overweight and obesity, blood pressure, and tobacco use. That NCDs are framed and tracked in such a way that puts the spotlight on individual responsibility – especially through daily diet and activity choices – only serves to further demonstrate how the discipline of public health continues to depoliticize chronic disease.

## Regional

To demonstrate the pervasiveness of individualism and a behavioral risk mentality in public health approaches to NCDs, one must approach the issue through

---

<sup>148</sup> United States Department of Health and Human Services, Comments and Proposed Revisions to the Draft WHO Strategy on Diet, Physical Activity and Health (Department of Health and Human Services, 2004), 4.

<sup>149</sup> World Health Organization, NCD Surveillance: WHO Global Infobase, World Health Organization, Available: [http://www.who.int/ncd\\_surveillance/infobase/web/en/](http://www.who.int/ncd_surveillance/infobase/web/en/), August 25 2004.

different levels of analysis. The Pan American Health Organization's CARMEN Project, begun in 1995 to address the prevalence of NCDs throughout the Americas, similarly privileges individual bodies and behavioral explanations and prevention strategies that educate people to take better care of themselves.<sup>150</sup> The stated purpose of the program "is to improve the health status of the population by reducing the prevalence of the risk factors associated with non-communicable diseases (NCDs). This is attained through integrated health promotion and disease prevention at the community level and their health care services."<sup>151</sup> Despite this emphasis on a community context, the risk factors emphasized and the content of prevention efforts by and large are oriented toward the level of the individual and the reform of her behavior.

While the CARMEN project recognizes the role of such "contextual" factors as poverty, gender (in)equality, and environmental conditions in the genesis of certain cases of NCDs, "[s]moking, inadequate diet, and physical inactivity are considered key risk factors for the preventive action of CARMEN. Therefore, CARMEN acts in the prevention of these risk factors and, in tandem, promotes protective patterns of health."<sup>152</sup> These factors are targeted through several channels - the development of public health policies, community action programs, and the expansion of NCD prevention efforts in the health service sector – all of which are designed to effect changes in personal health status along several dimensions:

---

<sup>150</sup> The English translation for the CARMEN acronym is: Set of Actions for the Multifactoral Reduction of Non-Communicable Diseases.

<sup>151</sup> Pan American Health Organization, About the CARMEN Initiative, Available: <http://www.paho.org/English/HCP/HCN/IPM/cmn-about.htm>, September 5 2004.

<sup>152</sup> Pan American Health Organization, CARMEN: An Initiative for Integrated Noncommunicable Disease Prevention in the Americas, Available: <http://www.paho.org/english/ad/dpc/nc/carmen-info.htm>, September 5 2004.

- Biological conditions, to include blood pressure or cholesterol levels
- Consumption behaviors, to include smoking, diet, and use of alcohol
- Health promotive or protective behaviors, such as regular exercise, or using seatbelts
- Regular screening measures, to include women's exams or annual physicals
- Psychosocial factors, such as stress, social support, and work environment.<sup>153</sup>

With the exception of psychosocial features, which directly consider the individual in a larger structural context, the majority of these actionable areas operate at the level of the individual and the choices he or she makes. To the extent that the procedures for analysis and action do not address the political and economic dynamics that give shape to such choices, the public health community at this level, as well, reifies the construction of NCDs as apolitical phenomena.

State: The United States, Britain, and Sweden

These recurring themes of behavioral risk and individual responsibility are evident in state health programs, as well. In the United States, the Centers for Disease Control's Agenda on Chronic Disease Prevention makes very clear the primary fount of NCD origins, and the means by which they are best prevented or contained:

Developing chronic diseases is not an inevitable consequence of aging; in many cases, their origins are grounded in health-damaging behaviors practiced by people every day for much of their lives. Evidence indicates that with education and social support, people can and will take charge of their health. The national agenda must call for programs that focus on individual responsibility and behavior change...<sup>154</sup>

---

<sup>153</sup> Pan American Health Organization, About the CARMEN Initiative.

<sup>154</sup> Centers for Disease Control and Prevention, "The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease," 8.

The CDC goes on to outline specific programs, such as school health initiatives that educate young people about the dangers of tobacco and alcohol, and provide guidance and opportunities for healthy eating and exercise. Other recommended programs target specific risk factors, such as tobacco; the CDC recommends the establishment of “quit lines” and greater involvement of primary health care providers in advising patients to quit or not to take up smoking. And on the risk factor of sedentary lifestyle, strategies include placing motivational signs near elevators to encourage people to make the “healthy” choice of using the stairs.<sup>155</sup>

In its 2003 update on the National Service Framework for Coronary Heart Disease (NSF CHD), the British Health Service reiterated its goal of reducing mortality from coronary heart disease and stroke by 40% in people under the age of 75, by the year 2010.<sup>156</sup> While several dimensions were addressed in the context of the report, including access to better primary care and faster treatment of heart attack patients, the cornerstone of prevention efforts outlined by the NSF were clustered around the reduction of risk factors such as tobacco usage, physical inactivity, and poor diet. Specific components of the NSF action plan including expanding funding for anti-smoking campaigns, developing a referral system whereby doctors can advise at-risk patients of exercise trainers and facilities in their area, and improving access to fruits and vegetables for all, but especially for children and people with low

---

<sup>155</sup> Centers for Disease Control and Prevention, "The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease."

<sup>156</sup> National Service Framework for Coronary Heart Disease, Delivering Better Heart Services: Progress Report, 2003 (London: National Health Service, 2003).

incomes.<sup>157</sup> All of these actions indicate an orientation of prevention that is predicated upon targeting and reducing established risk factors associated with CHD.

Similarly, the 2004 Wanless Report on the state of population health in Britain elucidates the key principle underlying public health action toward achieving chronic and other disease prevention: “Individuals are ultimately responsible for their own and their children’s health and it is the aggregate actions of individuals, which will ultimately be responsible for whether or not such an optimistic scenario...unfolds.”<sup>158</sup> When individuals choose poorly, the report concludes that it is because of a failure to have the proper information to make wise decisions, an inaccurate calculation of costs and benefits, and/or social context failures that glamorize unhealthy lifestyles.<sup>159</sup> In other words, poor decisionmaking can be attributed to some of the classic examples of market failure, a feature that highlights the infiltration of economic logic in the construction of illness in public health.

The strategies recommended for dealing with these “failures” involve in the first instance intensifying health education efforts to improve public awareness of chronic disease risk factors. Framed as “health literacy” campaigns, these are viewed as critical not only because they educate the public about prevention, but also how to manage an illness once acquired:

The increasing importance of self-care, when individuals monitor and treat their own conditions, means that the ability for patients to understand and then act upon information about their condition,

---

<sup>157</sup> National Service Framework for Coronary Heart Disease, Delivering Better Heart Services: Progress Report, 2003.

<sup>158</sup> Derek Wanless, Securing Good Health for the Whole Population: Final Report (London: United Kingdom Department of Health, 2004), 4.

<sup>159</sup> Wanless, Securing Good Health for the Whole Population: Final Report, 152.

medication and personal surveillance (such as monitoring their blood glucose levels) is crucial to good health outcomes.<sup>160</sup>

Other instruments advocated to encourage individuals to better manage their health include tax schemes to create incentives for individuals to abstain from the consumption of damaging products (as in a tobacco tax), and voluntary partnership agreements that outline roles and responsibilities of patients and physicians in treating a chronic disease, or “exercise prescriptions,” where at-risk individuals present vouchers at local gyms to get necessary activity.<sup>161</sup>

Sweden, more so than either the U.S. or Britain, articulates a public health strategy that considers behavioral risk factors in context; the 2003 National Public Health Strategy identified eleven objectives to better improve the overall health of the population, and to combat chronic diseases in particular. While five pertained to lifestyle choices such as diet, activity, and the use of medical services and screening opportunities, the remainder considered structural factors such as economic security and a safe, clean environment.<sup>162</sup> Nonetheless, the greatest proportion of the disease burden in Sweden has been found to be attributed to lifestyle factors. According to the National Institute of Public Health (NIPH), of the ten most impactful risk factors contributing to ill health, seven were the products of lifestyle choice, with smoking, alcohol, and obesity as the top three factors accounting for 15% of the disease burden.<sup>163</sup> Of the risk factors that the NIPH is actually charged with combating through specific programs, the vast majority are behaviorally based: tobacco,

---

<sup>160</sup> Wanless, Securing Good Health for the Whole Population: Final Report, 159.

<sup>161</sup> Wanless, Securing Good Health for the Whole Population: Final Report, 171-79.

<sup>162</sup> National Institute of Public Health - Sweden, The National Public Health Strategy for Sweden in Brief (Stockholm: National Institute of Public Health, 2003).

<sup>163</sup> National Institute of Public Health - Sweden, National Institute of Public Health in Sweden: A Presentation (Stockholm: National Institute of Public Health, 2000) 17.

STD/HIV, alcohol and narcotic drugs, diet and physical activity.<sup>164</sup> Most recently, these programs have culminated in the preparation of a plan for disseminating health information about lifestyle risk factors, due out in 2005.<sup>165</sup>

With these issues in mind, NCD prevention efforts in Sweden have also focused on working through individuals to reform their lifestyle choices; in an effort to heighten its cancer prevention efforts, the Swedish government implemented the aforementioned Smokefree Children initiative in 1992 to reduce children's exposure to a risk factor strongly linked with cancer onset: tobacco usage. The government has also recently developed a program to tackle another risk factor implicated in a number of chronic diseases: physical inactivity. "Sweden on the Move" began in 2001 as a program to promote regular exercise among sedentary individuals. In a review of the program, Sweden's National Institute of Public Health declared it part of a "long-term strategy of promoting health and preventing disease by increased physical activity."<sup>166</sup>

It is possible, through this cursory examination of different sites of public health practice – global, regional, and state – to get a sense of the pervasiveness of the risk mentality, a focus on individual bodies, and the tenets of behavioralism in charting the aetiology of disease and in mobilizing resources to fight it. If it is a core element of mainstream public health, though, it is not without challenge at the margins. I turn now to addressing the burgeoning critique posed by social

---

<sup>164</sup> National Institute of Public Health - Sweden, National Institute of Public Health in Sweden: A Presentation 17.

<sup>165</sup> National Institute of Public Health - Sweden, The Swedish Public Health Policy (Stockholm: National Institute of Public Health, 2004) 26.

<sup>166</sup> National Institute of Public Health - Sweden, Sweden on the Move 2001 - a Year of Success! (Stockholm: National Institute of Public Health, 2002).

epidemiologists, focused as they are on illuminating structural factors conditioning health outcomes, and to clarifying how the critique manifest in this project is categorically different.

*The Social Question: Social Epidemiology and the Political Analysis of Public Health*

Even given the pervasive evidence of the public health community's tendency to construct NCDs as problems of behavior, some may point to existing epidemiological studies that articulate the role of socioeconomic factors in the prevalence of NCDs. Skeptics may identify a number of publications over the years that have identified a persistent and strong relationship between socioeconomic disparity and ill health.<sup>167</sup> These factors, which include such dimensions as income

---

<sup>167</sup> The literature on the relationship between various dimensions of socioeconomic status and health is extensive. On general aspects of income level, for example, see: G. Pappas, S. Queen, W. Hadden and G. Fisher, "The Increasing Disparity in Mortality between Socioeconomic Groups in the United States, 1960-1986," *New England Journal of Medicine* 329 (1993).; P.D. Sorlie, E. Backlund and J.B. Keller, "U.S. Mortality by Economic, Demographic, and Social Characteristics: The National Longitudinal Mortality Study," *American Journal of Public Health* 85 (1995).; and P. McDonough, G.J. Duncan, D. Williams and J. House, "Income Dynamics and Adult Mortality in the United States, 1972 through 1989," *American Journal of Public Health* 87 (1997). On income inequality, see: G. Smith, M. Davey and D. Blane, "The Black Report on Socioeconomic Inequalities in Health. 10 Years On," *British Medical Journal* 301 (1990).; R.G. Wilkinson, *Unhealthy Societies. The Afflictions of Inequality* (London: Routledge, 1996).; I. Kawachi, B.P. Kennedy, K. Lochner and D. Prothrow-Smith, "Social Capital, Income Inequality, and Mortality," *American Journal of Public Health* 87 (1997).; R.G. Wilkinson, "Income, Inequality and Social Cohesion," *American Journal of Public Health* 87 (1997).; John Lynch, George Davey Smith, Marianne Hillemeir and et al., "Income Inequality, the Psychosocial Environment, and Health: Comparisons of Wealthy Nations," *Lancet* 358 (2001).; Mark W. Massing, Wayne D. Rosamund, Steven B. Wing and et al., "Income, Income Inequality, and Cardiovascular Disease Mortality: Relations among County Populations of the United States, 1985-1994," *Southern Medical Journal* 97.5 (2004). For discussions on educational attainment, see: J.M. Guralnik, K.C. Land and D. Blazer, "Educational Status and Active Life Expectancy among Older Blacks and Whites," *New England Journal of Medicine* 329 (1993).; and I.T. Elo and S.H. Preston, "Educational Differentials in Mortality: United States, 1979 -85," *Social Science & Medicine* 42 (1996). On gender, see: J. Popay, M. Bartley and C. Owen, "Gender Inequalities in Health: Social Position, Affective Disorders and Minor Physical Morbidity," *Social Science & Medicine* 36 (1993).; Peri J. Ballantyne, "The Social Determinants of Health: A Contribution to the Analysis of Gender Differences in Health and Illness," *Scandinavian Journal of Public Health* 27 (1999).; and Dawn Michelle Baunach, "Gender, Mortality, and Corporeal Inequality," *Sociological Spectrum* 23 (2003).

level, income inequality, level of education, and gender and other social inequalities, reveal:

a striking consistency in distribution of mortality and morbidity between social groups. The more advantaged groups, whether expressed in terms of income, education, social class or ethnicity, tend to have better health than other members of their societies.<sup>168</sup>

While many of these studies are focused on the relationship between various socioeconomic variables and all-cause mortality, several highlight the implications for specific NCDs.<sup>169</sup> And whether directed toward explanations of all-cause mortality or particular diseases, this social epidemiology perspective makes very clear how economic, gender, and other disparities can impact health; however, one must not assume that these constitute a *political* critique, as it is understood here.

To provide such a political account would take one of two forms. The first is the identification and exploration of the political determinants of health, or how the norms and ideologies that permeate systems of power condition the well-being of the population. These systems include not only the formal institutions of the state, but the economy and modes of social organization, as well. Thus, it involves interrogating the values and principles that ultimately give shape to the social and economic environments injurious to health – not the environments as determinants themselves, which is the province of social epidemiology.

---

<sup>168</sup> David Blane, "Editorial: Social Determinants of Health - Socioeconomic Status, Social Class, and Ethnicity," American Journal of Public Health 85.7 (1995): 903.

<sup>169</sup> On ischaemic and other types of heart disease, cancer, and chronic liver diseases, see S. McIsaac and R.G. Wilkenson, "Income Distribution and Cause-Specific Mortality," European Journal of Public Health 7 (1997). On obesity, see Maria Essig, "Depression Leads to Obesity, but the Reverse Is Not True," Women's Health Weekly December 5 2002. On CHD, see Wendy E. Parmet, "The Impact of Law on Coronary Heart Disease: Some Preliminary Observations on the Relationship of Law to 'Normalized' Conditions," Journal of Law, Medicine, & Ethics 30.4 (2002). Finally, on diabetes, see John McKinlay and Lisa Marceau, "U.S. Public Health and the 21st Century: Diabetes Mellitus," Lancet 356.9231 (2000).

To illustrate this distinction, consider the case of income inequality. Scholars such as Smith, et al (1990), Wilkinson (1996), and Lynch, et al (2001) have all identified income inequality as a major risk factor for ill health. In these analyses, however, there is no interrogation as to the factors that produce the income inequality, or how public health efforts might respond to those. What political norms are valorized such that inequalities are tolerated? How are these embedded in the institutions and practices that reify such inequalities? A political analysis of this kind might consider how the valorization of such tenets as individual autonomy and efficiency (as opposed to collective responsibility and equity) are exhibited in the kinds of economic and social institutions and practices that facilitate health outcomes.

But to engage these questions is to pursue an entirely different task, one that is outside the purview of mainstream public health practice. Fueling this is perhaps a sense of futility – that aiming public health efforts “upstream” at the irresistible forces that organize our societies and economies is too Herculean a task. Syme, though he too falls back on class as a determinant without addressing political forces which pattern class inequalities, addresses this very issue in the context of conceptualizing a comprehensive public health framework:

The first job in developing such a framework would be to identify the most important population determinants of disease...The most important social determinant of disease is social class. Social class has been an overwhelmingly important risk factor for disease since the beginning of recorded time, and it's related to virtually every cause of disease. We have all made this observation, but we're not sure what to do about it. If revolution is the only useful intervention to the ills of social class, it is not surprising that public health professionals have instead pursued more straightforward research that such as the relationship between physical activity and diabetes.<sup>170</sup>

---

<sup>170</sup> S.L. Syme, Social Determinants of Health: The Community as an Empowered Partner, January 2004, Available: [http://www.cdc.gov/pcd/issues/2004/jan/03\\_0001.htm](http://www.cdc.gov/pcd/issues/2004/jan/03_0001.htm), July 27 2004.

In this regard, the social epidemiology perspective highlights significant, non-behavioral factors conditioning chronic disease patterns, and in so doing provides a valuable contribution that expands the analytical horizons of public health. As illustrated, however, it does not pursue an avenue of inquiry that explores the political origins and determinants of those socioeconomic factors.

The second type of political analysis of the public health of chronic disease refocuses our attention away from determinants of health outcomes to the practice of public health itself. That is, it directs us to consider the way that political values, norms, or ideologies are manifest in the way that diseases are understood, and their causes explained; it also calls us to consider how these values are manifest in the programs and strategies that are developed to prevent and treat NCDs. It is an exercise that encompasses the scholarship of individual researchers, as well as the organization and practices of national public health agencies, and it is, in essence, one that puts the discipline of public health itself under the microscope.

Neither do social epidemiologists engage in this kind of political analysis. Even as they consider socioeconomic factors like class, gender, or ethnicity, social epidemiologists are still *epidemiologists*, concerned with the study of the distribution and determinants of disease in populations. As a discipline, epidemiology is focused outward – on the explanation and ultimate containment of disease phenomena – not inward in reflexive, critical analysis of its own assumptions, values, strategies, and methods. This should not be construed as a slight, but more a recognition that one should not expect epidemiologists to pursue a line of inquiry that is out of the purview of their disciplinary training.

This lack of attention to the political underpinnings of the public health discipline is also informed by a strenuous adherence to the idea that epidemiologists and others in the larger public health community are engaged in a science that is ultimately value-free and inherently neutral. McKinlay and Marceau note:

Many practitioners of traditional public health consider public health and politics (or social action) to be entirely separate worlds and furthermore, believe that they should remain separate. Public-health activities, many believe, ought to remain a value-free, mainly scientific activity, devoid of any partisan preference. Politics, by contrast, can be viewed as a distasteful activity involving powerful self-interested pressure groups, using state power to achieve particular ends, and money and party pressure to affect nationally important decisions.<sup>171</sup>

The authors go on to critique this view of the political – that it cannot be reduced to the machinations of parties and interest groups to exercise power – to suggest that public health is inextricably bound in the realm of politics. However, they do so from the perspective of focusing on determinants: “To disregard these sociopolitical determinants of health is to relegate public health once more to the prevention and promotion of individual risk behaviours (which are mere epiphenomena).”<sup>172</sup>

While their attention to the need for this kind of research is laudable, it is again, only one avenue of inquiry: one need not account for the determinants of disease to provide a political analysis of public health. In this vein, it should be clarified that the main goal of this project is not aimed at providing an account of these determinants of NCDs – though in Chapter 3, I briefly address the significance and implications of the public health community eschewing these and other structural determinants in favor of behavioral risk analysis and intervention. Rather, its central concern is to demonstrate how the cohesive yet subtle, and often unconscious

---

<sup>171</sup> McKinlay and Marceau, "U.S. Public Health and the 21st Century: Diabetes Mellitus," 761.

<sup>172</sup> McKinlay and Marceau, "U.S. Public Health and the 21st Century: Diabetes Mellitus," 761.

attempts by the public health community to depoliticize NCDs, are themselves a political exercise – one that is given logic and shape by the tenets, doctrine, and programs of neoliberalism. The suitability of public health, engaged as it is with the depoliticization of chronic disease, as a sphere to manifest the neoliberal impulse is apropos. As Beck has concluded: “neoliberalism is *high* politics which presents itself as completely *non*-political: the absence of politics as a revolution!” [emphasis in original]<sup>173</sup> After contextualizing the prevalence of NCDs and some key specific risk factors associated with them in Chapter 3, I pursue a more in-depth account of how this revolution manifests itself in public health approaches to noncommunicable disease.

---

<sup>173</sup> Ulrich Beck, What Is Globalization? (Malden: Blackwell, 2000) 122.

## Chapter 3: NCDs and the Risk Discourse of Public Health

In short, I at least have finally been convinced that living is injurious to health.  
- Irving Kenneth Zola

It is necessary to outline the nature and scope of major NCDs, and to trace how the discipline of public health has come to understand their origins and to develop strategies to respond to them. Several arguments emerge beyond the first and most basic assertion that chronic disease is a major health burden globally. Namely, that public health approaches to NCDs have proceeded with an overwhelming bias towards risk analysis and behaviorist models that privilege problems of lifestyle choice. Additionally, that these twin impulses are evident especially when it comes to major categories of NCDs such as coronary heart disease (CHD) and cancer. And finally, that the behaviorist impulse of public health approaches to chronic diseases occludes the larger structural conditions that enable certain “risky” lifestyle choices to proliferate. To proceed without due attention to the nuanced interactions of the individual with her environment that produce risk, is to close off avenues of intervention that could potentially better address the problem of NCDs. In addition, and of key importance for this project, this decontextualization functions to diminish the “public” aspect of public health, devolving it into a didactic institution that educates at-risk individuals: squarely putting the burden of disease prevention and management on the shoulders of the patient, and when appropriate, the physician in the clinical setting.

### Major Noncommunicable Diseases and Their Scope

While there are a number of conditions classified as noncommunicable diseases – long-term blindness and deafness, mental disorders such as depression, chronic respiratory diseases such as asthma, and even violence – several stand out for the burden they pose in terms of mortality and in terms of their distribution among the global population. It is helpful to gain a sense of what they are and the toll they exact globally (in terms of death and/or disability), as well as how the case countries for this project are affected by the major NCDs.

*Cardiovascular diseases* – A number of conditions are classified as CVDs, or diseases which inhibit the proper functioning of the heart and blood vessels. Two of the more common CVDs include myocardial infarction (heart attack) and cerebrovascular disease (stroke). CVD accounts for 17 million deaths annually, or approximately 32% of global mortality.<sup>174</sup>

*Cancer* – “Cancer” is something of a catch-all term, referring to more than 200 specific conditions whereby normal, healthy cells experience “hits” to their genetic structure and subsequently mutate, growing and spreading uncontrollably.<sup>175</sup> WHO estimates that ten million new cases are diagnosed every year worldwide; furthermore, cancer accounts for of 12% global mortality annually, approximately 6 million deaths.<sup>176</sup>

---

<sup>174</sup> World Health Organization, Cardiovascular Disease, Available: [Who.int/ncd/cvd/index.html](http://www.who.int/ncd/cvd/index.html), March 28 2004. See also B. Popkin, S. Horton and K. Soowon, "The Nutrition Transition and Prevention of Diet-Related Diseases in Asia and the Pacific," Food and Nutrition Bulletin 22.4 (2001).

<sup>175</sup> Malin Dollinger, Ernest H. Rosenbaum and Greg Cable, eds., Everyone's Guide to Cancer Therapy: How Cancer Is Diagnosed, Treated, and Managed Day to Day (Kansas City: Andrews Medical Publishing, 2002) 5.

<sup>176</sup> World Health Organization, Cancer, Available: <http://www.who.int/cancer/en/>, March 28 2004.

*Diabetes – Diabetes mellitus* is a condition characterized by an “inherited or acquired deficiency in production of insulin by the pancreas, or by the ineffectiveness of the insulin produced.”<sup>177</sup> Although diabetes has accounted for a small portion of global mortality (less than 2% annually<sup>178</sup>), it is a widespread disorder that lends itself toward long-term management as opposed to cure. In 2000, more than 176 million people worldwide were living with diabetes. As with other NCDs, health experts project these numbers to exacerbate, with estimates of new cases more than doubling by 2030, to 370 million.<sup>179</sup>

In Chapter 1, a breakdown of global mortality trends revealed that they are rapidly displacing infectious diseases as the major source of death in every region of the world except Sub-Saharan Africa and the Middle East, and have continued to pose a greater share of the global disease burden over time.

In 2002, three-quarters of global mortality among adults 15 and older, approximately 32 million deaths, were a product of NCDs. These accounted for nearly four times as many deaths as infectious diseases, maternal, perinatal and nutritional conditions combined.<sup>180</sup> Mortality profiles, however, provide only one dimension of the toll exacted by NCDs, and tend to underestimate their burden by excluding “non-fatal health outcomes.”<sup>181</sup> When we examine the burdens they pose in terms of disability or lost “healthy” years of life, it becomes evident just how

---

<sup>177</sup> World Health Organization, Global Burden of Diabetes (Press Release).

<sup>178</sup> World Health Organization, The World Health Report 2000.

<sup>179</sup> World Health Organization, Diabetes Estimates and Projections, Available: <http://www.who.int/ncd/dia/databases4.htm>, March 28 2004.

<sup>180</sup> World Health Organization, The World Health Report 2003 (Geneva: World Health Organization, 2003).

<sup>181</sup> World Health Organization, The World Health Report 2003, 5.

critical a problem NCDs are especially for high and middle income countries, as noted in Table 4.

**Table 4. Global Burden of Noncommunicable Diseases, 2002<sup>182</sup>**

<b>Countries</b>	<b>% Disease Burden (by DALYs)</b>
Industrialized	80
Middle-income	70
Developing	50

It is not surprising that NCDs should comprise such an overwhelming share of the disease burden in industrialized countries; these are characterized by high life expectancies – into the 70s and 80s – and NCDs tend to be problems that occur in the later stages of life; prior to age 45, for example, NCDs account for less than 1/3 of mortality; from ages 45-59, that figure rises to approximately 2/3; after age 60, they account for over 80%.<sup>183</sup> To get a better sense of how industrialized countries are affected by NCDs, it is helpful to take a close look at the health challenges they currently pose in the three case countries for this project.

*Scope of NCDs in the United States, United Kingdom, and Sweden*

United States

NCDs are an especially serious problem in the United States, in terms of disability and death, as well as cost. More than 90 million Americans are living with at least one, and often multiple chronic diseases, and they account for 70% of the

---

<sup>182</sup> World Health Organization, The World Health Report 2003, 18.

<sup>183</sup> World Health Organization, The World Health Report 1999.

country's mortality. The bulk of deaths are attributed to only four conditions – coronary heart disease (30%), cancer (23%), stroke (7%), and diabetes (3%).<sup>184</sup>

Some of these same conditions are characterized by long-term management and/or disability, as well. Diabetes is well-known as a disease that stays with a patient over time; among American adults diagnosed with diabetes, 37% have had the disease between five and fourteen years, with another 26% having lived with it for over 15 years.<sup>185</sup> As many as 61 million Americans are living with some form of cardiovascular disease, and each year six million are hospitalized as a result of it. Coronary heart disease is one of the leading causes of permanent disability among adults, and more than one million people are rendered permanently disabled as a result of stroke each year.<sup>186</sup>

Furthermore, the fact that NCDs are such a widespread challenge means that they constitute a large share of the economic costs associated with ill health and treatment. Annually, the U.S. economy absorbs approximately \$1.4 trillion spent on medical care costs, of which 75% are attributed to treatments for chronic illness. As the leading cause of death in the United States, heart disease alone accounts for \$300 billion in direct costs for treatment, and another \$129 billion in lost productivity.<sup>187</sup>

---

<sup>184</sup> National Center for Chronic Disease Prevention and Health Promotion, Fact Sheet: Actual Causes of Death in the United States, 2000, March 15, 2004, Available:

[http://www.cdc.gov/nccdphp/factsheets/death\\_causes2000\\_access.htm#graph1](http://www.cdc.gov/nccdphp/factsheets/death_causes2000_access.htm#graph1), March 31 2004.

<sup>185</sup> Centers for Disease Control and Prevention, Data and Trends: Diabetes Surveillance System, Duration of Diabetes, August 4, 2003, Available:

<http://www.cdc.gov/diabetes/statistics/duration/fig1.htm>, March 28 2004.

<sup>186</sup> Centers for Disease Control and Prevention, Preventing Heart Disease and Stroke.

<sup>187</sup> Centers for Disease Control and Prevention, Chronic Disease Overview, October 27, 2003, Available: <http://www.cdc.gov/nccdphp/overview.htm>, March 28 2004.

The overall costs for cancer have been estimated at \$171.6 billion annually, to include both direct treatment as well as lost productivity due to death and disability.<sup>188</sup>

#### United Kingdom

The profile of the United Kingdom is similar to that of the United States, where the vast majority of premature disability and death is attributed to NCDs. Annually, about 41% of deaths are due to cardiovascular disease and stroke, slightly higher than in the United States. Another 25% of deaths are attributed to cancer, and 17% to chronic respiratory diseases.<sup>189</sup> Coronary heart disease is the single greatest cause of death each year, with 115,000 killed; stroke is second at 54,000.<sup>190</sup>

The British government, in its 1999 White Paper on the state of the nation's health, expressed the need to look beyond mortality statistics to how chronic conditions were being (and could be better) managed by those coping with them. In doing so, it employed the concept of "unhealthy years," which are the number of life years characterized by long-standing illness and disability. In the UK, where men's average life span is 75 years, men can expect to experience 15 years of chronic illness and/or disability; where women's average lifespan is 80, 17 years will be spent managing chronic illness. For both men and women, half of those "unhealthy years" are attributed to two NCDs: cardiovascular disease and cancer.<sup>191</sup> Two million

---

<sup>188</sup> American Cancer Society, Cancer Facts and Figures (Atlanta: American Cancer Society, 2003), 3.

<sup>189</sup> United Kingdom Department of Health, Saving Lives: Our Healthier Nation (White Paper) (London: Department of Health, 1999), 17.

<sup>190</sup> United Kingdom Department of Health, Saving Lives: Our Healthier Nation (White Paper), 18.

<sup>191</sup> M.R. Bone, A.C. Bebbington, C. Jagger, K. Morgan and G. Nicolaas, Health Expectancy and Its Uses (London: HMSO, 1995).

hospital-bed days are accounted for by heart disease annually, and over 200,000 new cases of cancer are diagnosed every year; quite sobering is the fact that a third of Britons can expect to get cancer at some point in their lives.<sup>192</sup>

#### Sweden

Recent mortality figures for Sweden indicate that cardiovascular disease accounts for approximately half of annual mortality, with cancer the second leading cause of death for both men and women – at nearly 25%.<sup>193</sup> While mortality from CVD has decreased by 20% since the early 1990s, it still remains the leading cause of death; cancer rates continue to rise; the number of new cases has increased annually by an average of 2%, with 47,000 new cases diagnosed in 2002.<sup>194</sup>

Sweden has the world's oldest population, where one out of every five people is age 65 or older; this creates a public health situation characterized by chronic disease management issues. Cardiovascular disease is implicated not only as the leading cause of death, but also of morbidity in the Swedish adult population. By age 65, 38% of men and 34% of women will be living with heart disease, by age 75, that figure increases to nearly half.<sup>195</sup> In addition to CVD, diabetes is an important health challenge for the aging Swedish population. Over 15% can expect to contract diabetes at some point in their lives, and typically in the later life stages; 90% of

---

<sup>192</sup> United Kingdom Department of Health, Saving Lives: Our Healthier Nation (White Paper), 17.

<sup>193</sup> National Board of Health and Welfare - Sweden, The Cause of Death Register, September, 2001, Available: <http://www.sos.se/epc/english/dorseng.htm>, March 28 2004.

<sup>194</sup> National Board of Health and Welfare - Sweden, Cancer Incidence in Sweden, 2002 (Stockholm: Official Statistics for Sweden, 2003).

<sup>195</sup> National Board of Health and Welfare - Sweden, Health Care Services Statistical Yearbook 2000 (Stockholm: National Board of Health and Welfare - Sweden, 2000).

Swedish diabetes patients suffer from Type 2, which typically occurs in persons over 40 and with a history of overweight.<sup>196</sup>

This snapshot profile of the burdens posed by chronic disease in the three case countries provide a sense of how entrenched NCDs are as a source of death and disability, and in so doing indicate the need for medical and public health systems to be attuned to the burdens they pose on individuals, communities, and societies. For industrialized countries like these three, the orientation of their health systems is already very much directed at combating these illnesses – to a great extent by tackling the major risk factors associated with them. This argument is developed further in Chapters 6-8, which address the particular dynamics of their respective public health systems. For now, having charted the scope and burden posed by several NCDs, including the most responsible for death and disability – heart disease and cancer – it must be established how public health conceptualizes and mobilizes forces against them. In doing so, we witness in greater detail how the earlier discussed themes of individualized risk analysis and behavioralism are manifest especially in the public health of NCDs.

### *Risk Factors and Major Diseases*

In Chapter 2, an analysis of the public health discourse illuminated how the concept of risk (and risk analysis), the behaviorist impulse, and individual bodies are central to modern public health practice. In order to further explore how these phenomena manifest themselves in the prevention and treatment of NCDs, I turn now

---

<sup>196</sup> National Board of Health and Welfare - Sweden, Sweden's Health Care Report, 2001 (Stockholm: National Board of Health and Welfare, 2002), 226.

to an examination of two major categories of them – coronary heart disease and cancer. Through this account, it is possible to discern how not only the medical community, but also the public health community approaches their prevention and treatment in a manner consistent with risk analysis and behavioral modification.

In a standard text on coronary heart disease epidemiology, disease causation is attributed to a number of risk factors, with the four most prominent being rich diet, cigarette smoking, elevated levels of serum cholesterol, and hypertension, with primary prevention strategies directed toward behavioral modification to reduce these risk factors.<sup>197</sup> These key risk factors are echoed and elaborated on by a Mayo Clinic guide to heart health, which attributes the onset of coronary heart disease to a range of risk factors; again, hypertension, diet, cholesterol, and smoking are key, as are physical inactivity, stress, drug use, and non-modifiable factors as family history, age, and gender.<sup>198</sup>

While some of these risk factors a person can do nothing about, the emphasis is placed on lifestyle modification. The Clinic's program for reducing risk of the onset of CHD is based on the "information generated from the experience of Mayo's 2000 physicians and scientists."<sup>199</sup> It involves five key components: to quit smoking by adopting a change in attitude, to "eat for a healthy heart" by increasing fruit and vegetable intake among other strategies, to reduce cholesterol through dietary changes, relying on pharmaceutical assistance as a secondary resource, becoming more physically active, and by managing stress better through behavioral

---

<sup>197</sup> J. Stamler, "Established Major Coronary Risk Factors," *Coronary Heart Disease Epidemiology*, eds. M. Marmot and P. Elliot (Oxford: Oxford University Press, 1992).

<sup>198</sup> Bernard Gersh, ed., *Heart Book*, 2nd ed. (New York: William Morrow, 2000) 138.

<sup>199</sup> Gersh, ed., *Heart Book 2*

modification.<sup>200</sup> These are all elements of lifestyle, and it falls to the individual to not only become aware of their risks, but also to take significant action to reduce them.

The tendency toward constructing NCDs as products of risk factor interaction and toward reducing their onset by targeting these factors is also evident in the health community’s approach to cancer. According to a recent physician-edited and contributed volume on cancer diagnosis and management, the onset of most malignant tumors is understood as resulting from a confluence of potential risk factors, the majority of which are behavioral, as indicated in Table 5.

**Table 5. Risk Factors in Cancer Incidence<sup>201</sup>**

<b>Risk Factor</b>	<b>% Cancer Cases Implicated In</b>
Diet	30-35
Tobacco	30-32
Viruses/infections	10
Sexual practices	7
Alcohol	3-4
Environmental pollution	2
Heredity	2

In their contribution to this guide, physicians Alberts and Loescher explicitly link the objective of cancer prevention with risk analysis and lifestyle modification; they point out that 70% of all cancer incidence is the product of lifestyle choice, and that the main mechanism of prevention is “keeping cancer from developing by reducing risk.”<sup>202</sup> Because the focus is on risk reduction, and the major sources of cancer incidence are grounded in lifestyle practices, the cancer prevention strategies

---

<sup>200</sup> Gersh, ed., Heart Book 2

<sup>201</sup> Dollinger, Rosenbaum and Cable, eds., Everyone's Guide to Cancer Therapy: How Cancer Is Diagnosed, Treated, and Managed Day to Day 5

<sup>202</sup> David S. Alberts and Lois J. Loescher, "Cancer Prevention, Screening, and Risk Assessment," Everyone's Guide to Cancer Therapy: How Cancer Is Diagnosed, Treated, and Managed Day to Day, eds. Malin Dollinger, Ernest H. Rosenbaum and Greg Cable (Kansas City: Andrews Medical Publishing, 2002) 325-26.

they outline are directed toward the transformation of risky behaviors into health-affirming ones. These strategies include smoking cessation, improved diet, regular exercise, safe sexual practices, reduction in exposure to UV radiation, and caution with hormone replacement therapy.

Because the disease prevention strategies outlined here are put forth by the Mayo Clinic and physicians, it is not surprising that they should be characteristic of the so-called biomedical model of disease prevention. But this logic of responsibility and the individuation of risk management are evident in public health approaches as well. To demonstrate how this is the case, consider the public health approaches taken by the British Health Service in addressing these two diseases.

In Britain, the Health Development Agency (HDA), a division of the larger National Health Service (NHS), is tasked with identifying “the evidence of what works to improve people's health and reduce health inequalities.”<sup>203</sup> It was tasked with implementing strategies to reduce the cancer burden recommended in the NHS’ 2000 National Cancer Plan. In its key document outlining British public health approaches to cancer prevention, the HDA addresses seven risk factors – smoking, diet and nutrition, physical activity, obesity, alcohol, sunlight, and radon.<sup>204</sup>

Moreover, the HDA in its report adapts its recommendations on several behavioral factors from an earlier agency report on preventing heart disease:

In the case of smoking, diet and nutrition, obesity and physical activity we have built upon the material covered in the HDA’s *Coronary Heart*

---

<sup>203</sup> Health Development Agency, About the HDA, Available: <http://www.hda.nhs.uk/html/about/index.html>, March 31 2004.

<sup>204</sup> Health Development Agency, Cancer Prevention: A Resource to Support Local Action in Delivering the NHS Cancer Plan, 2002, Available: [http://www.hda.nhs.uk/html/resources/cancer\\_prevention/introduction.html](http://www.hda.nhs.uk/html/resources/cancer_prevention/introduction.html), March 31 2004.; See also United Kingdom Department of Health, The NHS Cancer Plan (London: The National Health Service, 2000).

*Disease: Guidance for implementing the preventive aspects of the National Service Framework* (HDA, 2001) by highlighting the links between these factors and cancer, and updating the subsections on effective interventions and suggestions for action.<sup>205</sup>

The HDA's focus on primarily behavioral risk factors for cancer echoes, as the organization itself suggested, those risks targeted in CHD prevention strategies. In that report, the HDA covers *only* the four behavioral risk factors mentioned. And comprehensive public health strategies to address such factors are largely, though not exclusively tied to effecting change at the individual level. Consider, for example, the comprehensive program outlined for addressing smoking. One of the major elements of the program is geared toward smoking cessation services. The CHD prevention report outlines four specific components of smoking cessation services: influencing smokers' motivations via primary care advice, media campaigns, and warning labels; interventions by the smoker's physician and other primary care professionals; pharmacotherapies such as nicotine-replacement; and behavioral support in the form telephone counseling, self-help, and if deemed appropriate, specialist referral.<sup>206</sup> All of these aim to reduce disease risk by conditioning individual behavior either in a clinical setting or via broader education and counseling campaigns.

Other elements of the public health program that target individuals and their lifestyle choices include media campaigns and advocacy, as they "influence smoking behavior and may be especially appropriate for reaching those who are less educated

---

<sup>205</sup> Health Development Agency, Cancer Prevention: A Resource to Support Local Action in Delivering the Nhs Cancer Plan.; See also Health Development Agency, Coronary Heart Disease: Guidance for Implementing the Preventative Aspects of the National Service Framework (London: Health Development Agency, 2001).

<sup>206</sup> Health Development Agency, Coronary Heart Disease: Guidance for Implementing the Preventative Aspects of the National Service Framework 11.

and those in poor communities.”<sup>207</sup> Even elements which are much more explicitly population based – such as the aim to reduce smoking in public places via legislation or voluntary bans – have as part of their impetus a design to condition individual behavior. Part of the HDA’s justification for this measure is that “the spread of smoking restrictions reduces the opportunities to smoke and thus reduces consumption.”<sup>208</sup>

That the HDA would adopt a risk approach conditioned strongly by behavioral elements is reinforced by the view adopted by the British government writ large. In its 1999 White Paper on the state of the nation’s health, it stressed that when it comes to preventing chronic diseases such as CHD and cancer, the responsibility of prevention falls to the (would-be) patient, who must become an expert at recognizing and managing their risk exposure. “Armed with knowledge and information about risk and being aware of the conditions under which risks can be greater, people can make informed decisions in managing their everyday life.” In elaborating upon the risk factors about which people most need to educate themselves, three are most prominent: physical activity, diet, and smoking.<sup>209</sup>

The role of public health institutions in this endeavor is advisory – aimed at making available the information that helps individuals become better consumers of good health. “In short, it is the role of Government to provide information about risk. But in most cases it is for the individual to decide whether to take the risk.”<sup>210</sup> In so

---

<sup>207</sup> Health Development Agency, Coronary Heart Disease: Guidance for Implementing the Preventative Aspects of the National Service Framework 13.

<sup>208</sup> Health Development Agency, Coronary Heart Disease: Guidance for Implementing the Preventative Aspects of the National Service Framework 12.

<sup>209</sup> United Kingdom Department of Health, Saving Lives: Our Healthier Nation (White Paper), 29.

<sup>210</sup> United Kingdom Department of Health, Saving Lives: Our Healthier Nation (White Paper), 31.

doing, the population strategies of public health take on characteristics of the medical model, aimed at producing “expert” patients capable of deflecting the slings and arrows that their own choices, rather than outrageous fortune, rain upon good health.

While the extended example of the British public health approach to CHD and cancer risk illustrates the entrenched elements of risk, individual responsibility, and behavioralism that exist in NCD prevention, it should not be seen as somehow unique. In the United States, the National Center for Chronic Disease Prevention and Promotion (a branch of the Centers for Disease Control and Prevention), also makes the connection between prevention and lifestyle modification:

The number of new cancer cases can be reduced substantially, and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving optimal weight, improving nutrition, and avoiding sun exposure—can significantly reduce a person’s risk for cancer.<sup>211</sup>

The same approach is demonstrated in the public health approach to heart disease:

We can take significant steps toward a heart-healthy and stroke-free America through several actions. These include early and continuous health education that focuses on prevention and healthy lifestyle choices; medical services that provide the most effective drugs and therapies without disparity; and environmental policies in schools, work sites, and communities that promote good nutrition, regular physical activity, and abstinence from smoking.<sup>212</sup>

In Sweden, too, NCD analysis and prevention is structured along these same lines in the public health community. In the National Board of Health and Welfare’s 2002 report on the state of Swedish public health, the epidemiological risk factors singled out for heart disease were high blood pressure, high cholesterol, and smoking.

---

<sup>211</sup> National Center for Chronic Disease Prevention and Health Promotion, Preventing and Controlling Cancer: The Nation's Second Leading Cause of Death, March 29, 2004, Available: [http://www.cdc.gov/nccdphp/aag/aag\\_dcpc.htm](http://www.cdc.gov/nccdphp/aag/aag_dcpc.htm), March 31 2004.

<sup>212</sup> United States Department of Health and Human Services, A Public Health Action Plan to Prevent Heart Disease and Stroke (Atlanta: Department of Health and Human Services, 2003), iii.

Moreover, additional “life style factors such as diet, exercise and psychosocial circumstances in the home and the workplace affect the development of the disease.”<sup>213</sup> And when advocating mechanisms to reduce the burden of CHD and cardiovascular disease more generally, patient-level interventions dominated: increased use of cholesterol-reducing drugs, molecular and stem-cell technologies for “arterial renewal”, and above all, “[m]ethods for causing patients to change their behaviour and follow treatment programmes, to take greater responsibility and participate in prevention and rehabilitation.”<sup>214</sup>

While primary government documents were unavailable in English regarding Sweden’s public health approach to cancer epidemiology and prevention,<sup>215</sup> it is possible to witness a continuation of the themes of risk analysis and behavioralism with regard to another major NCD for which information in English is available: stroke. In 2002, the Swedish National Board of Health and Welfare published a series of national guidelines for the prevention and management of stroke. These guidelines, directed at public health personnel, emphasized that

The demographic prevalence of risk factors is a key component in both the prevention of stroke in the population (primary prevention) and the prevention of recurrence in affected individuals (secondary prevention). Primary prevention consists of measures to improve the general health of the public through lifestyle modification and...particularly pharmacological treatment of risk factors in persons

---

<sup>213</sup> National Board of Health and Welfare - Sweden, Sweden's Health Care Report, 2001, 196.

<sup>214</sup> National Board of Health and Welfare - Sweden, Sweden's Health Care Report, 2001, 203. Citations therein.

<sup>215</sup> While the National Board of Health and Welfare does publish annual cancer incidence and prevalence studies in English, and the 2002 report on the state of national public health had a detailed discussion of cancer screening, none of these documents included a discussion of aetiology (which would address risk factor analysis), nor of intervention or prevention strategies. A potential alternative source of primary documents for public health information on cancer, the Swedish Cancer Society, also proved fruitless; no reports, and little of the website, were available in English.

identified as being at especially high risk of stroke (prevention in high-risk individuals).<sup>216</sup>

Of these risk factors, the report highlights hypertension as being especially relevant, and the National Board of Health and Welfare identifies as *population* initiatives hypertension prevention measures that operate through behavioral modification of individuals: education programs that promote physical activity and caloric-intake reduction, as well as anti-smoking and anti-drinking campaigns.<sup>217</sup>

From this assessment of how NCDs such as CHD and cancer, as well as stroke, are understood in terms of causation and prevention, it is possible to discern not only the dominance of risk factor analysis in contemporary health models, but also how these risks are framed as largely a project for individual self-monitoring and behavioral management. The goal here is not to dispute the claims that these individual behaviors are important or have an integral place in explicating and arresting chronic disease processes. However, in the public health and medical discourses there appears to be a tendency to take these risky behaviors on their own terms, with comparatively much less attention to the structures, processes, and dynamics that condition and facilitate them. “Don’t eat fattening foods,” we are told; but what dynamics are proliferating the availability of them and influencing people to choose them? A lack of sustained interrogation of such questions remains one of the greatest weaknesses of NCD prevention and management models.

In order to further develop and substantiate this claim, I turn now to a closer examination of three prominent risk factors - tobacco, sedentary lifestyle, and poor diet – implicated in a range of noncommunicable diseases. This analysis

---

<sup>216</sup> National Board of Health and Welfare - Sweden, Sweden's Health Care Report, 2001, 42.

<sup>217</sup> National Board of Health and Welfare - Sweden, Sweden's Health Care Report, 2001, 44.

demonstrates how these factors are constructed in the health discourse as problems of individual choices, and suggests how broader environmental forces condition those choices and make them more likely to occur. The logic and the value of this exercise is to illustrate that the dominant level of analysis and site of programmatic strategies of public health often bypass mechanisms and pathways by which behavioral risk factors come to flourish. In other words, choice and behavior do not occur in a vacuum; and if the nuance of the web model of causation is to be reinvigorated in public health, the interplay of environmental *and* behavioral factors must be explored to identify not only the complex origins of chronic disease, but additional avenues of response that don't fall back on pat lifestyle interventions.

Two points of clarification: what follows should not be interpreted as an argument that in structural factors, we find the “true cause” of NCDs – far from it; rather, the analysis is directed at problematizing the public health community's account of causation and derivative management strategies. Nor is this an exercise, as stipulated in Chapter 2, geared toward a sustained treatment of the political determinants of health; what follows is a cursory exploration of trends in the broader political economy that have implications for behavioral risk factors, not an interrogation of the underlying values and norms, or political determinants, that give shape to the environment in which these behaviors occur. Thus, the implicit critique here remains squarely directed at the discipline of public health itself. For by decontextualizing its analytical and management models of NCDs, public health engages in a strategy of the depoliticization of disease— one that only serves, as I have argued, to highlight the inherently political nature of the maneuver.

Major NCD Risk Factors: The Privileging of Behavioral Choice and the Importance of Context

According to the U.S. Department of Health and Human Services, the top contributors to U.S. mortality in 1998 were tobacco usage (400,000 deaths attributed to as primary cause); and diet and inactivity (300,000).<sup>218</sup> Together these three risk factors account for 35% of mortality that year, more than all others combined. From the earlier analysis of public health approaches to NCDs like cancer and heart disease, we see a recurring theme whereby these practices are consistently implicated in disease onset as key risk factors requiring attention. They therefore make excellent candidates for a closer examination, but should not be interpreted as exhaustive of the potential risks for chronic disease onset.

Tobacco

The health effects of tobacco consumption have been well established for over four decades, with usage implicated in a number of chronic conditions, including cardiovascular and cerebrovascular diseases, lung and other forms of cancer, and chronic respiratory conditions. It is estimated that tobacco accounts for approximately four million deaths per year, or 1/10 of all adult deaths globally.<sup>219</sup> Trends over the past thirty years have been characterized by a marked decline in consumption in industrialized countries, while consumption in developing countries has increased dramatically. From 1970 to the mid-1990s, cigarette consumption

---

<sup>218</sup> United States Department of Health and Human Services, Health United States (Washington, DC: Department of Health and Human Services, 2000).

<sup>219</sup> C.K. Gajalakshmi, Prabhat Jha, Kent Ranson and Son Nguyen, "Global Patterns of Smoking and Smoking Attributable Mortality," Tobacco Control in Developing Countries, eds. Prabhat Jha and Frank Chaloupka (Oxford: Oxford University Press, 2000) 11.

doubled from three trillion to six trillion units per year, spurred largely by the growth in the global South.<sup>220</sup>

Because of the addictive nature of nicotine, a major ingredient of cigarettes, consumption tends to be habitual, not casual (globally, smokers average 14 cigarettes per person, per day), and to begin at young ages – in middle and low income countries, for example, nearly 80% of smokers have become habitual users by the age of 20.<sup>221</sup>

Given the rising rates of consumption in the developing world, it is estimated that by 2030, the number of annual deaths attributable to tobacco consumption will exceed 10 million per year, or 1/6 of all adult mortality.<sup>222</sup> Even if consumption levels off in the near future, the long delay between smoking onset and the manifestation of disease will still mean a higher death rate attributable to tobacco in the coming decades.<sup>223</sup>

Understandably, health experts are concerned about the consequences of tobacco usage for health. However, the tendency exists to construct the problem as a matter of behavioral choice; that the individual body is the locus of both problem and solution is evident in the explanations offered for why persons begin smoking, as well as in the prevention and cessation strategies advocated by public health professionals.

---

<sup>220</sup> Gajalakshmi, Jha, Ranson and Nguyen, "Global Patterns of Smoking and Smoking Attributable Mortality," 21.

<sup>221</sup> Gajalakshmi, Jha, Ranson and Nguyen, "Global Patterns of Smoking and Smoking Attributable Mortality," 17.

<sup>222</sup> Gajalakshmi, Jha, Ranson and Nguyen, "Global Patterns of Smoking and Smoking Attributable Mortality," 11.

<sup>223</sup> R. Peto and D. Zaridze, Tobacco: A Major International Health Hazard (Lyon: International Agency for Research on Cancer, 1986).; R. Peto and et al., "Mortality from Tobacco in Developed Countries: Indirect Estimation from National Vital Statistics," Lancet 339 (1992).

In explaining the origins of smoking behavior, public health experts have identified several factors – including depression, schizophrenia, polydrug abuse, and genetic predispositions, all of which themselves are conditions or practices localized in the individual body.<sup>224</sup> Other relevant factors, such as socioeconomic class and position, certainly suggest a more structural influence, but operate particularly through the stress they induce on individuals for whom smoking is coping mechanism – it is a practice especially prevalent among single mothers, the unemployed, and educational underachievers.<sup>225</sup> Thus, even though poverty correlates with tobacco usage, health experts have stressed that outcomes have more to do with a person's perception of and response to the environment in which she finds herself:

Poverty itself is not a cause of smoking. Indeed, the fact that tobacco is consumed more by groups for which it is, in relative terms, more expensive, is paradoxical...Several hypotheses have been put forward to explain the socioeconomic gradient in smoking. First...the poor and less educated are less aware of the health hazards of smoking and thus more likely to adopt this harmful practice. Second...smoking may be a self-medication to cope with the strains of material deprivation...Third, it is argued that the adoption of smoking may be a replacement reward, as smoking is often described as one of the few things a poor person can do for himself or herself.<sup>226</sup>

In addition to the individualization of risk manifest in the explanations for tobacco usage, risk management is also targeted to the individual body, even as it

---

<sup>224</sup> Karl Fagerstrom, "The Epidemiology of Smoking: Health Consequences and Benefits of Cessation," *Drugs* 62.Supplement 2 (2002): 3-4. See also: K.S. Kendler, M.C. Neale and C.J. MacLean, "Smoking and Major Depression," *Archives of General Psychiatry* 50 (1993).; and N.L. Benowitz, "Nicotine Addiction," *Primary Care* 26 (1999).

<sup>225</sup> Fagerstrom, "The Epidemiology of Smoking: Health Consequences and Benefits of Cessation," 3.; see also Royal College of Physicians, *Nicotine Addiction in Britain: A Report of the Tobacco Advisory Group of the Royal College of Physicians* (London: Royal College of Physicians, 2000).

<sup>226</sup> Martin Bobak and et al., "Poverty and Smoking," *Tobacco Control in Developing Countries*, eds. Prabhat Jha and Frank Chaloupka (Oxford: Oxford University Press, 2000) 57. For a detailed discussion of these explanations, see H. Graham, "Women's Smoking and Family Health," *Social Science & Medicine* 25 (1987).; and H. Graham, "Gender and Class as Dimensions of Smoking Behaviour in Britain: Insights from a Survey of Mothers.," *Social Science & Medicine* 38 (1994).

often operates through the broader spheres of policy and economy. Nowhere is this more evident than on the relative weight lent to prevention strategies that are targeted on the demand for and consumption of tobacco, rather than production; the conclusion of a recent report on the rise of tobacco usage in developing countries asserts that

millions of deaths could be prevented over the next few decades by implementing modest, cost-effective tobacco-control policies. These policies include higher taxes, comprehensive bans on the promotion and advertising of tobacco, better and more widely publicized research into the consequences of smoking, [and] prominent warning labels.<sup>227</sup>

Such strategies aim at regulating various dimensions of individual behavior – the use of education and economic incentives to affect the (potential) smoker’s decision-making calculus, and the restriction of advertising to prevent the psychological manipulation of “vulnerable” consumers, as Saffer notes:

Cigarette advertising is not designed to convey information about the physical characteristics of the product. Information about these characteristics is easily obtained. Cigarette advertising is designed to create a fantasy of sophistication, pleasure, and social success...In developing countries, this imagery can be designed to associate the product with a glamorous fantasy of American or European life-styles. The relatively small expenditure on tobacco provides a link to this fantasy lifestyle.<sup>228</sup>

Although Saffer is quick to dismiss the content of tobacco advertisements as “information,” they do communicate information of a certain type – they communicate to the consumer a mechanism by which they may actualize their

---

<sup>227</sup> Prabhat Jha, Fred Paccaud and Son Nguyen, "Strategic Priorities in Tobacco Control for Governments and International Agencies," Tobacco Control in Developing Countries, eds. Prabhat Jha and Frank Chaloupka (Oxford: Oxford University Press, 2000) 462.

<sup>228</sup> Henry Saffer, "Tobacco Advertising and Promotion," Tobacco Control in Developing Countries, eds. Prabhat Jha and Frank Chaloupka (Oxford: Oxford University Press, 2000) 217.

potential for happiness – however constructed, artificial, and ultimately bankrupt that mechanism might prove.

When considered in this regard, the role of information becomes especially critical – particularly as one compares the promotion and prevention strategies applied to education and advertisement bans. As policy campaigns aim to reduce tobacco usage by restricting access to the “dangerous” fantasies constructed by advertisements, and simultaneously promote health awareness campaigns predicated upon “sound” scientific research, there is the concomitant, yet subtle, effect of privileging the rational subjectivity concerned with health consequences and outcomes, and rejecting alternative subjectivities driven by flights of fancy, or the need to escape a world too often dominated by a concern with those consequences and outcomes.

Even as tobacco prevention and control efforts are primarily targeted toward the regulation of individual bodies and their access to the product in question, shifts in the broader political economy facilitate the conditions by which tobacco usage becomes more of a problem, namely by increasing the production and distribution of the product, as well as constraining the ability of health agencies to effectively educate consumers about the risks posed by tobacco.

Most notably, trends toward trade liberalization have created unprecedented opportunities for smoking behavior to flourish. Taylor, et al, in their study of the impact of trade liberalization on tobacco consumption, conclude “the liberalization of

tobacco-related trade has contributed to global increases in cigarette smoking and other tobacco use, particularly in low-income and middle-income countries.”<sup>229</sup>

An additional relevant factor is that of foreign direct investment (FDI), as the transnational tobacco industry has availed itself of liberalized regulations regarding FDI to penetrate developing markets, either through licensing in a joint venture with a domestic monopoly or through other forms of partnering with domestic companies.<sup>230</sup> Since 1990, the three largest tobacco companies, CNTC (China), Phillip Morris (USA), and BAT/Rothmans (United Kingdom), made acquisitions or expanded investment partnerships in a rather impressive number of countries: Hungary, Russia, the Czech Republic, Lithuania, Ukraine, Kazakhstan, Azerbaijan, Uzbekistan, Romania, China, Poland, Portugal, Cambodia, Mexico, and Tanzania and Turkey. At the same time, smoking rates have increased in many of these countries, particularly those in Eastern Europe and South Asia.<sup>231</sup>

Finally, in considering the role of the broader environment in conditioning behavioral outcomes, it is necessary to examine an additional trend with regard to

---

<sup>229</sup> Allyn Taylor, Frank Chaloupka, Emmanuel Guindon and Michael Corbett, "The Impact of Trade Liberalization on Tobacco Consumption," Tobacco Control in Developing Countries, eds. Prabhat Jha and Frank Chaloupka (Oxford: Oxford University Press, 2000) 361. For additional studies substantiating this conclusion, see Frank Chaloupka and A. Laixuthai, U.S. Trade Policy and Cigarette Smoking in Asia (1996).; C.R. Hsieh and T.W. Hu, The Demand for Cigarettes in Taiwan: Domestic Versus Imported Cigarettes (Nankang: Institute of Economics, 1997).; Frank Chaloupka and M. Corbett, "Trade Policy and Tobacco: Toward an Optimal Policy Mix," The Economics of Tobacco Control: Towards an Optimal Policy Mix, eds. I. Abedian and et al. (Cape Town: University of Cape Town Press, 1998).; and D. Bettcher, D. Yach and E. Guindon, "Global Trade and Health: Key Linkages and Future Challenges," Bulletin of the World Health Organization 78.4 (2000).

<sup>230</sup> Allyn Taylor and Douglas Bettcher, "WHO Framework Convention on Tobacco Control: A Global "Good" for Public Health," Bulletin of the World Health Organization 78.7 (2000): 924. See also the World Tobacco File 1998, (London: International Trade Publications, Ltd., 1998).; World Bank, Curbing the Epidemic: Governments and the Economics of Tobacco Control (Washington, DC: The World Bank, 1999).; and S. Asma and et al., "Tobacco," Oxford Textbook of Public Health, eds. R. Detels and et al, 4th ed. (Oxford: Oxford University Press, 2002).

<sup>231</sup> Luk Joosens and Bungon Ritthiphakde, Role of Multinationals and Other Private Actors: Trade and Investment Practices (Geneva: World Health Organization, 2000).

economic policy adjustments, that of the curtailed expenditures for public health programs and the concomitant implications for health education and awareness campaigns.<sup>232</sup> Even as public health experts call for increased awareness and education campaigns to halt the spread of tobacco usage, the dissemination of that information may be compromised by resource constraints as public health systems are subject to budget cuts and program restructuring.

### Sedentary Lifestyle

While much attention has been paid to changing patterns pertaining to tobacco usage, sedentary lifestyle is also a major focal point in the prevention of NCDs. Sedentary lifestyle is characterized by a marked lack of regular physical activity in day-to-day life; physical activity is defined as “any body of movement provided by skeletal muscles that results in a substantial increase over the resting energy expenditure.”<sup>233</sup> This includes such activities as exercise, sport, household chores, occupational work, or any other activity affecting total daily energy expenditure.<sup>234</sup>

---

<sup>232</sup> For discussions of the impact of structural adjustment programs on health education, particularly with regard to expenditure decrease, see: John W. Peabody, "Economic Reform and Health Sector Policy: Lessons from Structural Adjustment Programs," *Social Science & Medicine* 43.5 (1996).; World Health Organization, *U.N. Special Initiative on Africa: The Health Dimension (Press Release)* (World Health Organization, 1996).; World Health Organization, *Collaboration within the United Nations System and with Other Intergovernmental Organizations* (Geneva: World Health Organization, 1998).; Jacques Van Der Gaag and Tania Barham, "Health and Health Expenditures in Adjusting and Non-Adjusting Countries," *Social Science & Medicine* 46.8 (1998).; Claudio Schuftan, "Equity in Health and Economic Globalization," *Development in Practice* 9.5 (1999).

<sup>233</sup> C. Bouchard and R.J. Shephard, "Physical Activity, Fitness and Health: The Model and Key Concepts," *Physical Activity, Fitness and Health: International Proceedings and Consensus Statement*, eds. C. Bouchard, R.J. Shephard and T. Stephens (Champaign: Human Kinetics, 1994) 77.

<sup>234</sup> Vern Seefeldt, Robert M. Malina and Michael A. Clark, "Factors Affecting Levels of Physical Activity in Adults," *Sports Medicine* 32.3 (2002): 144.

For such activities to be considered regular, a person must engage in them at least five days a week for thirty minutes each time.<sup>235</sup>

The World Health Organization indicates that the lack of regular physical activity is responsible for over two million deaths per year, and is a major risk factor for a number of noncommunicable diseases, including cardiovascular disease, colon and breast cancer, Type 2 diabetes, high blood pressure and osteoporosis.<sup>236</sup>

Moreover, sedentary lifestyle is a truly global phenomenon, with the results of health surveys indicating that between 60 and 85% of the world's population do not engage in regular physical activity.<sup>237</sup>

That sedentary lifestyle is a risk framed as a problem of individual behavior is evident in the very models that are employed to explain the origins of the phenomenon. In their discussion of factors affecting physical activity in adults, Seefeldt, et al point to the dominance of theoretical models predicated upon assumptions of free action and the calculated choices of rational individuals: these include the aforementioned Health Belief Model, as well as others such as the Theory of Planned Behavior and the Relapse Prevention Model. The Theory of Planned Behavior emphasizes the individual's perceived control over opportunities, resources, and skills believed necessary to induce behavioral modification; thus, under this

---

<sup>235</sup> World Health Organization, Physical Inactivity: A Leading Cause of Death and Disability (Press Release) (Geneva: World Health Organization, 2002), 1.

<sup>236</sup> World Health Organization, Physical Inactivity: A Leading Cause of Death and Disability (Press Release), 1.

<sup>237</sup> World Health Organization, Physical Inactivity: A Leading Cause of Death and Disability (Press Release), 1.

rubric, personal attitude and motivation are paramount explanatory factors in assessing why individuals do or do not exercise.<sup>238</sup>

The decision to engage in physical activity, however, is not a one-time event; maintenance over the long-term is considered important, and thus the Relapse Prevention Model is also a prominent feature of physical activity research. Like the Health Belief and Planned Behavior models, this one also emphasizes the individualization of risk and responsibility. It postulates that actors can prevent relapses into sedentary lifestyle through the identification and removal of factors inhibiting participation, such as a negative emotional state, low motivation, and limited coping skills.<sup>239</sup>

Because of the analytical emphasis placed on individualized risk and responsibility, it is not surprising that strategies for action are then targeted at the same level; even to the extent that greater social and community involvement is invoked, it is primarily as a means to provide education and the communication of risk, and/or to enhance access to physical activity opportunities for individuals. In the context of raising awareness, the relationship between patient and doctor takes on special significance, but proceeds with the dispensation of expert advice and

---

<sup>238</sup> For a discussion of planned behavior theory as applied to physical activity, see G. Godin, "Theories of Reasoned Action and Planned Behavior: Usefulness for Exercise Promotion," Med Sci Sports Exerc 26.11 (1994). This report summarizes eight studies focusing on the role of behavioral motivation and control on exercise outcomes. See also C.L. Blue, "The Predictive Capacity of the Theory of Reasoned Action and the Theory of Planned Behavior in Exercise Research: An Integrated Literature Review," Research in Nursing and Health 18 (1995).; M. Conner and P. Sparks, "The Theory of Planned Behavior and Health Behaviors," Predicting Health Behavior, eds. M. Conner and P. Norman (Buckingham: Open University Press, 1996).; and H.A. Hausenblas, A.V. Carron and D.E. Mack, "Application of the Theories of Reasoned Action and Planned Behavior to Exercise Behavior: A Meta-Analysis," Journal of Sport & Exercise Psychology 19 (1997).

<sup>239</sup> For a discussion of relapse prevention, see B.H. Marcus and A.L. Stanton, "Evaluation of Relapse Prevention and Reinforcement Interventions to Promote Exercise in Sedentary Females," Research Quarterly for Exercise and Sport 64 (1993).; G.A. Marlatt and J.R. Gordon, eds., Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors (New York: Guilford Press, 1985).; and D.W. Daly, Relapse: Conceptual, Research, and Clinical Perspectives (Hayworth Press, 1989).

evaluation for a behavioral practice that is still ultimately the responsibility of the person in question:

The role of the healthcare provider, who is often the attending physician, commonly invokes the tenets of social learning theory, wherein the counselor recognises the readiness for change in behaviour, communicates to the client the need for greater activity, provides the necessary conditions for activity to occur, and furnishes support and evaluation for the duration of the activity.<sup>240</sup>

Similarly, policy and community involvement strategies have focused on providing resources and access that facilitate individual participation in regular physical activity:

Involving communities in the promotion of physical activity is a popular form of inducement, with the assumption that communities can provide the necessary resources, opportunities and personnel that are beyond the control of individuals. Community based approaches have used media campaigns, direct education, changes in policy and improved public facilities to induce greater participation in activity programmes.<sup>241</sup>

Specific actions designed to increase participation may include requiring physical fitness programs in schools, providing publicly funded parks and recreation facilities, and pursuing physical activity education and advocacy campaigns.

While the techniques of analysis and strategies for action are admirable in terms of their ultimate goal to reduce the burdens of NCDs, in focusing so extensively on the individual motivations and predictors of physical activity, the public health arena has turned an analytical blind eye to the greater structural dynamics which ultimately condition those behavioral choices. In the case of sedentary lifestyle,

---

<sup>240</sup> Seefeldt, Malina and Clark, "Factors Affecting Levels of Physical Activity in Adults," 157.

<sup>241</sup> Seefeldt, Malina and Clark, "Factors Affecting Levels of Physical Activity in Adults," 158.

particular features associated with economic industrialization and modernization have particular relevance.

One effective means to assess these overall structural changes is to examine the patterns of rural to urban migration. Rural to urban migration patterns have several consequences – most notably increased access to motor vehicles and forms of public transportation, thus potentially decreasing the amount of daily energy expenditure; furthermore, a shift toward living in an urban environment also introduces other elements potentially affecting behavioral decisions to pursue regular physical activity – such as high crime rates for outdoor activities, and the economic costs associated with private health clubs or other recreational sports. McMichael points to the close link between urban living and the shift toward “unhealthy” behaviors and the onset of NCDs:

Urbanism potentiates many changes in human behaviour that affect disease risks... The increase in the incidence of obesity illustrates several aspects of urban living. Among city dwellers, it reflects the combination of easier access to energy-dense processed foods and a decline in physical activity at work, at home, and recreationally. Typical urban living thus entails an imbalance in the energy budget that leads to obesity, and this greatly increases the risk of high blood pressure and type II (adult onset) diabetes.<sup>242</sup>

Another feature of particular relevance is the employment structure, especially with regard to shifts from agricultural employment – traditionally involving moderate to strenuous physical activity – to agricultural production predicated upon automation and mechanization, as well as a move to more sedentary jobs in the service and

---

<sup>242</sup> Anthony J. McMichael, "The Urban Environment and Health in a World of Increasing Globalization: Issues for Developing Countries," Bulletin of the World Health Organization 78.9 (2000): 1119.

manufacturing sectors. In a discussion the increasing prevalence of obesity in the Asian context, Popkin notes the special relevance of this factor:

...there has also been a rapid shift in Asia towards much more of a service sector economy and towards greater use of new technologies in current occupations. One of the most inexorable shifts with modernization and industrialization is the reduced use of human energy to produce more capital-intensive manufacturing and goods and services. The result is obviously a marked shift in activity patterns at work, a trend particularly associated with the shift into increasingly capital-intensive production and increasingly sedentary manufacturing, service and commercial work.<sup>243</sup>

The shift towards higher-skilled jobs is associated with wage and income increases, which are framed in a particularly positive light with regard to health outcomes.

Dollar, for example, asserts that “rising income of the poor leads to better nutrition, lower child mortality, better maternal health, and also to better female education, which contributes further to these health outcomes.”<sup>244</sup> However, even as certain health indicators improve, new challenges emerge – such as those posed by NCDs– that problematize the view that shifts toward higher-paying jobs are a mechanism by which health outcomes are improved.

Finally, to the extent that education and advocacy campaigns are identified as important mechanisms for prompting behavioral change, it is worth considering the extent to which changes in the political economy impact such activities. As noted with regard to education campaigns in the above discussion of tobacco, many societies have undergone economic adjustments emphasizing privatization and a limited role for government in the economy. One of the areas where this shift has

---

<sup>243</sup> B. Popkin, "Nutrition in Transition: The Changing Global Nutrition Challenge," Journal of Clinical Nutrition 10. supplement (2001): S15.

<sup>244</sup> David Dollar, "Is Globalization Good for Your Health?" Bulletin of the World Health Organization 79.9 (2001): 828.

occurred is social and welfare spending. Tullao emphasizes that in developing countries where economic liberalization has occurred, it has often been accompanied by curtailment or diversion of public funds away from public health services.<sup>245</sup> The consequences of these structural shifts potentially impact the relative access of at-risk individuals to informational resources or other interventions designed to facilitate adoption of healthy lifestyles.

#### Poor Diet

Once associated primarily with the industrialized countries of the North, a “poor” diet characterized by excessive consumption of fats and sugars, especially in the form of processed foods, and a decrease in consumption of fruits and vegetables has in recent years become more of a global phenomenon:

Diet has been known for many years to play a key role as a risk factor for NCDs...What is apparent at the world level is that great changes have swept the entire world since the second half of the twentieth century, inducing major modifications in diet, first in industrial regions and more recently in developing countries. Traditional, more plant-based diets have been swiftly replaced by high-fat, energy-dense diets with a substantial content of animal foods.<sup>246</sup>

Nutritional experts point to a “nutrition transition” in industrializing countries, whereby the structure and overall composition of diet has changed, and where changes in body size and body composition become evident.<sup>247</sup> These shifts are

---

<sup>245</sup> Tereso S. Tullao, "The Impact of Globalization on Noncommunicable Diseases: Opportunities and Threats," Globalization, Diets, and Noncommunicable Disease (Geneva: World Health Organization, 2002) 21.

<sup>246</sup> World Health Organization, Diet, Nutrition, and the Prevention of Chronic Diseases (Geneva: World Health Organization/FAO, 2002), 5.

<sup>247</sup> See, for example: B. Popkin, "Nutritional Patterns and Transitions," Population Development Review 19 (1993).; B. Popkin, "The Nutrition Transition in Low-Income Countries: An Emerging Crisis," Nutrition Reviews 52 (1994).; Popkin, "Nutrition in Transition: The Changing Global Nutrition Challenge."; C.A. Monteiro and et al., "The Nutrition Transition in Brazil," European Journal

marked by a greater percentage of total energy consumed in the form of fat, and concomitantly, an increase in Body Mass Index (BMI), a common measure of overweight and obesity.<sup>248</sup> As a consequence of this nutritional shift (as well as a decline in physical activity, discussed above), obesity has become a much larger issue in areas that traditionally have been marked by high levels of under-nutrition only. Between 1995 and 2000, the number of obese adults globally increased by half, from 200 million to 300 million, with the majority of new cases occurring in developing countries.<sup>249</sup> By 2000, of the 300 million obese adults, 170 million were living in the global South.<sup>250</sup>

As these nutritional shifts occur globally, public health authorities have steadfastly concentrated on the behavioral component of the nutrition transition, with comparatively little attention to how that behavior is conditioned by the greater changes in the socioeconomic and political environment. That diet is framed as a problem and solution of individual behavior is evident in the recommended strategies for NCD prevention. These strategies concentrate on behavioral modification, and even when the greater policy environment is addressed, it is primarily in the context of how public authorities and agencies can promote modification at the level of the individual body. On targeting prevention strategies at the level of the individual, a recent health report stresses that:

Nutrition is coming to the fore as a major modifiable determinant for chronic disease, with scientific evidence increasingly supporting the

---

of Clinical Nutrition 49 (1995).; A. Drewnowski and B. Popkin, "The Nutrition Transition: New Trends in the Global Diet," Nutrition Review 55 (1997).; World Health Organization, Diet, Nutrition, and the Prevention of Chronic Diseases.

<sup>248</sup> Popkin, "Nutrition in Transition: The Changing Global Nutrition Challenge," 13.

<sup>249</sup> World Health Organization, Controlling the Global Obesity Epidemic, September 14 2002 2002, Available: <http://www.who.int/nut/obs.htm>.

<sup>250</sup> World Health Organization, Diet, Nutrition, and the Prevention of Chronic Diseases, 8.

view that alterations in diet have strong effects, both negative and positive, on health throughout life. Most importantly, dietary adjustments can not only influence present health, but determine whether or not an individual will develop diseases such as cancer, cardiovascular disease, and diabetes, much later in life.<sup>251</sup>

That institutional and policy support is also targeted at fostering proper individual behavioral choices is indicated by the emphasis on education and health communication, as opposed to interventions in the economy with regard to food production, advertising, and the like. Outlining a major disease prevention strategy with regard to diet, the WHO Department of Nutrition and NCD Prevention and Promotion stresses that “basically, it is a question of communicating health information and skills to people, persuading them of the benefits of healthy changes and providing them with social and environmental support for such changes.”<sup>252</sup> Greater institutional involvement is thus targeted at providing 1) information and 2) support for behavioral modification. However, where detailed guidelines exist for target nutrient and caloric intakes, limits for fat and sugar consumption, and other dietary aspects, similar guidelines for institutional responsibilities are thin. A 2002 report on nutrition and NCD prevention, for example, identifies specific goals for nutrient intake (fats, carbohydrates, proteins, cholesterol, sodium), BMI levels, and physical activity, yet the only strategy pertaining to institutional responsibility was vague at best:

Ways to reduce the intake of soft drinks, cigarette smoking and high-energy diets, and to increase physical activity will have an impact throughout society. Such changes need the active participation of

---

<sup>251</sup> World Health Organization, Diet, Nutrition, and the Prevention of Chronic Diseases, 3.

<sup>252</sup> World Health Organization, "Nutrition and NCD Prevention," (2002).

communities, politicians, health systems, town planners and municipalities, as well as the food and leisure industries.<sup>253</sup>

Clearly, poor diet has become a global problem, and is becoming especially acute in industrializing countries; it also is a product of individual lifestyles, as the public health discourse indicates in its emphasis on education campaigns. Yet larger forces and changes in the global political economy ensure that these choices are not made in a vacuum, and suggest why they may be becoming more prevalent.

Certain structural factors appear to be of particular relevance for conditioning dietary behavior. The first pertains to the availability of high fat, processed foods, and directs one to consider the role of the world food trade and foreign direct investment. For example, in their analysis of the relationship between economic practices and global diet trends between 1962 and 1994, Drewnowski and Popkin have found that as developing economies liberalized their trading and investment practices to become more integrated, a concomitant nutrition shift occurred, displacing traditional diets rich in starches, fruits and vegetables to ones marked by a high intake of processed foods rich in fats and sugar.<sup>254</sup> Tullao also highlights the impact of liberalization on consumption in the case of the Pacific islands:

As prices of these commodities go down with the reduction of tariffs brought about by trade liberalization, the lack of adequate food safety standards and regulations has opened the door to low-quality processed food that may result in serious health risks.<sup>255</sup>

---

<sup>253</sup> World Health Organization, Diet, Nutrition, and the Prevention of Chronic Diseases, 19.; specific data on goals appear 21-23.

<sup>254</sup> Drewnowski and Popkin, "The Nutrition Transition: New Trends in the Global Diet." See also P. Zimmet, "Globalization, Coca-Colonization, and the Chronic Disease Epidemic: Can the Doomsday Scenario Be Averted?" Journal of Internal Medicine 247 (2000).

<sup>255</sup> Tullao, "The Impact of Globalization on Noncommunicable Diseases: Opportunities and Threats," 15.

And proliferate these processed foods have. In their analysis of trends in processed food export growth, Rae and Josling (2001) note a sustained expansion in the availability of these types of foods for both developing and industrialized countries. Globally, export growth rates for processed meats averaged 10% per year between 1985 and 1995; other categories, such as dairy products and refined sugar also averaged an annual growth rate of over 9%, while beverages averaged 11%.<sup>256</sup> Such growth indicates not only that processed foods have become big business, but that they have become much more accessible throughout the world. Thus, individuals are increasingly faced with an array of widely available processed foods that may have advantages in being affordable and convenient, but are not especially high in nutritional value.

Two other previously discussed factors relevant for physical activity may also be relevant for considering the structural influences on dietary behavior: urban migration and a shift in the occupational structure. Without extensively revisiting these earlier discussions, it is worth reiterating the logic which makes them applicable dimensions for affecting dietary behavior. First, as individuals migrate to urban locations, they are confronted with an increased availability of food products high in fat and sugar. Popkin finds

a most pronounced association between urbanization with the shifts in diet, activity and body composition...Compared with rural diets, urban diets show trends towards consumption of superior grains (e.g. rice or wheat, rather than corn or millet), more milled and polished grains (e.g. rice, wheat), food higher in fat, more animal products, more sugar and more food either prepared away from the home or processed.<sup>257</sup>

---

<sup>256</sup> A. Rae and T. Josling, Processed Food Trade and Developing Countries: Protection and Trade Reform (New Zealand Trade Consortium, 2001).

<sup>257</sup> Popkin, "Nutrition in Transition: The Changing Global Nutrition Challenge," S16.

In addition to considering the role of urbanization on diet, one should also consider the implications of shifts in the occupation structure. As workers move into more sedentary jobs, not only is there a decline in energy expenditure, but the features of many of these jobs may impact dietary behavior: long work days may suggest the desirability of convenience foods (which often have little nutritional value) and/or eating out; in a 2001 study by Evans, Sinclair, et al. on consumer dietary choice, consumers identified themselves as being aware of the health risks posed by processed foods, and the benefits of healthier alternatives, but preferred to buy them because of their convenience.<sup>258</sup>

### Conclusion

In Chapter 2, an exploration of the “social question” in a public health context revealed that many researchers are aware of the role of structural factors in conditioning health outcomes. Yet, despite the implications of such factors in affecting major NCD risk behaviors, the public health community continues to advocate preventative measures and interventions that do not adequately address these aspects. The WHO, for example, in its framework to better address the burdens of NCDs, outlines eight elements that are essential to this task; beyond the typical lifestyle recommendations, these include such mechanisms as emphasizing prevention in the provision of health care, better training and education for health personnel, evolving more integrated health care systems, and centering care and

---

<sup>258</sup> M. Evans, R. Sinclair, C. Fusimalohi and V. Liava'a, "Globalization, Diet, and Health: An Example from Tonga," Bulletin of the World Health Organization 79.9 (2001). See also Tullao, "The Impact of Globalization on Noncommunicable Diseases: Opportunities and Threats."; and R. Lyons and L. Languille, Healthy Lifestyle: Strengthening the Effectiveness of Lifestyle Approaches to Improve Health (Health Canada, Population and Public Health, 2000).

prevention efforts on not only the patient, but the family as a means of effecting lifestyle change.<sup>259</sup> While these recommendations take a step forward by focusing on what the *health care system* can do to address NCDs (as opposed to the patient), none of the eight elements even tangentially addresses those environmental factors which condition the proliferation of risk behaviors these health programs aim at changing. This analytical and programmatic blind spot is evident in national public health programs as well, as epidemiologists Fairbanks and Wiese note:

Public health policy at the federal level in the U.S. has been slow in adopting policies that incorporate socio-environmental approaches, concepts of social equity, and local control. The focus of federal funding and support for health continues to target individuals' diseases and health risk behaviors, rather than addressing the environmental or social circumstances that promote those diseases and behaviors.<sup>260</sup>

Such a skewed focus suggests a major weakness in current public health approaches to NCD prevention and management. One of the greatest limitations of the individualist and behaviorist impulses in contemporary public health is that they obscure how these lifestyle choices are themselves conditioned and exacerbated by larger structural forces and processes – whether political, economic, or cultural in nature. Risk behaviors like smoking and eschewing physical activity are more than *inputs* into disease onset, they are to a certain extent *outputs* of the greater environment in which people live. Because of the general unwillingness or inability of the public health establishment to address risk behaviors in this light, the result is a decontextualization of NCDs that in the end functions to depoliticize that experience of disease.

---

<sup>259</sup> World Health Organization, Innovative Care for Chronic Conditions.

<sup>260</sup> Fairbanks and Wiese, The Public Health Primer 92.

Some might view this as a good thing - that matters of illness are best left to a clinical relationship between patient and doctor, and that public health is not and should not be approached as a site of political analysis. But to close off avenues of what issues and phenomena are properly examined from a political or socioeconomic context is a dangerous exercise. For it not only stifles the *intellectual* interrogation of the inherent assumptions and values of disciplinary practices like medicine and public health, but does a disservice to those patients and at-risk individuals who could benefit from a more comprehensive approach. Zola (1994) stresses this aspect by asserting “the labels health and illness are remarkable ‘depoliticizers’ of an issue. By locating the source and the treatment of problems in an individual, other levels of intervention are effectively closed.”<sup>261</sup> This view is echoed by Crawford, who views the prevailing emphasis on behavioral risks as inhibiting an understanding of the social determinants of disease.<sup>262</sup>

Crawford’s approach is to critique not only the “victim-blaming” mentality inherent in these models, but to particularly stress the role of class structure as a disease determinant. Other structures and environmental factors bear greater consideration as well – changes in the global economy, and cultural and technological diffusion across borders to name a few. These are elements that merit greater incorporation into the prevailing analytical models of public health, and in the major prevention and management strategies of NCDs. Doing so would not absolve the

---

<sup>261</sup> Irving Kenneth Zola, "Medicine as an Institution of Social Control," *The Sociology of Health and Illness: Critical Perspectives*, eds. Peter Conrad and Rochelle Kern (New York: St. Martin's Press, 1994) 400.

<sup>262</sup> Robert Crawford, "Individual Responsibility and Health Politics," *The Sociology of Health and Illness: Critical Perspectives*, eds. Peter Conrad and Rochelle Kern (New York: St. Martin's Press, 1994) 384.

individual of responsibility. Behavioral choices do matter, and chronic disease is an experience necessarily grounded at one level in an individual's body. But that "at-risk" person or patient is part of a larger social body, as well. To downplay the influences of that greater environment on behavioral choice is to lead to much more narrow prevention and management strategies that are at odds with public health's historical focus on population health, and its improvement through population-directed strategies.

Beyond that, it leads to behavioral models of disease that are at best largely uni-dimensional, even if they do not fall into the trap of *reducio ad absurdum*. That said, some do associate an excessive focus on individual behavior in risk analysis with such an outcome, as is put forth in a physician's tongue-in-cheek speculation on the composite profile of a low-risk candidate for coronary artery disease. Based on known CHD health risks at the time, such a candidate would be:

an effeminate municipal worker or embalmer completely lacking in physical or mental alertness and without drive, ambition, or competitive spirit; who has never attempted to meet a deadline of any kind; a man with poor appetite, subsisting on fruits and vegetables laced with corn and whale oil, detesting tobacco, spurning ownership of radio, television, or motorcar, with full head of hair but scrawny and unathletic appearance, yet constantly straining his puny muscles by exercise. Low in income, blood pressure, blood sugar, uric acid and cholesterol, he has been taking nicotinic acid, pyridoxine, and long term anticoagulant therapy ever since his prophylactic castration."<sup>263</sup>

It is a humorous and extreme example of what such models of analysis and prevention could generate, but I do not argue that public health takes the logic of behavioralist models to such an absurd end. Rather this example and the overall thrust of this critique is to suggest how an excessive focus on risk factors, and most

---

<sup>263</sup> G.S. Myers quoted in L. Losagna, *Life, Death and the Doctor* (New York: Alfred Knopf, 1968) 215-16.

especially those pertaining to individual bodies and lifestyle choice, creates a view of NCD causation and prevention that is extremely narrow and that closes off avenues of intervention at other levels of society. Chopra laments that

[i]ndividual lifestyles become a major risk factor for ill health and health policy becomes a process of prescribing relevant behaviour changes through health education to the population and, possibly, treatment for those at “high-risk”.<sup>264</sup>

Yet another practical outcome is implied by this focus – and one that substantively is of key concern for this project. For a discipline that is so oriented toward the identification and management of risk, public health is remarkably myopic about the risk such an approach does itself: the more that the origins and interventions for chronic disease management devolve to prompting individuals to engage in better self-care, the greater the risk that public health ceases to be public at all. As we will see in Chapter 7, this risk is compounded by the fact that public health institutions are increasingly adopting the business model as the template for reforming their organization and practices, and the population whose health is to be secured is viewed not as the “public,” but as “clients” and “consumers.” In such an environment, the risk becomes turning public health into a private enterprise. The seeds of this change are there already, and they are the product of a distinctly neoliberal governmentality. But to demonstrate how they are indeed so, we must begin with the concept itself; it is to an explication of governmentality, and particularly neoliberalism as a style of it, that I now turn.

---

<sup>264</sup> Chopra, "Globalization and Food: Implications for the Promotion of Healthy Diets," 3.

## Chapter 4: The Evolution of Government Rationality

What would need to be studied now, therefore, is the way in which the specific problems of life and population were raised within a technology of government which, without always having been liberal – far from it – was always haunted since the end of the eighteenth century by liberalism’s question.

- Michel Foucault, “The Birth of Biopolitics”

One of the most important activities (as well as one of the most difficult challenges) of cross-disciplinary research is the project of translation. Even within a field, terms such as “government(ality),” “power,” “liberalism,” or “health” have built around them a number of codified assumptions, definitions, and connotations, and yet are still the subject of intense debate on ontological, epistemological, and normative grounds. How much greater the chance for contestation when we open up the disciplinary arena; where these same terms may be constructed or deployed in very different ways, or not at all. To make different disciplines – political science and economy, public health, poststructuralist philosophy, and sociology – “speak” to each other coherently on these issues requires in the first instance an adequate translation. This chapter is an exercise in exactly that, developing and elaborating key concepts that are fleshed out in the remaining theoretical chapter, and also in the context of the public health practices of the case countries in Chapters 6-8.

At its core, therefore, this chapter has two goals. The first is to clarify the somewhat nebulous concept of “governmentality”, especially in terms of its relation to the Foucauldian notion of government. Having done that, the second goal is to draw out an evolutionary account of governmentality in Western society, with particular attention to how welfarist forms so dominant in the 19<sup>th</sup> and early 20<sup>th</sup> centuries have evolved to their neoliberal incarnations today.

From Government to Governmentality

Before addressing specific kinds of governmentality – such as welfarist or neoliberal – we must begin with the concept itself. But to do so and thus gain a fuller analytical purchase on “governmentality,” we must first unpack latent assumptions and explicit characterizations associated with “government.”

It has been a common practice in political science to identify the practice of government coterminously with the institutions and activities of the state.<sup>265</sup> In recent years, the expansion of transborder issues such as environmental decline and crime, and the political involvement of nonstate actors, have all served to soften the claim that the state is the key actor or ultimate authority in politics, global or otherwise. Nonetheless, the state has occupied a privileged place in the analytics of government, as Colebatch notes:

To the extent that mainstream political scientists are interested in questions of government, they tend to see it in the ‘sovereign body’...which they refer to as ‘the government’ or ‘the state’...Along with political philosophers and welfare economists, political scientists debate the circumstances in which, and the extent to which, governments should choose to exercise their authority.<sup>266</sup>

---

<sup>265</sup> The realist theory of international relations has been especially prone to state-centrism. See, for example: Hans Morgenthau, Politics among Nations, ed. Kenneth Thompson, 6th ed. (New York: McGraw Hill, 1985).; and Krasner, Sovereignty: Organized Hypocrisy. In addition, Colburn’s (1988) review of statism and state centrism in comparative politics employs the terms “state” and “government” interchangeably. Forrest D. Colburn, "Statism, Rationality, and State Centrism," Comparative Politics. July (1988). On this issue more generally, see also: Dean, Governmentality: Power and Rule in Modern Society 23.; and Max Weber, Essays in Sociology, trans. H.H. Gerth and C.W. Mills, eds. H.H. Gerth and C.W. Mills (London: Routledge and Kegan Paul, 1972) 78.

<sup>266</sup> H.K. Colebatch, "Government and Governmentality: Using Multiple Approaches to the Analysis of Government," Australian Journal of Political Science 37.3 (2002): 417-18. For additional discussions of the prevalence of this perspective in public policy and political science, see T.R. Dye, Understanding Public Policy, 5th ed. (Englewood Cliffs: Prentice Hall, 1985).; Dean and Hindess, "Introduction: Government, Liberalism, and Society."; and Dean, Governmentality: Power and Rule in Modern Society.

This “instrumentalist perspective,” as he terms it, embraces government as an actor, the actions of whom are centered on intervention (conceived as minimally constructing and enforcing the “rules of the game”) in response to some collective need.<sup>267</sup> Such a perspective on government contrasts sharply with that articulated by a governmentality approach. Rather than a “black box” model where the activities of rule and the exercise of political authority are ascribed to a state bonded to territorial borders and a population, such an approach locates the apparatus of the state as part of a larger network of institutions and practices governing the lives of the population:

...the question is no longer one of accounting for government in terms of ‘the power of the State’, but of ascertaining how, and to what extent, the state is articulated into the activity of government: what relations are established between political and other authorities; what funds, forces, persons, knowledge or legitimacy are utilised; and by means of what devices and techniques are these different tactics made operable.<sup>268</sup>

State institutions and other elements in this network – such as clinicians, social workers, educators, the professional organizations and institutions that are built up around their practices, and the techniques by which knowledge in these and other disciplines are produced and deployed – are all engaged in the project of administration. Most specifically, this administration is targeted at the security, health, and happiness of the population.<sup>269</sup>

Thus, an analytics of government provides an account of the means and mechanisms by which this administration is achieved; such an account is also

---

<sup>267</sup> Colebatch, "Government and Governmentality: Using Multiple Approaches to the Analysis of Government," 421-22.

<sup>268</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 177.

<sup>269</sup> Foucault, "Governmentality," 100. See also Mitchell Dean, "Powers of Life and Death Beyond Governmentality," *Cultural Values* 6.1-2 (2002): 119-20.; Dean and Hindess, "Introduction: Government, Liberalism, and Society," 8; Rose and Miller, "Political Power Beyond the State: Problematics of Government," 174.

predicated upon further assumptions as to the project of government – that government exhibits political rationality, and that it exists and is achieved through the exercise of power in three interrelated spheres: knowledge, technologies of power or rule, and the production of subjectivities.

### *Political Rationalities*

What has been hinted at, but not drawn out explicitly thus far, is that government is less an object and more an ongoing process that is engaged in constructing and regulating the social, political, and economic fabric of “society.” This is accomplished “through a multiplicity of agencies and techniques,”<sup>270</sup> but underlying these, and giving them a cohesive direction is that which makes government intelligible and the regulation of conduct possible: political rationality.

Building upon the work of Foucault, who conceptualizes “governmentality” as the rationality of government (hence the synthesis of term), Rose and Miller offer a particularly detailed and coherent account of political rationalities, which are characterized by several elements. First is that of a moral component, which evokes the appropriate responsibilities and powers of authorities – and articulates the values and ideas toward which government should be directed: principles such as freedom, equity, justice, or efficiency, for example. Second, political rationalities are built upon a particular knowledge or understanding upon the nature of those who are to be governed – “a flock to be led, legal subjects with rights, children to be educated, a resource to be exploited...a population to be managed.”<sup>271</sup> Finally, political

---

<sup>270</sup> P. Miller and Nikolas Rose, "Governing Economic Life," *Economy and Society* 19.1 (1990): 75.

<sup>271</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 179.

rationalities construct a cogent and coherent vision of “reality” via the means of language; it makes reality not only thinkable, but also “amenable to political deliberations.”<sup>272</sup>

These rationalities of government constitute the basis of rule, but they must be deployed in specific and calculable ways such that government may occur. The means of this deployment directs attention to a final feature assumed by a governmentality approach: that the exercise of power in the arenas of knowledge, technologies of rule, and subjectivity is the means by which projects of government are carried forward.<sup>273</sup>

### Power

Given that “power” has been conceptualized and defined a number of ways,<sup>274</sup> it is important to be very clear on its nature within a governmentality approach. Power, while directed toward the management and discipline of population, is not necessarily restrictive or coercive. Exercised in the three aforementioned spheres, bringing into effect the rationalities of government, it operates more often in a generative and productive way. Foucault stresses that:

If power were never anything but repression, if it never did anything but to say no, do you really think one would be brought to obey it? What makes power hold good, what makes it accepted, is simply the fact it doesn't only weigh on us as a force that says no, but that it

---

<sup>272</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 179.

<sup>273</sup> Dean, Governmentality: Power and Rule in Modern Society 31-32.; also Rose and Miller, "Political Power Beyond the State: Problematics of Government."; Mitchell Dean, "Governing the Unemployed Self in an Active Society," Economy and Society 24.4 (1995).; Sean P. Eudaily, The Present Politics of the Past: Indigenous Legal Activism and Resistance to (Neo)Liberal Governmentality (New York: Routledge, 2004) 47.

<sup>274</sup> For a detailed treatment on the conceptualization of power in the social sciences, see Peter Digeser, "The Fourth Face of Power," Journal of Politics 54.4 (1992).

traverses and produces things, it induces pleasures, forces knowledge, produces discourses.<sup>275</sup>

By emphasizing the constructive dimensions of power, an analytics of government thus concerns itself with both what is produced via the exercise of power – in the domains of knowledge and expertise, practices or technologies, and identities – and more importantly, how these are produced.

### Knowledge, Technologies, Subjectivity

In Dean's account of the three dimensions of governmentality, he deliberately employs a Greek referent for the knowledge (*episteme*), technical (*techne*), and subjectivity (*ethos*) aspects of government.<sup>276</sup> In a simple sense, these terms *episteme*, *techne*, and *ethos* translate into English as knowledge, technology, and ethics. However, the purpose of using the Greek stems from the desire to recognize their broader connotation. *Episteme* refers not only to knowledge as truth, but also to the rules and processes by which truth is produced (i.e. epistemology). *Techne* is not only the root of technology, in the sense of tools, but also means "art" in the broad sense of that which is constructed by humans (nature vs. artifice). Finally, *ethos* is both the source of "ethics," as well as a way or mode of life consonant with the realm of subjectivity. The value of these terms exists in their conceptual flexibility and broad connotation; thus to employ them in the context of a governmentality approach is warranted because such an approach is oriented towards the widest possible

---

<sup>275</sup> Michel Foucault, "Power and Truth," Power/Knowledge: Selected Interviews and Other Writings 1972-1977, ed. Colin Gordon (Brighton: The Harvester Press, 1980) 119.

<sup>276</sup> Dean, "Governing the Unemployed Self in an Active Society."; also, Dean, Governmentality: Power and Rule in Modern Society 31-32.

investigation of the activity of governing. As such, they appear throughout the rest of the project as another mode of referring to the three axes of governmentality.

Within a governmentality approach, knowledge is first a domain, one that is not simply reducible to ideas or concepts.<sup>277</sup> Rather, as a domain it is characterized by its holistic aspect: a collection of techniques, theories, experiments, methods, evidence, standards for the training and education of experts, and the expertise that is the result of their professional practices. When approaching what the *episteme* of government, a governmentality approach asks:

what forms of thought, knowledge, expertise, strategies, means of calculation, or rationality are employed in practices of governing? How does thought seek to transform these practices? How do these practices of governing give rise to specific forms of truth? How does thought seek to render particular issues, domains and problems governable?<sup>278</sup>

The role of expertise in this endeavor especially important, since it carries the weight of authority in terms of building effects of “truth” about a particular object of knowledge – such as the origins of disease in a population. The establishment of truth narratives by experts have the additional effect that by creating such narratives, boundaries are established between legitimate, acceptable objects and means of producing knowledge, and those that are devalued as ill-focused, unscientific, or the product of fancy and superstition.<sup>279</sup> Through the establishment of these boundaries, experts and expertise become an important component in the government of individuals’ behavior and day-to-day activities. The link with government and the

---

<sup>277</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 177.

<sup>278</sup> Dean, Governmentality: Power and Rule in Modern Society 31. For an additional discussion on the *episteme* of government, see also Dean, "Governing the Unemployed Self in an Active Society."

<sup>279</sup> I. Illich, Irving Kenneth Zola, J. McKnight, J. Caplan and H. Shaikan, Disabling Professions (London: Marion Boyars, 1977).

political rationalities that inform it are suggested by the intermediary link that experts constitute between political authorities and the objects of government:

Experts would enter into a kind of double alliance. On the one hand, they would ally themselves with political authorities, focusing upon their problems and problematizing new issues, translating political concerns about economic productivity, innovation, industrial unrest, social stability, law and order, normality and pathology and so forth into the vocabulary of management, accounting, medicine, social science and psychology. On the other hand, they would seek to form alliances with individuals themselves, translating their daily worries and decisions...into a language claiming the power of truth, and offering to teach them the techniques by which they might manage better, earn more, bring up healthier or happier children and much more besides.<sup>280</sup>

By deploying a language weighted with the authority of truth, and by advocating techniques that are aimed at the improvement of the daily lives of the population – such as education, management strategies, and the like – knowledge becomes a key arena for the exercise of power and the practice of government. The importance of knowledge, and especially expertise, to the practices of government is indicated by the nature of government itself, for “government is a domain of cognition, calculation, experimentation and evaluation.”<sup>281</sup> Moreover, the role of experts and expertise is not repressive; the power that is exercised through them regulates conduct in such a way as to facilitate the ideals and aims of the population. The role of expertise is thus “not one of weaving an all-pervasive web of ‘social control’, but of enacting assorted attempts at the calculated administration of diverse aspects of conduct through...tactics of education, persuasion, inducement, management, incitement, motivation and encouragement.”<sup>282</sup>

---

<sup>280</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 188.

<sup>281</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 175.

<sup>282</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 175.

These tactics – or technologies that constitute the realm of *techne*– work in a generative fashion to bring into effect lives that are deemed desirable given the values bound up with the dominant political rationality of government. Hence, they are a mechanism by which privileged objects of knowledge (ontology) and means of knowing (epistemology) are deployed in the government of the population. They are also a means by which “authority [is] constituted and rule accomplished.”<sup>283</sup> But what are these technologies – how are they recognized? While Rose and Miller assert that they are in principle nearly unlimited in number and variety,<sup>284</sup> examples abound: surveillance in any number of spheres, including health and crime; modes of national economic accounting; contractualism in the legal and economic arenas, as well as such places as the learning contract of the classroom; and finally “technologies of citizenship,” such as self-esteem and empowerment counseling, which function to transform self-identity from a state of helplessness to one of activity and engagement.<sup>285</sup>

---

<sup>283</sup> Dean, Governmentality: Power and Rule in Modern Society 31.

<sup>284</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 183.

<sup>285</sup> Surveillance is perhaps one of the most fully analyzed technologies of government. See, for example: Michel Foucault, "The Politics of Health in the 18th Century," Power/Knowledge: Selected Interviews and Other Writings 1972-1977, ed. Colin Gordon (Brighton: The Harvester Press, 1980).; and David Armstrong, Political Anatomy of the Body (Cambridge: Cambridge University Press, 1983). These authors explore the treatment of population surveillance (census data, vital statistics, etc.) and individual surveillance (anatomy and clinical medicine). See also Foucault's (1977) historical account of the evolution of surveillance techniques as a mode of disciplinary power. Michel Foucault, Discipline and Punish: The Birth of the Prison (London: Allen Lane, 1977). Additional examples include: W.R. Arney, Power and the Profession of Obstetrics (Chicago: University of Chicago Press, 1982).; D. Silverman, Communication and Medical Practice, (London: Sage, 1987).; Robin Bunton, "More Than a Woolly Jumper: Health Promotion as Social Regulation," Critical Public Health 3.2 (1992).; and L. McKie, "The Art of Surveillance or Reasonable Prevention? The Case of Cervical Screening," Sociology of Health and Illness 17 (1995). On the transition from liberal to Keynesian to neoliberal technologies of economic accounting, see Barry Hindess, "Neoliberalism and the National Economy," Governing Australia, eds. Mitchell Dean and Barry Hindess (Cambridge: Cambridge University Press, 1998).; on the role of contracts and contractualism as a technology of government, see Anna Yeatman, "Interpreting Contemporary Contractualism," Governing Australia, eds. Mitchell Dean and Barry Hindess (Cambridge: Cambridge University Press, 1998).; and Glyn Davis, Barbara Sullivan and Anna Yeatman, eds., A New Contractualism (Melbourne: Macmillan,

This last example, technologies of citizenship, is especially apropos to relating how the project of government is indelibly bound to the construction of agency and subjectivity (*ethos*), and how this construction is interwoven with the *episteme* and *techne* dimensions of government.

A key to approaching the linkage between subjectivity and government exists in what Foucault terms “the techniques of the self,” which are the “[p]rocedures...suggested or prescribed to individuals in order to determine their identity, maintain it, or transform it in terms of a certain number of ends, through relations of self-mastery or self-knowledge.”<sup>286</sup>

Foucault’s characterization of these techniques implicitly draw connections between the three axes of governmentality – creation or transformation of identity achieved as a consequence of self-knowledge and mastery, which does not occur in a vacuum. Individuals are *educated* via procedures or strategies which enable self-knowledge to occur; this is the activity and the realm of expertise, and thus highlights the condition that expertise makes possible self-knowledge.

This relationship between expert and self-knowledge, as well as the interplay of *episteme*, *techne*, and *ethos* aspects of government, are further clarified through reference to the technologies of citizenship. As Dean writes:

We note here the stress on both the technical aspect – or *techne* – of governing and the manner in which governing is concerned with the fabrication of certain kinds of subjectivity and identity. The

---

1997).; on self esteem and empowerment programs see Barbara Cruikshank, "The Will to Empower: Technologies of Citizenship and the War on Poverty," *Socialist Review* 23.4 (1994).; Barbara Cruikshank, "Revolutions Within: Self-Government and Self-Esteem," *Foucault and Political Reason: Liberalism, Neo-Liberalism and Rationalities of Government*, eds. Andrew Barry, Thomas Osborne and Nikolas Rose (London: University College London Press, 1996).; and Dean, *Governmentality: Power and Rule in Modern Society*.

<sup>286</sup> Michel Foucault, "Subjectivity and Truth," *Ethics: Subjectivity and Truth*, ed. P. Rabinow (New York: New Press, 1994) 87.

technology of citizenship requires *consciousness* of one's powerlessness, *knowledge* of its causes, and action to change its conditions.<sup>287</sup> [emphasis added]

In order for such technologies of empowerment to be successful, one must first possess an awareness of their condition (self-knowledge), which itself is accomplished via an appeal to a body of knowledge that establishes the "truth" of causation and manifestation (the province of expert knowledge of psychology and psychiatry). Thus, to recognize oneself as unempowered, or a victim, is to recognize in the experience of that condition certain features expert authorities have identified as being indicative of it (i.e. timidity, low initiative, self-doubt), or causative of it (i.e. experiences of violence or abuse, etc.).

This relationship of self-knowledge to expert knowledge is not merely one of comparison, however; it is more than setting one's individual experiences against a backdrop of expertise, of recognizing "fit" and then acting constructively upon it. For to the extent that agents conceive of their identities and experiences as consistent with or capable of achieving a state reified by expert authorities as "the norm" or "the ideal," self-knowledge becomes conditioned, even constructed by expertise and the technologies that deploy it. As a dimension of governmentality, therefore, subjectivity is an arena where the exercise of power is directed again in a productive capacity to achieve the regulation of conduct:

Incorporating, shaping, channeling and enhancing subjectivity have been intrinsic to the operations of government...[T]he government of subjectivity has taken shape through the proliferation of a complex and heterogeneous assemblage of technologies. They have acted as relays, bringing the varied ambitions of...authorities into alignment with the

---

<sup>287</sup> Dean, *Governmentality: Power and Rule in Modern Society* 67.; for additional elaboration on these linkages, see Cruikshank, "The Will to Empower: Technologies of Citizenship and the War on Poverty," 30-31.

ideals and aspirations of individuals, with the selves each of us wants to be.<sup>288</sup>

Here again, the exercise of power is conceptualized in generative, constructive terms, to the aim of facilitating the achievement of a healthy, happy state of being – as that state is valorized as “normal,” “ideal,” “productive,” and/or “desirable” and thus consistent with the dominant political rationality. Because power is understood and deployed in such facilitative terms, the practices of government cannot compel one to assume a particular identity. Rather, certain character traits are privileged in such a way as to appear desirable:

Regimes of government do not *determine* forms of subjectivity. They elicit, promote, facilitate, foster and attribute various capacities, qualities and statuses to particular agents. They are successful to the extent that these agents come to experience themselves through such capacities (e.g. of rational decisionmaking), qualities (having a sexuality) and statuses (e.g. as being an active citizen).<sup>289</sup>

Were one to approach government as the analysis of state institutions, then citizens appear only as legal subjects – allowed certain choices, prohibited others. However, a governmentality approach refocuses our attention on citizens as subjects of freedom, possessing the capacity to interact with other free subjects. This interaction may take the form of domination, bargaining, or resistance, and in so doing highlights the relationship between governmentality and ethics. On this note Foucault points out that “the concept of governmentality makes it possible to bring out the freedom of the subject and its relationship to others – which constitutes the

---

<sup>288</sup> Nikolas Rose, Governing the Soul: The Shaping of the Private Self (London: Routledge, 1990) 213. For additional discussions on the interplay of knowledge, technologies, and subjectivity, see Dave Holmes and Denise Gastaldo, "Nursing as Means of Governmentality," Journal of Advanced Nursing 38.6 (2002): 559.

<sup>289</sup> Dean, Governmentality: Power and Rule in Modern Society 32.

very stuff of ethics.<sup>290</sup> In this regard, citizenship can be conceptualized and actualized within a program of responsibility rather than merely the realm of the juridical. This aspect is particularly important as we begin to direct attention toward liberal forms of governmentality, which have historically constructed a division from the public or state sphere with that of the private. Thus, “[l]inking the idea of the care of the self with citizenship enables us to escape this binary divide between private ethics and public politics.”<sup>291</sup>

### Evolution of Liberal Governmentality

The assertions detailed above – that government is not synonymous with the state, that the project of government exhibits political rationality, and that it is achieved via the exercise of power in the three interrelated domains of knowledge, technologies, and the production of subjectivities – form the theoretical bones of a governmentality approach. In order to flesh them out, however, and thus clarify the various dimensions of governmentality, the following sketches out the historical evolution of liberal governmentality, most especially in the transition from its welfarist incarnation of the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, to the neoliberal form so dominant today. This historical sketch is pursued through an elaboration of the political rationalities underlying welfare liberalism (or welfarism) and neoliberalism, and how power is deployed in terms of *episteme*, *techne*, and *ethos*.

---

<sup>290</sup> Michel Foucault, "The Ethics of the Concern of the Self as a Practice of Freedom," Ethics: Subjectivity and Truth, ed. P. Rabinow (New York: New Press, 1994) 300.

<sup>291</sup> Melanie White and Alan Hunt, "Citizenship: Care of the Self, Character and Personality," Citizenship Studies 4.2 (2000): 100.

Within a governmentality framework, one encounters “liberalism” not simply as an ideology or theory, but as a practice “oriented toward objectives and regulating itself by means of a sustained reflection.”<sup>292</sup> Moreover, as a practice, Foucault directs our attention toward the flexibility of liberalism’s manifestations over time, especially as a tool of critique, and the contestations between these manifestations in a given point in time.<sup>293</sup> Dean elaborates on and clarifies this point:

This means that the key targets of liberalism can change according to the circumstances in which it is located: at the end of the eighteenth century, it was notions of ‘reason of state’ and police; at the end of the nineteenth century, it was earlier forms of liberalism; after the Second World War in Europe, it was forms of national and state socialist totalitarianism; at the end of the twentieth century, it includes not only the ideal of a welfare state but also the very concept of the nation-state.<sup>294</sup>

In this regard, it is possible to trace the opposition between competing liberalisms in a historical moment, as well as discern how such a contest proceeds with one manifestation growing out the practices and effects of an earlier incarnation. Hence, an analytics of liberal government proceeds with attention to the evolution of its forms and practices, attending especially to the continuities that run through them all, as well as the breaks that mark distinctly unique styles of governmentality.

#### Roots of Welfarism: Classical Liberalism and the Problematics of Government

As a mode of governmentality, welfarism evolved from a classical liberal mode of government that, beginning in the late 18<sup>th</sup> century, shifted the emphasis

---

<sup>292</sup> Michel Foucault, "The Birth of Biopolitics," *Ethics: Subjectivity and Truth*, ed. P. Rabinow (New York: New Press, 1994) 73-74.

<sup>293</sup> Foucault, "The Birth of Biopolitics," 75. On the flexibility of liberalism’s forms, and also on its role in critique, see also Dean, *Governmentality: Power and Rule in Modern Society* 49-51.

<sup>294</sup> Dean, *Governmentality: Power and Rule in Modern Society* 49.

from the augmentation of state strength and prosperity as the end of government, to that of society:

Liberalism is to be analyzed, then, as a principle and a method for rationalizing the exercise of government, a rationalization that obeys – and this is its specificity – the internal rule of maximum economy...[L]iberal thoughts starts not from the existence of the state, seeing in government the means for attaining that end it would be for itself, but rather from society, which is in a complex relation of exteriority and interiority with respect to the state.<sup>295</sup>

Under such a rubric, the expansion of state power and reach does not translate into the maximization of welfare for society; rather, the enhancement of welfare is achieved via the pursuit of private interest of free and autonomous subjects in a sphere separate that of the state. For liberal government, therefore, political economy approaches such as those articulated by Smith and Ricardo help to provide the conceptual tools and the language for constructing society in such a manner.<sup>296</sup> Society exists, in this sense, as a sphere with a natural history of its own, and flourishes under conditions where private interests could be freely pursued in the market with minimal intervention from the state.<sup>297</sup>

Nonetheless, liberalism should not be seen as arising exclusively from the province of economy; rather, that sphere constitutes an arena in which the liberal

---

<sup>295</sup> Foucault, "The Birth of Biopolitics," 74-75.

<sup>296</sup> On the influence of Smith and the principle of the "invisible hand", see Gordon, "Introduction," 15-18.; also Dean, Governmentality: Power and Rule in Modern Society 114-15. On the role of Ricardo's conceptualization of the economy as a bioeconomic reality and the relationship of his differential theory of rent to the rise of liberal government, see Mitchell Dean, The Constitution of Poverty: Towards a Genealogy of Liberal Governance (London: Routledge, 1991) 148-55. More general treatments of the historical rise of liberal governmentality include: Foucault, "The Birth of Biopolitics," 74-76.; Barry Hindess, "Politics and Governmentality," Economy and Society 26.2 (1997).; Dean, Governmentality: Power and Rule in Modern Society 113-30.; and Dean and Hindess, "Introduction: Government, Liberalism, and Society."

<sup>297</sup> Ilpo Helen, "Welfare and Its Vicissitudes," Acta Sociologica 43 (2000): 159.

critique of state intervention could be logically deployed. Foucault is clear on this point:

There is no doubt that the market as a reality and political economy as a theory played an important role in the liberal critique. But...liberalism is neither the consequence nor the development of these; rather, the market played, in the liberal critique, the role of a "test," a locus of privileged experience where one can identify the effects of excessive governmentality and weigh their significance.<sup>298</sup>

Moreover, minimal intervention should not be construed as a total lack thereof; the province of the state intersects with that of society by creating a secure environment, and guaranteeing the conditions of liberty such that free subjects are able to pursue their interest in the market.<sup>299</sup> In conjunction with this, it is society's manifestation as a population that must be secured that engenders conditions, which facilitate the later emergence of welfarism. Dean states:

This new object, society, is made up of the concrete exchanges of the economy, of the lives, infirmities, frailties and death of individuals, of the occupations, customs, habits, patterns of family life and modes of communication of the population, of the quest by the population for subsistence, and of the ensuring of the distribution of wealth. Above all, civil society is the concrete thing that ultimately government must govern...Liberalism, then, already contains the possibility of a *social government*...[emphasis in original]<sup>300</sup>

The role and interest of the state in providing the basic conditions of security intersect with the construction of society itself under liberal government to create the possibility for the emergence of welfarism. The industrial capitalism engendered by the deployment of liberal economic principles during the 19<sup>th</sup> century historically became linked to the expansion of social and political debate surrounding such issues

---

<sup>298</sup> Foucault, "The Birth of Biopolitics," 76.

<sup>299</sup> Foucault cited in Gordon, "Introduction," 19.

<sup>300</sup> Dean, Governmentality: Power and Rule in Modern Society 125-26.

as poverty, child labor, and the status of women.<sup>301</sup> As a result, “[w]hen the task of government was redefined as securing society not only from the state, but also from the economy, the question of welfare was introduced to into the liberal problematizations of government.”<sup>302</sup>

#### Welfarist Governmentality

Having briefly charted the conditions that created the space for the emergence of welfarism, it is necessary to examine its characteristics as a form of governmentality, including the political rationality that informed it, as well as the particular configurations of power that were deployed in the arenas of knowledge, technology, and subjectivities.

The political rationality underlying welfarism as a mode of governmentality directed government toward specific ends. Most especially it was concerned with the elevation of the social as a domain to be acted upon toward the encouragement of prosperity and growth. In this regard, it is possible to trace the lingering influences of classic liberalism. Unlike the earlier incarnation, however, the means of promoting the welfare of society increasingly came to be linked with the apparatuses of the state, as the increasingly economy came to be seen as a source of vulnerability:

As a political rationality, welfarism is structured by the wish to encourage national growth and well being through the promotion of social responsibility and the mutuality of social risk...The key innovations of welfarism lay in the attempts to link the fiscal,

---

<sup>301</sup> On poverty, see G. Procacci, "Social Economy and the Government of Poverty," Ideology and Consciousness 4 (1978).; and Dean, The Constitution of Poverty: Towards a Genealogy of Liberal Governance.; on the problematics of child labor, and the status of women and the family, see J. Donzelot, The Policing of Families (New York: Pantheon, 1979).

<sup>302</sup> Helen, "Welfare and Its Vicissitudes," 159.

calculative and bureaucratic capacities of the apparatus of the state to the government of social life.”<sup>303</sup>

The emphasis on the mutuality of risk and social responsibility also demonstrate a particular conception of the nature of the subjects who are to be governed. To the extent that they exist as part of a network that distributes risk and rewards across the social body, subjects exist in solidarity with each other, part of the larger network that constitutes the relational fabric of society.

The language that renders such a view thinkable is grounded in a “vocabulary [that] sought to discover the means of translating the particular, the personal and the private into the general, the public and the social.”<sup>304</sup> It is in the context of this translation that the development of new (or reformulated) institutions and practices make such a transition operable. Thus, Dean charts the rise from the late nineteenth through the mid twentieth centuries of such phenomena as *social promotion*, which opens up the private realm of the family to new or expanded sites of practice in the fields of public education, family planning, and the like. Similarly, *social insurance* – which recasts the particular individual experiences of economic vulnerability due to old age, illness, unemployment, or injury – become reconfigured in the public sphere in comprehensive pension systems, unemployment exchanges, nationalized health care systems, and so forth.<sup>305</sup>

The political rationality of welfare liberalism is articulated in the various activities and practices pertaining to knowledge, technologies of power, and subjectivities. Like classic liberalism, welfarism retains a concern for the population,

---

<sup>303</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 192.

<sup>304</sup> Dean, Governmentality: Power and Rule in Modern Society 129.

<sup>305</sup> Dean, Governmentality: Power and Rule in Modern Society 129.

as well as the functioning of a national economy. However, unlike the classic liberal view of the national economy as largely autonomous and self-regulating, welfare liberalism reconfigures the national economy as a site of government.<sup>306</sup>

Furthermore, the aforementioned vulnerabilities engendered by market activities introduce a new object of knowledge – market failure – and the development of an intellectual machinery, Keynesian political economy – capable of articulating it as a problem to be remedied. Thus:

The emergence of Keynesian political economy can thus be considered the epistemic articulation of welfare liberalism. In the concepts of ‘market failure’ and ‘demand management’ we find the double injunction for the state to manage the social objects of the market and aggregate demand, for the express purpose of the ‘proper’ functioning of a multiplicity of economic actors within civil society.<sup>307</sup>

To the end of effectively managing aggregate demand as well as the problematics of social life, a comprehensive knowledge of the workings of the national economy and society gave rise to ever-expanding fields of inquiry and documentation. The reification of the aggregate, of the social, was implicated both in the disciplines that emerged or expanded during this time, as well as the means and methods involved in knowledge production. Such fields as public health, public administration, welfare economics, sociology, and social work became well established in academic institutions during this era.<sup>308</sup>

And with this establishment came also the flourishing of the expert knowledge and analytical techniques that sought to make sense of and ameliorate the problems of society. Indeed, welfare liberalism privileged expertise: “by incorporating expertise

---

<sup>306</sup> Hindess, "Neoliberalism and the National Economy," 218.

<sup>307</sup> Eudaily, The Present Politics of the Past: Indigenous Legal Activism and Resistance to (Neo)Liberal Governmentality 50.

<sup>308</sup> Dean, Governmentality: Power and Rule in Modern Society 129.

into a centrally directed network, welfarism facilitates the creation of domains in which political decisions are dominated by technical calculations.”<sup>309</sup> On monitoring and managing the national economy, for example, Hindess points to the use of “statistical aggregates” such as “investment” and “savings,” which, complemented by other indicators such as national unemployment levels and GNP, not only enabled knowledge of the national economy, but also had implications for the deployment of technologies of government. For “if changes in some of these aggregates could be brought about by government action then corresponding changes in other aggregates could be expected to follow.”<sup>310</sup> Thus, if national unemployment were a problem, for example, actions to correct it (such as in the form of public works programs, unemployment exchanges, etc.), would be expected to have spillover benefits for other measures of performance. In this regard, the production of knowledge in the context of welfarism directed attention not only toward *what* the problems of society entailed, but also provided the justification for implementing the means to correct them.

Set against the backdrop of urban squalor chronicled at the turn of the century by Sinclair (*The Jungle*), and later the privation and dispossession of the Depression era, the implementation of technologies to govern the vagaries of market and society became paramount. These technologies were embodied in various institutions and practices, from “tax regimes to social insurance, from management training to social casework, from employment exchanges to residential homes for the elderly.”<sup>311</sup> Moreover, as these programs became increasingly linked to the apparatus of the state,

---

<sup>309</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 196.

<sup>310</sup> Hindess, "Neoliberalism and the National Economy," 218.

<sup>311</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 191.

the activity of governing society yielded increasingly complex administrative structures and the expansion of public expenditures – especially in terms of social insurance in the areas of health and employment.<sup>312</sup>

Entwined with the disciplinary expertise that made the “social” thinkable, and the technologies which made it operable, were those citizens who themselves constituted “society.” If government was to be directed toward the ends of managing social welfare, it would also involve the shaping of subjectivity such that individuals could envision themselves as part of something larger than themselves. Hence, as Rose and Miller point out, a welfarist mode of governmentality “constituted individuals as citizens bound into a system of solidarity and mutual inter-dependency.”<sup>313</sup> To see oneself as existing in solidarity was to enable practices that further made the government of society possible in spheres that had contact with, but were not necessarily administered by the state: the formation and rise of labor unions, for example, as well as the emergence of the women’s suffrage movement.

A subjectivity predicated upon solidarity *between* citizens was complemented by the construction of the relationship between society and the state. To the extent that society was to be secured, and its ills managed, and to the extent that the state exerted responsibility over these endeavors, one draws out the pastoral elements that produce society as a flock to be shepherded.<sup>314</sup> This point is illustrated through the

---

<sup>312</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 196.

<sup>313</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 196.

<sup>314</sup> For discussions of pastoral power in the exercise of government, especially with reference to welfarism, see Dean, *Governmentality: Power and Rule in Modern Society* 76.; Michel Foucault, "Politics and Reason," *Politics, Philosophy, Culture: Interviews and Other Writings 1977-1984*, ed. L.D. Kritzman (New York: Routledge, 1988) 67, 71.

dynamics of insurance that bound the subjects of society, not so much as individuals as a collectivity, to an interventionist state:

Welfarism embodies a particular conception of the relationship between the citizen and the public powers...Insurance fundamentally transforms the mechanisms that bind the citizen into the social order. A certain measure of individual security is provided against loss or interruption of earnings through sickness, unemployment, injury, disablement, widowhood or retirement. Yet simultaneously these subjects are constituted as the locus of social responsibility and located within a nexus of social risk.<sup>315</sup>

Via the technologies and practices that manage the welfare of society, the state comes to be constructed as caretaker, shepherd, steward. This excerpt from Rose is also appropriate for highlighting the relationship between subjectivity and the other two axes of governmentality. For it is through the deployment of technologies and practices that are themselves predicated upon bodies of knowledge and ways of knowing, that our very identities are shaped; it is how we come to know ourselves, to see ourselves in the context of our relations with others, and ultimately, to govern ourselves.

#### Neoliberal Governmentality

To further draw out the features of governmentality and highlight its historical evolution, it is worth charting the emergence and ascension of neoliberalism as a style of governmentality. The conditions of this emergence are made possible again by the manifestation of liberalism as a mode of critique. What began as a means to constitute and protect the population via the dispersion of social risk, the “welfare state” in Western liberal democracies came under attack beginning in the 1970s for

---

<sup>315</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 196.

reasons ranging from the fostering of dependency and the dilution of individual responsibility, to bloated and inefficient bureaucracy, to the ever-expanding public expenditures on social programs and economic interventions.<sup>316</sup> Friedman observes these tendencies in his assertion that the state, or “[g]overnment proved unable to manage enterprises, to organize resources to achieve stated objectives at reasonable cost. It became mired in bureaucratic confusion and inefficiency. Widespread disillusionment set in about the effectiveness of centralized government in administering programs.”<sup>317</sup> In terms of this critique, neoliberalism emerges as “a liberal response to the achievements of the liberal mode of government.”<sup>318</sup>

This critique evolved in response to a range of sociopolitical and economic phenomena that occurred under the auspices of welfarist governmentality. It is beyond the scope of this project to address them all, but several are worth highlighting to provide a sense of how the historical rupture from one mode of governmentality to another was made possible.

The first involved conditions in the political economy of the 1960s and 1970s, alluded to briefly above. Though neoliberalism as an ideology has its roots reaching several decades back in time, events of that era coalesced in such a way as to bring

---

<sup>316</sup> On this transition, see Nikolas Rose, "Governing 'Advanced' Liberal Democracies," Foucault and Political Reason, eds. Andrew Barry, Thomas Osborne and Nikolas Rose (Chicago: University of Chicago Press, 1996).; Ellen MacEachen, "The Mundane Administration of Worker Bodies: From Welfarism to Neoliberalism," Health, Risk and Society 2.3 (2000).; Jamie Peck and Adam Tickell, "Neoliberalizing Space," Antipode 34.3 (2002).; Dean, Governmentality: Power and Rule in Modern Society 150-53. While these analysts chart the genesis of the neoliberal critique in the 1960s and 1970s, it gains ascension and notoriety in the 1980s under the national economic reforms associated with Thatcherism/Reaganism, and in the 1990s is articulated in the expanding practices and technologies associated with globalization.

<sup>317</sup> Milton Friedman, "Introduction," The Road to Serfdom (Chicago: University of Chicago Press, 1994 [1972, 1944]) xiii.

<sup>318</sup> Barry Hindess, "Liberalism, Socialism and Democracy: Variations on a Governmental Theme," Foucault and Political Reason, eds. Andrew Barry, Thomas Osborne and Nikolas Rose (Chicago: University of Chicago Press, 1996) 78.

the voices of critique to the fore. The expansion of the state under welfarism was a sustainable phenomenon only so long as economic growth continued to be strong. In Sweden, for example, record economic growth during the 1960s was accompanied by an expansion in the public sector, from just over 30% of GNP in 1960, to 60% by 1978.<sup>319</sup> However, even as the welfare state continued to expand in the 1970s, economic productivity and growth slowed, ultimately resulting in fiscal deficit. Sweden was not alone in facing such economic challenges. In the United States, the 1970s were characterized by ongoing stagflation, price surges and supply shortages in the wake of the oil crisis, trade deficits as U.S. markets were flooded with cheap imports, and budget deficits as the state attempted to cope with the ills of the economy:

The government's ever-rising need for funds swelled the budget deficit and led to greater government borrowing, which in turn pushed up interest rates and increased costs for businesses and consumers even further. With energy costs and interest rates high, business investment languished and unemployment rose to uncomfortable levels.<sup>320</sup>

Against this backdrop of economic slowdown, the above-mentioned critique of bloated bureaucracy and a welfarist imperative in public policy began to auger for the emergence of a rationality that sought to impose fiscal discipline and a reinvigoration of market principles. In pointing to this transition, Rose and Miller characterize the eventual shift to neoliberal rationality in terms of its disjuncture with welfarism:

Those aspects of government that welfare construed as political responsibilities are, as far as possible, to be transformed into commodified forms and regulated according to market principles.

---

<sup>319</sup> Peter Ehn, Magnus Isberg, Claes Linde and Gunnar Wallin, "Swedish Bureaucracy in an Era of Change," Governance: An International Journal of Policy, Administration, and Institutions 16.3 (2003): 432.

<sup>320</sup> United States Department of State, The U.S. Economy: A Brief History, February, 2001 2001, Available: <http://usinfo.state.gov/products/pubs/oecon/chap3.htm>, February 17 2005.

Economic entrepreneurship is to replace regulation, as active agents seeking to maximise their own advantage are both the legitimate locus of decisions about their own affairs and the most effective in calculating actions and outcomes.<sup>321</sup>

In addition to auguring for challenges in the political economy, this era witnessed an emerging critique of professional expertise and “expert knowledge” that had flourished under welfare liberalism; the feminist movement of the 1970s, for example, sparked a critique of the medical discipline as a domain that approached women’s health in a patriarchal manner, and that in a professional capacity privileged the role of women as support figures (such as nurses) as opposed to physicians and experts in their own right.<sup>322</sup> Expert knowledge, and the professions, were thus “said to be unaccountable systems of exclusion, delegitimizing local, folk and alternative forms of knowledge and de-skilling the population of its existing capacities and local knowledge.”<sup>323</sup> The critique of professional expertise, while not necessarily manifest as a dimension of neoliberal rationality in and of itself, does allow for the emergence of a new mode of conceptualizing the role of the expert, and of the patient or client – to one less predicated upon hierarchy, and more directed toward the facilitation of partnership and the importance of “client” knowledge. Dean elaborates as to the implications of this rupture for the emergence of neoliberal government:

One outcome of the critique of professional expertise and knowledge has been to make the application and use of expert knowledge dependent upon the ‘choice’ of those formerly regarded as clients of services. This prepares for the conception of quality service provision as ‘customer-focused’ and for the widespread tendency to reconfigure

---

<sup>321</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 198.

<sup>322</sup> B. Ehrenreich and D. English, For Her Own Good: 150 Years of the Experts' Advice to Women (London: Pluto Press, 1979). For a more general treatment of the emerging critique of expert professions, see Illich, Zola, McKnight, Caplan and Shaikan, Disabling Professions.

<sup>323</sup> Dean, Governmentality: Power and Rule in Modern Society 154.

formerly public provision as markets in services and expertise over which the consumer is sovereign.<sup>324</sup>

In the context of health care especially, an additional dynamic coalescing in the early 1970s opened the space for contestation that hearkened the emergence of neoliberal government. Rose and Miller refer to this dynamic as the breach of the “medico-administrative enclosure of health,” and it includes several elements. First, the success in expanding and refining technological capabilities in such areas as medical diagnostics and treatment began to constitute more expensive health care. Concomitantly, as longevity improved in advanced welfare states, health care systems – especially universal systems such as those in the United Kingdom and Sweden – experienced pressure from increased demand for services. Finally, the proliferation of a wide array of health professionals, including physicians’ assistants, nurses, physical therapists, occupational health care workers, and others, resulted in attempts to organize for both better wages as well as to have a greater say in how health care should be administered.<sup>325</sup> The confluence of these events resulted, as Rose and Miller point out, in a move to both reestablish a sense of cohesion to the practice of health care, and to make that practice more efficient – a task accomplished through the appeal to economic rationality:

As the health apparatus threatened to become ungovernable, a new form of rational expertise, grounded in the discourse of health economics, began to provide resources for those who wished to challenge the prerogatives of doctors. New devices began to be developed for evaluating the costs and benefits of different treatments

---

<sup>324</sup> Dean, *Governmentality: Power and Rule in Modern Society* 154.

<sup>325</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 195. For additional reference to these and other dynamics in the context of specific cases, see Chapter 7 for a discussion of the pressures leading up to reform in the United Kingdom and Sweden.

and decisions, rendering them amenable to non-clinical judgments made neither by doctors nor by local politicians, but by managers.<sup>326</sup>

The above examples should not be taken to constitute an exhaustive look at the events that opened the space for the neoliberal critique, but do provide a sense of the phenomena that the neoliberal critique confronted and ultimately responded to. Moreover, having established these elements as the milieu from which neoliberal rationality emerges, we are able to move toward a fuller characterization of that rationality. As will be drawn out in the subsequent discussion, this rationality invokes both tenets of classic liberalism, as well as introduces distinctly new elements.

In terms of the ends or aims of government, the political rationality of neoliberalism is drawn to the values of freedom and autonomy; indeed for Hayek, freedom is the “supreme principle” of which other aims (justice, cultural progress, etc.) are only derivative.<sup>327</sup> Coexisting with the emphasis on freedom and autonomy is the valorization of the market, particularly toward the encouragement of efficiency within it. In his analysis of neoliberal political economy, especially that of Hayek, Gordon draws out the key relationship between freedom and the market: “Freedom being the absence of coercion, the market order is a regime of freedom, because individuals may engage in whatever transactions they voluntarily choose to make.”<sup>328</sup>

In this regard, a neoliberal rationality of government incorporates classic liberal principles of liberty, the privileging of the competitive market, and the

---

<sup>326</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 195. On this point, see also M. Ashmore, M.J. Mulkay and T.J. Pinch, Health and Efficiency: A Sociology of Health Economics (Open University Press, 1989).

<sup>327</sup> F.A. Hayek, The Constitution of Liberty (Chicago: University of Chicago Press, 1960) 68.

<sup>328</sup> Scott Gordon, "The Political Economy of F.A. Hayek," The Canadian Journal of Economics 14.3 (1981): 481.

depoliticization of economic activity. On this latter point, Rose and Miller chronicle neoliberalism's

scepticism over the capacities of political authorities to govern everything for the best...Its language is familiar and needs little rehearsal. Markets are to replace planning as regulators of economic activity. Those aspects of government that welfare construed as political responsibilities are, as far as possible, to be transformed into commodified forms and regulated according to market principles.<sup>329</sup>

In addition to reinvigorating classic liberal values concerning liberty and the market, a neoliberal political rationality conceptualizes the governed in a manner that is consistent with these values. If we return to the latter point raised by Gordon, we note two distinct features. First of all, the governed are individuals; a central feature of the neoliberal critique was to recast emphasis on the autonomy and responsibility of individuals as opposed to "society." In a 1987 interview, Prime Minister Margaret Thatcher gave perhaps the clearest articulation of this aspect of the neoliberal logic of government:

I think we've been through a period where too many people have been given to understand that if they have a problem, it's the government's job to cope with it...They're casting their problem on society. And you know, there is no such thing as society. There are individual men and women, and there are families. And...people must look to themselves first. It is our duty to look after ourselves, and then to look after our neighbor.<sup>330</sup>

To the extent that "there is no such thing as society," neoliberal rationality invokes an analytical and practical focus on agents – be they bodies or firms – that casts them as desirably autonomous. Indeed, the responsabilization of individuals that Thatcher alludes to becomes instrumental in the construction of a subjectivity that is predicated upon self-reliance and investment, as will be demonstrated in subsequent discussion.

---

<sup>329</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 198.

<sup>330</sup> Margaret Thatcher, "Interview," Women's Own 1987: 10.

A second feature enunciated in Gordon's assessment and implicit in the Thatcher example is that individuals are endowed with the ability to choose, and in so doing, provide for themselves in the best possible manner. Given the privileging of competition and efficiency in neoliberal discourse, decisionmaking in the context of assessment of costs and benefits is attributed to individuals.<sup>331</sup> As we will see, however, in the discussion on neoliberal subjectivity, the privileging of the choice-making actor does not restrict the possibility for our choices to be conditioned by larger influences; indeed, it is via the deployment of technologies such as education, awareness programs, and the like, that individuals are encouraged to view themselves as empowered to make the appropriate assessment of costs and benefits, and hence the "right" choices.

Beyond the invocation of classical liberal principles, the neoliberal critique of welfarism incorporates distinctly new features (hence, *neoliberalism*). If we trace the three axes of governmentality – the domains of knowledge, technologies, and subjectivity – these become evident.

Within the context of knowledge, one of the paramount differences between classic and neoliberalism is the characterization of the market in political economy. Where classic liberals such as Smith and Ricardo envisioned it as a "natural" sphere, neoliberals have approached it differently. Foucault draws attention in this regard to two strands of neoliberalism. The first, "ordoliberalism," refers a German style prevalent in Europe between the years 1948 and 1962. Seeking a capitalist reason for overcoming "social irrationalities" and the problems of totalitarianism, ordoliberals postulated that the market is *not* a naturally occurring arena of autonomous

---

<sup>331</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 10.

interaction. Rather, a competitive market emerges from the implementation of institutional and juridical arrangements that enable its cultivation. Prior institutional organization and rules of law are thus key, as is the project of monitoring to ensure that markets both remain competitive and do not create social distortions.<sup>332</sup>

The second strand, that of the American “Chicago School,” emerged in the post World War II decades as a response to the bureaucratic and public sector expansion of the New Deal, and Keynesian attempts to manage the macroeconomy via state intervention.<sup>333</sup> Within the context of the Chicago School, the market constitutes the preeminent form of social and economic organization, but is not “natural” in the classic liberal sense, nor is it constructed as the ordoliberal view it; rather, it is conceptualized, in the mode of Hayek, as “a spontaneous social order governed by customary rules selected by a complex cultural learning process.”<sup>334</sup> While conceptualized in such a light, it is deployed as the guiding principle for the organization of all social and economic life. Miller reflects on this dimension of the Chicago-style political economy:

A Chicagoan, furthermore, looks continuously for new ways to introduce the market system of rewards and penalties. At heart he appears to have a commitment to the market system with the opportunity it affords for impersonal achievement of individual goals that rejects, or at least renders suspect, all forms of social organization other than the market at levels above the family. Indeed, it is not a caricature to imagine some modern-day Chicagoans hard at work on the problem of introducing the price system into the family organization.”<sup>335</sup>

---

<sup>332</sup> Foucault, "The Birth of Biopolitics," 78.; Dean, Governmentality: Power and Rule in Modern Society 56-58.

<sup>333</sup> Foucault, "The Birth of Biopolitics," 79.; Dean, Governmentality: Power and Rule in Modern Society 56-58.

<sup>334</sup> Dean, Governmentality: Power and Rule in Modern Society 157.

<sup>335</sup> J. Laurence Miller, "On the 'Chicago School of Economics'," The Journal of Political Economy 70.1 (1962): 66.

Within this new rationality of government, the market as an object of knowledge thus undergoes reformulation, no longer a natural sphere, but one that could be created and applied to such arenas as crime, the family, health, education, even the state itself.

Thus, under neoliberal government, the extension of market principles and styles of management would apply to:

*all* forms of conduct – to the conduct of organizations hitherto seen as non-economic, to the conduct of government and to the conduct of individuals themselves – constitutes the essential characteristic of this style of government: the promotion of an enterprise culture.<sup>336</sup>

In so doing, market rationality emerges as the universal or supreme rationality of governance – also a uniquely neoliberal trait. To bring institutions and identities in line with this logic is to foster not only a sense of efficiency but also of competitiveness.

A second feature of *episteme* for neoliberal governmentality involves relocating the emphasis from the national as a domain of knowledge production to sub- and supranational levels. Hindess contends in his analysis of national economic accounting in the welfarist to the neoliberal eras, that the emergence of neoliberal governmentality reconfigured how the processes and indicators of economy were understood and measured. With this transition, he argues, there comes to be disaggregation of “the national economy” in terms of generating information and measuring performance.<sup>337</sup> Hence, there comes to be a growing emphasis on the level of the consumer, through such indicators as the Consumer Confidence Index and levels of consumer spending, as well as performance indicators for individual sectors

---

<sup>336</sup> G. Burchell, "Liberal Government and Techniques of the Self," *Foucault and Political Reason: Liberalism, Neo-Liberalism and Rationalities of Government*, eds. Andrew Barry, Thomas Osborne and Nikolas Rose (London: University College London Press, 1996) 29.

<sup>337</sup> Hindess, "Neoliberalism and the National Economy," 219.

or industries. Concomitantly, he argues that analytical and econometric focus comes also to be directed outward from the national economy to that of the global. In this regard, the global economy becomes increasingly an object of documentation and performance – currency exchange rates, capital mobility, international patterns and levels of investment and savings – and conceptualized as a larger system that conditions the performance of sectors of national economic activity. Hindess thus concludes that “[n]one of this requires that the national economy as a whole should be conceptualised as a largely self-regulating system.”<sup>338</sup>

Predicated upon these conceptions of knowledge, neoliberal rationality is directed toward the deployment of particular technologies of governance that make that knowledge operable. These technologies can be broadly grouped into two categories. The first, characterized as “government at a distance,” is predicated upon state and society reform in a manner consistent with a market model.<sup>339</sup> Specific technologies here would include those typically ascribed to the economic programs of Thatcherism and Reaganism, and the structural adjustment programs of the 1980s and 1990s: the rolling back of public welfare provision via decentralization and privatization –especially in the areas of social insurance – deregulation, and encouragement of competition. In many ways, these technologies are some of the most recognizable features of neoliberal governmentality, but they by themselves are not solely constitutive of it.

---

<sup>338</sup> Hindess, "Neoliberalism and the National Economy," 219.

<sup>339</sup> Eudaily, The Present Politics of the Past: Indigenous Legal Activism and Resistance to (Neo)Liberal Governmentality 52.; Rose and Miller, "Political Power Beyond the State: Problematics of Government," 199-200.; and Dean, Governmentality: Power and Rule in Modern Society 160-61.

A second technology of neoliberal governance worth mentioning is that of mechanisms designed to build “human capital.” Associated with the work of Becker, technologies of investment in human capital are “activities that influence future monetary and psychic income by increasing the resources of people.”<sup>340</sup> These activities include all types of education, skill-building programs, self-help techniques, and other means by which people come to act upon themselves as entrepreneurs. As Rimke notes in her discursive analysis of self-help texts from the 1970s through the 1990s, knowledge of the self, of our limitations and our potential, is often mediated by expert guidance proffered in these texts by psychologists, medical doctors, and the like, and that the means by which we improve ourselves is via the disciplined life. But in engaging in these projects of self-improvement, “one is not explicitly coerced...; one does so because one wants to improve. The self-help genre presents individual ‘development’ and ‘personal growth’ as a free moral and ethical decision and as a ‘natural’ undertaking by well-meaning citizens.”<sup>341</sup> In this regard, individuals become engaged in projects of self-government in the context of freedom, and of the desire to maximize the possibilities for achieving a full, prosperous, and happy life.

But in this regard, viewing individuals as capital deviates from earlier liberal postulations that conceptualize them as labor, with capital an entirely different resource. And to the extent that individuals come to see and operate upon themselves as a project for investment, with all of the self-reflection and improvement that that entails, the more that we see the manifestation of reflexive government – where

---

<sup>340</sup> Gary Becker, *Human Capital* (New York: National Bureau of Economic Research, 1964) 1.

<sup>341</sup> Heidi Marie Rimke, "Governing Citizens through Self-Help Literature," *Cultural Studies* 14.1 (2000): 62.

government of individual conduct is achieved *through* individual conduct. “Thus, neo-liberal government is at its apex when it works through ‘self-governing’ individuals and communities, giving the appearance of not governing at all.”<sup>342</sup>

The doctrine and technologies of human capital also help bring into effect the construction of a subjectivity particular to neoliberalism. This subjectivity displays several features; already discussed is that of active entrepreneurship, of viewing oneself as a project for investment. Linked with this feature is that of consumerism, of viewing oneself as being capable of, and indeed responsible for choosing those practices that facilitate the living of a full and active life:

When neoliberalism introduces the market model for application in every field of human activity, it creates the demand for a new mode of subjectivity. Liberation from the patronage of the welfare state is claimed to call for the moulding of people into ‘clients,’ ‘consumers,’ ‘entrepreneurs’ and so on, which, in turn, requires that all people become responsible, ‘prudent’ individuals capable of governing themselves and calculating the outcomes of their actions.<sup>343</sup>

When considered in conjunction with the dimension of active entrepreneurship, the consumerist impulse of this mode of governmentality reveals what one might call a schizophrenic injunction of neoliberal subjectivity. On the one hand, the irony of human capital is that even as we are encouraged to empower ourselves through active practices of self-entrepreneurship, it is difficult to escape the implied disempowerment inherent in such a view; specifically, our bodies, our psyches, our souls are projects to be improved – never fine as they are, always in need of refinement and improvement toward some distant state of perfection. Moreover, as Rimke notes, progress is not achieved purely in the context of selfhood, but with

---

<sup>342</sup> Eudaily, The Present Politics of the Past: Indigenous Legal Activism and Resistance to (Neo)Liberal Governmentality 53.

<sup>343</sup> Helen, "Welfare and Its Vicissitudes," 161.

guidance and encouragement from experts. Against this, our position as consumers lends a sense of empowerment that comes from being in a position to choose our paths, a better life – to engage in self-craft in the first place.

It is on this issue of choice that I close with a final observation on neoliberal subjectivity. Choice is certainly privileged in the practices of neoliberal government – indeed, Gordon argues that for American neoliberalism – it is *the* preeminent human faculty.<sup>344</sup> As such, subjectivity in a neoliberal context is itself predicated upon the ability to choose. The rational actor of *homo oeconomicus* so intrinsic to classical liberal accounts like that of Smith, however, is not quite the same choice-making actor of neoliberalism. Dean characterizes this new agent as ‘manipulable man,’ whose choices are capable of being modified and conditioned by the external environment:

Rather than the subject who rationally calculates its interests as an economic actor, the choices of the subject are capable of being modified by its environment. *Homo oeconomicus* here meets behaviourism to the extent that modifications in behaviour follow from remodeling the environment according to market rationality.<sup>345</sup>

The principle that external influences condition individual choice are thus integral to the deployment of technologies pertaining to human capital – self help, education programs, and the like. Indeed, it is the notion of external influence – that we can be educated to make the appropriate choices – that make the idea of human capital and the project of self-craft possible. As we will see, this and other dimensions of neoliberal governmentality become particularly evident as we move to a discussion of

---

<sup>344</sup> Gordon, "Introduction," 43-44.

<sup>345</sup> Dean, Governmentality: Power and Rule in Modern Society 57.

how contemporary public health manifests itself as a project of neoliberal government.

## Chapter 5: Public Health as Neoliberal Government

By providing norms by which individuals are monitored and classified, and against which individuals may be measured, the emphasis of the new public health is upon persuading people to conform voluntarily to the goals of the state and other agencies. This is a crucial feature of neo-liberalism: the recognition that in modern societies the state is positioned not as domineering, repressive or authoritarian, but rather as part of a set of institutions and agencies that are directed at enhancing personal freedoms and individual development.

- Alan Petersen and Deborah Lupton

Having charted the evolution of governmentality and elucidated the major features of its neoliberal incarnation, I provide here a theoretical account of the link between a specifically neoliberal style of governmentality and contemporary public health – especially with regard to its orientation toward NCD prevention and management. Public health in this regard is not a value-free or neutral science; it is brimming with political logic and laden with normative implications. Moreover, it is through the systematic and consistent deployment of neoliberal rationality in all three spheres of government – knowledge, technologies, and subjectivity – that it becomes possible to articulate how the arena of public health is losing its orientation as a truly public endeavor.

In recent years, elements of a governmentality approach have been applied to a number of arenas of health and human welfare, including nursing, hormone replacement therapy, mental health and psychiatry, and eating disorders, just to name a few.<sup>346</sup> The appropriateness of such an approach for medical and health issues is

---

<sup>346</sup> On nursing, see Sarah Winch, Debra Creedy and Wendy Chaboyer, "Governing Nursing Conduct: The Rise of Evidence-Based Practice," *Nursing Inquiry* 9.3 (2002).; Holmes and Gastaldo, "Nursing as Means of Governmentality."; and Michael Clinton and Michael Hazelton, "Towards a Foucauldian Reading of the Australian Mental Health Nursing Workforce," *International Journal of Mental Health Nursing* 11.1 (2002). On hormone-replacement therapy, see Jennifer Harding, "Bodies at Risk: Sex, Surveillance and Hormone Replacement Therapy," *Foucault: Health and Medicine*, eds. Alan Petersen

indicated by their concern with the well being of bodies and minds – a domain that necessitates government in order to achieve the ends of health and happiness. Dean notes that “[t]he analytics of government, conceived as the multidimensional analysis of the different ways in which our conduct is guided and directed, and for various ends, exists within a broader field... This field includes the powers of death, of punishment and of coercion... [and] also includes the powers of life, of the living, and of the processes of life, which have previously been assigned the title of ‘biopolitics.’”<sup>347</sup>

If governmentality is, therefore, concerned with the government of life, those domains which are specially devoted to its enhancement, regulation, and preservation – such as public health – are especially amenable to a critical interrogation within a governmentality framework. The application of such a framework to the specific realm of public health is most notably evident in the work of Petersen and Lupton, whose critical analysis of the field looks particularly at the implications of health knowledge and practices for the development of self-identity and notions of citizenship.<sup>348</sup> The individual work of Lupton, as well, has also emphasized the exercise of disciplinary power in the discourse and practice of public health, with

---

and Robin Bunton (New York: Routledge, 1998). On mental health and psychiatry, see David McCallum, "Mental Health, Criminality, and the Human Sciences," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998).; and Deborah Tyler, "At Risk of Maladjustment: The Problem of Child Mental Health," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998). On eating disorders, see Liz Eckermann, "Foucault, Embodiment and Gendered Subjectivities: The Case of Voluntary Self-Starvation," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998).

<sup>347</sup> Dean, "Powers of Life and Death Beyond Governmentality," 123.

<sup>348</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk*.

particular attention to the application of Foucauldian notions of subjectivity to the construction of “healthy” citizens.<sup>349</sup>

As a consequence, this project may be seen as an outgrowth of this relatively recent critical approach to public health, and seeks to elaborate upon it in several ways. First, Petersen and Lupton (together, as in Lupton’s solo work), proceed with a macrolevel view of the discipline of public health – across space and time, and without a sustained focus on public health approaches to particular conditions or diseases.<sup>350</sup> Here, on the other hand, the theoretical treatment of public health’s manifestation as a project of neoliberal governmentality proceeds with more attention to specific detail: namely, the public health of noncommunicable diseases, as opposed to a broad collection of conditions.

Second, where this prior scholarship has emphasized the ways in which public health discourse and practice construct particular subjectivities and notions of neoliberal citizenship, this analysis further contextualizes public health practice as neoliberal governmentality through greater attenuation to all three dimensions – *episteme*, *techne*, as well as *ethos*. It is to a closer reading of these dimensions that I now turn.

### *Knowledge and Neoliberal Rationality*

---

<sup>349</sup> Lupton, *The Imperative of Health: Public Health and the Regulated Body*.

<sup>350</sup> With regard to this macro-level perspective, for example, Petersen and Lupton take a particularly global approach in examining how the Healthy Cities Project, under the auspices of WHO, directs community participation and active citizenship throughout the world. And with regard to “healthy citizens,” Lupton and Petersen and Lupton also proceed with general reference to “Western society” and examples gleaned from any number of places – Australia, the U.S.; Britain, Canada, etc.

Given that public health is a broad discipline – constructing and addressing problems ranging from child malnutrition to HIV/AIDS to violence – the analytical focus here is narrowed to exploring how public health approaches NCDs as a domain of knowledge, and how this manifestation of contemporary public health knowledge demonstrates features consistent with neoliberal governmentality. This concern generates two specific questions meriting exploration here: what does public health tell us that we can know about NCDs (in terms of its causes and strategies for prevention), and how do we know it? In other words, how is the “truth-telling” narrative of these origins and preventative strategies produced, and what enables that knowledge production?

To the extent that the knowledge sphere of contemporary public health manifests itself as an element of specifically neoliberal governmentality, it does so through the privileging of certain aims, concepts, and methods in the arena of epidemiology – the preeminent arena of knowledge production in public health. In the context of public health writ large, and the public health of chronic disease specifically, epidemiology provides the analytical tools for explaining the origins of disease; it is then on the basis of those explanations that general prevention and intervention strategies are identified both for public health and clinical practice. Thus, “[t]he discipline of epidemiology now constitutes the major source of the ‘knowledge’ and ‘facts’ of the new public health enterprise.”<sup>351</sup>

---

<sup>351</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk* 30. This assertion is shared by a number of public health researchers. Savitz, et al (1999), for example, critique the common description of epidemiology as “the basic science of public health” in health textbooks for implying that the entire legitimate knowledge base of public health is predicated upon epidemiology; Savitz, Poole and Miller, "Reassessing the Role of Epidemiology in Public Health." On this issue, see also Levinson, "Issues at the Interface of Medical Sociology and Public Health."; Spitzer, "Medical

In considering the privileging of particularly neoliberal dimensions of epidemiological inquiry, most relevant for this analysis are the shift away from its civic-minded spirit in the 19<sup>th</sup> century toward a goal of increased technical refinement of analytical methods in the latter decades of the 20<sup>th</sup>; a concomitant shift in the level of analysis from the collective, or population, to the level of individual in the context of epidemiological models; and the justification of this individualism, as well as the use of particular epidemiological methods, on the basis of cost efficiency.

At the time of its development in the 19<sup>th</sup> century, epidemiology as a sphere of public health knowledge retained as its object of analysis the population, and the development of statistical methods in the at this time came to be intimately connected to the means by which knowledge of population disease patterns was acquired.<sup>352</sup> Consistent with the impulse of welfarism's emphasis on the social realm, leaders of the early epidemiological movement viewed the methods of explaining disease origins in populations as intimately connected with the social project of improving the lot of the masses. William Farr, who developed a system of vital statistics that became the basis of the widely used International Classification of Diseases, and a leader of the early epidemiological movement, viewed statistics in this regard as "the science of social reform."<sup>353</sup> To him and likeminded contemporaries it was a method that enabled public health reformers to legitimize their calls to reform practices and

---

Sociology and Public Health: Problems and Prospects for Collaboration in the New Millennium."; and Beaglehole and Bonita, Public Health at the Crossroads 217-18.

<sup>352</sup> Beaglehole and Bonita, Public Health at the Crossroads 90.

<sup>353</sup> See Mervyn Susser and A. Adelman, "The Work of William Farr," Epidemiology, Health & Society, ed. Mervyn Susser (New York: Oxford University Press, 1987).; and J.M. Eyler, "The Conceptual Origins of William Farr's Epidemiology: Numerical Methods and Social Thought in the 1830s," Times, Places, and Persons. Aspects of the History of Epidemiology, ed. A.M. Lilienfeld (Baltimore: Johns Hopkins University Press, 1980). See also Beaglehole and Bonita, Public Health at the Crossroads 92-93.

institutions in the areas of sanitation and education, among others. Complementing this aspect, classic epidemiology also retained an emphasis on the sociopolitical and economic contexts of disease. John Snow, who became famous for identifying contaminated drinking water as the source of mid-19<sup>th</sup> cholera outbreaks in Britain, contextualized his epidemiological explanation of cholera's origins with attenuation to the social and economic circumstances that conditioned the epidemic's emergence.<sup>354</sup>

By the middle of the 20<sup>th</sup> century, at the time that public health concerns in Western industrialized countries shifted from infectious to noncommunicable disease, the emergence of a new epidemiological paradigm effectively restructured the means by which experts made sense of the disease process. Disappearing was the social motivation of epidemiology, in terms of the earlier focus on populations and the contextual explanations of disease origins. This transition emerges at the time of the rise of NCDs in the aftermath of World War II. Early studies on heart disease and lung cancer began to identify the role of risk attributable to individual behavior as opposed to environmental structures.<sup>355</sup> Moreover, a legacy of the biomedical model of disease, informed by the ascendance of the germ theory of disease causation and

---

<sup>354</sup> Beaglehole and Bonita, Public Health at the Crossroads 94. For a more detailed discussion of Snow's theory of cholera causation, see W. Winkelstein, "A New Perspective on John Snow's Communicable Disease Theory," American Journal of Epidemiology 142 (1995).; also D. Cameron and I.G. Jones, "John Snow, the Broad Street Pump and Modern Epidemiology," Journal of Clinical Epidemiology 41 (1988).

<sup>355</sup> Two of the key reports of this era linking cigarette smoking with lung cancer are E.L. Wynder and E.A. Graham, "Tobacco Smoke as a Possible Etiologic Factor in Bronchiogenic Carcinoma: A Study of 654 Proved Cases," Journal of the American Medical Association 143 (1950).; and R. Doll and A.B. Hill, "Smoking and Carcinoma of the Lung: Preliminary Report," British Medical Journal ii.739-748 (1950). For a comprehensive review of the findings and methodological legacy of the Framingham study on heart disease, see T. Dawber, The Framingham Study (Cambridge, MA: Harvard University Press, 1980).

modern advances in microbiology, contributed to a decontextualization of the role of social and economic factors.<sup>356</sup> On this point, Spitler notes:

Epidemiologists in public health embraced the new biomedical paradigm and focused their research on the discovery of risk factors at the individual level...[these] were easier to measure than social or economic factors and fit very well into the experimental and quasi-experimental designs favored by biomedicine.<sup>357</sup>

At the time that the aims of epidemiology were coming to be decoupled from the earlier spirit of promoting social change, they were increasingly directed toward the technical refinement of method. This aspect is especially prominent between the 1960s and the 1980s, when avenues of inquiry became less directed at causative explanations of disease origins and more toward correcting problems in prevailing statistical methods, such as bias and confounding. Additionally, this era witnessed the development of new methods such as the case control design, and the refinement of classic designs such as the cohort study, which had been criticized for being too impractical because of its large expense and time-consuming nature.<sup>358</sup> On this latter point, the logic underlying such refinements was to “make economical use of the advantages of cohort design,”<sup>359</sup> while shedding the major drawbacks. The practical effect was to apply the criterion of cost efficiency to the actual methods of

---

<sup>356</sup> Brandt and Gardner, "Antagonism and Accommodation: Interpreting the Relationship between Public Health and Medicine in the United States in the Twentieth Century."

<sup>357</sup> Spitler, "Medical Sociology and Public Health: Problems and Prospects for Collaboration in the New Millennium," 252.

<sup>358</sup> For a discussion of these and other aspects of the “methodological preoccupation” of epidemiology during this era, see Beaglehole and Bonita, Public Health at the Crossroads 98. Additionally, a number of other public health researchers have documented the tendency of modern epidemiology to be focused on technical refinement as opposed to understanding the origins of disease. See also: M. Terris, "The Epidemiologic Tradition," Public Health Reports 94 (1979).; Mervyn Susser, "Epidemiology in the United States after World War II: The Evolution of Technique," Epidemiology Review 7 (1985).; David A. Freedman, "Statistical Methods and Shoe Leather," Sociological Methodology 21 (1991).; and Walter W. Holland, "Editorial: The Hazards of Epidemiology," American Journal of Public Health 85.5 (1995).

<sup>359</sup> Beaglehole and Bonita, Public Health at the Crossroads 102.

epidemiological study – the application of market rationality in a sphere that under classic liberalism, would not have been seen as a domain to be governed by the same rules as the market.

One may witness this application through a closer analysis of the logic evident in the selection of research design. While a number of research design methods exist, several are worth highlighting in this regard. In the aforementioned case-control study, individuals already manifesting a disease (cases) are compared and analyzed in reference to a control group that does not manifest it – though persons in this group are usually similar along other dimensions, such as age, gender, etc. Exposure to risk factors of cases and controls is then assessed to determine an odds ratio that compares the odds of a case experiencing risk exposure to those of a control.<sup>360</sup> In a cohort study, on the other hand, the group under observation is defined in terms of risk exposure, rather than having the disease. The nature of the study is longitudinal, with the cohort followed over time and tracked for the emergence of disease.<sup>361</sup>

A recent study comparing the relative merits of case-control versus cohort designs in ascertaining the causes of childhood cancer, asserts that the case-control method is the most widely used “because of its low cost and high efficiency,” as it is “generally cheap and quick to perform.”<sup>362</sup> While classic cohort studies do not manifest these same qualities – as they track exposures over time, they are neither

---

<sup>360</sup> Claire L. Bell and Donna M. Hammal, "Case-Control Versus Cohort Studies in the Investigation of Childhood Cancer," *Pediatric Hematology and Oncology* 19 (2002): 289.

<sup>361</sup> K.J. Rothman, "Types of Epidemiologic Study," *Modern Epidemiology*, ed. K.J. Rothman, 2nd ed. (Boston: Little, Brown, 1986).

<sup>362</sup> Bell and Hammal, "Case-Control Versus Cohort Studies in the Investigation of Childhood Cancer," 290-91. Bell and Hammal are not alone in characterizing the case-control study as the dominant method of epidemiological analysis on the basis of its cost-effectiveness and ease of execution. On this point, see also Beaglehole and Bonita, *Public Health at the Crossroads* 102.; and Loise Parker, "Research Design and Methods," *Pediatric Hematology and Oncology* 19 (2002): 287.

quick nor inexpensive – variations in them are hierarchically categorized for their desirability. Specifically, there are two types of cohort studies – retrospective designs, in which all risk exposures under consideration have occurred, and prospective designs, where exposures may have occurred, but the disease outcome has yet to manifest. Bell and Hammal note that between these:

A retrospective study has a definite advantage in this case, in that one does not have to wait an extended period of time to achieve adequate follow-up. A prospective study covering the same time period is likely to be *far too expensive and time consuming*, and simply not practical. [emphasis added]<sup>363</sup>

Thus, despite the desirability of cohort studies in tracking a wide range of exposures and risks, and being able to follow them over time, the value of cost-efficiency has come to be emphasized as a more important criterion by which methods are selected – as attested by the prevalence of case-control studies. This logic is only reinforced by injunctions for public health programs engaged in chronic disease epidemiology to make cost considerations a primary consideration in the design and execution of studies; in the United States, for example, recent budget cuts at the state and federal levels, in conjunction with a reorientation of the public health system toward emergency preparedness in the wake of 9/11, have prompted chronic disease programs to generate more epidemiological research with less public support.<sup>364</sup> This has meant the expansion of cooperative research partnerships between state public health agencies and organizations like the Arthritis Foundation, private universities and medical schools; it has also meant the employment of

---

<sup>363</sup> Bell and Hammal, "Case-Control Versus Cohort Studies in the Investigation of Childhood Cancer," 292. On his point, see also Beaglehole and Bonita, Public Health at the Crossroads 101.

<sup>364</sup> Kathleen E. Toomey, "Improving States' Capacity for Chronic Disease Epidemiology: Can State Health Officials Meet the Challenge?" Journal of Health Management and Practice 9.4 (2003): 256-57.

resources generated from mass settlements, as in the class-action suits against the tobacco industry.<sup>365</sup> The implication of such trends not only reinforces the notion that maximizing cost efficiency is a key value in the execution of public health, but also suggests how public health is becoming increasingly co-opted by the private sector, whether in the form of foundations, firms, or private schools.

The emphasis lent to governing public health research in accordance with the market principle of cost efficiency is complemented by a second dimension of epidemiological analysis that exhibits neoliberal rationality: a focus on individual, as opposed to population risk factors in causative inquiry. In Chapter 3, it was established how contemporary public health frames chronic diseases like CHD and cancer as arising out of the interaction of a confluence of risk factors – many of which are framed as problems of individual behavior. Epstein contextualizes this assertion in the context of explaining the epidemiological understanding of the causes of CHD:

...on both the community and individual level, the disease is caused as much or more by what we do than by what we are. The view is crystallized in the concept of 'life-style'...Life-style is the first step in the chain which leads over the risk factors to the clinical events. Life-style determines risk factor levels, against the background of genetic variation.<sup>366</sup>

Despite the clarity and forcefulness of Epstein's assertion, there exists an implied question: what environmental or structural factors determine, or at least condition, lifestyle? The logic of this atomistic thinking characterizes much of contemporary epidemiological analysis; it is referred to in the literature by turns as

---

<sup>365</sup> Toomey, "Improving States' Capacity for Chronic Disease Epidemiology: Can State Health Officials Meet the Challenge?" 257.

<sup>366</sup> F.H. Epstein, "Contribution of Epidemiology to Understanding Coronary Heart Disease," Coronary Heart Disease Epidemiology, eds. M. Marmot and P. Elliot (New York: Oxford University Press, 1995) 29.

“the decline of population epidemiology,”<sup>367</sup> or “asocial epidemiology,”<sup>368</sup> and is exemplified in the downplaying of structural factors such as class and socioeconomic position, as well as cultural norms. In fact, on the issue of class, a major textbook on epidemiology posits that “social class is presumably related causally to few if any diseases.”<sup>369</sup>

Two points are relevant here. First, a focus on behavioral risk factors reveals two key and interconnected elements of neoliberal rationality in the construction of objects of epidemiological knowledge. Namely, that these objects are individuals, and not the population of classic epidemiology. It is not that the population does not exist in the epidemiological context; but it exists as an aggregate of individuals, and while epidemiologists still do population studies, their purpose is “to study decontextualized individual risk factors, rather than to study population factors in their social and historical context.”<sup>370</sup> Moreover, such a construction is to an extent predicated upon the strategic economic rationality on the part of public health researchers. Research, especially in public health, is an expensive endeavor – studies

---

<sup>367</sup> Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," 679.

<sup>368</sup> Beaglehole and Bonita, Public Health at the Crossroads 219. On epidemiology's privileging of individual risk behavior as the dominant level of analysis, see also: Krieger, "Epidemiology and the Web of Causation: Has Anyone Seen the Spider?"; Davis and Howden-Chapman, "Translating Research Findings into Health Policy."; Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health."; C.M. Shy, "The Failure of Academic Epidemiology: Witness for the Prosecution," American Journal of Epidemiology 146.6 (1997).; Diez-Roux, "Bringing Context Back into Epidemiology: Variables and Fallacies in Multi-Level Analysis."; Levinson, "Issues at the Interface of Medical Sociology and Public Health."; Schwartz and Carpenter, "The Right Answer for the Wrong Question: Consequences of Type Iii Error for Public Health Research."; Brandt and Gardner, "Antagonism and Accommodation: Interpreting the Relationship between Public Health and Medicine in the United States in the Twentieth Century."; McKinlay and Marceau, "Upstream Health Policy: Lessons from the Battle of Tobacco."; Spitzer, "Medical Sociology and Public Health: Problems and Prospects for Collaboration in the New Millennium."

<sup>369</sup> Rothman, "Types of Epidemiologic Study.", quoted in Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," 679.

<sup>370</sup> Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," 679.

must be funded, and they are not funded by and large out of the pockets of those doing the research. Pearce explains:

In most countries, the main sources of funding are government or voluntary agencies that have little interest in, or sympathy for, studies of socioeconomic factors and health. In the last decade, Western countries, especially anglophone countries, have increasingly placed emphasis on individual responsibility, typified by the famous statement by Margaret Thatcher that “there is no such thing as society, there are only families and individuals.” Governments and funding agencies have been most supportive of studies that focus on individual lifestyle and epidemiologists, either through choice or through necessity, have tended to go “where the money is.”<sup>371</sup>

This shaping of epidemiological knowledge is predicated upon public health institutions and analysts existing *within* a system of neoliberal governmentality— and from that position of interiority in a difficult position to engage in critical reflection, as Levinson notes:

Public health agencies have limited capacity and autonomy to target established political and economic forces. As political entities, they are subject to those forces. Perhaps as a consequence of this situation, public health practice has given relatively little thought to the development of programmes...that address the fundamental structural causes of disease and disability.<sup>372</sup>

A second point that is a corollary to the interconnections of the first is that by focusing on the behavioral choices of individuals as risk factors, epidemiology is centered on a level of analysis most amenable, and least costly, to change. To the extent that individuals can be reoriented – indeed, rehabilitated – to engage in behaviors and practices that minimize risk on their own, one need not engage in the costly and difficult endeavor of restructuring macrolevel dimensions of economy and society – such as the modes of production, distribution of wealth and access to

---

<sup>371</sup> Pearce, "Traditional Epidemiology, Modern Epidemiology, and Public Health," 679.

<sup>372</sup> Levinson, "Issues at the Interface of Medical Sociology and Public Health," 77.

resources, and level of state intervention in the regulation and provision of public welfare. This logic is evident in Kass' concern over the implications of emphasizing causation beyond the level of the individual; these potential structural factors he denounces as "excessive preoccupations, as when cancer phobia leads to government regulations that unreasonably restrict industrial activity."<sup>373</sup>

In addition to being economically inefficient or impractical, such a macrolevel orientation is critiqued for potentially treading on individual freedom, a key value of neoliberalism. In this regard, Fuchs asserts that "the greatest potential for reducing coronary artery disease, cancer, and other major killers still lies in altering personal behavior...[E]mphasizing social responsibility can increase security, but it may be security of the 'zoo' – purchased at the expense of freedom."<sup>374</sup>

When interwoven together, these concerns provide a justification for retaining an analytical focus on individual behaviors in the disease process, because the practical dimensions of changing them are presumably easier and less costly – again, the application of market rationality to the practice of public health. Crawford's analysis of this aspect of epidemiology and the larger discipline of public health lead him to characterize this impulse thusly:

The practical focus of health efforts, in other words, should not be on the massive, expensive, politically difficult, or even politically dangerous task of overhauling our work and community environments. Instead, the focus must be on changing individuals who live and work within those settings. In the name of pragmatism, efficacy is thus ignored.<sup>375</sup>

---

<sup>373</sup> L. Kass, "Regarding the End of Medicine and the Pursuit of the Health," *Public Interest* 40, Summer (1975): 42.

<sup>374</sup> Victor Fuchs, *Who Shall Live?* (New York: Basic Books, 1974) 26, 46.

<sup>375</sup> Crawford, "Individual Responsibility and Health Politics," 386.

These shifts in the aims, objects, and methods of epidemiology reflect a larger shift in governmental rationality from a welfarist impulse to a neoliberal one. In one regard, this is relatively easy to discern – in dissolution of “the social” and a privileging of the individual – especially as it pertains to risk factors in the level of analysis.

However, to the extent that the direction of epidemiological inquiry becomes more reflexively geared toward the end of becoming a more efficient mode of inquiry – resolving errors affecting study validity and inventing new, “economical” means of analysis – the more it is indicative of a neoliberal impulse to apply market rationality to a historically non-economic arena. It establishes the boundaries and norms governing the production of knowledge in public health, and it is this knowledge, which comes to inform the deployment of specific technologies and the concomitant construction of the “at-risk” subjectivity.

*At the Nexus of Knowledge and the Technologies of Practice: Directing Expertise Toward Prediction and Control*

The pursuit of knowledge within public health, especially in the realm of epidemiology, is not a purely reflexive practice; it is ultimately directed toward the implementation of strategies and techniques designed to address disease burdens, chronic and otherwise. Epstein charts the importance of knowledge to the practical arena of public health:

[t]he strength of the epidemiological approach lies partly in its ability to identify not only risk factors...but to determine their relative importance singly and in combination with the population at large. It also permits a quantitative estimate of how much of the disease can be accounted for in terms of known risk factors...This knowledge is important for the practice of preventative cardiology, public health

planning of preventative services, and for the design of research still needed.<sup>376</sup>

The implications of Epstein's observation point to how the discourse that is built up around risk analysis produces facts that then become the basis for the deployment of specific technologies – such as prevention services and health education. This intimate link between the establishment of cause and the practices of pre- and intervention call to mind the mutual dependency of the spheres of *episteme* and *techne* for putting into effect the practice of government. Moreover, the knowledge generated by the epidemiological studies to which Epstein refers create a foundation upon which further knowledge is built up; the greater the amassing of information, and the more that one witnesses convergence along the lines of explanation, the more tightly knit the narrative account of why these diseases occur, and how they are best treated. For example, approximately sixty epidemiological studies on the causes of CHD – performed on different populations in Europe, the U.S., and elsewhere, and all employing somewhat different methods – all indicate serum cholesterol, blood pressure, and smoking constitute by far the most prevalent risk factors for CHD onset.<sup>377</sup> Given the convergence of these findings, one thus can identify a fairly unified narrative for why CHD occurs; furthermore, because this narrative is deployed by public health scientists and experts, it becomes weighted with authority that further reifies the truthfulness of its account.

*Technologies of Government in the Context of Public Health*

---

<sup>376</sup> Epstein, "Contribution of Epidemiology to Understanding Coronary Heart Disease," 22.

<sup>377</sup> Epstein, "Contribution of Epidemiology to Understanding Coronary Heart Disease," 25.

With this link in mind, it is important to examine more closely the technologies of government in public health, and the ways in which they exhibit neoliberal rationality. To this end, one may assess two dimensions, each of which addressing an aspect of neoliberal government detailed in the previous chapter: technologies directed to the end of “government at a distance” and those pertaining to human capital. One may also frame these as *macrotechnologies*, which refer to those practices that give shape to a public health system as a whole, conditioning its institutional and organizational structure, patterns of funding, and modes of operation. The technologies pertaining to government at a distance are especially relevant here – as such phenomena as privatization, deregulation, and decentralization are all practices which ultimately condition the form and function of modern public health systems.

Additionally, there are *microtechnologies*, or those specific practices and programs carried out by public health agencies that are geared toward building human capital by educating and empowering individuals to take control of their own health. Examples include disease and risk factor surveillance, as well as health promotion and education programs.

#### Macrotechnologies: Health Reform and Government at a Distance

Prior to the mid-19<sup>th</sup> century, public health was largely the business of local governing councils and voluntary organizations.<sup>378</sup> Manifesting the welfarist rationality that came to tie the governance of social welfare to the activities of the state, the British Public Health Act of 1848 was the first attempt in Western societies

---

<sup>378</sup> Beaglehole and Bonita, Public Health at the Crossroads 151.

to recode public health under the auspices of a national government; by the early twentieth century, the United States had developed the federal Public Health Service, and over the course of the twentieth century, the provision of public health came to be very much a province of the state – especially in the context of controlling epidemics, generating rules and guidelines for public health practice, and promoting human welfare through the creation of health institutions and programs.<sup>379</sup>

Over the course of the twentieth century, various factors began to put a strain on the national provision of public health, and the larger health and welfare systems of which it is a part: for example, population aging, the rising cost of health care (for those countries employing public insurance schemes), and the rising costs of surveillance and intervention technologies.<sup>380</sup> For example, by 1975, public health expenditures in France, Germany, and Sweden were more than twice the proportion of GDP they had constituted only fifteen years earlier, and expenditures had grown by more than half in Britain.<sup>381</sup> The rising costs constituted a “fiscal imperative”

---

<sup>379</sup> Dorothy Porter, Health, Civilization and the State: A History of Public Health from Ancient to Modern Times (London: Routledge, 1999). For additional discussions on the consolidation of public health under state auspices, see also Fox’s analysis of post-World War II practice in the United States, D.M. Fox, “The Public Health Service and the Nation’s Health Care in the Post-World War II Era,” Public Health Reports 109 (1994): 725-27.; Johannison’s (1994) study of the evolution of public health organization and policies in Sweden, K. Johannison, “The People’s Health: Public Health Policies in Sweden,” The History of Public Health and the Modern State, ed. Dorothy Porter (Amsterdam: Editions Rodopi B.V., 1994).; and Hamlin’s (1994) analysis of the state role in public health in Britain, C. Hamlin, “State Medicine in Great Britain,” The History of Public Health and the Modern State, ed. Dorothy Porter (Amsterdam: Editions Rodopi B.V., 1994).

<sup>380</sup> Anne Somjen, “Distinguishing Features of Reform in Australia and New Zealand,” Health Reform in Australia and New Zealand, ed. Abby Bloom (New York: Oxford University Press, 2000) 60.

<sup>381</sup> Richard Freeman and Michael Moran, “Reforming Health Care in Europe,” Recasting European Welfare States, eds. Maurizio Ferrera and Martin Rhodes (New York: Frank Cass and Company, 2000) 37.

necessitating reform by the 1980s, that only exacerbated with the coming of recession by the early 1990s.<sup>382</sup>

These factors put an emphasis on the reform of specific macrotechnologies of public health – namely, the means by which health institutions are structured and organized, and the means by which they are financed.<sup>383</sup> Thus, “health reform” has come to mean a “reconfiguration of the major structural features of a health system – finance, provision, and regulation – on a national or statewide basis.”<sup>384</sup>

The logic underlying such reform is informed by several impulses, but one of the most prevalent is the aim to encourage health systems to operate more efficiently. This injunction has been informed by a presumption that expansive public policies of regulation and provision of health and welfare “*ought no longer* be pursued, because they *cannot* be successfully implemented in the socio-economic and cultural environment of advanced capitalism.”<sup>385</sup> Lazar and Stoyko in this regard highlight the global trends toward the support of freer markets – expansion of free-trade agreements and zones, liberalization of payment systems, as well as capital and investment controls – that have come to condition the contemporary environment in

---

<sup>382</sup> Freeman and Moran, "Reforming Health Care in Europe," 37. On the emergence of the reform imperative, see also D. Wilsford, "States Facing Interests: Struggles over Health Policy in Advanced Industrial Democracies," Journal of Health Politics, Policy, and Law 20.3 (1995).

<sup>383</sup> Comparative studies of health reform have often converged on approaching the subject from this perspective – that is, assessing the economic provision for and organizational structures of public health institutions. On this point, see Abby Bloom, "Introduction," Health Reform in Australia and New Zealand, ed. Abby Bloom (New York: Oxford University Press, 2000a) 8.; also W. Hsiao, "Comparing Health Systems: What Nations Can Learn from One Another," Journal of Health Politics, Policy, and Law 17 (1992).; and G.R. Palmer and S.D. Short, Health Care and Public Policy: An Australian Analysis (Melbourne: Macmillan, 1994) 39-42.

<sup>384</sup> Abby Bloom, "General Introduction," Health Reform in Australia and New Zealand, ed. Abby Bloom (New York: Oxford University Press, 2000b) 3.

<sup>385</sup> Herbert Kitschelt, The Transformation of European Social Democracy (Cambridge: Cambridge University Press, 1994) 7.

which states also make domestic policy decisions.<sup>386</sup> In this sense, the logic of the market is not only apropos for the external behavior of states, but comes to inform internal behavior, as well.

The application of market reforms to the organization and provision of health care have been deployed in several ways. First, a movement toward competition as a means of promoting efficiency within the health system. Even in systems such as Sweden's or Britain's, which have extensive public provision of health services, the introduction of "quasi-markets" are a means to cut costs while not completely devolving public provision. In such a system, health agencies become "purchasers," and providers such as community services, hospitals, and the like, compete for contracts. Klein notes that "[b]y mimicking market forces, the new arrangements would force providers to be both more efficient and more responsive; if they failed to improve their performance, they would lose income as purchasers switched their contracts."<sup>387</sup>

A second technology of health reform has been geared toward the restructuring of quality control procedures – especially in the expansion of audit systems in the public health arena. Introduced in Germany as early as the late 1970s, and Britain a decade later, these procedures were implemented with the specific aim of increasing efficiency. As a means of eliminating excessive bureaucratic waste, "audit was to be institutionalized everywhere, and management was to be able to

---

<sup>386</sup> Harvey Lazar and Peter Stoyko, "The Future of the Welfare State," International Social Security Review 51.March (1998): 5.

<sup>387</sup> Rudolf Klein, "Why Britain Is Reorganizing Its National Health Service - yet Again," Health Affairs 17.4 (1998): 113. On the role of internal markets as a means to increase efficiency in health care systems, see also A.C. Enthoven, Reflections on the Management of the National Health Service (London: Nuffield Provincial Hospital Trust, 1985).; J. Le Grand and W. Bartlett, eds., Quasi-Markets and Social Policy (Houndsmills: Macmillan, 1993).; and David Mechanic and David A. Rochefort, "Comparative Medical Systems," Annual Review of Sociology 22 (1996): 254-55.

initiate an independent professional audit if there was cause to question the quality or cost-effectiveness of a service.”<sup>388</sup>

Finally, a third technology of health reform is relevant for this study – the trend toward decentralization in the provision of health care. This has occurred both in the expansion of public-private partnerships in the arena of research, health promotion, and education, as well as in the institutional structures of health governance. In this latter case, it has been concomitantly accompanied by a simultaneous trend away from local health administration at the town and county levels and toward sub-state regional levels. Freeman and Moran, in their analysis of health policy reform and convergence in the European context, thus note in new organizational structures

a decentring of health systems...recent reform has consolidated the regional structure of health governance. Reform has instigated processes of scaling up from the district or locality as well as down from the centre, aggregating local administrations and interests as well as disaggregating national ones...<sup>389</sup>

Through these and other technologies, health reform has come to exhibit a very strong feature of neoliberal rationality – namely the application of market principles to the activities of the state. This does not mean that the public context of health and health care is devolving irrevocably into the private. Several broad studies of welfare reform generally, and health reform specifically, suggest that the welfare state in Western societies is not in the process of being dismantled.<sup>390</sup> Rather, this

---

<sup>388</sup> Klein, "Why Britain Is Reorganizing Its National Health Service - yet Again," 113. See also Freeman and Moran, "Reforming Health Care in Europe," 41.

<sup>389</sup> Freeman and Moran, "Reforming Health Care in Europe," 49.

<sup>390</sup> See, for example, K. van Kersbergen, "The Declining Resistance of Welfare States to Change," *Survival of the Welfare State*, ed. S. Kuhnle (London: Routledge, 2000) 25.; and C. Green-Pedersen and M. Haverland, "The New Politics and Scholarship of the Welfare State," *Journal of European Social Policy* 12 (2002): 44. Additional studies have identified the actual expansion of social welfare

rationality exists in the process of altering institutional configurations in accordance with a particular logic emphasizing competitiveness and efficiency. Hence, Ham and Brommels conclude with regard to their study of the United Kingdom, Sweden, and the Netherlands that:

In none of these countries have policymakers sought to abandon planning and regulation. Rather, the aim has been to combine some market incentives with a framework of rules to guide competition and the capacity to intervene to tackle market failure. The reforms that are taking place are in this way leading to the development of regulated or managed markets.<sup>391</sup>

To the extent that this neoliberal rationality is deployed through the organization and institutional procedures of contemporary Western health systems, it is also evident in the specific technologies of managing the challenge posed by noncommunicable diseases. These “microtechnologies” are deployed in the context of established functions of public health. While each national system of public health may vary as to its specific duties and responsibilities, a 1988 Institute of Medicine report in the United States identified responsibilities often associated with public health systems. These include the identification of health problems via population surveillance and the establishment of causation, and, if applicable, modes of disease transmission; mobilization of resources to respond to health problems through targeted programs and policies toward disease prevention and health promotion; and the assurance of population access to services required for health preservation through “facilitating access” to other providers, or where that is not possible,

---

provisions in certain countries such as Spain. On this aspect, see S. Kuhnle, ed., The Survival of the European Welfare State (London: Routledge, 2000). and L. Moreno, "The Spanish Development of Southern European Welfare," The Survival of the European Welfare State, ed. S. Kuhnle (London: Routledge, 2000).

<sup>391</sup> Ham and Brommels, "Health Care Reform in the Netherlands, Sweden, and the United Kingdom," 112.

providing those services directly.<sup>392</sup> It is to a closer analysis of two of these functions – surveillance and health promotion, that I now turn.

#### Microtechnologies: Surveillance and Health Promotion

It should be noted at the outset that surveillance in and of itself is a technology operable under multiple forms of governmentality; as Foucault charts in texts such as *Birth of the Clinic* and *Discipline and Punish*, expert surveillance of the ill and the criminally insane under liberal government was actualized towards the end of enclosing the sick and deviant in the institution.<sup>393</sup> As we will see under neoliberal government, surveillance is deployed not only by experts, but encouraged in the at-risk themselves, and is put toward the end of inculcating within those individuals the desire to reform their behavior – not toward secluding them from the rest of society.

In the context of surveillance, one of the major contributions of NCD epidemiology is the concept of “tracking.” Relying on methods ranging from genetic screening to traditional surveys, this practice of surveillance is aimed at identifying as early as possible in life those who are likely to be at high risk for NCD onset later in life. The purpose behind such technologies is that “[p]owerful methods of tracking would permit the institution of preventative measures before risk factors have already become too high.”<sup>394</sup> The aim of prevention, and hence control, is intimately related to the construction and communication of risk. To the extent that individuals can be made aware of their vulnerability, they can also become educated about specific

---

<sup>392</sup> Institute of Medicine, *The Future of Public Health* (Washington, DC: National Academy Press, 1988), 43.

<sup>393</sup> Foucault, *Discipline and Punish: The Birth of the Prison*, and Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, 1994 ed. (New York: Vintage, 1994 [1973]).

<sup>394</sup> Epstein, "Contribution of Epidemiology to Understanding Coronary Heart Disease," 26.

practices – such as improved diet, avoiding tobacco, or getting more exercise – that will enable them to counteract it. Petersen and Lupton highlight the importance of risk communication in public health practice to achieving these ends:

The “factors of risk” they [health experts] identify are distributed throughout the social body to the extent that (responsible) individuals at every turn face the task of having to monitor, regulate and change (that is, refashion) themselves to avoid, modify, control and eliminate behaviours and situations deemed “risky”.<sup>395</sup>

These behaviors and situations that constitute the “risky” lifestyle cover every conceivable arena of day-to-day living, opening up numerous areas for governance. Bunton’s analysis of the use of surveys in public health reveals numerous dimensions of lifestyle routinely subject to the technical calculation of risk for the purpose of health promotion and education strategies: work occupation and habits; leisure activities; social and sexual behavior; distribution of food consumption in terms of fats, sugars, fruits and vegetables; extent of alcohol and tobacco consumption; and weight, cholesterol levels, and blood pressure.<sup>396</sup> Surveillance of these and other lifestyle dimensions makes possible their control, insofar as individuals can be conditioned in such a way as to *desire* to control them. Hence, “[t]he language of health risks exemplifies [a] ‘reflexive’ process, as lay people absorb expert knowledge and reorganize their lives accordingly, being expected to know how to ‘choose’ a healthy lifestyle.”<sup>397</sup> As aforementioned, this indicates how surveillance under neoliberal government is put toward the ends of behavioral reform, desired and

---

<sup>395</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 20.

<sup>396</sup> Bunton, "More Than a Woolly Jumper: Health Promotion as Social Regulation," 7.

<sup>397</sup> Michael Bury, "Postmodernity and Health," Modernity, Medicine and Health: Medical Sociology toward 2000, eds. Graham Scrambler and Paul Higgs (New York: Routledge, 1998) 11. On the topic of surveillance and its dimension of social control, see also Anthony Giddens, Modernity and Self-Identity (Cambridge: Polity Press, 1991) 149-50.; and J. Gabe, "Health, Medicine and Risk: The Need for a Sociological Approach," Medicine, Health and Risk: Sociological Approaches, ed. J. Gabe (Oxford: Blackwell, 1995).

achieved *through* the target audience, as opposed to incarceration or repressive tactics that operate *on* such individuals by health authorities.

As NCD risks come to be calculated in largely in terms of behavioral choice, and individuals come to reorganize their lives in accordance with a healthy lifestyle, surveillance technologies demonstrate a particular aspect of neoliberal rationality. That is, they are geared toward locating the practices of government and the regulation of conduct in individual bodies. Eckermann points to how “surveillance nurtures self-discipline (causing individuals to ‘gaze upon themselves’... Thus where persons themselves and their bodies are turned into ‘objects’, self-surveillance emerges as a practice of control.”<sup>398</sup> However, in this sense, control and concomitantly, discipline of the body, are not achieved by means of coercion, but through the manipulation of desire: how can individuals be persuaded or motivated to discipline themselves? To allude to the quotation above, how can they be made to “absorb” and act on the expert knowledge generated by technologies of surveillance?

It is in this process of “absorption” of the expertise generated by surveillance techniques that a second technology is relevant: health promotion or education programs. These constitute a further means by which risk can be communicated, and also that individuals can be brought to desire change in their habits and modes of living.

While directed at specific conditions, diseases, or risk factors, health promotion or education programs share a single aim: “enabling people to take control

---

<sup>398</sup> Eckermann, "Foucault, Embodiment and Gendered Subjectivities: The Case of Voluntary Self-Starvation," 157.

over and improve their health.”<sup>399</sup> They are characterized by several features: the emphasis on prevention as opposed to treatment and intervention; the development of indicators to measure performance for stated public health objectives; an orientation toward community involvement to promote healthful behaviors; and the “marketing” of healthful behaviors or attitudes through the use of mass media.<sup>400</sup> This last dimension is especially interesting for demonstrating the neoliberal rationality underlying contemporary public health. Social marketing, as will be further developed in Chapter 7, is distinct from traditional health education; the former operates through the manipulation of desire through the application of key principles of business promotion, prompting a target audience to identify with a certain social goal or behavior. The latter is oriented more toward the hierarchical communication of expert knowledge to a public in need of information; it takes the form of warnings, or dire predictions as to the consequences of risk – as in cigarette or alcohol warning labels detailing hazards of smoking to pregnant women and their unborn children, or the anti-drug campaigns that employ unpleasant fried-egg metaphors asserting that “this is your brain on drugs – any questions?” Lupton’s analysis of social marketing campaigns in the arena of public health has led her to conclude that:

In the discourse of social marketing, the language and orientation of the commercial economic world predominate. Based on the assumptions of marketing, which centre around the “marketing mix” and the “four Ps” (product, place, price and promotion), social marketing views information or “correct” attitudes as a product to be

---

<sup>399</sup> World Health Organization, *Diet, Nutrition, and the Prevention of Chronic Diseases*, 21. The U.S. Department of Health and Human Services has also conceptualized health promotion in these terms, positing that promotion strategies are “those related to individual lifestyle – personal choices made in a social context – that can have a powerful influence over one’s health prospects” United States Department of Health and Human Services, *Health Status of Minorities and Low-Income Groups*, 3rd ed. (Washington, DC: Department of Health and Human Services, 1991) 6.

<sup>400</sup> B.K. Tones, “Health Education and the Ideology of Health Promotion: A Review of Alternative Approaches,” *Health Education Research: Theory and Practice* 1.1 (1986): 3.

marketed...Under this model health becomes a commodity and members of the public “consumers” who must be persuaded to acquire it at some cost to themselves, whether it be the giving up of smoking or salt or the loss of leisure time which is newly devoted to exercise.<sup>401</sup>

Social marketing campaigns, and health promotion activities more generally, can be generated at the level of the state, as in physical activity campaigns that prompt youth to engage in exercise the same way that sports heroes or other role models do.<sup>402</sup> It can also take the form of non-state initiatives, as in the Susan G. Komen Breast Cancer Foundation, whose on-going “Race for the Cure” prompts individuals to engage in 5k run/walks; in doing so, these people both provide for their own health, and are motivated through a desire to raise awareness of the problems of breast cancer and to support an organization engaged in fighting it.<sup>403</sup>

In targeting prevention, health promotion strategies often emphasize positive, pro-active steps that can be taken. For example, in the case of cancer prevention efforts, health promotion campaigns in the United States have emphasized a multi-faceted strategy geared toward empowerment. Consider the prevention campaign of the American Cancer Society. In it, the organization emphasizes the physical,

---

<sup>401</sup> Lupton, The Imperative of Health: Public Health and the Regulated Body 111-12. There is a rich amount of literature on social marketing in the public health context. Several examples include: G. Hastings and A. Haywood, "Social Marketing and Communication in Health Promotion," Health Promotion International 6.2 (1991).; J.C. Ling, B.A.K. Franklin, J.F. Lindsteadt and S.A.N. Gearon, "Social Marketing: Its Place in Public Health," Annual Review of Public Health 13 (1992).; and R.C. Lefebvre, "The Social Marketing Imbroglia in Health Promotion," Health Promotion International 7.1 (1992).

<sup>402</sup> I refer in particular to the VERB campaign in the United States, which targets sedentary youth; one especially interesting technique that the campaign employs is to place a full page ad in popular comic books, demonstrating in a split-page format superheroes engaging in physical activity, and youngsters engaging in similar sport – whether football, soccer, or running. The format and content encourage physical activity through prompting an identification response in the target audience – that is, if one is active, one shares something in common with popular heroes such as Wolverine or Nightcrawler of the X-Men (characters portrayed in these ads). On the VERB campaign, see F. Wong, M. Huhman, C. Heitzler, L. Asbury, R. Bretthauer-Mueller and S. McCarthy, VERB™ -- a Social Marketing Campaign to Increase Physical Activity among Youth, July 2004 2004, Available: [http://www.cdc.gov/pcd/issues/2004/jul/04\\_0043.htm](http://www.cdc.gov/pcd/issues/2004/jul/04_0043.htm), November 9 2004. For additional discussion of the VERB campaign, see Chapter 7.

<sup>403</sup> Susan G. Komen Breast Cancer Foundation, Available: [www.komen.org](http://www.komen.org), 02/19/2005 2005.

psychological, and material benefits of quitting or not smoking; these include longer life, improved appearance as a result of breaking the “premature aging” cycle associated with smoking, improved sensory abilities as senses of smell and taste return to normal, increased social acceptance for nonsmokers; and last, but certainly not least, the money saved by quitting or avoiding an expensive habit.<sup>404</sup>

The society also advocates positive strategies for preventing other types of cancer, such as melanoma (skin). Rather than adopting a restrictive or coercive stance – as in eschewing all outdoor activities or sun exposure as dangerous – the organization recommends applying sunscreens, wearing hats, using sunless tanners and bronzers for the skin – all framed as simple, easy choices that individuals can make to maximize their health without having to give up the outdoors.<sup>405</sup>

This emphasis on empowering individuals to become motivated and educated to manage their own health codes with the element of neoliberal rationality emphasizing not only individual autonomy, and the right and ability for individuals to govern their own lives – but also that this government can be achieved without recourse to coercion or state intervention. One aforementioned feature of health promotion – that of social marketing – only reinforces this aspect. Intervention is not appropriate or even necessary if individuals can be induced to “consume” the healthy practices being marketed in the promotion campaigns. Gastaldo alludes to this feature by asserting that health promotion

---

<sup>404</sup> American Cancer Society, Guide to Quitting Smoking, Available: [http://www.cancer.org/docroot/PED/content/PED\\_10\\_13X\\_Guide\\_for\\_Quitting\\_Smoking.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp?sitearea=PED), May 24 2004.

<sup>405</sup> American Cancer Society, Protect Your Skin from U.V., Available: [http://www.cancer.org/docroot/PED/content/ped\\_7\\_1x\\_Protect\\_Your\\_Skin\\_From\\_UV.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/ped_7_1x_Protect_Your_Skin_From_UV.asp?sitearea=PED), May 25 2004.

is empowerment because the information provided to patients helps them to make informed choices. Based on the knowledge acquired and their own previous knowledge, patients can make decisions about their health, taking into account scientific, social and personal factors. This gives them the opportunity to exercise autonomy and self-government.<sup>406</sup>

This characterization also reflects how the decision-making ability of individuals can be conditioned by external influences – what Dean has termed “manipulable man” in the context of neoliberal governmentality. In this case, expert knowledge deployed through the technology of health promotion constitutes such an external influence.

*Technologies and the Craft of Self: Implications for Subjectivity*

As surveillance becomes a technology for the deployment of expertise toward the ends of prediction and control, and as individuals are motivated via health promotion programs to discipline themselves in the name of achieving “good health,” we come to witness how each technology is implicated in the construction of a particular type of subjectivity toward the end of governing conduct.

In the case of surveillance, this technology identifies arenas for governance; through statistical and other calculations of risk, it renders the boundaries of what is normal, what is healthy, and what is also irresponsible or dangerous. Along a range of behaviors and practices, one can then be brought to see himself as either within the boundaries of what is “healthful” or otherwise valorized. On the other hand, risk discourse also functions to localize individuals who do not fit such a profile as objects

---

<sup>406</sup> Denise Gastaldo, "Health Education and the Concept of Bio-Power," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998) 129. On the non-coercive aspect of health promotion and its implication for self-government, see also Lupton, *The Imperative of Health: Public Health and the Regulated Body* 53.; and Tones, "Health Education and the Ideology of Health Promotion: A Review of Alternative Approaches."

requiring governance and discipline. The implications of being categorized thus bear directly on how one comes to understand and relate to herself – which is the very province of subjectivity. Giddens is well known for charting the expansion of the risk domain, or “manufactured uncertainty,” as a consequence of modernity. As he notes, this aspect of modernity affects every aspect of life – including the project of self-craft:

The self becomes a reflexive project and, increasingly, the body also. Individuals cannot rest content with an identity that is simply handed down, inherited, or built on a traditional status. A person’s identity has in large part to be discovered, constructed, actively sustained. Like the self, the body is no longer accepted as “fate”...<sup>407</sup>

In this regard, there is no natural subjectivity, as such; it is always in the process of renegotiation, reconstruction, and in the context of the prevention of NCDs, it does so with the appeal to the expertise and authority that is deployed via such technologies as public health education efforts. By the proffering of knowledge to make informed choices, health education also becomes the mechanism by which awareness, and even subjectivity can be transformed. A common definition of “health education” reveals this aim. It is

any activity which promotes health-related learning, i.e. some relatively permanent change in an individual’s capabilities or dispositions. It may produce changes in understanding or ways of thinking; it may bring about changes in belief and facilitate the acquisition of skills; or it may generate changes in behaviour or lifestyle.<sup>408</sup>

Thus, through the acquisition of knowledge about risks and the means to mitigate them, one may experience a “permanent” change in the way she relates to herself;

---

<sup>407</sup> Anthony Giddens, *Beyond Left and Right: The Future of Radical Politics* (Stanford: Stanford University Press, 1994) 82.

<sup>408</sup> Tones, "Health Education and the Ideology of Health Promotion: A Review of Alternative Approaches," 6.

perhaps it is expressed in different ways, as suggested via changes in beliefs or behaviors, but these only become possible because the individual comes to relate and manage herself differently.

Technologies of surveillance and health promotion, then, function interactively to condition how individuals are brought to relate to and ultimately govern themselves. Returning the earlier example of tracking as a means of surveillance, we identify another implication of *techné* for subjectivity. By reaching at risk people early in life, even unto childhood, and educating them how to minimize their risks of ill-health, there is a greater opportunity to inculcate in them a self-view of vulnerability, and in so doing, promote the technologies of self-craft that will be the key overcoming that vulnerability.<sup>409</sup>

And therein is the irony, and the impossibility of neoliberal subjectivity in the context of public health; for as much as technologies like health promotion are supposedly predicated upon empowerment – conditioning the individual to understand their risks and to want to mitigate them toward living a longer, fuller life – they depend, in order to be successful, on a subjectivity by which one sees herself as *always* at risk, *always* vulnerable. In the example of tracking do we come to see how the production of knowledge, the deployment of specific technologies like surveillance and programs to modify lifestyle, and the construction of subjectivities

---

<sup>409</sup> On efforts to track risk factors in infants and youth, see D.J.P. Barker and C. Osmond, "The Maternal and Infant Origins of Cardiovascular Disease," *Coronary Heart Disease Epidemiology*, eds. M. Marmot and P. Elliot (New York: Oxford University Press, 1995)., and D. Labarthe, "Coronary Risk Factors in Childhood," *Coronary Heart Disease Epidemiology*, eds. M. Marmot and P. Elliot (New York: Oxford University Press, 1995). By "technologies of self-craft" I refer to the practices of a disciplined lifestyle typically viewed as "healthy" - physical activity, eschewing tobacco, rich diets, and excessive alcohol consumption.

are all interconnected to weave a systematic program aimed at the management and regulation of conduct.

*Towards Rationality and Empowerment: The Subject of Public Health*

In the context of minimizing the burdens posed by NCDs, contemporary public health employs technologies such as health promotion that are intimately linked with the realm of subjectivity. Predicated upon theories of health behavior that assume a rational, calculating subject, and directed toward the production of an entrepreneurial self actively engaged in maintaining their own health, public health education and promotion campaigns privilege a particularly neoliberal subject. Kelly has noted in this regard that “([n]eo)liberal governmentality...attempts to reconfigure the practices of government by conceiving the subject as rational, autonomous, choice making and responsible.”<sup>410</sup>

The Rational Subject in Theories of Health Behavior

In exploring the dimensions of subjectivity in the course of governmentality, addressing how subjectivity is constructed or addressed in the context of public health goes a long way to illustrating why health promotion and education programs are targeted toward the changing of risk behaviors at the level of the individual. These programs, and the larger field of health communication of which they are a part, are predicated upon a principle assumed to govern the behavior of individuals: the hierarchy-of-effects. This principle, progressively linear in nature, posits that beliefs

---

<sup>410</sup> Peter Kelly, "Youth at Risk: Processes of Individualisation and Responsibilisation in the Risk Society," *Discourse: studies in the cultural politics of education* 22.1 (2001): 29.

foster attitudes, which in turn yield intentions to act one way or another, which ultimately results in the behavior itself.<sup>411</sup> As Sapp notes:

The hierarchy of effects principle assumes that cause and effect are rational in the sense that attitudes accurately reflect beliefs, intention accurately reflects attitudes, and behavior accurately reflects intention...Although rationality has been conceptualized as resulting from different cognitive processes – such as expected utility [and] subjective utility...the presumption of rationality is central to all theories derived from the hierarchy of effects principle.<sup>412</sup>

Through a closer examination of one such theory, the Health Belief Model (HBM), this underlying assumption comes to the fore. First developed in the 1950s, and becoming especially prominent in the 1970s and 1980s, it assumes that individuals “rationally assess the positive and negative consequences of a set of alternative choices, estimate the probabilities of all outcomes, evaluate each outcome in terms of its expected utility to us, compare alternatives, and decide on a course of action.”<sup>413</sup> This calculated action is predicated upon how we come to evaluate health problems and risks; that is, our susceptibility to the problem, how severely it is likely to affect us, the likely efficacy of prevention and intervention strategies, and the costs to implementing these solutions. Such “health beliefs” thus determine one’s willingness to act, and given “cues to action” (for example, external motivation from health experts or family members), trigger behavior.<sup>414</sup>

---

<sup>411</sup> The hierarchy of effects principle was first put forth by Lavidge and Steiner (1961) in the context of marketing and advertising effectiveness; it has since informed behavioral models in a range of disciplines, and as Sapp notes, it underlies multiple theories of health behavior, Stephen G. Sapp, "Incomplete Knowledge and Attitude-Behavior Inconsistency," *Social Behavior and Personality* 30.1 (2002). Among these are the Health Belief Model and the Theory of Reasoned Action.

<sup>412</sup> Sapp, "Incomplete Knowledge and Attitude-Behavior Inconsistency," 37.

<sup>413</sup> Paul E. Pezza, "The Impact of Dominant Paradigms on Contemporary Health Education Theory, Research, and Practice," *Wellness Perspectives* 9.3 (1993): 7.

<sup>414</sup> H. Ross and P. Mico, *Theory and Practice in Health Education* (Palo Alto: Mayfield, 1980).

It is interesting to note that despite numerous criticisms external to the field of health education, within it, it remains, as Pezza notes, “theoretical bedrock” for explaining the origins of health decisionmaking.<sup>415</sup> The centerpiece of these criticisms has focused on its limitations with regard to accurately predicting behavior. Applied in the context of predicting exercise behavior of obese and non-obese adolescents, for example, 14% of obese variance was explained by the HBM alone and only 7% of non-obese variance. The largest proportion of variance, as well as past exercise behavior, was explained by cues to action, especially with regard to social approval.<sup>416</sup>

Similar studies assessing the predictive power of the HBM have been performed in the context of post-coronary exercise regimen compliance<sup>417</sup>, dental health behavior<sup>418</sup>, and willingness to seek treatment for symptoms of heart disease or cancer.<sup>419</sup> While focusing on different contexts of the application of the HBM, they concur in its limited ability to account for behavior.

Even given these critiques, the HBM remained throughout the 1980s and into the 1990s the preeminent model of health behavior, referred to in a standard textbook on health education as the “dominant theory.”<sup>420</sup> Moreover, proponents of the model have attempted to bolster the HBM through the incorporation of elements from other

---

<sup>415</sup> Pezza, "The Impact of Dominant Paradigms on Contemporary Health Education Theory, Research, and Practice," 9.

<sup>416</sup> J. O'Connell, "Utilization of the Health Belief Model in Predicting Dieting and Exercising Behavior of Obese and Non-Obese Adolescents," University of Toledo, 1984.

<sup>417</sup> B. Tirrell and L. Hart, "The Relationship of Health Beliefs and Knowledge to Exercise Compliance in Patients after Coronary Bypass," *Heart and Lung* 3 (1980).

<sup>418</sup> J. Kirscht, "The Health Belief Model and Predictions of Health Actions," *Health Behavior: Emerging Research Perspectives*, ed. D. Gochman (New York: Plenum, 1988).

<sup>419</sup> I. Janis, "Improving Adherence to Medical Recommendations: Prescriptive Hypotheses Derived from Recent Research in Social Psychology," *Handbook of Psychology and Health, Volume IV: Social Psychological Aspects of Health*, ed. A. Baum (Hillsdale, NJ: Lawrence Erlbaum Associates, 1984).

<sup>420</sup> K. Glanz, F. Marcus Lewis and B. Rimer, *Health Behavior and Health Education: Theory, Research, and Practice* (San Francisco: Jossey-Bass, 1990).

theoretical models, including Social Learning Theory, which addresses aspects of self-efficacy and perceived barriers to action, and the Theory of Reasoned Action, which focuses on intention as the primary vehicle for generating behavior.<sup>421</sup> The implications of this theoretical refinement have thus led Pezza to conclude that:

It would appear that in striving to incorporate essential elements of Social Learning Theory and the Theory of Reasoned Action, the proponents of what has been the major vehicle for the dominant paradigm for explaining health behavior would breathe new life into the Health Belief Model. This may be an effort to extend the model and better approximate reality. Instead, it may be illustrative of a prevailing paradigm flexing under stress by co-opting dissonant ideas as a means of accommodating anomalies.<sup>422</sup>

The persistence with which the HBM has survived in public health education and promotion, as well as its refinement with reference to two other psychological models of individual behavior, reflects the extent to which subjectivity is constructed in terms of rationality and calculative predilections. In their assessment of these models of behavior change in the context of the HIV prevention strategies, Airhihenbuwa and Obregon note that “the health belief model and theories with similar principles were designed to address health prevention from an individual, linear, and rational perspective.”<sup>423</sup>

Such dimensions speak to a particularly liberal subjectivity, in which individuals are constructed, and come to see themselves, as autonomous beings

---

<sup>421</sup> For application of social learning theory in regards to self-efficacy relevant to HBM, see A. Bandura, "Self-Efficacy: Toward a Unifying Theory of Behavioral Change," Psychological Review 84.2 (1977). and V.J. Strecher, B. DeVellis, M. Becker and I.M. Rosenstock, "The Role of Self-Efficacy in Achieving Health Behavior Change," Health Education Quarterly 13.1 (1986). On the Theory of Reasoned Action, see Azjen and Fishbein, Understanding Attitudes and Predicting Social Behavior. for a general articulation; on application to the HBM, see N. Janz and M. Becker, "The Health Belief Model: A Decade Later," Health Education Quarterly 11.1 (1984).

<sup>422</sup> Pezza, "The Impact of Dominant Paradigms on Contemporary Health Education Theory, Research, and Practice," 9.

<sup>423</sup> Collins O. Airhihenbuwa and Rafael Obregon, "A Critical Assessment of Theories/Models Used in Health Communication for HIV/AIDS," Journal of Health Communication 5.Supplement (2000): 8.

whose state of health (or lack thereof) is largely the product of behavior, and the choices that govern it. Hence, it is not surprising that health education and promotion strategies are often geared toward the transformation of self in the context of lifestyle.

#### The Entrepreneurial Self

The theoretical models of public health, in addition to assuming a rational, calculating actor, also construct particularly neoliberal subjects through the directive that individuals' choices can be influenced and rehabilitated by external factors. Harkening back to Dean's concept of neoliberalism's "malleable man," elucidated in Chapter 4, herein we find the primary function of health education in the prevention of chronic disease: to provide the intellectual and motivational tools to enable individuals to transform themselves into healthy, productive, and happy people. Decisionmaking frameworks can be influenced, modified, and brought into line with values consistent with the dominant political rationality – in this case, freedom from external restraint coupled with private responsibility to manage one's behavior. Hence, as Lupton notes: "Education is seen as the key to behaviour change: if people are informed about the dangers of indulging in certain activities, it is argued that they will then rationally use this information to weigh up the risks to themselves and act accordingly."<sup>424</sup>

Toward the end of transforming how individuals relate to themselves and govern their behavior, public health campaigns emphasize individual responsibility in that process. Consider, for example, the World Health Organization's awareness program on Active Aging. Developed as a means to stave off the burden of NCDs so

---

<sup>424</sup> Lupton, The Imperative of Health: Public Health and the Regulated Body 56.

prevalent among older individuals, this program recognizes that improved quality of life as one ages is predicated upon staying involved and active in managing one's own health and welfare.

Active ageing policies and programmes recognize the need to encourage and balance personal responsibility (self-care), age-friendly environments and intergenerational solidarity. Individuals and families need to plan and prepare for older age, and make personal efforts to adopt positive personal health practices at all stages of life. At the same time supportive environments are required to “make the healthy choices the easy choices.”<sup>425</sup>

To the extent that environment plays a role in the active aging process, it is primarily, as WHO notes, to affect the individual's decisionmaking process. Responsibility is still squarely on one's own shoulders to take the appropriate steps to manage their lives productively.

This sense of responsibility is echoed in specific recommendations by the Organization for interventions to manage the risks of high blood pressure and cholesterol – two major risk factors for NCDs. In the case of high blood pressure, recommendations included individual management through drug treatment and clinical consultation for behavior modification, complemented by population initiatives directed at food labeling to educate consumers about salt content in foods. The interventions suggested for cholesterol reduction involved mass media campaigns directed toward educating the population about the dangers of high cholesterol, and individual management in the form of daily intake of cholesterol-reducing drugs, four annual visits to a health provider for evaluation, and one to two

---

<sup>425</sup> World Health Organization, Active Ageing: A Policy Framework (Geneva: World Health Organization, 2002), 17.

annual outpatient visits for health education.<sup>426</sup> While in each case individual initiative is an explicit dimension of intervention, even population interventions such as health education still operate upon and through individuals to motivate them to become better consumers in the market, and ultimately better consumers of health.

Through an emphasis on active aging, risk-intervention strategies that privilege individual cognizance and responsibility for managing their conditions – even at the population level – public health directives such as those of WHO privilege autonomy and self-responsibility. Hence, “the self that is being privileged and normalized in such discourses is that of the enterprising and entrepreneurial self, the individual who is interested in and willing to take action to improve his or her health status.”<sup>427</sup>

Indeed, it is through sustained activity of relating to ourselves as entrepreneurs that we come to manage the vagaries of risk that have been posited as the defining feature of late modernity. Beck’s concept of the “risk society,” characterized by the constant identification of and attempts to manage risk, offers a general account in this regard.<sup>428</sup> But it is in Giddens’ concept of “positive welfare” that we find perhaps the closest articulation of how closely tied are the projects of risk management and self-actualization. In prior work, he has characterized late modernity as rife with “manufactured uncertainty,” whereby the capacity for prediction of future events eludes society; in this context, individuals come to depend more and more on expert

---

<sup>426</sup> World Health Organization, The World Health Report 2002, 115-16.

<sup>427</sup> Lupton, The Imperative of Health: Public Health and the Regulated Body 61. This perspective is also evident in the concept of “healthism,” which posits good health as the responsibility of individuals in terms of their lifestyle management. On this topic, see M. Greco, “Psychosomatic Subjects and the ‘Duty to Be Well’: Personal Agency within Medical Rationality,” Economy and Society 22.3 (1993). and Robert Crawford, “Healthism and the Medicalization of Everyday Life,” International Journal of Health Services 19 (1980).

<sup>428</sup> Ulrich Beck, Risk Society: Towards a New Modernity (London: Sage, 1992).

systems for guidance, when these systems themselves are inadequate to the task of anticipating possible events or outcomes.<sup>429</sup> Hence, risk and the attempts to mediate it, become defining features of contemporary society. One specific means to overcome manufactured uncertainty, he argues, is to gear social policy towards “positive welfare,” or the process of utilizing risk as a means of achieving self-actualization through the fostering of a particular kind of subjectivity:

Schemes of positive welfare, oriented toward manufactured rather than external risk, would be directed to fostering the autotelic self. The autotelic self is one with inner confidence which comes from self-respect...It refers to a person able to translate potential threats into rewarding challenges, someone who is able to turn entropy into a constant flow of experience. The autotelic self does not seek to neutralize risk or to suppose that “someone else will take care of the problem”; risk is confronted as the active challenge which generates self-actualisation.<sup>430</sup>

The autotelic self that Giddens describes is the lifestyle entrepreneur valorized in public health approaches to preventing and managing the challenges of NCDs. Harkening back to the example of WHO’s program on Active Ageing, Giddens suggests this approach to dealing with the risks and challenges associated with old age; that rather, than relying on pension and other state provision schemes, that they actively participate in the management of their own health and welfare.<sup>431</sup>

This emphasis on individual responsibility – particularly as it is framed as active entrepreneurship – reflects a decidedly neoliberal rationality in the arena of how we relate to and manage ourselves. Through education and clinical guidance, individuals can be induced to see themselves as empowered, and in managing risk, capable of achieving self-actualization. Government and the regulation of conduct in

---

<sup>429</sup> Giddens, Modernity and Self-Identity.

<sup>430</sup> Giddens, Beyond Left and Right: The Future of Radical Politics 192.

<sup>431</sup> Giddens, Beyond Left and Right: The Future of Radical Politics 170.

the arena of disease prevention are thus not immediately restrictive or repressive. On the other hand, however, the notion that risk cannot be ultimately overcome, but only managed, fosters a subjective orientation that depends on a sense of vulnerability for that management to be successful. This, then, is the tension alluded to earlier – neoliberal subjectivity in the context of public health approaches to chronic disease is at once predicated upon empowerment as well as need, mastery as well as vulnerability: dichotomies at once always in contest, always in play.

Other elements of neoliberal rationality are also evident in the aforementioned public health approaches to chronic disease. The reasoning that WHO employs in advocating active aging, for example, justifies it on the basis of accomplishing two goals: first, it promotes autonomy and independence later in life, and second, it “offset[s] rising costs in pensions and income security schemes as well as those related to medical and social care costs.”<sup>432</sup> Again, the privileging of autonomy at the level of the individual is evident here, as well as cost-efficiency as a means of justifying programs directed toward individual empowerment and self-management. On this latter point, in the analysis of recommended interventions for high blood pressure and cholesterol among other risk factors, WHO based its recommendations primarily on how cost-efficient they were. In this context, it advocates an “absolute risk approach,” which considers risk factors in conjunction for estimating the likelihood of a cardiovascular event in an individual over the next ten years. This likelihood is expressed in threshold levels – in the case of the WHO study, 5%, 10%, 25%, and 35%. The theme of cost-efficiency in general, as well as in the context of

---

<sup>432</sup> World Health Organization, Active Ageing: A Policy Framework, 17.

interventions to reduce the risks associated with cardiovascular disease is thus evident:

Because health resources are always scarce in relation to need, choices must be made about how to allocate them between the substantial number of options available to reduce risks. The best way of doing this is to estimate, for each intervention, the gains in population health and the associated costs compared to the situation that would exist if the intervention were not undertaken... The absolute risk approach for a threshold of 35% is very cost-effective in all sub regions and is always more cost-effective than the alternative of treatment based on observed levels of blood pressure and cholesterol alone. As the threshold is lowered, the health benefits increase but so do the costs – in fact, it gets more and more expensive to obtain each additional unit of health benefit.<sup>433</sup>

Considering especially the emphasis on economic efficiency, it is important to attend to how a subjectivity predicated upon entrepreneurialism and self-efficacy is linked with this goal, as well as the more general aim of maintaining productivity. As the care of the self can be devolved from the responsibility of the state, and the public health approach to chronic disease emphasizes private responsibility, individuals govern themselves in such a way as to justify calls to devolve, or at least roll back, social insurance programs, expansive public health bureaucracies, and the like. On this point, Higgs notes:

Health promotion steps into the public domain as a virtuous activity not only promoting health but also the person. While this seems to accord with the modern conception of the agentic individual who can mould himself or herself, it also provides the basis of a new relationship between state and citizen...The new citizen learns to engage with risks constructively because if he or she doesn't there is no collective security net waiting to make good the damage.<sup>434</sup>

---

<sup>433</sup> World Health Organization, The World Health Report 2002, 102, 17.

<sup>434</sup> Paul Higgs, "Risk, Governmentality and the Reconceptualization of Citizenship," Modernity, Medicine and Health: Medical Sociology toward 2000, eds. Graham Scrambler and Paul Higgs (New York: Routledge, 1998) 193.

Moreover, to the extent that individuals invest in themselves and their health over the long term, they “will continue to make a productive contribution to society in both paid and unpaid activities as they age.”<sup>435</sup> In this regard, they secure and contribute not only to their own welfare, but also to that of society.

The citizenship impulse in this regard is quite strong, linking the maintenance of the individual body with that of the social, without recourse to state interference. Thus, Petersen and Lupton note that “in the context of Western economies, in which expanding production and the accumulation of wealth are important, ‘good health’ is that condition which is least disruptive of production...A healthy person is able to take part, to the best of his or her physical ability, in contributing to the nation’s prosperity.”<sup>436</sup> As this aspect pertains to subjectivity as a dimension of governmentality, it suggests how intimately tied the project of self-craft is to achieving the aims of neoliberalism in the economic realm.

#### Subjectivity in the Public Health Context: Conformity and Resistance

The construction of autonomous, responsible subjects within the public health discourse indeed has implications for how individuals come to see themselves in terms of what it means to be “healthy.” One study, for example, explores how middle-class American men and women between the ages of 35 and 55 conceptualize health, and what it means to “be healthy.” Subjects, when interviewed, frequently characterized the achievement of health as the result of conscious management of lifestyle and body – the active entrepreneurship alluded to throughout this text. This conscious management was as much predicated upon a proactive program of

---

<sup>435</sup> World Health Organization, Active Ageing: A Policy Framework, 46.

<sup>436</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 67.

cultivating practices to enhance fitness, as it was refraining from tobacco or a poor diet. As one respondent said:

Health to me is the food you eat, how you carry yourself, from the clothes you wear, to the size you are, body fat, skin tone, and whether you're sick. I feel if you take care of yourself by working out and eating right,...you will be stronger and healthier.<sup>437</sup>

Other studies of health attitudes and behavior have indicated that many come to view health in a similar regard – as an ongoing project of conscious lifestyle management, discipline, and adherence to public health and medical guidelines.<sup>438</sup>

Yet, if the possibility for prevention of chronic disease is so commonly understood – by experts as well as lay individuals – to exist in the behavioral choices of “lifestyle,” and health education campaigns are directed toward its modification, it is reasonable to question how it is so many people have come to be poor stewards of their bodies.

Consider the example of hypertension. In their analysis of National Health and Nutrition Examination Surveys (NHANES) from 1960-1991, Burt, et al. found that lay people came to have over time a much greater awareness of the sources of risk associated with hypertension, yet Hill has pointed out that over that same time frame and even into the late 1990s, the control rate of hypertension in the United States was only 27%.<sup>439</sup> More generally, as was discussed in Chapter 3, risk factors

---

<sup>437</sup> R. Saltonstall, "Healthy Bodies, Social Bodies: Men's and Women's Concepts and Practices of Health in Everyday Life," Social Science & Medicine 36.1 (1993): 8.

<sup>438</sup> See, for example, Crawford's account of Chicago interviewees. Robert Crawford, "A Cultural Account of 'Health': Control, Release, and the Social Body," Issues in the Political Economy of Health Care, ed. J.B. McKinlay (New York: Tavistock, 1984).; additionally, see MacInnes and Milburn's study of Scottish individuals. A. MacInnes and K. Milburn, "Belief Systems and Social Circumstances Influencing the Health Choices of People in Lochaber," Health Education Journal 53 (1994). For a perspective on the role of gender with regard to these attitudes, see S. Bordo, "Reading the Slender Body," Body/Politics: Women and the Discourses of Science, eds. M. Jacobus, E.F. Keller and S. Shuttleworth (New York: Routledge, 1990).

<sup>439</sup> V.L. Burt, J.A. Cutler, M. Higgins, M. Horan, D. Labarthe, P. Whelton, C. Brown and E. Roccella, "Trends in the Prevalence, Awareness, Treatment, and Control of Hypertension in the Adult U.S. Population: Data from the Health Examination Surveys, 1960-1991," Hypertension 26 (1995).; Martha

such as obesity and physical inactivity continue to be prevalent even in industrialized countries with established and active public health systems engaged in ongoing NCD education projects.

While it would be another project entirely to go into depth on the strategies of resistance to neoliberal governmentality in the public health sphere, it is important to say a few words about the possibilities and potential logic for refusing compliance with public health directives on risk management. A governmentality approach does not imply determinism; beings that are capable of being conditioned are also capable of resistance. The sites and means of this resistance may vary, but generally can be conceptualized as the ways in which individuals resist prescribed norms or behavioral patterns in their day-to-day lives. Thus, “[a]t this micro-level, people may not conform to public health or health promotional advice because of a conscious sense of frustration, resentment, or anger, or because they derive greater pleasure from other practices of the self...”<sup>440</sup>

The implication of this perspective is that the apparatuses of governmentality are not imposed, nor completely deterministic; there exists the possibility of resistance and the construction of a subjectivity that does not accord with the dominant mode of governmentality.<sup>441</sup>

How does one account for the possibility of resistance in a public health context – that is, how can one speak to the production of the disciplined, healthful

---

Hill, "Closing the Gap between Information and Action," Key Aspects of Preventing and Managing Chronic Illness, eds. Sandra Funk, Elizabeth Tornquist, Jennifer Leeman, Margaret S. Miles and Joanne S. Harrell (New York: Springer Publishing Company, 2001) 13.

<sup>440</sup> Lupton, The Imperative of Health: Public Health and the Regulated Body 133.

<sup>441</sup> For more on this point, see L. McNay, Foucault and Feminism: Power, Gender and the Self (Cambridge: Polity Press, 1992) 84.

subject when it does not code with the behavioral choices that so many make? It is worth considering that conduct is shaped not only by public health dictums in the context of governmentality, but other spheres which are also directed at the regulation of conduct. In this regard, Lupton points to a number of examples, such as commodity culture, schools, the legal system, and media, that all function to regulate bodies and lives. Hence, “the competing discourses around the construction of the subject are too diverse and contradictory to ensure full alignment to the imperatives of public health.”<sup>442</sup>

Second, resistance in the form of “risk-taking” may actually contribute to an individual’s sense of purpose and accomplishment. Lupton and Tulloch’s recent study on voluntary risk-taking indicated that interview subjects frequently characterized noncompliance with prescribed lifestyle dictums as a means of fully realizing their promise as individuals. As one interviewee put it, “I don’t think you can live life fully without placing yourself in a risky situation. I don’t think you can fully find your own potential without taking risks.”<sup>443</sup> This perspective provides an interesting counterpoint to that of Giddens, whose concept of the autotelic self is predicated upon the active management of risk in order to maximize one’s potential as an individual.

A third potential factor derives not from the conscious lack of compliance on the part of individuals, but from the struggle of health educators to identify the best means of motivating people. There has been acknowledgement by those in the health

---

<sup>442</sup> Lupton, *The Imperative of Health: Public Health and the Regulated Body* 134.

<sup>443</sup> Deborah Lupton and John Tulloch, “‘Life Would Be Pretty Dull without Risk’: Voluntary Risk-Taking and Its Pleasures,” *Health, Risk and Society* 4.2 (2002): 119.

community that despite decades of research on health communication and behavior, a “magic bullet” in this regard remains elusive. Harrell and Leeman conclude that

While we have a beginning understanding of how to assist individuals with behavior change, we still have not opened the black box; that is, we still do not know what interventions will be most effective in promoting health and preventing disease. We do not know enough about how to motivate people to make enduring changes in their behaviors.<sup>444</sup>

Of course, such a perspective presupposes that the means of preventing or arresting the disease process exists in that black box to begin with. In such a light, if only people can be motivated – if only they can be persuaded to take action themselves, then there is no need to open up for interrogation the myriad of social, economic, and political structures that enable such behaviors to flourish. This privileging of agency, of the responsible and proactive subject who must be motivated and cultivated, is one dimension by which public health devolves into the realm of the private, but it is not the only one.

The folding of public and private spheres is also evident in the transformation of how public health approaches the production and dissemination of knowledge, and the technologies of practice that are predicated upon that knowledge. Public health discourses - and the assemblage of procedures built up around them – manifest as a project of governmentality, one that has evolved over time to reflect a dominant neoliberal rationality. From the aims of epidemiology, to its methods, from the macrotechnologies oriented toward health reform to the microtechnologies of surveillance and health education, from the subject as rational and malleable to the

---

<sup>444</sup> Joanne S. Harrell and Jennifer Leeman, "Promoting Healthier Behaviors," Key Aspects of Preventing and Managing Chronic Illness, eds. Sandra Funk, Elizabeth Tornquist, Jennifer Leeman, Margaret S. Miles and Joanne S. Harrell (New York: Springer Publishing Company, 2001) 29.

subject as entrepreneurial and engaged: all of these elements weave together to cast public health - especially in its orientation toward NCDs – as a system of neoliberal governance and as a system of inherently political practices.

The practical effect of this is to increasingly make public health the province of private endeavor, and its standards of evaluation more about cost-efficiency than outcome efficacy. This argument has been cursorily and generally developed in this chapter; in the next three, it is developed and substantiated through a detailed analysis of public health approaches and practices in the case countries.

## Chapter 6: The Disciplinary Knowledge of Public Health

To be exercised, power needs to know.  
- Pasquale Pasquino

The argument here is that neo-liberal notions of individual autonomy, the free market and limited government are related, in a mutually producing and sustaining way, to the imperatives to ‘self-care’ in the form of self-surveillance and self-regulation at the heart of prevailing discourses on health risk.  
- Ann Robertson

The previous chapter offered a brief sketch of how the production of knowledge in public health – especially as executed under the auspices of epidemiological inquiry – has evolved to exhibit a particularly neoliberal rationality. This is perhaps most notable in the disciplinary shift from an overriding concern with population to one increasingly characterized by an emphasis on individuals, particularly with regard to the situation of risk in human behavior and “lifestyle.” This latter element is also evident, as explored in the previous chapter, in the prevalence of theories of health which have as a central element an assumption of the rational, calculating actor – such as in the hierarchy-of-effects principle and the Health Belief Model.

Given the broad domain of *episteme* as an axis of governmentality, such a sketch only affords the briefest of illustrations of its actualization in public health. The following analysis deepens the discussion by examining in detail two additional elements pertaining to the role of knowledge in public health, and the dominant political rationality that characterizes it. The first concerns the production of scholarly health knowledge; as is demonstrated, risk continues to constitute a major theme – especially in the field of epidemiology – and in the context of publications on

chronic disease, behavioral risks remain of central importance. This element provides a sense of breadth – assessing the production of knowledge in a more global scope than could be afforded by a more narrow discussion of publishing trends in the three case countries.

The cases, however, provide an especially valuable lens for assessing a second dimension of *episteme* – that of how public health practitioners and scholars are trained in an academic context, with reference to educational institutions' curricula and research agendas. For the purposes of evaluating public health education in the case countries, five institutions were selected. In the United States, the top three ranked schools by *U.S. News and World Report* – Johns Hopkins University, Harvard University, and the University of North Carolina at Chapel Hill – were an understandable choice; given their prominence and respectability in the health community, they serve as a benchmark of what state-of-the-art public health education might be expected to look like. Because the United Kingdom has only a single national school of public health, the London School of Hygiene and Tropical Medicine, it is the exemplar of such education in the British context. Finally, in Sweden, where no national school exists, an international institution of public health education – the Nordic School of Public Health – was the initial and preferred choice as it is the sole school devoted exclusively to public health in Sweden. However, the limited availability of source documents pertaining to curricula and research, particularly in English, compromised the utility of this option. Thus, Swedish public health education is analyzed through the lens of the Karolinska Institutet, the center of graduate training in health and medicine for the country. As an institution, it educates

30% of all Swedish health workers, and generates 40% of all health research performed at Swedish universities – the highest proportions of any single institution.<sup>445</sup> Where possible, however, discussion of its curricular materials is augmented by additional reference to the Nordic School.

The five institutions evaluated across the cases demonstrate variety not only in terms of their being situated in countries with unique histories, cultures, and traditionally distinct approaches to social welfare, including public health, but also in terms of their institutional context. As illustrated later in the chapter, public health education in the United States is highly decentralized, while in Britain there is a single national school of public health. Finally, in Sweden, there are limited options for public health education, including the aforementioned Nordic School of Public Health and Karolinska Institutet, as well as a single department in the general university at Gotebörg. Despite this variety, and understandable differences in particular elements of the programs, remarkable similarity exists in the underlying structure of curricular education and research, and in the political rationality that informs them.

By providing detailed discussions of these programs, it is possible to marry analytical depth with the breadth that the more global assessment of publishing trends affords. And when considered in context with elements of *episteme* developed in the previous chapter – particularly key health promotion models in public health – we gain a much more robust understanding of how the various dimensions of *episteme*

---

<sup>445</sup> Karolinska Institutet, [A Medical University](http://info.ki.se/ki/index_en.html), Available: [http://info.ki.se/ki/index\\_en.html](http://info.ki.se/ki/index_en.html), January 19 2005.

manifest in the discipline of public health, and how these consistently exhibit neoliberal rationality.

*“Risk Mentality” in the Production of Health Knowledge*

Throughout this analysis, the discipline of public health – and especially its subfield of epidemiology – has been characterized as having a “risk mentality” that guides its systems of knowledge and practices. This was highlighted in Chapter 2 with a brief sketch of Skolbekken’s analysis of the “risk epidemic” in medical publishing over a twenty-five year period. Here, however, the analysis turns to build upon Skolbekken’s study to further substantiate that as a discipline engaged in knowledge production, public health continues to privilege the concept of risk.

As with Skolbekken’s study, this analysis begins with a survey of the frequency that the term “risk” appears in the title and/or abstract of articles listed with a major health database – MEDLINE. Where he evaluates the frequency of these “risk-articles” from the period 1967-1991, this analysis picks up the year following, charting the frequency of such articles from 1992-2004. For purposes of comparison, the database PUBMED was added, as was an additional PUBMED search that included a “Cancer” restrictor, which exclusively returns publications pertaining to this NCD.<sup>446</sup>

---

<sup>446</sup> Attempts to identify other NCD specific restrictors, such as those for CVD or diabetes, were not successful; these would have enabled a stronger comparison between condition-specific articles and more generalist publications on the prevalence of risk. Nonetheless, given that cancer is a major source of mortality and morbidity – especially in the case countries – the inclusion of a database devoted to publications on it enables at least a first-cut look at how prevalent the concept of risk is in said publications, vis-à-vis articles in the more general health databases.

A second dimension that extends and is adapted from the original study is the evaluation of risk articles as a percentage of total articles in major health publications. In addition to several specialist journals covering such fields as anesthesiology, obstetrics, and epidemiology, Skolbekken considers a series of seven “generalist” journals on medicine – representing publishing in the United States, Great Britain, and Scandinavia.<sup>447</sup> Based on their reputation as “among the most reliable and prestigious” journals in the world, he selected, among others, the *Journal of the American Medical Association (JAMA)* and the *British Medical Journal (BMJ)* as representative of those two countries.<sup>448</sup> Additionally, he evaluated three Scandinavian medical journals – the journals of the Swedish, Danish, and Norwegian medical associations, respectively – “to see if the trends found in the internationally most renowned journals were also found in Scandinavia.”<sup>449</sup>

The analysis here builds upon this approach, evaluating the number of “risk articles” as a percentage of total articles over the thirteen-year period; however, it introduces an adaptation by looking at journals primarily associated with public health. The journals were selected on the basis of a report generated by the Evidence-Based Practice for Public Health Project; in 2003, it ranked the top public health journals in the world on the basis of “impact factor” (IF), which is a “measure of the frequency with which the ‘average article’ in a journal has been cited in a particular

---

<sup>447</sup> Skolbekken, "The Risk Epidemic in Medical Journals."

<sup>448</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 292. He bases his assertion about the status of these journals on Garfield's (1986) study that evaluated which journals were considered most reliable, and had the greatest impact, as determined by medical experts E. Garfield, "Which Medical Journals Have the Greatest Impact?" *Annals of Internal Medicine* 105 (1986).

<sup>449</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 292.

year.”<sup>450</sup> While the overall rankings include specialist areas pertaining to occupational health, toxicology, and other areas, I focus on the top ten journals in the fields of general public health and epidemiology, as listed in Table 6.<sup>451</sup>

**Table 6. Top Journals in General Public Health and Epidemiology**

Rank by IF	Journal Name	IF	Category
1	World Health Organization Technical Report Series (WHO TRS)	7.900	Public Health
2	American Journal of Epidemiology (AJE)	4.189	Epidemiology
3	Annual Review of Public Health (ARPH)	4.128	Public Health
4	Epidemiology	3.962	Epidemiology
5	American Journal of Public Health (AJPH)	3.279	Public Health
6	Bulletin of the World Health Organization (WHO Bulletin)	2.694	Public Health
7	American Journal of Preventative Medicine (AJPM)	2.630	Public Health
8	International Journal of Epidemiology (IJE)	2.368	Epidemiology
9	Journal of Clinical Epidemiology (JCE)	2.223	Epidemiology
10	Annals of Epidemiology (AE)	2.214	Epidemiology

As suggested in Chapter 1, the tendency of health journals is to reflect an international flavor, regardless of their place of publication; this is certainly true of expressly international journals, such as the *Bulletin of the WHO*, but is also true of expressly “national” publications, such as the *American Journal of Epidemiology*.<sup>452</sup> Nonetheless, in order to more explicitly tie this dimension of the analysis to the production of knowledge in the case countries, three additional journals were included; these were the *JAMA*, the *BMJ*, and the *Scandinavian Journal of Public Health (SJPH)*. The *JAMA* and *BMJ* were retained for several reasons, even though they are not expressly directed to the production of public health research. First, they

<sup>450</sup> Evidence-Based Practice for Public Health Project, Top 25 Public Health Journals by Impact Factor, 1.

<sup>451</sup> Evidence-Based Practice for Public Health Project, Top 25 Public Health Journals by Impact Factor, 1.

<sup>452</sup> The editorial staff of the *AJE* includes representatives not only from the United States, but also Australia, Canada, Sweden, and Scotland, among others; they also publish submissions from researchers all over the world.

provide a sense of continuity between Skolbekken's study and this one; the only other journals he evaluates that appear in this analysis are *American Journal of Epidemiology* and the *International Journal of Epidemiology*. Including two of the key journals he uses to represent the production of health knowledge in the United States and Britain retains this sense of continuity, and allows one to chart the trends in these same journals over a more extended period of time. Additionally, "expressly" American journals pertaining to both epidemiology and public health are already evident in the ten selected journals, and while it does not retain a British moniker, the *International Journal of Epidemiology* is a United Kingdom publication; thus, one will already gain somewhat of a sense of the prevalence of risk in these journals. Augmenting them with additional, highly respected health publications – even if not expressly devoted to public health – enables a more robust discussion. Moreover, because they are two medical journals, one can compare the extent to which risk is a dominant concept in public health versus medical journals.

While Sweden does not have an expressly national publication on public health, the closest substitute available is the *Scandinavian Journal of Public Health* – with Swedes represented extensively on both the editorial board and in publications, it enables at least a general comparison of risk prevalence in articles with other sources.<sup>453</sup>

In addition to the database query and the general evaluation of the thirteen journals, this analysis takes a more in-depth look at risk through an evaluation of the

---

<sup>453</sup> An attempt was made to include the *Journal of the Swedish Medical Association (Läkartidningen)*, in keeping with the selection of the *JAMA* and *BMJ*. However, the journal is not available via major health databases; MEDLINE, PUBMED, and Science Citation Index were all searched to no avail. It was ultimately found via the publication website, however, is searchable only in Swedish.

titles and abstracts of the 307 articles published in the *Annual Review of Public Health (ARPH)* between 1992 and 2004. The *ARPH* was listed as the third most influential journal in the field of public health, according to the impact factor rankings. Specifically, each article was hand-coded on the basis of whether it was directed to the substance of chronic disease as either a specific condition (e.g. cancer) or as a broad category of illness. Second, for those articles dealing with chronic disease, each was coded as to whether it identified as a proximate risk associated with the illness one or more behavioral factors; “proximate risk” should not be misconstrued as the *only* relevant factor, merely the primary one under consideration in the context of the study.

Three additional points on this portion of the analysis are warranted. First, the decision to work in-depth on the *ARPH* was made on the basis of the fact that it provided the most manageable number of abstracts for hand-coding over the full thirteen-year period – 307. The next smallest number with all years represented was *The Annals of Epidemiology*, with 1077. This follows Skolbekken’s procedure for hand-coding the *Journal of the Norwegian Medical Association* to determine the substance of the risk-articles appearing in it. Second, unlike Skolbekken, hand-coding in this analysis was done for all articles in the publication, as opposed to only the risk articles. The decision to include *all* 307 over the thirteen-year period, as opposed to only the 99 with “risk” in the title or abstract, was made on the basis that articles could reasonably deal with specific factors in the substance of the text, but without including the term “risk” in the short space of title/abstract. More specifically, it is designed to catch any risk-articles that would have otherwise gone

unacknowledged. Finally, the decision to evaluate the prevalence of articles on chronic disease and specifically behavioral risk factors was made to highlight again a key concern of this project – how, and to what extent, chronic diseases are explained primarily in relation to the choices that individuals make. As a corollary to this point, such an evaluation also allows one to set aside those articles that deal with “risk” but have nothing to do with disease phenomena.<sup>454</sup> While such articles are useful for demonstrating an overarching preoccupation with risk, they are not necessarily germane to the core concern of this project: the practice of public health as it pertains to the understanding, intervention, and prevention of chronic, noncommunicable diseases.

*The “Epidemic” Continues: Prevalence of Risk-Articles in Health Publishing*

The results of the query in two general health databases (MEDLINE and PUBMED) reveal a continuing preoccupation with “risk” as a core concept in knowledge production. Skolbekken’s analysis of MEDLINE demonstrated that the percentage of articles registered there with the term in the title and/or abstract increased from 0.1% in 1967 to 5% in 1991.<sup>455</sup> Over the course of the next thirteen years, the prevalence of risk articles has more than quadrupled to an average of 21.3% (Figure 1) over the time frame. This growth has been consistent, with the overall percentages incrementally increasing – from an initial spike to 19.5% between 1992 and 1996, to 21.2% (1997-2000), and 22.5% (2001-2004). By presenting the results

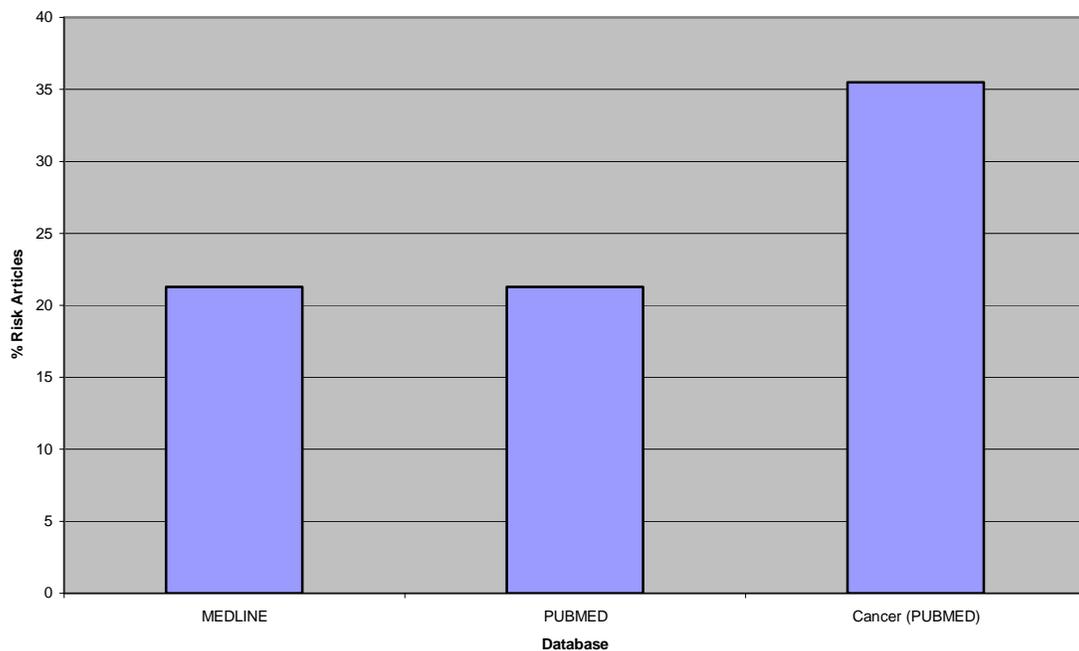
---

<sup>454</sup> For example, the *ARPH* occasionally featured articles dealt with “risk” from the perspective of insurance programs, occupational health (e.g. which professions were most associated with on-the-job injuries), and motor vehicle and bicycle safety.

<sup>455</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 293.

in terms of prevalence, or risk articles as a percentage of the total published, we are able to anticipate the potential critique that the increase in the number of risk articles is simply a function of voluminous publishing in the modern age. As Skolbekken concludes, “There is therefore more to this increase than a mere reflection of the overall increase in the total number of articles published.”<sup>456</sup>

**Figure 1. Prevalence of Risk Articles in Health Databases**



As with MEDLINE, PUBMED reflected a similar trend over the period, with the articles with “risk” in the title or abstract averaging approximately 21% of the total, also with incremental increases of around 2% in the latter four-year periods. What is most noteworthy in comparing the generalist databases with the PUBMED restrictor for exclusively cancer publications is the difference in the prevalence rate; articles focusing on cancer issues were nearly twice as likely to have risk as a key

<sup>456</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 293.

concept – approximately 36% of all articles, 1992-2004. While this feature is not entirely unexpected given that articles dealing with specific diseases will often be engaged in identifying factors, or “risks” associated with their onset, it does serve to highlight how central the concept of risk is to the investigation of disease phenomena.

This general increase in the overall prevalence of risk-articles in MEDLINE and PUBMED is reinforced by the results of the analysis of their prevalence in the thirteen health journals. First, some background: among the generalist journals evaluated by Skolbekken, the percentage of risk articles had increased to an average of 10-12% by 1991 – the highest rates found in the *JAMA* (11.8%), the *New England Journal of Medicine* (10.2%), and the *Journal of the Swedish Medical Association* (9.6%). The *BMJ* was not far behind, at 8.2%.<sup>457</sup> Among two specialist epidemiology journals, the results were far more pronounced; by 1991 approximately 50% of articles *American Journal of Epidemiology* focused on risk, complemented by 47% of those in the *International Journal of Epidemiology*.<sup>458</sup>

These findings are substantiated to varying degrees in the evaluation of the period 1992-2004 for general public health journals, as well as those pertaining to epidemiology. Generalist public health journals, such as the *American Journal of Public Health* and the *Annual Review of Public Health* averaged 20-30% risk articles over the period (Figure 2). Consistent with Skolbekken’s findings, the epidemiology journals demonstrated a much greater prevalence of risk articles – nearly 60% for *Epidemiology*, the *Annals of Epidemiology*, and the *AJE*. The two specialist journals evaluated by Skolbekken – the *AJE* and the *IJE* – continued to publish risk articles

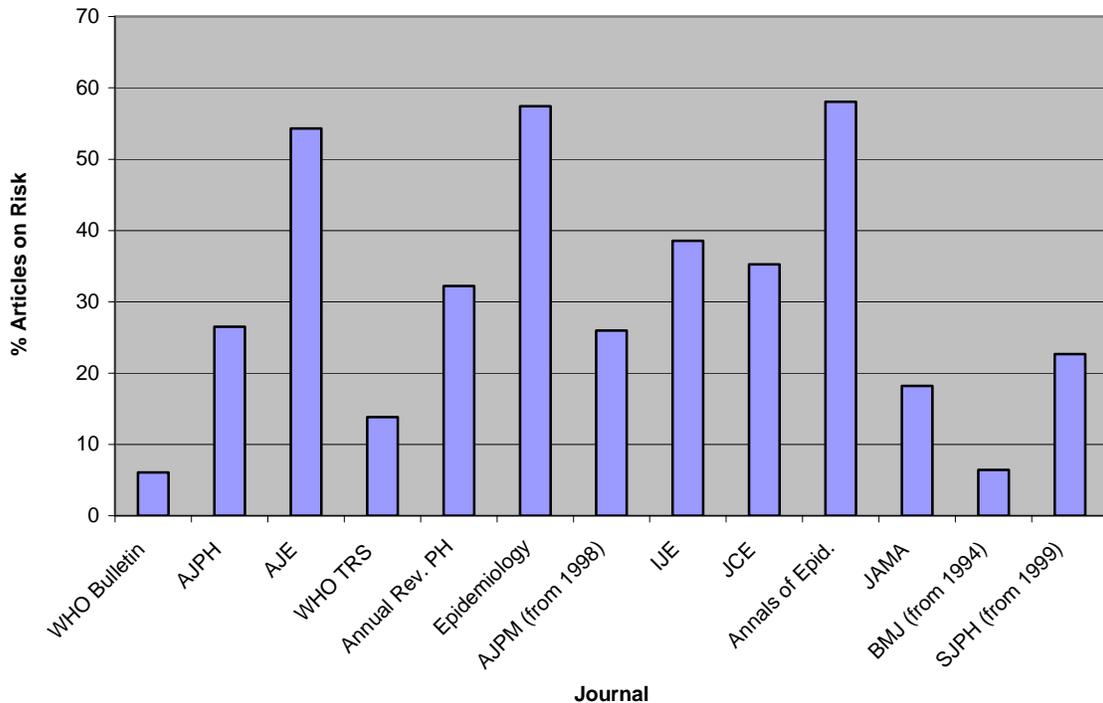
---

<sup>457</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 304.

<sup>458</sup> Skolbekken, "The Risk Epidemic in Medical Journals," 305.

much more frequently than generalist journals, though the percentage of risk articles in the *IJE* decreased to 38% over the time frame; on the other hand, the prevalence of such articles in the *AJE* increased slightly to 54%.

**Figure 2. Prevalence of Risk Articles in Health Journals, 1992-2004**



Among the national medical journals – the *BMJ* and the *JAMA* – the percentage of articles on risk remained relatively low compared to either public health or specialist epidemiology journals. As an extension of Skolbekken’s findings, publishing trends for articles in these journals decreased very slightly over the time frame in the *BMJ* (6.4%) and increased noticeably in the *JAMA* (18.2%). Especially noteworthy regarding the *JAMA* is the consistent growth over the time in the percentage of risk articles (Table 7).

**Table 7. Trends of Risk-Article Publishing in the JAMA**

<b>Years</b>	<b>Risk Articles, % of Total</b>
1992-1996	13.8
1997-2000	18.3
2001-2004	24.4

Although MEDLINE only provided searchable titles and abstracts of the *Scandinavian Journal of Public Health* from 1999, trends in the ratio of risk articles to overall pieces published were consistent with other results – an overall average of 22.7% from 1999-2004, and consistent growth over the period: from 19% of all articles in the first time period, to 24% between 2001 and 2004.

It is interesting to note that even among generalist health journals with comparatively low averages of risk articles over the period – the *WHO Bulletin* and the *WHO Technical Report Series* – a period of decline in the 1990s was followed by a strong resurgence between 2001 and 2004. Most notable in this case was the *WHO TRS*, where the prevalence rate of risk articles went from 7.7% (1997-2000) to 25% over the last four years.

Having charted the continued strong presence of risk articles in many public health and epidemiology journals, the last analysis explored more closely the presence of articles on NCDs and behavioral risk factors in one of the journals in the survey – the *Annual Review of Public Health*. As aforementioned, this journal was selected because it afforded the most manageable number of articles for hand-coding -- 307. However, it also provided an opportunity to explore the *ARPH*'s noticeable decline over the period in the frequency of risk articles – from a high of 42% (1992-1996) to 21% (2001-2004); it, along with the *IJE*, were the only two journals to post

noticeable and consistent decline in the prevalence of risk articles over the time period.

In the context of analyzing titles and abstracts for the *Annual Review of Public Health*, a trend was observed that while not accounting for the overall decline, at least suggested an area to which relative publishing emphasis *may* have shifted. This pertains to the rise of articles devoted to methodology – from the proper use of multi-level statistical models, to the role of the “normality assumption” in large health datasets, to issues associated with particular regression models, just to name a few.<sup>459</sup> Over the course of the time frame studied, the ratio of articles devoted to methodology steadily increased from 13% (1992-1996) to 33% (2001-2004). When considered with the concomitant decline in risk-articles, publishing trends in the journal appear to have shifted from a dominant concern with the substance of “risk” to one that places a more of an emphasis on the means of its calculation. Beaglehole and Bonita allude to the importance of statistical calculations of risk and other methodological techniques to public health and epidemiology:

Estimation of risk, both relative and absolute, is central to epidemiology...Methods of adjusting estimates of risk for possible confounding were developed and have become increasingly sophisticated. Furthermore, the crude risk rate has been broken down into two components, one reflecting confounding and the other

---

<sup>459</sup> These are simply a sample of the types of methodological articles published in the *ARPH*, and do not constitute an exhaustive list. On multi-level models, see: J.B. Bingenheimer and S.W Raudenbush, "Statistical and Substantive Inferences in Public Health: Issues in the Application of Multilevel Models," *Annual Review of Public Health* 25 (2004).; on the normality assumption in datasets, see T. Lumley, P. Diehr, S. Emerson and L. Chen, "The Importance of the Normality Assumption in Large Public Health Data Sets," *Annual Review of Public Health* 23 (2002).; on covariates in the Cox proportional-hazards regression model, see L.D. Fisher and D.Y. Lin, "Time-Dependent Co-Variates in the Cox Proportional-Hazards Regression Model," *Annual Review of Public Health* 20 (1999). Moreover, it should be stressed that I am not making a causal argument here; more analysis would be required to ascertain whether the rise in methodological articles is a product – in whole or part – of the decline in risk articles. The above is simply offered as a possibility, with subsequent discussion to suggest how these two categories of publications could be conceptually related.

reflecting the effect of the exposure. The central importance of obtaining valid results for all studies, irrespective of their design, is now appreciated....<sup>460</sup>

Given the critical task of achieving “valid results” for public health research, it is perhaps not surprising to see, at least as demonstrated in the *ARPH*, a growing space for methodological publications. As the authors conclude, modern public health “is becoming increasingly concerned with technique.”<sup>461</sup>

The overall decline of risk articles in the *ARPH* does not, however, necessarily mean that the risk impulse has disappeared entirely. Indeed, in the case of NCD articles in the *ARPH*, risk – especially of the behavioral variety – retains a dominant presence, even as the overall frequency of risk-articles in the journal has declined.

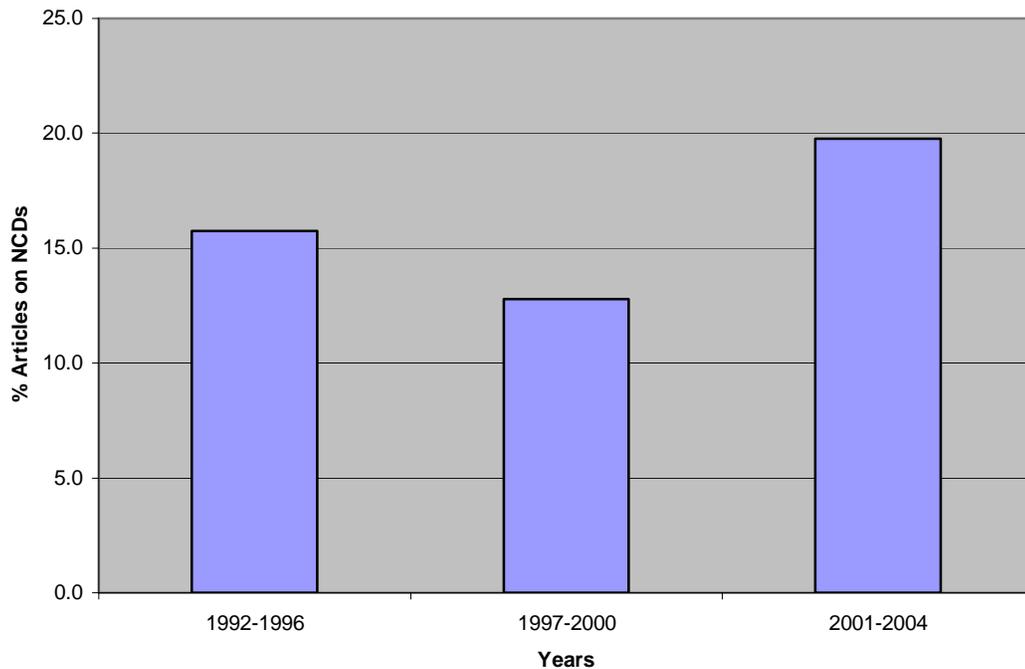
While the results did not demonstrate consistent growth over the time frame in the frequency of NCD articles appearing in the journal, the most recent period (2001-2004) reflected an increase such that approximately 20% of articles appearing in the journal dealt with chronic, noncommunicable diseases (Figure 3). For a general public health journal that addresses everything from infectious and chronic diseases to epidemiological methods, insurance policy and programs, regulatory policy, and health legislation, a ratio in this area appears respectable.

---

<sup>460</sup> Beaglehole and Bonita, *Public Health at the Crossroads* 106.

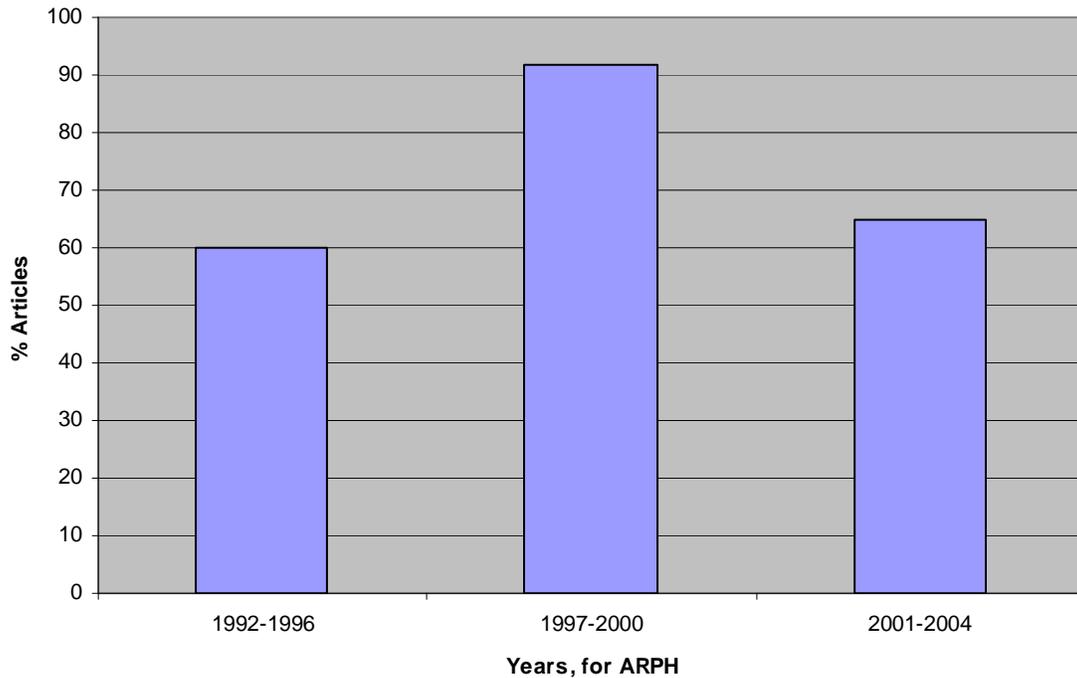
<sup>461</sup> Beaglehole and Bonita, *Public Health at the Crossroads* 135. On the fetishization of methodology in public health, see also Pearce, “Traditional Epidemiology, Modern Epidemiology, and Public Health.”

**Figure 3. Prevalence of Articles on NCDs in the *Annual Review of Public Health***



Of these articles on a range of NCDs, including cancer, asthma, mental illness, and heart disease, the majority were consistently analyzed with reference to behavioral risk factors; the overall average of NCD articles identifying behaviors as proximate risk(s) for the disease analyzed was 69% over the thirteen year period, and was *at least* 60% in each of the three multi-year groups (Figure 4). The most frequently analyzed condition was cancer (16 of 49 articles), and perhaps not surprisingly, tobacco consumption was the most frequently cited risk factor (15 times), followed by diet (10 times).

**Figure 4. Behavior(s) Identified as Proximate Risk(s) in NCD Articles**



In the context of the *ARPH*, therefore, while the overall prevalence of risk-articles declined over the period, the tendency to analyze NCDs with reference to risk as a general concept, and behavioral risks in particular, remains strong even in the face of said decline. The *ARPH* was also an unusual case, not consistent with the general trends that point to the continued prominence of a risk mentality in the publishing of health articles; consistent with Skolbekken’s findings, this privileging has been much more pronounced in epidemiological journals, though is still quite noticeable in public health journals, especially when considered in relation to medical publications like the *JAMA* and the *BMJ*. This feature pertains even to the *Scandinavian Journal of Public Health*, which has published risk-articles at an increasing rate over the last five years, such that one fifth of all articles in that publication are concerned with risk as a phenomenon – similar to the *American*

*Journal of Public Health* as well as several other generalist journals; such a result would seem to suggest that the prominence of this risk concept in public health is not unique to a particular country or region, but is a widespread phenomenon.

*The “Risk Mentality” and Neoliberal Government*

Two of the arguments advanced throughout this project are the overall prominence that risk discourse retains in the contemporary practice of public health, and that the systems of knowledge and practices geared toward the management of NCDs are grounded not only in a general discourse of risk, but in those specific hazards located in the individual – especially hazards pertaining to behavioral choice. It is this second argument which is especially germane to the overall contention that contemporary public health approaches to chronic disease exhibit neoliberal rationality and are implicated in the project of government at a distance.

The increasing prevalence of risk articles in MEDLINE publishing patterns of the last thirteen years, the concomitant prevalence rate among PUBMED articles, and the sustained and in several cases growing rate of risk articles across the thirteen journals, only provides a clearer illustration of the general proposition that risk is an important analytic lens for monitoring the public’s health. As a theme in the production of knowledge – or a dimension of the *episteme* of government– risk is implicated therefore in how the hazards of the public’s health are ordered and understood; however, the *general* phenomenon of risk prevalence in public health publishing does not in and of itself constitute an illustration of knowledge predicated upon neoliberal rationality.

This is highlighted most clearly in the high prevalence rates exhibited among epidemiological journals. As described earlier in the text, epidemiology has historically concerned itself with the identification of the determinants of disease in *populations*; in the analysis, these journals also overwhelmingly exhibited the highest prevalence of risk articles (in three of five journals, well over 50% of all articles). Bearing this in mind, we are reminded of the close link between population and risk. On this point, Ewald notes that “risk only becomes something calculable when it is spread over a population...The idea of risk assumes that all individuals who compose a population are on the same footing: each person is a factor of risk, each person is exposed to risk.”<sup>462</sup>

As a way of measuring, predicting, and ultimately guiding the public’s health, the *general* concept of risk and risk analysis thus has as its emphasis population as object, and is aimed at identifying (to ultimately counteract) the hazards that undermine that population’s well-being. In so doing, a general phenomenon of risk discourse is consistent with earlier forms of liberal government. As it coalesced under classical and later welfare modes of government, the public health movement of the eighteenth and early nineteenth centuries came to be synonymous with the securing of population – particularly to ensure productivity in the economy. Lupton clarifies:

The goal of the public’s health became an essential objective of political power. In concert with the economic imperatives of the emergent capitalist system, the health of population became of central importance...It was in the interests of the modern European state to ensure that its citizens were healthy so as to promote productivity: health at the level of the population as a whole.<sup>463</sup>

---

<sup>462</sup> Francois Ewald, "Insurance and Risk," *The Foucault Effect: Studies in Governmentality*, eds. G. Burchell, C. Gordon and P. Miller (Chicago: University of Chicago Press, 1991) 203.

<sup>463</sup> Lupton, *The Imperative of Health: Public Health and the Regulated Body* 22-23. This point has been developed in several other accounts of the history of public health and social medicine. See

Where we see in the risk discourse of public health the introduction of a particularly neoliberal rationality is the narrowing field of analytical inquiry into public health approaches to noncommunicable diseases and the specific types of risk privileged in the analyses of these conditions. Before delving into this aspect, a general point is first warranted – and that is based on the above analysis, knowledge production around chronic disease is much more closely linked to a risk discourse than is the general discipline of public health. As demonstrated earlier, the database restrictor that generated only cancer-related articles in PUBMED revealed a risk article prevalence rate of 35%, compared with only 21% of general health articles in the other two databases. Moreover, a clear majority of articles on NCDs in the *ARPH* were analyzed with reference to behavioral risk factors – an overall average of 69% over the entire time span. Such results do not preclude the general role of risk in approaching other types of illness or public health issues more generally, but point to the especial affiliation of risk discourse to public health approaches to chronic disease.

It is with reference to this last result (the prominence of behavioral risk factors in analyzing NCDs) that the close association of chronic disease with the identification of risk in *individual bodies* – is highlighted. Although risk is concerned with the population, contemporary public health knowledge that frames chronic disease risk in behavioral terms at the same time privileges the locus of the individual body. And it

---

especially B.S. Turner, "The Interdisciplinary Curriculum: From Social Medicine to Postmodernism," *Sociology of Health and Illness* 12.1 (1990).; A.F. La Berge, *Mission and Method: The Early Nineteenth-Century French Public Health Movement* (Cambridge: Cambridge University Press, 1992).; and G.B. Risse, "Medicine in the Age of Enlightenment," *Medicine in Society: Historical Essays*, ed. A. Wear (Cambridge: Cambridge University Press, 1992).

is this feature – this privileging of behavioralism and the locus of risk in singular bodies – which introduces a particularly neoliberal character to the rationality underlying risk discourse in contemporary public health knowledge. Dean, in his analysis of the evolution of styles of governmentality, refers to the distinct shift that the individualization of risk has for auguring a modified form of liberal government:

A central significance of the rationalities of risk today is that they have been attached to a set of political programmes and formulas of rule that represent a major retraction of social rights and the ideal of the welfare state that drove social provision for much of the now receding century...In the twilight of the twentieth century, we might say that *the individualization of risk is linked to new forms of liberal government.*<sup>464</sup>

A rationality of risk that privileges individualism and the role of behavioral choice in the analysis of NCDs thus reveals an expressly political character to “neutral” science. As Lupton notes:

The discourses of risk and testing serve to cast certain individuals and groups as dangerous, either to themselves or others, based on apparently objective medical and epidemiological classifications derived from statistical principles...Risk, as the concept is used in public health, therefore may be regarded as having less to do with the nature of ‘danger’ than the ideological purposes to which concerns about risk may be put.<sup>465</sup>

Where Lupton identifies these ideological purposes in the stigmatization of “risky” individuals or groups – homosexuals, drug abusers, parents who refuse to vaccinate their children, among others – it seems that the tenor of political rationality is also

---

<sup>464</sup> Dean, Governmentality: Power and Rule in Modern Society 191. Dean is not alone in his characterization of an individualist risk discourse as exhibiting neoliberal rationality. This point has also been addressed in a general context by Robert Castel, "From Dangerousness to Risk," The Foucault Effect: Studies in Governmentality, eds. G. Burchell, C. Gordon and P. Miller (Chicago: Chicago University Press, 1991).; and in health and medical contexts by Lupton, The Imperative of Health: Public Health and the Regulated Body.; Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk.; and Ann Robertson, "Embodying Risk, Embodying Political Rationality: Women's Accounts of Risks of Breast Cancer," Health, Risk and Society 2.2 (2000).

<sup>465</sup> Lupton, The Imperative of Health: Public Health and the Regulated Body 105.

evident in the purposes for which such knowledge may be put to use. More specifically, it draws our attention from the transmission of knowledge– the communication of risk – from experts to those at risk, who are implicated under neoliberal governmentality in the proactive management of their vulnerability.

Such an aspect allows us to consider both the subtle and complex character of *episteme* in the public health context – the role of expertise in facilitating lay knowledge of illness and vulnerability – as well as the ties between knowledge and technologies of practice or risk management. In order to manage chronic disease, or those risks which give rise to it – one must first recognize, must first know, the danger to be counteracted. And this implies the transmission of knowledge from expert to patient for the purposes of self-management of risk – the ultimate expression of government at a distance in the context of public health. Castel alludes to this dimension, and the underlying neoliberal rationality that informs it, with regard to the trends emphasizing the individualization of risk:

[O]ne can wonder whether these trends do not inaugurate a set of new management strategies of a kind specific to ‘neo-liberal’ societies. New forms of control are appearing in these societies which work neither through repression nor through welfare interventionism...The profiling flows of population from a combination of characteristics whose collection depends on epidemiological method suggests a rather different image of the social: that of a homogenized space composed of circuits laid out in advance, which individuals are invited or encouraged to tackle, depending on their abilities.<sup>466</sup>

The production of public health knowledge that exhibits such a political rationality is thus implicated in the government of those at risk in the management of their vulnerabilities and illness. The construction of public health knowledge around the concept of risk, and in the context of NCDs risks that are the product of

---

<sup>466</sup> Castel, "From Dangerousness to Risk," 293-95.

behavioral choices, understandably has an impact on how those “at-risk” know and make sense of their situation – the implications of *episteme* in a different context.

Robertson’s study of women’s accounts of risk in the context of breast cancer evidences the link between the production of public health knowledge, and the means by which individuals come to understand and ultimately govern their vulnerability.

She concludes that:

Nearly every woman in this study talked about the individual responsibility that she and all women have for reducing their personal risks for breast cancer. This was always framed in terms of individual responsibility at the level of lifestyle behaviours such as diet, smoking and alcohol consumption, behaviours which they were well aware of as ‘risk factors’ for breast cancer:

Well, let me see, you know, as I say, I’m very careful about what I eat, I don’t drink a lot, I don’t smoke, I exercise regularly, I’m not obese, I don’t eat meat – a lot of the things that I know are risk factors I’ve eliminated from my life...

Now I didn’t have [son] `til I was thirty-two, so that’s kind of a drag – women are working and they’re having children later in life, I’m sure that is that seems to be increasing the risk...<sup>467</sup>

*Episteme* is thus intimately linked with the other axes of governmentality. In the context of the study on breast cancer, women’s knowledge of the disease was informed to a great extent by the concept of risk, and their understanding of the techniques of risk management involved the discipline of the body (eating right and exercise) and recognition of the role of life choices (such as waiting to have children). Moreover, this aspect is also tied to *ethos*, or how the subject relates to the self in an ethical way; if risk can be known and managed – lifestyle disciplined – the subject is

---

<sup>467</sup> Robertson, "Embodying Risk, Embodying Political Rationality: Women's Accounts of Risks of Breast Cancer," 226-27.

brought to a *responsible* relation to the self; as one participant in the study described, “I think that all a person can reasonably do is identify the things that they can do to help...And if you don’t do that I think you’ re being kind of, you know, not being very responsible.”<sup>468</sup> As we will see developed in much greater detail in Chapter 8, the cultivation of subjectivity is ultimately facilitated by knowledge (for our purposes, public health and epidemiological knowledge) that is deployed via specific technologies implicated in the management of health and disease

As illustrated, the privileging of behavioral risk in the context of the production of public health knowledge about chronic disease – more than simply exhibiting a neoliberal rationale in and of itself – is thus also implicated in the extension of government at a distance. Public health programs and strategies for managing chronic disease are made possible by the production of knowledge, and thus one can reasonably expect that the rationality underlying one will complement the other.

Risk has been to some extent desocialized, privatized and individualized...[T]hose identified as ‘at risk’ or at ‘high risk’ – those who compose the targeted populations are to be empowered or entered into partnership with professionals, bureaucrats, activists and service providers. With the help of markets – often governmentally contrived – in services and expertise, these targeted populations are enjoined to recognize the seemingly natural bonds of affinity and identity that link them with others and to engage in their own self-management and political mobilization.<sup>469</sup>

The web, in this regard, is closely knit, and the privileging of risk – especially as it is grounded in individual bodies and behavior – is at its core. It is an element of public health knowledge that is common to the discipline; thus, though much of the more detailed analysis that comprises these last chapters of the project proceeds with

---

<sup>468</sup> Quoted in Robertson, "Embodying Risk, Embodying Political Rationality: Women's Accounts of Risks of Breast Cancer," 228.

<sup>469</sup> Dean, Governmentality: Power and Rule in Modern Society 191-92.

reference to specific experiences in case countries, risk-knowledge is not an element proprietary to either American, British, or Swedish public health. As we saw in the analysis of publishing trends, the prevalence of risk articles in the *SJPH* was comparable to that of the *AJPH*, and has steadily increased over the last five years; the *BMJ*, as an example of U.K. health knowledge, does stand out much more for an overall lower prevalence of risk articles. One must consider, though, that this is a generalist medical journal as opposed to one devoted to public health – and as identified in Skolbekken’s and my analyses, epidemiological journals and generalist public health journals are noticeably more preoccupied with risk than are general medical publications. While an anomaly, as we will see with the patterns of public health training in the United Kingdom, the macro- and microtechnologies of health government, and the means by which subjectivity is constructed in British public health – this one factor does not fundamentally undermine the overall contention that public health in the United Kingdom – especially with regard to chronic disease - exhibits a dominant political rationality associated with neoliberalism.

Given that *episteme* is concerned with more than patterns of knowledge production that do not necessarily correspond to national, but rather disciplinary borders, it is necessary to direct the analysis from this general tenor of public health knowledge to a dimension that is contextualized by national systems of education. Rose and Miller, in their account of the *episteme* dimension of governmentality, assert that knowledge is more than an accumulation of “facts” or ideas – that it encompasses theories, practices by which knowledge is accumulated (e.g. statistical techniques), and “knowledgeable persons from generals to architects and

accountants.”<sup>470</sup> Having demonstrated the prominent position of risk in the production of public health and epidemiological knowledge over the last decade, and especially behavioral risks in the explanation of NCDs – I turn now to a treatment of how public health experts themselves are produced in the three case countries.

*Episteme in the Academy: Public Health Education in the United States, United Kingdom, and Sweden*

The United States

In the United States, public health education – as with education across a range of disciplines – operates in a decentralized setting; that is to say, there is no national school of public health, and individual universities are empowered to develop and implement their own curricula and requirements. The lack of standardization is indicated by the fact that the number of core credit hours required for the M.P.H. degree varies from 11 to 58, depending on the institution; additionally, the time required to achieve the degree (assuming a full-time course load) ranges from 11 months to over two years.<sup>471</sup> Moreover, in the United States, public health remains relatively small discipline; in 1998-1999, for example, the country’s 29 accredited public health schools granted a total of 5568 advanced degrees.<sup>472</sup> Such

---

<sup>470</sup> Rose and Miller, "Political Power Beyond the State: Problematics of Government," 178.

<sup>471</sup> Noreen Clark and Elizabeth Weist, "Mastering the New Public Health," *American Journal of Public Health* 90.8 (2000): 1209.

<sup>472</sup> Institute of Medicine, *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century* (Washington, DC: Institute of Medicine, 2003), 8-9. Citations therein. In addition to schools of public health, 45 accredited programs in community health annually graduate 700-800 professionals, and 36 medical schools currently offer a joint M.D./M.P.H. degree program.

variation leads Clark and Weist to conclude that “[s]chools of public health are not uniform in the way they provide the educational foundation for practice.”<sup>473</sup>

This is certainly the case at Johns Hopkins University, Harvard University, and the University of North Carolina; although each requires a core foundation in the “basics” of public health – coursework in epidemiology, biostatistics, and health promotion, for example – program duration, credit requirements, breadth and depth of public health coursework are not standardized. Given this relative decentralization and lack of standardization across graduate programs in public health, the tendency of three of the most prominent and respected M.P.H. programs to all exhibit an underlying neoliberal rationality in their curricula is all the more telling.

*Johns Hopkins University*

Originally founded as the School of Hygiene and Public Health in 1916, the Bloomberg School of Public Health at Johns Hopkins University has grown to become the largest school of its kind in the world, with over 1800 students.<sup>474</sup> On average, a third of these pursue the M.P.H. degree, with 580 total enrolled for the 2004-2005 academic year.<sup>475</sup> As we will see with other graduate institutions of public health, the program is oriented toward practicing health professionals; admissions requirements are such that students must either have two years practical experience working in a health-related field, or must hold the M.D. or other terminal degree in a health-related specialty (dentistry, veterinary medicine, nursing). These requirements are such that just over half of all M.P.H. students either hold the M.D. degree (42%)

---

<sup>473</sup> Clark and Weist, "Mastering the New Public Health," 1210.

<sup>474</sup> Johns Hopkins Bloomberg School of Public Health, The School at a Glance, Available: [http://www.jhsph.edu/PublicHealthNews/school\\_at\\_glance.html](http://www.jhsph.edu/PublicHealthNews/school_at_glance.html), January 24 2005.

<sup>475</sup> Johns Hopkins Bloomberg School of Public Health, Master of Public Health: Student Demographics 2004-2005, Available: [http://www.jhsph.edu/Academics/MPH/admissions\\_MPH.html](http://www.jhsph.edu/Academics/MPH/admissions_MPH.html), January 24 2005.

or are in medical school (10%); professional nurses also account for a significant portion of enrollees, at 14%.<sup>476</sup>

The M.P.H. program is designed to provide training across all major subfields of public health – including epidemiology, biostatistics, health services administration, biological science, and health policy and ethics.<sup>477</sup> All M.P.H. graduates, regardless of specialization, must ultimately demonstrate specific competencies in the following areas: biostatistics and epidemiology, environmental health science, public health biology, management science, and social and behavioral science. Course credits in these competency areas comprise approximately half of the 80 total required for the M.P.H. degree. When assessing the specific competencies in these different areas, several features stand out: first, the privileging of risk discourse, evident in all competency fields except management science, as well as a capacity focus that emphasizes method more than substance. Risk assessment is a key element for many of the areas, as demonstrated in the specific requirements that M.P.H. candidates must fulfill and demonstrate capacity in. These include, but are not limited to:

- Understand commonly used public health measures, such as relative risk, attributable risk and relative hazards, and select appropriate statistical methods for estimating such measures in the presence of covariates (epidemiology and biostatistics)
- Describe various risk management approaches, including regulatory, engineering, and behavioral/risk communication options (environmental health sciences)

---

<sup>476</sup> Johns Hopkins Bloomberg School of Public Health, Master of Public Health: Student Demographics 2004-2005.

<sup>477</sup> Johns Hopkins Bloomberg School of Public Health, 2004-2005 Master of Public Health Full-Time Student Program Manual (Baltimore: Johns Hopkins University, 2004) 4.

- Identify techniques for improving risk assessment and risk management strategies (environmental health sciences)
- Apply biological principles to assessment of risk from potentially hazardous agents and behaviors (public health biology)<sup>478</sup>

This general concern with risk analysis in the core competencies of public health is given particular shape by courses which address the burdens posed by NCDs. In the context of existing curricula for the M.P.H. degree, concentrations or specialties are offered in eleven areas, none of which focus specifically on chronic or noncommunicable disease.<sup>479</sup> Nonetheless, students are able to take several courses in the context of such concentrations as epidemiology and nutrition that address either NCDs or the risk factors associated with them. Students in epidemiology, for example, may take a course that combines analytic approaches to CVD aetiology with strategies for prevention. “Epidemiologic and Preventative Aspects of Cardiovascular Diseases” is a seminar that focuses on three major strands of CVD – coronary heart disease, stroke, and end-stage renal disease. All three are approached through a lens “emphasizing the interrelationships of biological and behavioral aspects. [The course] focuses on established major modifiable risk factors for cardiovascular diseases, putative risk factors, and genetic susceptibility.”<sup>480</sup> Given that a public health course on CVD by design emphasizes biological, or genetic risk factors and those modifiable factors rooted in behavioral choices clearly indicates a predilection

---

<sup>478</sup> Johns Hopkins Bloomberg School of Public Health, 2004-2005 Master of Public Health Full-Time Student Program Manual 4-5.

<sup>479</sup> Concentrations are offered in such areas as occupational health, epidemiology, child health, health administration, health financing, and women’s health. Other areas of specialization do deal substantively with issues pertaining to chronic disease – including public health nutrition and social and behavioral science.

<sup>480</sup> Johns Hopkins Bloomberg School of Public Health, Courses, Available: <http://commprojects.jhsph.edu/courses/Results.cfm>, January 27 2005.

for framing aetiological analysis and prevention strategies at the site of the individual body.

Such an emphasis is also manifest in even the most basic course in the nutrition concentration for the M.P.H. “Principles of Human Nutrition” provides an overview not only of the “physiological requirements and functions of protein, energy, and the major vitamins and minerals,” but how these are implicated as disease determinants. In that context, the course instructs students in how to perform nutritional assessments of individuals, and to explain to them the “role of diet on the development of chronic diseases, such as cardiovascular disease, cancer, [and] diabetes.”<sup>481</sup> Under this framework, students are not only instructed in such a manner as to approach nutritional determinants of disease in a decontextualized manner, but also are prepared to a certain extent in the techniques associated clinical counseling – i.e., performing diet and nutrition assessments. Notwithstanding that such a technique is an important element in the prevention of disease, that it is taught in the context of a public health program does serve to further blur the line between a supposed population emphasis in public health, and the one-on-one counseling encounters in a clinical setting.

In addition to these examples from epidemiology and nutrition, an analytic perspective that privileges individual bodies and the risk behaviors that condition them is also reflected in general courses on the promotion of public health, which are often framed, at least in part, with reference to particular diseases such as cancer or heart disease. One such course, “Fundamentals of Health Education and Health

---

<sup>481</sup> Johns Hopkins Bloomberg School of Public Health, [Principles of Human Nutrition](http://apps1.jhsph.edu/courses/index.cfm?catalog_id=4944), Available: [http://apps1.jhsph.edu/courses/index.cfm?catalog\\_id=4944](http://apps1.jhsph.edu/courses/index.cfm?catalog_id=4944), January 24 2005.

Promotion,” is an introductory course in the concentration on public health management. In the main, the class provides “an overview of the breadth of programs and diversity of settings in the field of health education in health promotion, and an opportunity to develop skills in program planning.”<sup>482</sup> The way in which this content is approached, though, is illustrative of the general point about the tendency to frame the problems of public health in largely individualistic and behavioral terms.

The course:

Explains the importance of health behavior as a contributor to current public health problems and the role of health education and health promotion programs in addressing them, drawing examples from the literature on community-based health education, patient education, school health, and work-site health promotion.<sup>483</sup>

While working through multiple levels – patient education and the one-on-one counseling that is part and parcel of it – as well as community sites at work and in schools, the directive remains the same: a focus on behavior that individuals must choose to ameliorate for the sake of improving their own health, and that functions to improve the public’s health overall. This emphasis is reinforced in the catalogue description of course objectives. Students who complete the course should “appreciate the role of behavioral theories” in the development of public health programs; should be able to “explain the importance of health behavior as a contributor to current public health problems” and how health education can address these problems; and finally, to “improve their skills in planning a health behavior

---

<sup>482</sup> Johns Hopkins Bloomberg School of Public Health, Fundamentals of Health Education and Health Promotion, Available: [http://apps1.jhsph.edu/courses/index.cfm?catalog\\_id=5365](http://apps1.jhsph.edu/courses/index.cfm?catalog_id=5365), January 24 2005.

<sup>483</sup> Johns Hopkins Bloomberg School of Public Health, Fundamentals of Health Education and Health Promotion.

change program” through practical work focusing on needs assessment of at-risk individuals.<sup>484</sup>

This brief overview of the individualist and behavioral imperative informing key classes pertaining to chronic disease analysis and prevention is supported by the more general efforts of the school to increase course offerings along these lines. These efforts culminated in 2003 when the School acquired a \$20 million donation to develop a new Department of Behavior and Health which undoubtedly will have implications for how chronic diseases and their risk factors are analyzed.<sup>485</sup> While the department is still in its formative stages, the likelihood that chronic diseases such as CVD and cancer will be among those emphasized is suggested by the stated mission to “develop new ways to prevent behaviors that are associated with the leading causes of illness and premature death in the United States and other parts of the world.”<sup>486</sup> This aspect was reinforced in the comments of Scott Zeger, chairman of the university committee that recommended the creation of the new department: “Smoking, sedentary lifestyle and diet-caused obesity, avoidable injuries, substance abuse, and risky sexual behavior are the root causes of more than half of all deaths and hospitalizations in the United States...”<sup>487</sup>

The committee report that generated the creation of the new department emphasized several factors in providing justification for a new program on health behavior. The first was the fact that “sponsored opportunities for the study of

---

<sup>484</sup> Johns Hopkins Bloomberg School of Public Health, Fundamentals of Health Education and Health Promotion.

<sup>485</sup> Johns Hopkins Bloomberg School of Public Health, School to Establish Department to Study Ways to Enhance Healthy Behavior (Public Health News Center, May 2, 2003), 1.

<sup>486</sup> Johns Hopkins Bloomberg School of Public Health, School to Establish Department to Study Ways to Enhance Healthy Behavior, 1.

<sup>487</sup> Johns Hopkins Bloomberg School of Public Health, School to Establish Department to Study Ways to Enhance Healthy Behavior, 1.

behavior and health have increased in the last decade” from a number of public sources, including the NIH, CDC, National Science Foundation (NSF), as well as from private groups such as the Rockefeller Foundation and the MacArthur Foundation.<sup>488</sup> External funding from these and other sources for research on health behavior, behavior modification, and health promotion totals \$30 million per year in grant monies, approximately 20% of the School of Public Health’s portfolio.<sup>489</sup>

The fact that behavioralism informs such a broad range of public health research and teaching, and that as an organizing concept it is being coalesced into an entirely new department, suggests just how important a principle it is to contemporary public health in this educational setting. Regardless of the subfield, or specialty, the committee in making its recommendation to begin work on the development of a Department of Behavioral Health, stressed that “the faculty must be bound by a common theme that might in lay terms be: ‘understanding behavior to change it.’”<sup>490</sup>

A second justification for creating a department expressly concerned with behavioral determinants of health was framed in terms of the existing faculty resources and course offerings in graduate public health at the school. Currently, 43 tenure-track faculty – approximately 20% of the total in the BSPH – have research programs that focus on behavioral aspects of health, and “comprise what is likely one of the largest groups of its kind at any school of public health.”<sup>491</sup> With so many

---

<sup>488</sup> Veena Das, Janet DiPietro, William Eaton and et al., On Behavior and Health: Future Opportunities for the Johns Hopkins University Bloomberg School of Public Health (Baltimore: Johns Hopkins University, 2003), 5.

<sup>489</sup> Das, DiPietro, Eaton and et al., On Behavior and Health: Future Opportunities for the Johns Hopkins University Bloomberg School of Public Health, 6.

<sup>490</sup> Das, DiPietro, Eaton and et al., On Behavior and Health: Future Opportunities for the Johns Hopkins University Bloomberg School of Public Health, 15.

<sup>491</sup> Das, DiPietro, Eaton and et al., On Behavior and Health: Future Opportunities for the Johns Hopkins University Bloomberg School of Public Health, 6.

faculty performing research in this area, it is not surprising that course offerings reflect a focus on behavioralism and the problems of individual choice, as well. In 2001-2002, for example, 54 courses were offered on behavioral health, with 1337 enrollments, up from 1205 the previous year; these were offered across a range of subfields in public health as well, including biostatistics, epidemiology, health policy and management, mental health, and population and family health sciences.<sup>492</sup>

While the bulk of curricular analysis in this chapter focuses on program structure and course content, there is an element unique to the Bloomberg School of Public Health that merits exploration for its ability to highlight yet another dimension of neoliberal rationality in public health education. All M.P.H. students are required, as a component of their curriculum, to engage in a structured program of self-evaluation and individual assessment. Termed the “M.P.H. Individualized Goals Analysis” (IGA) requirement, this analysis serves a curriculum and professional planning tool to highlight the specific steps that students need to achieve to develop competency in public health. All students develop, within the second term following matriculation into the program, a comprehensive written assessment detailing “the knowledge, skills, and experiences” they bring to the program; the goals for their

---

<sup>492</sup> Das, DiPietro, Eaton and et al., On Behavior and Health: Future Opportunities for the Johns Hopkins University Bloomberg School of Public Health, 43-44. One would expect to find this emphasis in courses on specific risk factors – such as “Alcohol and Health” and “Tobacco Control” – as well as in courses that cover health communication for purposes of behavioral change (“Introduction to Persuasive Communications,” “Principles of Health Behavior Change,” and “Fundamentals of Health Education and Health Promotion”). However, the committee report indicated that behavioral approaches were also emphasized in methods courses such as “Causal Inference,” “Health Survey Research Methods,” and “Methods in Analysis of Large Population Surveys”; as well as in courses on food and nutrition, and growth and development across the lifespan.

education in terms of additional knowledge and skills, development of competency areas, and the description of possible capstone projects to demonstrate competency.<sup>493</sup>

To substantiate how these goals will be achieved, each student then prepares a “Curriculum Planning and Tracking Sheet” that plans out for each course a proposed completion date, and records the actual completion date and grade attained. Upon completing the tracking sheet, the student then provides a written assessment of how the specific curriculum selections will meet the individual’s established goals. Although all students prepare this initial analysis early on in the program, it is “intended to be a living document,” one that is periodically reviewed, updated, and reassessed by the student over the course of the M.P.H. program.<sup>494</sup>

Two points are merited with regard to this component of the M.P.H. program that have implications for how we assess it in terms of exhibiting political rationality. One of the themes established in the previous chapter as a key element of neoliberal rationality in the context of public health is the importance of persistent self-monitoring; in the execution of public health programs, this would call our attention to how individuals at risk are brought to review and adjust their daily habits in such a way as to minimize risk. But this principle, as evidenced by the Individualized Goals Analysis, is also deployed in the context of professional training in public health. Students are inculcated from nearly the beginning of their program at Johns Hopkins to chart not only their academic and professional goals, but to provide a very specific accounting of how those are to be achieved (which courses to take), when they are to

---

<sup>493</sup> Johns Hopkins Bloomberg School of Public Health, 2004-2005 Master of Public Health Full-Time Student Program Manual 18.

<sup>494</sup> Johns Hopkins Bloomberg School of Public Health, 2004-2005 Master of Public Health Full-Time Student Program Manual 18.

be achieved (proposed and actual completion dates), and to what degree of success they are achieved (grade for each course). This accounting requires that students self-monitor their progress and adjust their individual curriculum accordingly – hence the concept of the IGA as a “living document.”

But the principle that students are not only brought to approach the program in very individual terms, but most especially in an on-going process of self-monitoring speaks to a rationality of practice that emphasizes individual autonomy and responsibility; this point is further substantiated by the fact that it is not advisors or program directors that develop and execute these analyses (though advisors may be consulted), it is the students themselves, and it is to each student to periodically update and resubmit changes to the proposed curriculum.

A second point suggested by the stated aim of the IGA is the notion that M.P.H. students are brought to view themselves in the context of this on-going project in terms of human capital. They establish at the outset not only the “skills” and “knowledge” they already possess, but also those additional ones they need to acquire in order to function competently and productively as a public health professional. The emphasis on the acquisition (in the form of coursework) and demonstration (in the form of capstone projects) of competency reinforces this notion that students are making an *investment* in themselves and their professional future; and as demonstrated previously in this project, the identification of self as a site for investment – the acquisition of knowledge, skills, and abilities that allow one to function productively and to the fullest extent of their ability – is a hallmark trait of neoliberal rationality.

Returning to the earlier themes elucidated above in the context of graduate education – the prominence of a risk discourse, with an emphasis of behavioral risks associated with NCDs – these are augmented by the research centers and projects which are affiliated with the Bloomberg School of Public Health. The Center for Human Nutrition has dealt extensively, for example, with how the problematics of diet and nutrition are implicated in the onset of many NCDs. In fact, the branch of the center that deals with chronic disease explicitly approaches it from the perspective of lifestyle.<sup>495</sup> Since the mid-1990s, fifteen large-scale projects have been undertaken, covering such areas as obesity prevention in Baltimore schools, the role of lifestyle interventions to promote weight loss in reducing the burden of diabetes, to the effectiveness of olestra (a substitute for other fats and oils) in promoting weight loss among the obese.<sup>496</sup>

Another research center affiliated with the school that demonstrates an emphasis on behavioral modification and interventions is that of “The Lighthouse,” a center whose research is deployed in a manner consistent with a model known as “SHIP”: Self-Help through Intervention and Prevention. This approach employs focus groups, surveys, interviews, and empowerment training to improve health conditions among socially and economically disadvantaged groups in the Baltimore area.<sup>497</sup>

---

<sup>495</sup> The three branches, or research areas of the center are “Diet, Lifestyle and Chronic Disease,” “Maternal and Child Nutrition,” and “Micronutrients/Minerals.”

<sup>496</sup> Johns Hopkins Bloomberg School of Public Health, Center for Human Nutrition: Diet, Lifestyle and Chronic Disease, Available: [http://commprojects.jhsph.edu/research/chnArea.cfm?Research\\_Area=3](http://commprojects.jhsph.edu/research/chnArea.cfm?Research_Area=3), January 24 2005.

<sup>497</sup> Johns Hopkins Bloomberg School of Public Health, The Lighthouse: Our Research, Available: [http://www.jhsph.edu/ShipStudies/Our\\_Research/index.html](http://www.jhsph.edu/ShipStudies/Our_Research/index.html), January 24 2005.

While the bulk of their research is directed toward interventions pertaining to those suffering from HIV/AIDS, the center is worth highlighting for this important reason. Although The Lighthouse acknowledges the public health impact of social marginalization and poverty – and hence is directed to those in the community affected by them – the interventions *still* are predicated upon the need to change personal behavior. For example, the ANCHOR (Assisting Networks to Create Healthy Opportunities and Resources) Project was an executed under the auspices of The Lighthouse to provide eligible persons at-risk of HIV or other STDs a “six-session behavioral intervention that focuses on skill building and network support for HIV and other STD prevention. Participants are taught methods of encouraging and supporting their friends and peers to engage in HIV and other STD prevention behaviors.”<sup>498</sup>

A second project affiliated with The Lighthouse and one that is currently ongoing is that of SHIELD – Self-Help in Life-threatening Diseases. A program that crosses the boundaries between drug and HIV interventions, it is designed to “train individuals in the drug using community in Baltimore City to become health educators and promote HIV prevention within their community.”<sup>499</sup> Based on “an empowerment model, individuals in the outreach group were trained in applying leadership skills and encourage to promote HIV preventions within their communities and to conduct community outreach.”<sup>500</sup> Individuals recruited to the program participated in 8-10 training sessions, and work in a volunteer capacity to counsel at-

---

<sup>498</sup> Johns Hopkins Bloomberg School of Public Health, The ANCHOR Project, Available: [http://www.jhsph.edu/ShipStudies/Past\\_Projects/anchor.html](http://www.jhsph.edu/ShipStudies/Past_Projects/anchor.html), January 24 2005.

<sup>499</sup> Johns Hopkins Bloomberg School of Public Health, The SHIELD Project, Available: [http://www.jhsph.edu/ShipStudies/Current\\_Projects/shield.html](http://www.jhsph.edu/ShipStudies/Current_Projects/shield.html), January 24 2005.

<sup>500</sup> Johns Hopkins Bloomberg School of Public Health, The SHIELD Project.

risk individuals about engaging in less-risky behaviors and getting tested for HIV. This example is not only helpful in illustrating how public health interventions are often oriented toward counseling and education regarding behavioral modification, but also in illuminating how “government at a distance” works in practice. To the extent that individuals – and ones, at least in this capacity, who are volunteers – can be brought to do the work of public health, can teach people to manage their lives better, the more that work becomes devolved from a public health managed under the auspices of the state: the health of the public achieved or managed through the work of the private sphere.

It has already been established that approaches to population health that favor in analytical and practical terms the problematics of individualized risks are consonant with neoliberal rationality. As demonstrated in both course content and research initiatives pertaining to the public health of chronic disease, the Bloomberg School indeed exhibits the impulse of such rationality. But one must also consider this element in context with the on-going process of self-monitoring towards the end of self-investment that all public health graduate students engage in. In conjunction, they demonstrate multiple dimensions of neoliberal rationality in the domain of *episteme*: the privileging of the individual in terms of behavior as a recurring object of analysis, as well as in terms of self-motivated surveillance and adaptation toward the end of creating a more productive and capable self. These features are also complemented by competency emphasis in the M.P.H. program that privileges risk analysis across a range of subfields; though this privileging of risk discourse is not necessarily infused with a specifically *neoliberal* rationality, it is, as argued earlier in

this chapter, indicative of an overall liberal rationality that in the context of government seeks to minimize hazard toward the end of enhancing population health.<sup>501</sup> Through a continued analysis of graduate education at two other leading public health schools, we can assess how political rationality manifests in the most prominent and respected public health education programs in the United States.

*Harvard School of Public Health*

The Harvard School of Public Health (HSPH), founded in 1922, has been at the forefront of some of the most influential public health discoveries in the world. Among these are a number that deal directly with NCDs and their associated risk factors. In an on-line brochure that charts major accomplishments emerging from the school, the HSPH called attention to affiliated faculty who:

- Showed that the large majority of coronary heart disease and diabetes cases can be prevented by avoidance of smoking, moderate physical activity, weight control, a diet emphasizing healthy fats, healthy carbohydrates, and generous intake of fruits and vegetables, and optional moderate alcohol intake
- Released a report showing that more than half of U.S. cancer deaths result from modifiable lifestyle habits, including smoking, poor diet, obesity, and lack of exercise. This updated summary of cancer's preventable causes led to the development of the website Your Cancer Risk (now Your Disease Risk), which provides personalized recommendations for risk reduction.
- Determined that an aspirin a day protects men and women from heart attacks.<sup>502</sup>

---

<sup>501</sup> Whether or not “risk” in the given competency areas is infused with a neoliberal rationality would depend on how it is approached across the courses; if focusing on largely on individual, behavioral determinants of health, then a claim of neoliberal rationality would certainly apply. The prevalence of behavioralism across the different departments in the Bloomberg School of Public Health suggests this is at least a possibility, though one cannot say for certain.

<sup>502</sup> Harvard School of Public Health, *About HSPH*, December, 2004, Available: <http://www.hsph.harvard.edu/about.html#departments>, January 14 2005. These three are only a sampling of such accomplishments; others pertaining to CVD, chronic kidney disease, the risk of passive smoke, and cervical cancer screening were also highlighted.

At the very outset, therefore, it is possible to discern the trajectory of public health at the HSPH both significant content work in the area of chronic disease, as well as significant findings pertaining to the role of individual behavior in their prevention and/or onset. This linkage between prevention and lifestyle is reinforced by the school's assertion as to the importance of social and behavioral science in their curriculum and health research. Specifically, the HSPH states that "because preventing disease is at the heart of public health, we also pursue the social sciences to better understand health-related behaviors and their societal influences--critical elements in *educating and empowering people to make healthier lifestyle choices*. [emphasis added]<sup>503</sup>

It is interesting to note at the outset that while the HSPH makes clear in its orientation materials that its approach to public health is very different from biomedicine, in practice it caters to the educational and professional needs of clinicians. The M.P.H. program is designed for mid-career health professionals – approximately 70% of whom are physicians, with dentists and masters-level professional nurses also strongly represented.<sup>504</sup> Indeed, it is designed in a nine-month format to allow M.D. and other professional medical students to take a leave of absence between their third and fourth years to complete the M.P.H.<sup>505</sup> In 2003-2004, the HSPH had enrolled nearly 900 students, over a third of whom were pursuing the M.P.H.; the M.S. and S.D. (Doctor of Science) programs also comprised a significant

---

<sup>503</sup> Harvard School of Public Health, [About HSPH](#).

<sup>504</sup> Harvard School of Public Health, [Master of Public Health Program](#), Available: <http://www.hsph.harvard.edu/mph/questions.html>, January 14 2005.

<sup>505</sup> Harvard School of Public Health, [Master of Public Health Program](#).

portion of total enrollment, with 285 and 266 students respectively.<sup>506</sup> Unlike Johns Hopkins, whose M.P.H. program is designed to be completed over the course of approximately two years, the concentrated nature of the Harvard program reveals fewer course credits required for the degree – 40 as opposed to 80 at JHU.

While each student chooses a concentration – in such areas as family and community health, quantitative methods, health care management, occupational health, and public health law – all are required to take at least twenty credits in a series of core courses in such areas as ethics, biostatistics, epidemiology, health administration, and social science. Students may choose which course to take in each area; for example, students may take for the ethics requirement one of several courses covering such topics as ethics in health care delivery and individual and social responsibility for health.<sup>507</sup>

While no concentration in chronic disease exists, students developing depth knowledge in such areas as epidemiology or family and community health (which has a strong health promotion and communication component), will have the opportunity to take courses on the analysis and prevention of specific types of NCDs. When we consider how these are broached and conceptualized in the context of course descriptions, we garner a clearer sense of how NCDs and their associated risk factors are approached as objects of study in graduate public health education at Harvard.

As a lens for organizing the discussion, we may consider the available M.P.H. concentration Family and Community Health, towards the fulfillment of which students interested in chronic disease may take specific approved courses. These

---

<sup>506</sup> Harvard School of Public Health, [About HSPH](#).

<sup>507</sup> Harvard School of Public Health, [M.P.H. Program 2004-2005](#) (Harvard School of Public Health, 2004), 5.

include, among others, “Cancer Prevention” and “Principles of Nutrition.”; complementary classes also include “Epidemiology of Cancer” and “Science of Human Nutrition.”<sup>508</sup>

The course on cancer prevention emphasizes several factors relevant for this discussion, including risk analysis, and behavioral elements such as participating in screening and lifestyle changes:

Approaches to cancer prevention will be reviewed with the principal emphasis on primary prevention. The lectures, readings and projects will examine different theoretical and practical issues around effectiveness, feasibility, and sustainability of interventions: population vs. high-risk approaches, risk communication, and barriers to implementation. We will discuss issues in the application of screening, and then focus on the social and behavior changes that can achieve the same or greater reduction in cancer incidences.<sup>509</sup>

With detailed reference to the aetiology of two specific cancers, breast and colon, students also learn about strategies for prevention at multiple levels of intervention, while “action by health care providers (e.g., counseling and screening), regulatory policy... and individual behavior changes will be emphasized.”<sup>510</sup> Risk factors pertaining to individual behavior are likewise emphasized in “Epidemiology of Cancer,” which is focuses on the “identification of risk factors [and] examines the role of smoking, radiation, nutrition, and other exposures.”<sup>511</sup>

The “Principles of Nutrition” course provides an “overview of nutrition from epidemiologic, clinical, metabolic, and international perspectives, including nutritional assessment, malnutrition, obesity, eating disorders, relationships between

---

<sup>508</sup> Harvard School of Public Health, M.P.H. Program 2004-2005, 17-18.

<sup>509</sup> Harvard School of Public Health, Course Information: Epidemiology, January 12, 2005, Available: <http://www.hsph.harvard.edu/registrar/courses/epi.shtml>, January 14 2005.

<sup>510</sup> Harvard School of Public Health, Course Information: Epidemiology.

<sup>511</sup> Harvard School of Public Health, Course Information: Epidemiology.

nutrition and cancer and heart disease.”<sup>512</sup> A complementary course entitled “The Science of Human Nutrition” is structured such that “particular emphasis is given to current knowledge of the mechanisms that may explain the role of diet in the causation and/or prevention of ischemic heart disease, diabetes, obesity, hypertension, and cancer.”<sup>513</sup>

In addition to education in the context of the M.P.H. program, research and outreach efforts to combat the challenges posed by chronic diseases reflect underlying concerns about lifestyle in the public health context. The most notable of these is the Department of Epidemiology and the affiliated Center for Cancer Prevention at the HSPH. In 2004, the *Your Disease Risk* informational website was launched, an expanded version of an earlier informational site entitled *Your Cancer Risk*, launched in 2000.<sup>514</sup> For each disease, visitors to the site fill out questionnaires; while the number of questions vary across the conditions, they all fall into specific categories pertaining to height and weight, medical history, family history, dietary patterns, physical activity levels, and smoking history.<sup>515</sup> At the end of the questionnaire, results for the individual’s relative risk are indicated against a seven-level bar graph representing very low to very high risk for other men or women in their age group. Moreover, tips for reducing specific risks based on individual results are offered, and users can click on “personalized strategies to learn where to focus their prevention

---

<sup>512</sup> Harvard School of Public Health, Course Information: Nutrition, January 12, 2005, Available: <http://www.hsph.harvard.edu/registrar/courses/nut.shtml>, January 14 2005.

<sup>513</sup> Harvard School of Public Health, Course Information: Nutrition.

<sup>514</sup> Harvard School of Public Health, It's Not Just Cancer Anymore (Press Release) (Harvard School of Public Health, 2004), 1. The decision to expand the site to include other NCDs such as diabetes and heart disease was predicated upon the continuing popularity of the site; when *Your Cancer Risk* went online in 2000, it generated one million hits the first day, and has averaged nearly 1000 unique visitors every day over the last four years.

<sup>515</sup> Harvard School of Public Health, Your Disease Risk: Relative Risks (Diabetes, Heart Disease, Osteoporosis) (Harvard Center for Cancer Prevention, 2004).

efforts and how to make lifestyle changes. With each click, the bar graph shrinks, and users watch their risk drop.”<sup>516</sup>

The emphasis on individualization of analysis and strategies for prevention is designed to motivate users to better care for their health. Graham Colditz, Director of the Center for Cancer Prevention at the Harvard School of Public Health, characterizes the *Your Disease Risk* project in such terms:

*Your Disease Risk* pulls all these important diseases into one place and offers people consistent, practical prevention messages for each. The far-reaching benefits of a healthy lifestyle become apparent as people click through the site and see that *a single risk factor can impact their risk of many diseases--something we hope will inspire them to make healthy behavior changes.* [emphasis added]<sup>517</sup>

The *Your Disease Risk* project, in conjunction with curricular offerings on public health approaches to chronic disease reflect a very consistent and well-institutionalized concern about the problems of behavioral risk and lifestyle. And the more that analytical and education and other intervention efforts are constructed around these dominant concepts, the more that chronic disease is depoliticized and desocialized, and its management is relegated to a general project of government at a distance. As we will see, the public health schools at Johns Hopkins and Harvard are not alone in these emphases – they are very much entrenched at the University of North Carolina, as well.

*University of North Carolina*

Founded in 1939, the University of North Carolina School of Public Health (UNC-SPH) is similar to the other case schools in that it is overwhelmingly oriented

---

<sup>516</sup> Harvard School of Public Health, *Your Disease Risk: Relative Risks (Diabetes, Heart Disease, Osteoporosis)*, 1.

<sup>517</sup> Harvard School of Public Health, *Your Disease Risk: Relative Risks (Diabetes, Heart Disease, Osteoporosis)*, 1.

toward graduate education, with the majority of students pursuing an M.P.H. or other masters degree.<sup>518</sup>

As with Harvard, the UNC-SPH establishes at the outset in descriptive materials about its programs the key role of individual behavioral choices in affecting public health outcomes. Through its main website, visitors are introduced to the role of empowerment to condition such behavioral choices for the better:

Human behavior can lead to much better health or to consequences that exact a huge personal, social, and economic toll. Carolina's School of Public Health is creating the knowledge all citizens need to make healthier decisions...In the new millennium, empowering individuals to lead healthy lives will be key to improving the public's health.<sup>519</sup>

This emphasis is informed by the UNC-SPH's mission statement, which provides an orientation to how as an educational institution is views its role in enhancing public health:

A growing distrust of government and a widespread desire to reduce the overall tax burden on society have led to budgetary and programmatic squeezes on official public health agencies and at the same time they are being pushed to modernize and be more creative. These and related pressures are also forcing institutions of higher education to examine themselves carefully and to innovate as well.<sup>520</sup>

While the strands of such innovation certainly take a number of forms, budgetary, institutional, and curricular, it is certainly not unexpected in such an environment to emphasize, whether through training or research, what the public can do to keep themselves healthy; such a manifestation of government at a distance is

---

<sup>518</sup> For example, the 2004-2005 academic year had enrolled 1218 graduate students, as opposed to only 105 undergraduate students. Approximately 800 of these graduate students were pursuing an M.P.H. or other masters degree. For these and additional demographics, see University of North Carolina School of Public Health, Student Demographics: Fall 2004, Available: <http://www.sph.unc.edu/students/demographic/>, January 16 2005.

<sup>519</sup> University of North Carolina School of Public Health, Empowering People to Lead Healthy Lives, Available: [http://www.sph.unc.edu/flash/emp\\_news.cfm](http://www.sph.unc.edu/flash/emp_news.cfm), January 26 2005.

<sup>520</sup> University of North Carolina School of Public Health, Agenda for the 21st Century, Available: <http://www.sph.unc.edu/about/mission/agenda.htm>, January 16 2005.

thus not only implicated in the securitization of the public's health, but also a means of unburdening the public institutions historically involved in that process.

The general principle of helping people to see and embrace the benefits of a healthy lifestyle is carried through and reflected in both the curriculum offerings and research endeavors undertaken at the School of Public Health. In terms of curricula, one may consider the requirements and offerings for the M.P.H. degree, which, as with both Johns Hopkins and Harvard, constitutes one of the most frequently pursued graduate degrees in public health at this institution. A few general features of the M.P.H. program provide a sense of orientation as well as comparison across the other schools; similar to the other institutions, the M.P.H. program is considered advanced training for those already with at least three years of professional experience in the health professions, or those who already hold a doctoral degree in medicine, veterinary medicine, dentistry, or other appropriate and related field.<sup>521</sup> At least two full semesters of residence are required, consonant with the Harvard M.P.H. program, but the school acknowledges that majors in certain programs may require additional time to complete the degree. All students complete a series of core requirements across five content areas including epidemiology, health administration, and biostatistics. Moreover, all students concentrate in a departmental major, with course requirements set by the department in question, and to ensure breadth of knowledge, take at least four elective courses in each of three departments other than their major.<sup>522</sup>

---

<sup>521</sup> University of North Carolina School of Public Health, Admissions: Master of Public Health, M.P.H., Available: <http://www.sph.unc.edu/admissions/degrees/mph.htm>, January 27 2005.

<sup>522</sup> University of North Carolina School of Public Health, Admissions: Master of Public Health, M.P.H.

Several major and elective courses within the M.P.H. concentration areas cover aspects pertaining to chronic disease. The graduate seminar in cardiovascular disease epidemiology, for example, focuses on the “main causes of cardiovascular disease morbidity and mortality,” with specific content area addressing risk factors pertaining to diet and exercise, as well as “strategies for prevention” to counteract these risk factors.<sup>523</sup> Additional course offerings are available that look at specific behavioral risks and disease onset, such as “Diet and Cancer,” which looks at “food-related exposures and prevention of cancer of various sites.”<sup>524</sup> Other courses target interventions for specific risk behaviors, such as the Nutrition course, “Dietary Interventions,” which looks at how to reach at-risk individuals at schools and work sites via methods such as “social marketing and mass media.”<sup>525</sup>

More general courses on health education and health promotion also operate with extended reference to the importance of individuals’ behavior. “Social and Behavioral Science Foundations of Health Education” instructs students in the core “theories and concepts that apply to the analysis of health-related behavior and to the generation of intervention strategies.”<sup>526</sup> A follow-on to this introductory course is devoted solely to the theoretical exploration of particular health behaviors, and looks at “selected social psychological theories and their relationship to health promotion, disease prevention, and patient education.”<sup>527</sup> These courses, as well as the others

---

<sup>523</sup> University of North Carolina School of Public Health, Courses: Epidemiology, Available: <http://www.sph.unc.edu/students/course/?subject=epid>, January 27 2005.

<sup>524</sup> University of North Carolina School of Public Health, Courses: Epidemiology.

<sup>525</sup> University of North Carolina School of Public Health, Courses: Nutrition, Available: <http://www.sph.unc.edu/students/course/?subject=nutr>, January 27 2005.

<sup>526</sup> University of North Carolina School of Public Health, Courses: Health Behavior and Health Education, Available: <http://www.sph.unc.edu/students/course/?subject=hbhe>, January 27 2005.

<sup>527</sup> University of North Carolina School of Public Health, Courses: Health Behavior and Health Education.

described above, suggest an orientation toward the analysis and prevention of disease that if not exclusively, at least extensively emerges from a position that privileges the human faculty of choice. Public health students exploring the epidemiology of CVD, as noted above, focus extensively on risk factors like diet and exercise and how to generate appropriate intervention strategies based on those factors. Additionally, students tackling health promotion are grounded in theories that seek to explain why people do what they do, so promotion may be better oriented to get individuals to choose healthier behaviors. Hence, the stated orientation toward theories of human behavior that facilitate among other things, “patient education” – a phenomenon that blurs the lines between a clinical orientation that counsels the individual patient and a public health perspective which is presumably oriented toward the population at large.

Research at the UNC-SPH also reflects a consistent theme of behavioralism in the areas of NCD prevention and intervention. One arena in which this theme is evident is that of externally funded research. With information available on the amounts and direction of grant research at the school since 2000, an impressive array of initiatives have been funded to research the risk factors and burdens posed by a number of chronic diseases. These have covered such areas as physical activity in adolescents and the elderly, the relationship between alcohol intake and blood pressure, educational techniques to empower youth to avoid smoking, the relationship between hormone replacement therapy and cancer, and patterns of snacking behavior in the United States and their relationship to disease outcomes, just to name a few.<sup>528</sup>

---

<sup>528</sup> Epidemiology University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, and Nutrition, Grant Awards, FY 2000-2001 (Chapel Hill: University

Across the three departments most directly involved in chronic disease research – the Departments of Health Behavior and Education, Epidemiology, and Nutrition - a total of \$24.7 million was granted between FY 2000 and 2002 from external sources such as the CDC, American Heart Association, and National Cancer Institute to fund these and other projects directly dealing with behavioral risk factors for chronic disease.<sup>529</sup> Moreover, the trajectory of funding in the Department of Health Behavior over that time period indicates a steady increase of funding for projects relating to behavioral inputs to chronic disease – from approximately \$428,000 in FY 2000 to over \$4 million by FY 2002.<sup>530</sup> Such patterns reinforce the claim that the role of behavioral risk in chronic disease research is indeed a prominent one, and in the case of funding patterns at the UNC-SPH, is increasingly more so.

Specific projects associated with chronic disease analysis, prevention, and intervention primarily executed under the auspices of three departments: Health Behavior and Education, Epidemiology, and Nutrition. In fact, several of the self-identified strengths in these departments pertained directly to NCDs. In the

---

of North Carolina School of Public Health, 2002).; Epidemiology University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, and Nutrition, Grant Awards, FY 2001-2002 (Chapel Hill: University of North Carolina School of Public Health, 2003).; Epidemiology University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, and Nutrition, Grant Awards, FY 2002-2003 (Chapel Hill: University of North Carolina School of Public Health, 2003). These are only an example of the number of grant-funded projects dealing directly with behavioral risk and chronic disease. In the departments of Health Behavior and Education, Epidemiology, and Nutrition, the three that have the strongest ties to chronic disease as an area of research, 89 externally funded projects dealt directly with behavioral risks between FY 2000-2002.

<sup>529</sup> University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Grant Awards, FY 2000-2001.; University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Grant Awards, FY 2001-2002.; University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Grant Awards, FY 2002-2003.

<sup>530</sup> University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Grant Awards, FY 2000-2001.; University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Grant Awards, FY 2001-2002.; University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Grant Awards, FY 2002-2003.

Department of Health Behavior and Education, for example, a key strength identified was the prevention and control of cancer. In the context of prevention and education regarding this and other diseases, the department also stressed the role of an “Action-Oriented Community Diagnosis” that all first year students participate in, in which they develop focus group and interview questions for those in the community facing a specific health challenge, and where “empowerment education techniques are used to engage residents and service providers” in an attempt to address the identified challenge.<sup>531</sup>

The Department of Epidemiology also acknowledges its focus on cancer control as well as “the identification of causes of cardiovascular disease and methods for prevention.”<sup>532</sup> On these chronic diseases, the department highlighted its work in understanding the causal risk factors associated with CVD – specifically listing behavioral research in the areas of control of hypertension, avoiding tobacco, and physical activity – as well as cancer control (tobacco use).<sup>533</sup>

Finally, the Department of Nutrition highlighted its efforts in the area of NCD disease prevention in women, especially with its focus “on changing health behaviors associated with the leading causes of morbidity and mortality among women in North Carolina: physical inactivity, unhealthy diets, smoking, and stress.”<sup>534</sup> As we will see elucidated in Chapter 8, for example, one of the major interventions developed for the WISEWOMAN program was the product of nutrition research conducted out of the UNC-SPH.

---

<sup>531</sup> University of North Carolina School of Public Health, School of Public Health Viewbook, vol. 2 (Chapel Hill: University of North Carolina School of Public Health, 2004) 19.

<sup>532</sup> University of North Carolina School of Public Health, School of Public Health Viewbook 14.

<sup>533</sup> University of North Carolina School of Public Health, School of Public Health Viewbook 14.

<sup>534</sup> University of North Carolina School of Public Health, School of Public Health Viewbook 28.

Through these examples of NCD research and curricula at the University of North Carolina, as well as Harvard and Johns Hopkins, we are able to discern very consistent themes. Risk continues to be a guiding general precept of public health education, and behavioral risks are especially privileged in the analysis and prevention of chronic diseases. It is also interesting to note the commonality that education at these institutions is primarily oriented toward practicing health professionals, especially those already trained in a clinical context. As such, it is not surprising to see a healthy breadth of clinically oriented course offerings. Johns Hopkins, as the largest of the schools, understandably offers the most – over 60 courses, from “The Design and Analysis of Clinical Trials” and other methods courses, to “Assessment of Clinical Cardiovascular Disease,” to “Medical Mycology” and “Introduction to Medical Genetics.”<sup>535</sup> Both Harvard and UNC also offer a respectable number – nearly twenty each.<sup>536</sup>

Despite the disciplinary boundaries that exist and that maintain a separate orientation for medical and public health education, to the extent that public health admissions are structured to facilitate the enrollment of medical doctors, nurses, and other such health professionals and that coursework includes significant offerings in clinical education, one can envision how – at least in the contemporary environment – public health continues to be infused with the values and concerns of biomedicine.

---

<sup>535</sup> Johns Hopkins Bloomberg School of Public Health, Courses.

<sup>536</sup> UNC offers a range of such courses, including “Strategies of Prevention for Clinicians,” “Clinical Measurement and Evaluation,” and “Medical Nutrition Therapy.” Descriptions available via University of North Carolina School of Public Health, Courses, Available: <http://www.sph.unc.edu/students/course/>, January 27 2005. Harvard’s offerings include, among others, “Principles of Clinical Trials,” “Biological & Clinical Foundations of Reproductive & Child Health,” and “Immunology of Infectious Diseases.” These and other descriptions are available via Harvard School of Public Health, Course Descriptions and Schedules, Available: <http://www.hsph.harvard.edu/registrar/courses/>, January 27 2005.

Thus, despite institutional differences and a high degree of decentralization, the shared features and commonalities are such that it is possible to illustrate how public health education in the American context reflects not only a lingering influence of biomedicine, but also an underlying neoliberal rationality. As we will see in the case of the United Kingdom, as well as Sweden, such rationality is not constrained by geographical boundaries, or the unique cultural contexts in which public health institutions are embedded.

#### United Kingdom

The context of public health education in the United Kingdom represents a much higher degree of centralization than in the United States. Though limited courses in public health are available at the country's 26 medical schools, they are offered in an auxiliary capacity to clinical education, with each school having a single, general department of "public health."<sup>537</sup> The only school devoted to the study of general public health, as well as its subfields, is the London School of Hygiene and Tropical Medicine, executed under the auspices of the University of London. It is the national school of public health, first created as the London School of Tropical Medicine in 1899; by 1924, it had broadened as an institution to include a formal commitment to the study of "hygiene," the usage of which should be clarified. The school notes that at the time, "the term 'hygiene' was not restricted to its current meaning of 'cleanliness' or 'sanitary science', but was used in the wider sense of the

---

<sup>537</sup> R. Edwards, M. White, D. Chappel and J. Gray, "Teaching Public Health to Medical Students in the United Kingdom - Are the General Medical Council's Recommendations Being Implemented?" Journal of Public Health Medicine 21 (1999).

establishment and maintenance of health - now more usually described as 'public health'.<sup>538</sup>

In terms pertaining to both enrollments and degree offerings, is similar to the scope and size of the U.S. schools evaluated here. It is exclusively a post-graduate institution, with the majority of degrees public health conferred as taught MSc. programs; similar to an M.P.H., the degree is designed for those entering practice, as opposed to academic public health.<sup>539</sup> Each year approximately 800 new students are enrolled at the school from over 120 countries, with total annual enrollment around 1600.<sup>540</sup>

As with the schools in the United States, the MSc program is constructed as a professional development program, and is often pursued by clinicians already working in the NHS. The London School's 2002-2003 annual report highlights the fact that NHS medical doctors and other clinicians "who wish to develop their epidemiological research often gain their initial training from either the MSc Epidemiology course or a specially-designed short course."<sup>541</sup> Moreover, midwives, nurses, and allied health professionals also routinely enroll in degree programs. While these comprise a significant number of enrollees, students coming out of

---

<sup>538</sup> London School of Hygiene and Tropical Medicine, Introducing the London School, November 18, 2004, Available: <http://www.lshtm.ac.uk/prospectus/intro/>, January 18 2005.

<sup>539</sup> Research degrees including the DrPH and Ph.D. are also offered; the Dr.P.H. is offered to senior public health professionals interested in augmenting skills in policy and management, while the Ph.D. is a track for those possessing an MSc. degree and interested in academic public health.

<sup>540</sup> London School of Hygiene and Tropical Medicine, Introducing the London School.

<sup>541</sup> London School of Hygiene and Tropical Medicine, Annual Report--2002-2003 (London: London School of Hygiene and Tropical Medicine, 2003), 37.

undergraduate institutions in such areas as general science (biology, chemistry, etc.) or social science (economics, psychology, sociology), are also invited to apply.<sup>542</sup>

In terms of the public health curriculum, those pursuing a MSc. degree in public health may choose a generalist degree, or may specialize in one of four areas – health promotion, health services research, environment and health, or health services management. The degree is normally completed either over the course of one year (full-time) or two (part-time), and the terms of study are broken down into three parts. In Term 1, all students complete a series of core curricular requirements, including “Basic Statistics for Public Health & Policy,” “Basic Epidemiology,” “Introduction to Health Economics,” and “Principles of Social Research.”<sup>543</sup> Students also are required to take two additional courses over the first term, at least one of which in their proposed major area (such as health promotion), and the other from another subfield, or approved courses in general public health issues or health policy.<sup>544</sup> In Terms 2 and 3, students take a total of six courses, or “study units,” pursuant to their selected area of concentration; at least two of these courses are compulsory, set by the department, though a series of recommended courses are generally provided for each specialty.<sup>545</sup>

For the general degree in public health, thirty-one approved courses exist to fulfill the course requirements for Terms 2 and 3 (as well as the two additional, non-core courses for Term 1). Despite the fact that the degree is framed as a generalist

---

<sup>542</sup> London School of Hygiene and Tropical Medicine, Msc. In Public Health, November 18, 2004, Available: <http://www.lshtm.ac.uk/prospectus/masters/msph.html>, January 18 2005.

<sup>543</sup> London School of Hygiene and Tropical Medicine, Msc. In Public Health.

<sup>544</sup> London School of Hygiene and Tropical Medicine, Msc. In Public Health.

<sup>545</sup> It should be noted that the generalist MSc. degree in public health has only one compulsory course, “Integrating Unit: Public Health.”

option, the range of approved courses suggests more depth than breadth. Of the thirty-one courses, nearly half (thirteen) are explicitly devoted to methods, such as “Statistical Methods in Epidemiology” and “Analysis of Hierarchical and Dependent Data.” A second area of depth is the area of economic and business approaches to public health, which includes seven courses such as “Economic Analysis for Management & Policy,” “Economic Evaluation,” “Organisational Management,” and “Economics of Health Systems.”<sup>546</sup>

It is interesting to note that even courses which are not expressly devoted to health economics, but are offerings in both the generalist track as well as such concentrations as health policy and planning often display an econometric approach to the material. One such example is that of “Analytical Models for Decision-Making,” which prepares students for analyzing public health policy and management options, and how to choose among them for purposes of planning and implementation. The course is designed to cover “methods of decision support,” which is approached via material on “game theory, decision trees, decision conferencing, [and] expert systems.”<sup>547</sup> Secondary material on health care planning and problem structuring is approached via resource allocation models and hospital cost models, as well as “econometric approaches...gaming simulation, and strategic choice.”<sup>548</sup>

---

<sup>546</sup> London School of Hygiene and Tropical Medicine, Public Health - General, November 18, 2004, Available: <http://www.lshtm.ac.uk/prospectus/masters/msphg.html>, January 18 2005. The remaining courses are spread out across quite a broad range of public health issues and fields; for example, two courses in health promotion, and one each in such areas as sociological approaches to public health, ethics, history and health, sexual health, and medical anthropology, among others.

<sup>547</sup> London School of Hygiene and Tropical Medicine, Description of Teaching Units - Term 2 (London: London School of Hygiene and Tropical Medicine, 2004), 103.

<sup>548</sup> London School of Hygiene and Tropical Medicine, Description of Teaching Units - Term 2.

Because of the structure of the program, which allows students to take courses sequentially as opposed to concurrently within the term, with the exception of the single required course in the curriculum, a student may take all of their other approved courses in one of these two fields, if they so choose. Indeed, such an outcome is facilitated by prerequisites in the sequencing; for example, students who wish to take “Economics of Health Systems” a course offered in the last section of Term 3, must have completed “Economic Analysis for Management & Policy” as well as an introductory course in health economics in the first two terms.<sup>549</sup>

Given these two features – the primary areas in which the bulk of courses are offered and the ability of students to take the vast majority of their courses in one of the two areas - several points are relevant. First, the choices that a program makes in selecting its approved courses provide a clear indication as to what is held to be important knowledge – appropriate for those earning the degree that marks them a professional in the field. For a *generalist* program to have twenty of thirty one courses in methods and business and economic approaches to public health indicates that the refinement of technique, as well as the application of market knowledge to the practice of public health are important elements of graduate public health education. A course emphasis on method only reinforces the general claim that public health is increasingly focused on the calculation and evaluation of substantive issues of health and disease, rather than those issues themselves.

The second dimension – that of the permeation of public health knowledge and practice with the tools and techniques of economics – is especially pertinent to a

---

<sup>549</sup> London School of Hygiene and Tropical Medicine, Description of Teaching Units - Term 3 (London: London School of Hygiene and Tropical Medicine, 2004), 176.

discussion of neoliberal rationality in the government of health. As stressed in Chapter 4, and developed subsequently, a hallmark of this rationality is the application of market logic to historically non-market spheres such as the analysis and protection of population health. As evidenced by courses on economic analysis, and decision analysis framed in econometric terms, the privileging of economic knowledge exists not only as a substantive area, but also as a *way of knowing* for the purposes of health practice. As we will see, when considered in concert with the way courses pertinent to chronic disease are taught, as well as the way research initiatives on NCDs are pursued at the London School, the claim of public health education manifesting as an element of neoliberal governmentality is not a specious one.

For students interested in chronic disease, a range of courses are available, most especially in the areas of nutrition, epidemiology, and health promotion more generally. One such course, “Nutrition Related Chronic Disease,” is designed to introduce students “to key issues in the design and interpretation of nutritional epidemiological studies, and to evaluate current understanding of the relationship between nutrition and chronic disease.”<sup>550</sup> To that end, students are introduced to the epidemiological methods typically used to assess the relationship between diet and chronic illness, the changing patterns of nutrition consumption around the world, and how the promotion of dietary change is implicated in reducing individuals’ risk of “chronic diseases such as cardiovascular diseases, cancer, obesity, diabetes and osteoporosis.”<sup>551</sup>

---

<sup>550</sup> London School of Hygiene and Tropical Medicine, [Description of Teaching Units - Term 2](#), 142.

<sup>551</sup> London School of Hygiene and Tropical Medicine, [Description of Teaching Units - Term 2](#), 142.

Students wishing to approach chronic disease from the perspective of epidemiology may take the course “Epidemiology of Non-communicable Diseases,” which is designed to “generate an appreciation of the drivers of the burden of non-communicable diseases; [and] to identify methodological and conceptual issues in identifying causes of non-communicable diseases and evaluating preventive strategies.”<sup>552</sup> Focusing especially on mental illness, cancer, and cardiovascular disease, the course addresses a range of risk factors, from the “identification of genetic associations,” to an evaluation of diet and activity over the life course, to the role of infectious agents in the aetiology of certain NCDs such as cancer.

On this latter point, it is interesting to note that the London School’s course on NCD epidemiology was the only one to explicitly mention the role of infectious agents in the development of chronic disease – though it was consistent with other schools in identifying risk factors pertaining to lifestyle and behavior. Such a perspective is perhaps consonant with an overall school strength in communicable disease epidemiology and prevention compared to chronic disease– numerous courses are offered in these areas, as well as two MSc. degrees (Biology and Control of Disease Vectors and Control of Infectious Diseases); no degrees are offered in NCDs as either a category of illness or addressing a singular phenomenon (e.g. cancer).<sup>553</sup>

---

<sup>552</sup> London School of Hygiene and Tropical Medicine, Description of Teaching Units - Term 3, 177.

<sup>553</sup> Nearly thirty courses are offered in the area of infectious disease aetiology and control, including “Clinical Infectious Diseases,” “Genetics of Pathogens and Vectors,” “Clinical and Public Health Bacteriology,” and “Molecular Biology of Infectious Diseases,” just to name a few. For a more complete listing, see London School of Hygiene and Tropical Medicine, M.Sc. - Control of Infectious Diseases, Available: <http://www.lshtm.ac.uk/prospectus/masters/mscid.html>, January 18 2005. Another marker of the relative emphasis given infectious diseases is the number of faculty and doctoral students researching this area as compared to chronic disease. For example, 94 faculty and doctoral students list malaria as a major research area, and 68 list HIV/AIDS, compared to 29 for cancer, 16 for

One may view this strength arising at least in part out of the lingering commitment to the tropical medicine around which the school was initially founded as a means to address the health problems not primarily occurring at home, but throughout the Empire of the 19<sup>th</sup> and early 20<sup>th</sup> centuries. This overall forte in the area of public health approaches to infectious disease illustrates especially well one distinction of the British school from any of the American examples, or as we will see, from the Swedish case.

Other courses, while not explicitly dealing with issues of chronic disease, nonetheless are implicated in the study of their management, given the relative emphasis on lifestyle risk factors. One such course, “Health Promotion Theory,” is the core course for the concentration in health promotion and is directly implicated in the study of behavioral motivation and change. The course is directed toward several themes, including the history of health promotion, foundations of behavioral change, the role of policy, and evaluation strategies. In terms of orientation, the course is based on the framework for health promotion described in the Ottawa Charter for Health Promotion.<sup>554</sup> The World Health Organization’s 1986 Ottawa Charter approaches health promotion as an endeavor to

enable all people to achieve their fullest health potential. This includes a supportive environment, access to information, life skills and opportunities for making healthy choices. People cannot achieve their fullest health potential unless they are able to take control of those things which determine their health.<sup>555</sup>

---

cardiovascular disease, and 2 for diabetes. See London School of Hygiene and Tropical Medicine, Research Area - Keywords, Available: <http://www.lshtm.ac.uk/research/areas/acar>, January 19 2005.

<sup>554</sup> London School of Hygiene and Tropical Medicine, Description of Teaching Units - Term 1 (London: London School of Hygiene and Tropical Medicine, 2004), 68.

<sup>555</sup> World Health Organization, Ottawa Charter for Health Promotion (Geneva: World Health Organization, 1986), 1.

The emphasis in this characterization on empowering people to make healthy choices and to “take control” of the risks and factors that condition their health provides a very clear orientation of health promotion as a means of situating the management of risk to a great extent in the decisions each individual makes. This perspective is reinforced by the Charter’s continued characterization of health promotion as a technique that “increases the options available to people to exercise more control over their own health and over their environments, and to make choices conducive to health. Enabling people to learn throughout life, to prepare themselves for all of its stages and to cope with chronic illness and injuries is essential.”<sup>556</sup> The linkage between health promotion, the facilitation of health life choices, and chronic illness in particular is especially noteworthy, reinforcing the claim that the management of chronic disease risk is constructed to a great extent around the notion of individual empowerment. This notion is also developed in the follow-up course, “Principles and Practice of Health Promotion,” which is geared toward training students in the particular methods of health promotion; in addition to general coverage of public education and peer education, students are trained to address health promotion in the context of individual counseling, through a focus on motivational interviewing and cognitive behavioral therapy.<sup>557</sup>

That the London School’s foundation course in health promotion relies upon an approach that so explicitly focuses on the role of the individual as a primary site of health and risk management, and constructs the ability to undertake such management in terms consonant with the empowerment discourse of human capital (self-awareness

---

<sup>556</sup> World Health Organization, Ottawa Charter for Health Promotion, 3.

<sup>557</sup> London School of Hygiene and Tropical Medicine, Description of Teaching Units - Term 2, 148.

and education, development of “life skills,” etc.) reinforces the claim that the ways in which students of public health are brought to understand their discipline, and particular aspects of it, are often infused with a neoliberal rationality – one that, as we will see in subsequent chapters, logically extends to how public health is ultimately practiced.

The elements of neoliberal rationality that manifest in the structure and general offerings of the MSc in Public Health program, as well as in specific courses relevant to the analysis and control chronic disease are also manifest in research programs pursued at the school. Each year, the London School publishes an annual report highlighting newly funded programs, as well as research progress accomplished in existing programs for the full spectrum of public health fields offered by the school. In the context of public health research pertaining to chronic disease, the reports over the last several years have highlighted a number of projects that demonstrate an emphasis on behavioral risk factors – especially those pertaining to nutrition and diet. For example, the 2002-2003 report noted a recently undertaken project on lifecourse epidemiology, executed in concert with researchers at the University of Bristol and the Institute of Child Health, that looks at the links between diet and body composition in childhood with later onset of cardiovascular disease, high blood pressure, diabetes, and cancer.<sup>558</sup> The same report, as well as the previous 2001-2002 report, also highlights ongoing research that looks at the role of a specific dietary practice – vegetarianism - in the context of breast cancer risk; complementing this behavioral element in the reported cancer research was also a biomedical impulse

---

<sup>558</sup> London School of Hygiene and Tropical Medicine, [Annual Report--2002-2003](#), 8.

that analyzed breast cancer risk in the context of endocrine function, and “whether polymorphisms within candidate genes may underlie these associations.”<sup>559</sup>

The 2002-2003 report also examines how nutritionists affiliated with the London School also set up a new task force on obesity, one of the first projects of which was to evaluate the effects of polyunsaturated fat consumption on chronic disease outcomes among older people in the United Kingdom. Indeed, Ricardo Uauy, head of the Public Health Nutrition Unit which executed this new program, chaired the Joint WHO/FAO (Food and Agriculture Organization of the United Nations) Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases, which frames as a main mechanism in the prevention of chronic disease lifestyle change to emphasize carbohydrates (55-75% of daily intake), and the restriction of saturated fats to less than 10%.<sup>560</sup> Such information is not simply offered as an interesting sidebar, but rather as one more element that highlights how research in the prevention of chronic illness often privileges behavioral risk factors, and that such research bridges the academic study and analysis of public health (such as is executed at the London School) and the policy and practical arenas such as exist at the World Health Organization.

These themes have been echoed in other recent annual reports by the London School; the 2000-2001 report highlighted a study on the epidemiology of aging that involved 33,000 participants aged 75 and older and that found “protective effect of higher vitamin C and beta-carotene levels on mortality from cardiovascular disease

---

<sup>559</sup> London School of Hygiene and Tropical Medicine, Annual Report--2002-2003, 8.

<sup>560</sup> London School of Hygiene and Tropical Medicine, Annual Report--2001-2002 (London: London School of Hygiene and Tropical Medicine, 2002), 7. As noted, the cancer research across all of these projects was highlighted in both the 2002 and 2003 reports.

and, for women, from higher intakes of fruits and vegetables.”<sup>561</sup> The same report also noted that “concern about lifestyles is represented by research on physical exercise and activity” in the context of health promotion, and cited projects examining retention rates of users at fitness centers, as well as “a systematic review of effective interventions to reduce coronary risk through changes in diet and increases in physical activity.”<sup>562</sup>

This brief sketch of research on chronic disease and its risk factors over the past few years is not an exhaustive treatment of the breadth of the research programs pursued at the London School; indeed, as stressed, chronic disease, when compared to, for example, its communicable counterpart, is not the dominant area of public health inquiry at the school. Nor is it intended as a stand-alone illustration of the project’s general argument. However, the fact that the chronic disease research that *is* discussed in the London School’s annual reports highlights work emphasizing behavioral, and to a lesser extent, biomedical and genetic risks, provides at least an indication of how knowledge of these diseases is produced – and what is considered important in the production of that knowledge. And when considered in context with several other dimensions of public health education at the London School – courses on chronic disease epidemiology, nutrition, and health promotion that emphasize behavioralism and individual bodies, as well as an MSc. generalist degree in public health that privileges mainly methodological and economic knowledge, we *do* achieve a more comprehensive and systematic illustration of the argument that

---

<sup>561</sup> London School of Hygiene and Tropical Medicine, Annual Report--2000-2001 (London: London School of Hygiene and Tropical Medicine, 2001), 8-9.

<sup>562</sup> London School of Hygiene and Tropical Medicine, Annual Report--2000-2001, 24.

neoliberal rationality is manifest in the way public health analyzes and understands the risks associated with NCDs.

#### Sweden

Public health education in Sweden is institutionalized in several different ways. Unique among the case countries in housing an international school of health education, Sweden is home to the Nordic School of Public Health (NHV), a joint venture of the five Scandinavian countries (Sweden, Finland, Denmark, Iceland, and Norway) through the Nordic Council of Ministers that aims to “on a Nordic base offer knowledge and lead the discussion about models for prevention of illness, injuries and health promotion.”<sup>563</sup> In the context of such a jointly configured institution, Sweden still retains a dominant presence; since the school’s inception in 1953, all programs have been executed either on the original campus in Göteborg, or in new facilities acquired in 1987 at Nya Varvet– and coursework is primarily taught in Swedish.<sup>564</sup> Public health education is also executed under the auspices of two other institutions – the University of Göteborg (a general university offering concentrations in medicine and public health), as well as the Karolinska Institutet, Sweden’s expressly “medical university.”

While the desire to focus on a school devoted exclusively to public health – as in the case of the Nordic School – was a driving concern for this case, research was highly constrained by the limited availability of curricular materials and program

---

<sup>563</sup> Nordic School of Public Health, Description of Aim from the Nordic Council of Ministers, June 3, 2004, Available: [http://www.nhv.se/index\\_e.html](http://www.nhv.se/index_e.html), January 20 2005.

<sup>564</sup> Nordic School of Public Health, NHV from a Historical Perspective, June 3, 2004, Available: [http://www.nhv.se/index\\_e.html](http://www.nhv.se/index_e.html), January 20 2005.

content in English, and the paucity of detailed statements on research focus and key projects. As such, Swedish public health education is evaluated here through the lens of the Karolinska Institutet (KI), with additional reference to information from the Nordic School where available.

Even though it is not exclusively a school of public health, the KI is the epicenter of academic health and medical training for Sweden. As noted earlier, it accounts for the training of 30% of all Swedish clinicians and health workers, and producing 40% of all health research performed across Swedish universities – with both proportions being the highest of any university.<sup>565</sup> It is also a well-established school – founded in 1810, it was granted university status in 1861 later become the institution responsible for recommending the annual recipient of the Nobel Prize in Physiology or Medicine; five of its own researchers have been awarded the Nobel, as well.<sup>566</sup>

The KI Programme in Public Health Sciences is a small one – not surprising that it is a single department of public health embedded in a primarily clinical university. Annually, the entire school averages nearly 2000 enrolled students, with only a small cohort working in public health; for example, in 2002, the university awarded 24 masters degrees in public health science, consonant with many other departments, but much fewer than the largest fields of nursing (277) and medicine (223).<sup>567</sup> The department offers MSc and Ph.D. degrees in public health; the masters degree requires four terms of full time study (approximately two years), and as with

---

<sup>565</sup> Karolinska Institutet, [A Medical University](#).

<sup>566</sup> Karolinska Institutet, [It Started with Army Surgeons](#), July 20, 2004, Available: [http://info.ki.se/ki/history\\_en.html](http://info.ki.se/ki/history_en.html), January 20 2005.

<sup>567</sup> Karolinska Institutet, [Annual Report 2002](#) (Stockholm: Karolinska Institutet, 2002) 14.

the other institutions, is oriented toward general preparation in the fields of biostatistics, epidemiology, health and safety promotion, health administration, and health economics.<sup>568</sup> These comprise half of the total 120 credits, and are taken in the first and second terms; in the last two, students take their remaining courses in a concentration of their choice – options are available in biostatistics and epidemiology, health promotion, health care management and health economics, international health, safety promotion, and stress management.<sup>569</sup>

Unlike most other institutions evaluated here, the Karolinska Institutet does not offer single courses in chronic disease epidemiology or prevention. Material pertaining to NCDs is covered in the context of the concentration on health promotion, as well as additional course offerings in the field of public health nutrition. The core course on health promotion which all students take in the second term, “Disease Prevention and Health Promotion,” is particularly instructive in illustrating how approaches to the prevention of and intervention in the disease process (chronic or otherwise) is approached in a public health context at this institution. The course is divided into sequential parts, with the first providing a general overview of the history of health promotion, key concepts, and priorities. The remaining sections are what concern us especially, with the first covering the scope of “preventive activities with a focus on the individual.”<sup>570</sup> The curriculum guide describes this section in terms of its goal and scope of content:

---

<sup>568</sup> Karolinska Institutet, Study Programme in Public Health Sciences, July 20, 2004, Available: [http://info.ki.se/education/ects/Public\\_Health\\_Science/pubsci\\_intro\\_en.html](http://info.ki.se/education/ects/Public_Health_Science/pubsci_intro_en.html), January 20 2005.

<sup>569</sup> Karolinska Institutet, Study Programme in Public Health Sciences.

<sup>570</sup> Karolinska Institutet, Curriculum - Public Health Sciences, December 29, 2004, Available: [http://info.ki.se/education/ects/Public\\_Health\\_Science/pubsci\\_curr\\_en.html#disease](http://info.ki.se/education/ects/Public_Health_Science/pubsci_curr_en.html#disease), January 21 2005.

Intermediate goal: Knowledge of principles of preventive activities with an individual focus, knowledge about level of evidence based activities implemented.

Content: Early discovery and activities aimed towards high risk groups; to identify individuals at risk, screening and case finding; evaluate effects of screening; principles of medical measures (apart from counseling); vaccination; application on health problems, risk factors and target groups.<sup>571</sup>

The third section then shifts the educational focus away from the analysis of at-risk individuals and the scope of activities available to work with them, to an understanding of how the “changing of health-related behaviours through activities with an individual focus” is accomplished:

Intermediate goal: Knowledge of the most important behavioural scientific theories within the field of public health. To acquire practical abilities into designing elementary programme based on behavioural changes. Application of health problems, risk factors and target groups.

Content: The most frequently adopted theories and models which are used for individual contacts, both on group levels and on the community level: social learning theory, self-efficacy (Bandura), health belief model, and social diffusion. Social marketing, customer-client, SPIN-selling.<sup>572</sup>

That the understanding of disease prevention and intervention that all public health students are expected to master is predicated upon risk analysis and intervention at the individual level, and is primarily oriented intervention predicated upon the “knowledge of the most important *behavioural* scientific theories within the field of public health” [emphasis added], illustrates how disease prevention education in the context of this institution is infused with neoliberal rationality. It suggests how – at least in the core course on disease prevention – the population focus of public health

---

<sup>571</sup> Karolinska Institutet, Curriculum - Public Health Sciences.

<sup>572</sup> Karolinska Institutet, Curriculum - Public Health Sciences.

has given way, yet again, toward the privileging of individual bodies and the analytical precepts of behavioralism.

Of course, this is only one course, yet when considered in concert with other offerings in the arena of health promotion and disease prevention, appears to reflect a consistent theme. One such course is “Stress Prevention,” which looks at the implications of stress in the onset of a number of chronic diseases, including: myocardial infarction, a type of heart disease; mental illness and “burnout”; chronic fatigue syndrome; and recurring gastrointestinal disorders.<sup>573</sup> The course is oriented in the first instance toward “individual diagnoses and disease processes related to stress,” including those mentioned above; in this context, the majority of educational content is geared toward stress prevention. Because of the content emphasis on “possibilities for primary prevention and evaluation of effects of stress prevention programs,” key concepts are centered on stressors affecting individuals, and the mediating factors or coping skills which enable one to respond constructive to stress. Thus, the course covers “a number of concepts that are used in work environment examinations such as working hours, shift work schedule, psychological demands, decision latitude, support, effort, reward, hinder, [and] intellectual discretion.”<sup>574</sup> The curriculum guide also adds that “life events and traumatic experiences as well as posttraumatic stress disorders are discussed.”<sup>575</sup>

This emphasis on primary prevention and risk factors or stressors that work through the individual is echoed again in other courses that relate to chronic disease. Courses offered in the field of public health nutrition, for example, display these

---

<sup>573</sup> Karolinska Institutet, Curriculum - Public Health Sciences.

<sup>574</sup> Karolinska Institutet, Curriculum - Public Health Sciences.

<sup>575</sup> Karolinska Institutet, Curriculum - Public Health Sciences.

tendencies. In the curriculum guide to these courses, the KI makes very clear the analytical orientation toward public health nutrition, especially as it pertains to NCDs:

For the majority of European adults, who neither smoke nor drink excessively, the most significant controllable risk factors affecting their long term health are what they eat and how physically active they are.

There is a need for further research on interactions and potential synergy between *diet and physical activity as effective means for the promotion of a healthier lifestyle and the prevention of hypertension, obesity, cardiovascular disease and cancer*. [emphasis added]<sup>576</sup>

The coursework, not surprisingly, tends to reflect this orientation towards an analytics of individual-level factors and lifestyle interventions. In “Assessment of Nutrition and Physical Activity,” for example, an introductory course in this area, students are provided an overview of “both field and research methods of dietary assessment, physical activity assessment and anthropometry, [and] practical assessment of food and nutrient intake, physical activity and body composition.”<sup>577</sup> To that end, they are trained in particular methods of anthropometric assessment, such as skin-fold assessment at multiple body sites; they are also trained how to take the dietary histories of individuals and to demonstrate to these people the use and benefits of food diaries. Finally, students are taught to assess levels of aerobic fitness, and in that context be able to demonstrate the use of 24-hour activity diaries and heart rate monitoring, among other skills.<sup>578</sup> These skills are appropriate and geared toward individual body analysis and counseling in the areas of diet and activity – consonant

---

<sup>576</sup> Karolinska Institutet, Single Subject Courses in Public Health Nutrition, July 20, 2004, Available: [http://info.ki.se/education/ects/Public\\_Health\\_Nutrition/pubnut\\_intro\\_en.html](http://info.ki.se/education/ects/Public_Health_Nutrition/pubnut_intro_en.html), January 21 2005.

<sup>577</sup> Karolinska Institutet, Curriculum - Public Health Nutrition, July 20, 2004, Available: [http://info.ki.se/education/ects/Public\\_Health\\_Nutrition/pubnut\\_curr\\_en.html](http://info.ki.se/education/ects/Public_Health_Nutrition/pubnut_curr_en.html), January 21 2005.

<sup>578</sup> Karolinska Institutet, Curriculum - Public Health Nutrition.

more with clinical interactions between health workers and patients, rather than public health assessment of diet and activity patterns in populations.

Such emphases are evident also in more specialized courses, such as “Physical Activity in Public Health,” which covers the fundamentals of exercise physiology, means of assessing physical activity and fitness, general recommendations of physical activity (duration, frequency, intensity) for various age groups and health levels, and “current knowledge and statements about health enhancing effects of physical activity.”<sup>579</sup> Upon completion of the course, students are expected to not only be able to assess the physical fitness of those at-risk, but also to communicate to them the recommended levels of activity and “the importance of physical activity in relation to nutrition.”<sup>580</sup>

That a public health course on physical activity focuses so much on knowledge not only of physiology, but most especially of communicating lifestyle recommendations pertaining to the benefits and appropriate levels of exercise, again indicates that public health training in this context reflects an approach consistent with individual lifestyle counseling. This is not to say that there is no value in training health workers in such a way as to facilitate one-on-one work; however, this is not consistent with the claimed fundamental commitment of public health to the analysis and prevention of disease in populations, nor its historical commitment to assessing the role of socioeconomic and other structural factors in the onset of disease.

---

<sup>579</sup> Karolinska Institutet, Curriculum - Public Health Nutrition.

<sup>580</sup> Karolinska Institutet, Curriculum - Public Health Nutrition.

Despite this clear orientation of public health education at the Karolinska Institutet toward content that reflects a neoliberal rationality, one may suggest that such a phenomenon may be more indicative of its position in a clinical university oriented toward biomedicine than anything else. In the end, that may be; however, if we augment an examination of the curricular offerings at the KI with some of those at the aforementioned Nordic School of Public Health, one devoted *entirely* to the discipline of public health, we are able to bolster the claim that the Swedish case still is a good illustrative example of the general argument.

If it had been possible to proceed with a comprehensive curricular analysis of the Nordic School, that would have been ideal and more consistent with the institutions of the other cases, where medicine and public health are taught in different schools, even when at the same overarching institution. However, the only curricular materials available in English are for those specific courses taught in the language. Still, these are illustrative in such a way as to suggest that the privileging of individualism and behavioralism evident in public health education at the KI is echoed in at least some of the curriculum at the Nordic School.

Even in the general courses, this impulse is evident. For example, in the course, “Managing and Evaluating Change,” students build upon previous coursework in public health program evaluation, and “use methods to plan and carry out public health projects and changes to organisation.”<sup>581</sup> Coursework is oriented around the guiding theme – which is most illustrative of the general argument – that

---

<sup>581</sup> Nordic School of Public Health, Course Catalogue--2004-2005 (Nordic School of Public Health, 2004), 19.

“all improvements to health and health care are made by changing behaviour.”<sup>582</sup>

And while it is acknowledged in the course description that changes in organization and policy are sometimes necessary to effect behavioral change, the Nordic School’s assessment is nonetheless instructive for demonstrating a key principle espoused in the analysis and practice of public health.

Other courses in the fields of epidemiology and health promotion also reflect this commitment to individuals and the problematics of lifestyle choice. The only epidemiology course offered in English, “Lifestyle Epidemiology,” is an advanced methods course “for examining lifestyle-related factors and their impact on health”; five risk factors are selected for study, including the “usual suspects” of diet, physical activity, and smoking, as well as alcohol consumption and psychosocial factors.<sup>583</sup> These risk factors are evaluated with reference to primarily noncommunicable diseases, including CHD and breast cancer, as well as general conditions themselves associated with disease onset (e.g. obesity). Beyond the evaluative links explored between lifestyle choices and these conditions, part of the course is oriented toward assessing “how certain hereditary risk factors for disease may be modifiable by lifestyle.”<sup>584</sup> That an entire course on epidemiology is devoted to the implications of lifestyle choice for disease onset illustrates yet again the general claim that the behavioralist impulse in contemporary public health is a prominent one, especially in the context of chronic disease.

---

<sup>582</sup> Nordic School of Public Health, Course Catalogue--2004-2005, 19.

<sup>583</sup> Nordic School of Public Health, Course Catalogue--2004-2005, 26.

<sup>584</sup> Nordic School of Public Health, Course Catalogue--2004-2005, 26.

This emphasis on lifestyle risks and the situation of responsibility in the individual body is echoed in the course, “Empowerment,” which is taught in the context of a more general program of health promotion. As the Nordic School notes:

Empowerment is a central concept in contemporary public health and health promotion action. The concept deals with *transduction of power, insight and action competence to the actors in order to enhance the ability for self generated activity for change.* [emphasis added]<sup>585</sup>

Recognizing “the abundance of new scientific literature connected to the empowerment concept,” the course is designed to develop students’ abilities to develop and implement public health projects that incorporate it.<sup>586</sup> Given that empowerment theory is necessarily implicated in the exercise of government at a distance (i.e. self-management of health), and that the school acknowledges the privileged place of it in public health and as such has developed curricular offerings to address it, we are drawn to consider that public health education – even in the Swedish context, even at a school devoted entirely to public health – demonstrates a key element of neoliberal rationality.

From these curricular examples at the Nordic School, it is evident that the Karolinska Institutet’s approach to public health education cannot simply be explained away as a consequence of its embeddedness at a university oriented toward biomedicine. The same features of individualism and behavioral risk and responsibility are evident in both institutions’ curricular offerings. That such tendencies exist in the public health curriculum of the KI (as well as the Nordic School) is especially telling. As a case, Sweden was selected precisely for its

---

<sup>585</sup> Nordic School of Public Health, Course Catalogue--2004-2005, 22.

<sup>586</sup> Nordic School of Public Health, Course Catalogue--2004-2005, 23.

representation of a “Nordic” tradition historically characterized as much different from Anglo countries in its approach to social welfare – including health. When juxtaposed with the curricular content and expectations of public health education, the longstanding commitment of Sweden to a broad-based approach to social welfare and structural conditions affecting population well-being has not noticeably conditioned how the that education is approached, at least in the contemporary context. Thus, Sweden is especially relevant for demonstrating how public health rationality exhibits remarkable similarity across countries with distinct institutional, ideological, and cultural contexts.

As with the other institutions demonstrating elements of such rationality in their curricular offerings, there is also a similar emphasis in self-identified research strengths and on-going projects at the KI that deal with chronic disease.<sup>587</sup> One of the larger and more longstanding projects in epidemiology at the Karolinska Institutet is that of “Women’s Lifestyle and Health,” which is devoted to “finding risk factors for various diseases, like cancer, diabetes, and circulatory and psychiatric diseases” in adult women.<sup>588</sup> The project started over ten years ago, and more than 50,000 women have participated in the original survey, with a follow-up started in 2003. Questions centered on specific lifestyle habits, including “physical activity at home and at work, dietary habits, number of children, use of oral contraceptives, alcohol intake,

---

<sup>587</sup> As with the curricular offerings, an attempt was made to evaluate research programs at the NHV to augment the discussion of the Swedish case; however, published information in this area was even more limited than curriculum descriptions. Noting that the research concentrations of the school were in health promotion (especially pertaining to children) and health care management, the *NHV Report Series*, which provides specific descriptions of projects and programs, did not include either full-text or abstracts of its included publications. See Nordic School of Public Health, Research Policy, December 22, 2004, Available: [http://www.nhv.se/index\\_e.html](http://www.nhv.se/index_e.html), January 20 2005.

<sup>588</sup> Karolinska Institutet, Women’s Lifestyle and Health, July 20, 2004, Available: [http://www.meb.ki.se/surveys/klh/index\\_en.html](http://www.meb.ki.se/surveys/klh/index_en.html), January 21 2005.

smoking, height and weight, sleeping habits, social network and family relations, and UV-light exposure.”<sup>589</sup>

The lifestyle emphasis in this epidemiology project is echoed in additional research executed under the auspices of the Public Health Sciences department. Its research group on health promotion has been especially involved in the area of two chronic diseases – diabetes and cancer – with members involved in community programs such as the Stockholm Diabetes Prevention Programme (since the 1990s) and the Stockholm Cancer Prevention Programme (since the 1980s).<sup>590</sup> The work on diabetes has culminated in the establishment of a prevention program reaching 100,000 people in three municipalities; but the research group notes that prior to the establishment of this prevention program, “a baseline etiological study of oral glucose tolerance, anthropometric measures and lifestyle habits was performed in nearly 8,000 subjects.”<sup>591</sup> The fact that the aetiological analysis that predicated the public health prevention program was directed toward glucose tolerance, body measurement, and lifestyle reflects both the biomedical impulse of the public health research, as well as its concomitant neoliberal rationality. This rationality extends, not surprisingly, to the prevention work accomplished in the public health context. As the research group notes:

Several activities with the intention to prevent diabetes have been realized by the project leaders and their collaborators. Those activities are followed and evaluated by researchers at the diabetes prevention

---

<sup>589</sup> Karolinska Institutet, Women's Lifestyle and Health.

<sup>590</sup> Karolinska Institutet - Department of Public Health Sciences, Evaluation Reports from the Research Groups of the Department, December 7, 2001, Available: <http://www.phs.ki.se/evaluationphs/hpeval.htm>, January 21 2005.

<sup>591</sup> Karolinska Institutet - Department of Public Health Sciences, Evaluation Reports from the Research Groups of the Department.

unit. The intervention focuses on the risk factors low physical activity, poor dietary habits, obesity and tobacco use.<sup>592</sup>

In addition to the work on diabetes, the health promotion group in the Public Health Sciences department has also been involved with public health work in the area of cancer prevention. Members of the health promotion group have implemented and published on a “major component” of the Stockholm Cancer Prevention Programme – the “Quit and Win” contest model which is designed to curb tobacco use. Developed in the 1990s, the Quit and Win contest “is a cost-effective evidence based smoking cessation method for population-wide public health use that also supports more broadly national tobacco control work.”<sup>593</sup> For smokers over the age of 18 and who have been daily smokers for at least a year, “Quit&Win is a rapidly growing smoking cessation contest that contains a positive message for smokers.”<sup>594</sup> Contests last four weeks, and participants who succeed in giving up tobacco entirely during that time are eligible to win prizes.

Though the health promotion group was not responsible for the development of this contest model, the fact that they have focused on it as a key intervention in the Stockholm Cancer Prevention Programme suggests that this behavioral approach to tobacco risk is an important element of the group’s public health work on cancer.

### Conclusion

---

<sup>592</sup> Karolinska Institutet - Department of Public Health Sciences, Evaluation Reports from the Research Groups of the Department.

<sup>593</sup> QuitandWin.org, Quit&Win - Targets to Reach a Million Smokers to Stop Smoking, December 16, 2003, Available. <http://www.quitandwin.org/fi/content/press/backgrounder>, January 21 2005.

<sup>594</sup> QuitandWin.org, Quit&Win - Targets to Reach a Million Smokers to Stop Smoking.

Traced throughout this account of the multiple dimensions of *episteme* in the context of public health, we have seen several themes emerging. First, in the scope of publishing in the health disciplines – especially general public health and epidemiology, a risk mentality continues to be a prominent feature. Skolbekken identified the acceleration of this trend especially in the 1970s and 1980s, and if it has not overwhelmed the health disciplines, an extension of his analysis demonstrates the prevalence of risk-articles does not appear to have diminished in the contemporary environment. When one looks more closely at this phenomenon in the context of public health literature pertaining to NCDs – as exemplified in the *Annual Review of Public Health* – the risk mentality is not only strong, but is consistently framed in behavioral terms.

It is also reinforced in an educational context by the academic training and research practices employed by graduate institutions of public health. There are notable distinctions to be sure; the London's School's orientation toward infectious diseases, for example, was marked in comparison with other institutions, and suggests a unique position among all institutions evaluated. Its legacy of expertise in tropical medicine cultivated in the context of an empire that routinely confronted malaria, cholera, and other infectious diseases continues to inform education and practice to this day. Additionally, the institutions from the three case countries reflect very different institutional contexts – from the highly decentralized nature of American public health education, to the single national school in Britain, to a small department in a predominantly clinical university in Sweden.

Yet, despite these differences, and despite historically distinct ideological and cultural contexts across the three cases, public health education demonstrates remarkable similarities – which makes such similarities all the more striking. Curricula pertaining to the analysis and prevention of chronic diseases – whether in the context of epidemiology, nutrition, or other assessed fields – repeatedly demonstrate a privileging of lifestyle and other risks grounded in the individual body (such as genetic predisposition), from an analytics of disease aetiology, to the major mechanisms of intervention and prevention. Research promoted by these institutions also reflects this impulse – from such projects as the *Your Disease Risk* project at Harvard to the London’s School’s new research task force on obesity prevention, to the Karolinska Institutet’s application of the “Quit and Win” model to cancer prevention in Stockholm.

Life, and the choices that one makes in its exercise, is a domain of risk; from the foods one eats, to the amount of activity they engage in, to whether and how much they smoke, and so much of the other minutiae of daily life – does one have a drink, visit a tanning salon, get an annual check-up? This responsabilization of the individual is the means by which public health knowledge around chronic disease is made intelligible as a cohesive body of more-or-less accepted precepts around which interventions can be planned and health secured.

But this responsabilization that underlies so much of public health knowledge is not a value-free phenomenon; it is laden with political rationality that guides how “scientific” knowledge in public health is produced, and ultimately how technologies of intervention are deployed. Two points on this assertion are relevant. First, this

knowledge, constructed as it is around the key concept of risk, is implicated in the government of health. That risk as an analytical and programmatic element is further elucidated in largely behavioral terms with reference to chronic disease suggests how it is implicated in a specific kind of government: government at a distance. Dean thus concludes how “this proliferation of risk rationalities and reliance on the prudential individual means that authorities of all sorts – including national governments – have found a way of governing without governing society.”<sup>595</sup>

A second point, and indeed, a corollary to the first is that insofar as public health knowledge – whether one considers an epidemiological perspective that identifies NCD risks in diet or activity habits, or an approach to health promotion predicated upon the Health Belief Model or other behavioral theories – informs how interventions are devised and deployed, then we become keenly aware of the interactive nature of the various dimensions of governmentality. What is known, what is considered worth knowing, how “truth” or “fact” is produced – all of these necessarily guide which techniques or interventions in the management of risk and the promotion of health are considered appropriate. And to the extent that techniques are directed toward the changing of behavior, the mechanisms of that change must either be externally compelled or internally motivated. In the context of neoliberal governmentality, to foreshadow a key element of Chapter 8, the emphasis is on producing such internally motivated, empowered selves to achieve the securitization and government of health. Nettleton thus illustrates this interweaving of the three axes of governmentality in a health context:

---

<sup>595</sup> Dean, Governmentality: Power and Rule in Modern Society 192.

Government in this context is a dynamic process whereby the production and dissemination of information opens up new forms of knowledge and new styles of action. Given that the current style of government is such that the autonomous, enterprising self is presumed and incited, the proliferation of activities to support such individuals is not surprising. Self-governance implies an ongoing project in whereby we are continuously assessing information and expertise in relation to ourselves.<sup>596</sup>

Dean echoes this perspective in a context more specific to the activities of public health:

The responsible subject seeks to optimize his or her independence from others and from the state, e.g. by employing epidemiological data of health risks, and undertaking diet, lifestyle and exercise regimes recommended by private health and fitness professionals or publicly funded health promotion. The types of attitudes and behaviours these various authorities urge us to adopt means that risk management becomes what Foucault called the 'practices of the self'.<sup>597</sup>

In the larger sense, these practices of self not only are made possible by existing epistemic norms and "truths" and the public health practices that institute them, but they also are implicated in the reification of such knowledge; to the extent that one is educated as to her role as a site of risk and risk management and adjusts lifestyle accordingly, the further that the political rationality underlying the axes of government that make such a reorientation of selfhood possible is validated as "natural" or "appropriate." If there is to be a space for contestation, for positing that public health is not value-free but exhibits political rationality, and that its current neoliberal incarnation is not a necessary product of disciplinary evolution, but rather a single point along a spectrum of alterity, then an interrogation of its intellectual foundations and means of knowing is vital. It is also vital to interrogate the structures

---

<sup>596</sup> Sarah Nettleton, "Governing the Risky Self: How to Become Healthy, Wealthy and Wise," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998) 218.

<sup>597</sup> Dean, *Governmentality: Power and Rule in Modern Society* 191.

and institutions that govern its deployment, and how the specific programs (or microtechnologies) that are executed under its auspices are implicated in the production of particular kinds of subjects. It is to these elements that the analysis now turns.

## Chapter 7: Technologies of Public Health Practice

And there's no market forces involved with health care.  
- President George W. Bush

The scope of the public sector in health care has historically reflected a marked difference between Britain and Sweden on the one hand, and the United States on the other. An OECD measure that tracks the proportion of total health expenditures managed or directed through public agencies reveals that the two EU countries have tended to average well above 80%, while the U.S. figure is only 43%.<sup>598</sup> This is reinforced by a social policy orientation that in Sweden and the United Kingdom has tended to view health care as a right for all, as a social good whose cost is to be absorbed across all taxpayers. Toward this end, most health providers have been either publicly financed or non-profit, and are “expected to be motivated primarily by mission, e.g. the welfare of the community.”<sup>599</sup> With such characteristics, the Swedish model especially has tended to be viewed in sharp contrast with a much more privatized and streamlined American system. As Saltman notes:

Almost oppositely, health care in the United States has become, in the past 10 years, predominantly a market commodity. On the production side, providers increasingly conduct themselves as a bottom-line business, in which profit – not mission – is the main motivating incentive. Consistent with this understanding of health care, access to services in hospital and physicians’ offices has become defined by

---

<sup>598</sup> R.B. Saltman, "The Context for Health Reform in the United Kingdom, Sweden, Germany, and the United States," *Health Policy* 41.Supplement (1997): S11.

<sup>599</sup> Saltman, "The Context for Health Reform in the United Kingdom, Sweden, Germany, and the United States," S13.

ability to pay, either via adequate indemnity or capitated insurance or out-of-pocket.<sup>600</sup>

Given this view of two cases on the opposite ends of the health care system, “the U.K. system falls somewhere in between.”<sup>601</sup> Historically, the United Kingdom evolved as a single payer system, guaranteeing coverage and access to care for all, and is supported across the tax base – as in Sweden. Consistent efforts at reform over the past fifteen years have introduced more market elements and have begun to move it closer to the U.S. model, as Saltman argues. What he fails to account for, however, is that health reform efforts over the same period in Sweden have also moved it, as well, closer to the U.S. model. In the past, policy shifts in the European cases have been largely explored from the context of the role of political parties, interest groups, and even performative ruptures in existing policy frameworks – a perspective often associated with the work of Heclo.<sup>602</sup> What emerges from this chapter is not so much a problematization of these kinds of explanations – the role of parties or institutions in explaining *why* policy changes happen – as it is a demonstration of *how* a particular

---

<sup>600</sup> Saltman, "The Context for Health Reform in the United Kingdom, Sweden, Germany, and the United States," S13. Saltman's assertion about access contingent upon ability to pay is borne out by increasing instances of "patient dumping," or the transfer of uninsured emergency room patients to a public clinic before treatment – even in the face of legislation prohibiting this practice. For a detailed discussion of patient-dumping, see A. Kellerman and B.B. Hackman, "Emergency Department 'Patient Dumping': An Analysis of Inter-Hospital Transfers to the Regional Medical Center at Memphis, Tennessee," American Journal of Public Health 78 (1988).

<sup>601</sup> Saltman, "The Context for Health Reform in the United Kingdom, Sweden, Germany, and the United States," S14.

<sup>602</sup> Hugh Heclo, Modern Social Politics in Britain and Sweden: From Relief to Income Maintenance, Yale Studies in Political Science (New Haven, CT: Yale University Press, 1974). An examination of these and other issues is also addressed by Arnold Heidenheimer, Hugh Heclo and Carolyn Teich Adams, Comparative Public Policy: The Politics of Social Choice in Europe and America, 3rd ed. (New York: Bedford/St. Martins, 1990).; their comparative approach engages and explores policy differences in both a European and American context, with particular attention to the dynamics conditioning health policy. For an additional general treatment of comparative social welfare policy that also addresses underlying theoretical explanations, see Harold L. Wilensky, Comparative Social Policy: Theories, Methods, Findings, Research Series, University of California, Berkeley International and Area Studies (Berkeley: University of California, 1985).

shift has been occurring that problematizes the overall spectrum characterization of these three particular cases.

In evolving this argument, I do not argue that we are witnessing an ultimate end-point convergence in health care systems; each retains unique characteristics, each has manipulated different technologies of public health governance, and neither Sweden nor Great Britain have eschewed long-standing principles of universal coverage and the guaranteed right to health care. However, as this chapter demonstrates, there has been a sustained movement on the part of both Sweden and the United Kingdom to adopt market mechanisms associated with U.S. health care, and to apply those to the provision and practice of public health. Such a movement problematizes the utility of this “spectrum” model of cross-national comparison that posits the United States and Sweden in diametric opposition, with Britain lingering somewhere in between.

In all three countries, changes in the organization and administration of public health (and in the healthcare system overall) have been part of larger reform initiatives designed to introduce efficiency, streamline bureaucracy, and promote responsiveness to the needs of the consumer, or tax-payer. Specific macrotechnologies, such as organizational reform and competition or privatization measures, have been deployed to varying degrees in different ways across the three cases; this is not surprising given that differing institutional configurations and lingering historical and cultural norms mediate the exercise of these practices. Yet it is the fact that technologies demonstrating a distinctly neoliberal rationality are employed across such historically different cases that is telling. The same is true for

microtechnologies. In the U.S. for example, social marketing – or the application of commercial marketing techniques to health and welfare issues – is rapidly becoming a key element of public health campaigns. Though this technique has not displaced traditional health education or promotion models in Britain and Sweden, the promotion campaigns there have emphasized both a focus on individual, behavioral risk factors, and concomitantly, an emphasis on human capital promotion to encourage individuals to better manage and enhance their lives. It is, again, the pervasiveness of market logic in these technologies that creates a link across the three cases, as opposed to whether or not the case countries implement the exact same technologies in the same fashion.

The central argument of this chapter – that the macro- and microtechnologies of health government in the case countries demonstrate key elements of neoliberal rationality – should not be construed as an argument that the cases in the final analysis are equally neoliberal. Sweden’s public health commitment to addressing structural determinants of disease, for example, is not equaled in the public health approaches of either the other two case countries; nor in its provision of health coverage and service delivery, is it as “hypermarketized” as the United States or even Britain. Rather, the argument indicates that given the trajectory of policy reform initiatives and public health practices, the historically strange bedfellows of the industrialized world – the United States, United Kingdom., and Sweden – are really not strange anymore, after all. This argument is developed and substantiated through a four-part analysis of each case: contextual discussion of macropolicy reforms, a general discussion of microtechnologies in the overall health system, the application

of these technologies to the public health arena, and a brief discussion of microtechnologies that demonstrate neoliberal rationality. The justification for lending greater emphasis to macrotechnologies here is that the following chapter focuses in detail on one kind of microtechnology – health promotion campaigns – to ascertain their implications for promoting neoliberal subjectivity. Therefore, the depth afforded by Chapter 8 complements a more substantive analysis of macrotechnologies here.

### *The United States*

Government should be market-based—we should not be afraid of competition, innovation, and choice. I will open government to the discipline of competition.

- Governor George W. Bush

#### Reinventing the Federal Government: Or, Why Can't the State Be More Like the Market?

As we will see throughout all three cases, recent trends in the structure and practice of health care generally, and public health specifically, emerge out of a more general spirit of reform that coalesced in the case countries at roughly the same time: the early to mid-1990s. In the case of the United States, several reform initiatives embarked upon in 1993 provided the backdrop that has led the public health sector in subsequent years to increasingly adopt business models as a core element of their operating strategy, and to incorporate private sector norms of efficiency, customer focus, performance measures, and accountability into their activities.

In the summer of 1993, Congress passed the Government Performance and Results Act (GPRA), a law designed to reduce waste and inefficiency in the federal

government, and to hold agencies accountable for their performance. At the heart of the law was the desire “to improve the confidence of the American people in the capability of the Federal Government... by promoting a new focus on results, service quality, and customer satisfaction.”<sup>603</sup> These aims would be achieved by the implementation of departmental strategic plans, to be submitted no later than 1997 and updated at least every three years thereafter; by the submission of annual performance plans and reports that detail how successful the respective departments are in meeting their performance goals and mission objectives; and by establishing performance measures for managerial accountability and flexibility.<sup>604</sup> Despite lingering notions that the operation of government proceeded according to a different logic than that of the market, the GPRA and subsequent reforms displaced such assumptions by providing the impetus for the federal government to operate according to the principles and norms of the private sector:

When the Government Performance and Results Act was first implemented, many felt that government management was somehow "different," that the same rules that applied to the private sector could not apply to the public, or at least not in the same way. After all, government agencies don't have a bottom line or profit margin. But recent efforts, as this study shows again and again, attest that is not true. The bottom line for most government organizations is their mission: what they want to achieve.<sup>605</sup>

The efforts to apply these principles in the execution of federal responsibilities were pursued in multiple sites of government. As Congress was working toward the passage of the GPRA, in March of 1993, the Clinton Administration announced a six-

---

<sup>603</sup> "Government Performance and Results Act," 1st ed. (1993), 1.

<sup>604</sup> "Government Performance and Results Act."

<sup>605</sup> National Partnership for Reinventing Government, Balancing Measures: Best Practices in Performance Management, August 1999 1999, Available: <http://www.ora.gov/pbm/links/npr1.html>, October 14 2004.

month governmental review process that would focus on identifying ways to make federal agencies “work better and cost less.” This endeavor, known as the National Performance Review (later known as the National Partnership for Reinventing Government) (NPR), generated its first report in September of that year, which addressed cross-cutting issues such as procurement procedures and management of information technology. It followed up two years later with a second report detailing recommendations for government programs that could either be terminated or privatized; and later recommendations generated by the NPR have more recently focused on how agencies with close contact with the public (Education, Health and Human Services, etc.) should “reinvent” themselves to be more customer-centric.<sup>606</sup> Between 1993 and 1995, the NPR generated some 250 interagency recommendations pertaining to personnel, procurement, and regulation, as well as 440 agency-specific guidelines.<sup>607</sup>

Based on this logic, the NPR established a series of criteria, adapted from the private sector, for reformulating how federal agencies should conceptualize and carry out their mission. These criteria include establishing a “results-oriented set of measures” that further mission objectives and satisfy customer needs; establishing accountability at all levels of the organization; and systematically collecting and

---

<sup>606</sup> General Accounting Office - United States, "Reinventing Government: Status of Npr Recommendations at 10 Federal Agencies," (General Accounting Office, 2000), 1. See also National Performance Review, From Red Tape to Results: Creating a Government That Works Better and Costs Less (Washington, DC: National Performance Review, 1993).; and National Performance Review, Common Sense Government: Works Better and Costs Less (National Performance Review, 1995).

<sup>607</sup> General Accounting Office - United States, "Reinventing Government: Status of Npr Recommendations at 10 Federal Agencies," 3.

analyzing performance data to ensure that the mission is being carried out efficiently and satisfactorily for the customer.<sup>608</sup>

The renewal of efforts to conduct effective strategic planning and performance measurement in the federal government with the enactment of GPRA in 1993 creates new opportunities and obligations to learn from the private sector, which has had considerable experience in applying a balanced set of measures.<sup>609</sup>

The application of private sector principles was the means by which the federal government assumed it could successfully negotiate “21<sup>st</sup> century challenges” – economic, demographic, and technological - it would encounter and that would condition its performance. As David Walker, Comptroller General of the United States, noted in a statement delivered in testimony to Congress in 2000:

Government performance and accountability need to be enhanced in order to get the most out of available resources, and forge effective approaches to both the newly emerging and long-standing problems facing the nation.... To meet the challenges of the 21<sup>st</sup> Century, the federal government will need to:

- possess the effective management approaches and tools needed to develop and maintain high-performing organizations;
- implement the human capital practices needed to support a focus on performance management and economy, efficiency, and effectiveness;
- and implement modern approaches for more efficient and effective delivery of government services.<sup>610</sup>

---

<sup>608</sup> National Partnership for Reinventing Government, Balancing Measures: Best Practices in Performance Management.

<sup>609</sup> National Partnership for Reinventing Government, Balancing Measures: Best Practices in Performance Management.

<sup>610</sup> General Accounting Office - United States, "Managing in the New Millennium: Shaping a More Efficient and Effective Government for the 21st Century: Statement of David M. Walker, Comptroller General of the United States," Committee on Governmental Affairs (Washington, DC: General Accounting Office, 2000), Senate, 9. Walker's testimony echoes the reformist impulse embraced not only in the NPR and GPRA, but also in a number of other government documents. See, for example: General Accounting Office - United States, "Transforming the Civil Service: Building the Workforce of the Future - Results of a Gao Sponsored Symposium," (General Accounting Office, 1995).; General Accounting Office - United States, "Managing for Results: An Agenda to Improve the Usefulness of Agencies' Annual Performance Plans," (General Accounting Office, 1998).; and General Accounting

The principles set forth in the GPRA and NPR, and later reinforced through Congressional testimony and reports issued by the General Accounting Office (GAO) and the Office of Management and Budget (OMB), have been key elements of the Bush administration, as well. In the summer of 2001, the administration laid out The President's Management Agenda, an initiative designed to further reform and streamline federal operations. Regarding the justification and vision for the agenda, the Bush administration posits that:

The impetus for government reform comes, in part, as a reaction to chronic poor performance and continuing disclosure of intolerable waste. Agencies will take a disciplined and focused approach to address these long-standing and substantial challenges and begin the steps necessary to become high performing organizations in which:

- hierarchical, "command and control" bureaucracies will become flatter and more responsive;
- emphasis on process will be replaced by a focus on results;
- organizations burdened with overlapping functions, inefficiencies, and turf battles will function more harmoniously; and
- agencies will strengthen and make the most of the knowledge, skills, and abilities of their people; in order to meet the needs and expectations of their ultimate clients—the American people.<sup>611</sup>

This vision is to be achieved via multiple strategies. In addition to improving financial performance and expanding electronic government, the agenda focuses

---

Office - United States, "Managing for Results: Opportunities for Continued Improvements in Agencies' Performance Plans," (General Accounting Office, 1999).; Office of Management and Budget - United States, "The President's Management Agenda," ed. Executive Office of the President (OMB, 2002).; Office of Management and Budget - United States, "Conducting Public-Private Competition in a Reasoned and Responsible Manner," ed. Executive Office of the President (OMB, 2003).; and Office of Management and Budget - United States, "The Federal Government Is Results-Oriented: A Report to Federal Employees," ed. Executive Office of the President (OMB, 2004).

<sup>611</sup> Office of Management and Budget - United States, "The President's Management Agenda," 7.

extensively on two macrotechnologies deemed essential to reform: competitive sourcing of contracts and organizational reform.<sup>612</sup> As we will see, these technologies exhibit a neoliberal rationale of government, consonant with the overall impulse of U.S. federal reform over the last decade. A general accounting of these technologies follows, and then a more specific analysis of their application to the U.S. public health sector.

*Macrotechnologies: Competitive Sourcing and Organizational Reform*

Although the U.S. executive branch has encouraged federal agencies to contract services from the private sector since 1955, the federal reform efforts of recent years have embraced public-private competition as an endeavor to be expanded.<sup>613</sup> Competitive sourcing, a process by which eligible government contracts are required to be bid upon by both the private sector as well as federal providers, is one such manifestation; on average, the federal government has realized cost savings of between 20% and 50% when contracts are competitively bid, with the government earning on average 50% of competitively bid contracts.<sup>614</sup> By the end of FY 2001, federal agencies were required to have competitively sourced 5% of eligible contracts, and 15% by 2003.<sup>615</sup>

---

<sup>612</sup> Office of Management and Budget - United States, "The President's Management Agenda."

<sup>613</sup> General Accounting Office - United States, "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance," (General Accounting Office, 2004), 4. In 1966, efforts to solidify executive branch commitment to competitive sourcing were formalized by the Office of Management and Budget in its *Circular A-76*, and in its 1979 publication of a handbook outlining decision criteria to be used in determining whether public services should be contracted out to the private sector.

<sup>614</sup> Office of Management and Budget - United States, "The President's Management Agenda," vol.; and Office of Management and Budget - United States, "Conducting Public-Private Competition in a Reasoned and Responsible Manner."

<sup>615</sup> Office of Management and Budget - United States, "Performance Goals and Management Initiatives for the Fy 2002 Budget," (OMB, 2001).

In 2000, Congress convened a Commercial Activities Panel to study and evaluate the competitive sourcing process in the federal government; the results of that study, issued in 2002, uphold a series of principles that should be applied for all government procurement decisions – from health to defense to education, and other responsibilities. These principles emphasize the need for sourcing decisions to support agency mission and goals; to implement incentives “to foster high-performing, efficient, and effective organizations throughout the federal government”; to employ “human capital practices designed to attract, motivate, retain and reward a high-performing federal workforce”; to establish procedures for outsourcing that “would permit public and private sources to participate in competitions for work currently performed in-house, work currently contracted to the private sector, and new work”; and to implement accountability measures for all sourcing decisions.<sup>616</sup> In this context, “The Panel strongly supports continued emphasis on competition, and believes that whenever the government is considering converting work from one sector to another, public-private competitions should be the norm.”<sup>617</sup>

The report issued by the Commercial Activities panel prompted the Office of Management and Budget (OMB) in 2003 to revise their guidelines on competitive sourcing in federal procurement policies in the *Circular A-76*. In preparation for competitive sourcing of contracts, the OMB now requires federal agencies to complete a proposal that describes how the work will be fulfilled in accordance with

---

<sup>616</sup> Commercial Activities Panel, Improving the Sourcing Decisions of Government (Washington, DC: General Accounting Office - United States, 2002), 46-48.

<sup>617</sup> Commercial Activities Panel, Improving the Sourcing Decisions of Government, 5.

“Most Efficient Organization” (MEO) principles, which indicate the most cost-effective organization of agency resources.<sup>618</sup>

In addition to the promoting competitive sourcing of contracts, federal reform initiatives have promoted streamlining the federal agencies to reduce redundancy and increase operational efficiency. This endeavor has involved two major features. The first is cuts in the absolute number of federal employees, guided by multi-year performance reviews submitted by agency heads to the President. To this end, the NPR proposed cutting 252,000 jobs from the federal payroll, to be implemented over a course of several years.<sup>619</sup> Between 1993 and 2002, the number of cuts totaled 324,580 - far exceeding the number originally recommended in the NPR, and the federal civilian payroll is at its lowest level since 1950.<sup>620</sup>

Complementing these overall cuts, a second dimension has involved organizational restructuring to reduce layers of bureaucracy, thereby promoting more efficient operations and greater accountability. The justification for structural reforms was made on the basis that even as overall payroll cuts were implemented, the bureaucratic organization of many federal agencies remained hierarchical, with “silo” organizations pursuing overlapping responsibilities and engaging in “turf battles.”<sup>621</sup> One manifestation of this organizational reform is a phenomenon known as “organizational de-layering,” removing management layers to create a more minimalist, streamlined, and consumer-responsive operation. As a component of the

---

<sup>618</sup> Office of Management and Budget - United States, "Circular a-76 (Revised)," ed. Executive Office of the President (OMB, 2003).

<sup>619</sup> National Performance Review, From Red Tape to Results: Creating a Government That Works Better and Costs Less.

<sup>620</sup> Office of Management and Budget - United States, "The President's Management Agenda," 11.

<sup>621</sup> General Accounting Office - United States, "Managing in the New Millennium: Shaping a More Efficient and Effective Government for the 21st Century: Statement of David M. Walker, Comptroller General of the United States," 15.

President's Management Agenda, agencies were required to deliver, as a component of their FY 2003 budget requests, a five-year restructuring plan for their organization that encompasses de-layering. The goal of these plans is to redistribute more management personnel to front-line service delivery: "the number of layers in government must be compressed to reduce the distance between citizens and decision-makers."<sup>622</sup> To that end, each agency has been required to elaborate on how and to what extent it will reduce the number of managers, trim the number of organizational layers, reduce decision-making time, and bring more employees into contact with the public they serve.<sup>623</sup>

As technologies that apply management and procurement strategies of the private sector to government, they are imbued with the values embraced by the market – operational and cost efficiency, human capital management, results-oriented performance measures. And while the GPRA, NPR, and President's Management Agenda are initiatives designed to address all aspects of federal responsibility, a question immediately presents itself when encountering this general spirit of market reform. How has it manifested in the context of the health sector? More specifically, how have the macrotechnologies of competitive sourcing and organizational reform been employed to enable federal public health agencies to take on the accoutrements of the private sector?

In the Department of Health and Human Services, the agency with primary responsibility for the federal public health system, these technologies have been pursued aggressively in recent years. Overall, competitive sourcing guidelines have

---

<sup>622</sup> Office of Management and Budget - United States, "The President's Management Agenda," 13.

<sup>623</sup> Office of Management and Budget - United States, "The President's Management Agenda," 13.

been met or exceeded, to the result that approximately half of all DHHS employment contracts are competitively sourced; for example, in one division of DHHS, 315 jobs were required to be competitively sourced in FY 2003 - the Department exceeded the requirement, subjecting 429 contracts to competition.<sup>624</sup> Additionally, DHHS has devoted \$7.6 million for competitive sourcing analyses and support, more than that of any civilian agency except the Department of Agriculture, and more than that earmarked by the Departments of Education, the Interior, and the Treasury combined.<sup>625</sup>

Streamlining bureaucracy has also been a priority in the DHHS. Beginning in 2001, the department began steps to implement a number of cross-cutting procedures to support these aims. Among them is the consolidation of personnel offices, from 40 in 2001 down to four as of 2004; this has allowed the Department to streamline its personnel staff by 30% in only three years.<sup>626</sup> Furthermore, administrative functions in such areas as procurement, grants management, finance, and information technology were consolidated in 2003, reducing staff in these areas by 50%, thus “achieving significant savings.”<sup>627</sup>

Echoing the implementation of market reforms at the Departmental level of the federal health system, the two major organizations under its auspices responsible for public health research and practice – the National Institutes of Health (NIH) and

---

<sup>624</sup> Jason Peckenpaugh, Feds Win All Job Competitions at Health and Human Services Agency, 2003, Available: <http://www.govexec.com/dailyfed/0903/092203p1.htm>, November 10 2004.

<sup>625</sup> General Accounting Office - United States, "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance."

<sup>626</sup> Department of Health and Human Services Assistant Secretary for Administration and Management (Ed Sontag), "Restructuring Initiatives and Hiring Plans," ed. OPDIV and STAFFDIV Heads (Washington, DC: November 8 2001), 1.

<sup>627</sup> Department of Health and Human Services Assistant Secretary for Administration and Management (Ed Sontag), "Restructuring Initiatives and Hiring Plans," 2.

the Centers for Disease Control and Prevention (CDC) – have come to employ them, as well. However, each emphasizes differently these two technologies; the NIH has employed more extensively competitive sourcing of contracts, while the CDC has begun to implement in recent years major organizational reform.

*Macrotechnologies in the Context of Public Health: Reform at the NIH and CDC*

At the National Institutes of Health, the major basic and applied health research wing of the federal government, competitive sourcing has become a major feature of operational reform.<sup>628</sup> In 2002, the National Institutes of Health appointed its own Commercial Steering Committee, to evaluate and expand competitive sourcing options for health activities pursued by the NIH's 27 centers.<sup>629</sup> The committee has employed a series of decision-making criteria to ascertain whether or not to pursue private sourcing; these criteria reflect not only the value of efficiency so prevalent in a neoliberal rationale of government, but also concomitant values addressing consumer responsiveness, human capital, and management of risk. Along these lines, the Steering Committee considers factors pertaining to mission effectiveness – specifically, the activity's or function's role in fulfilling the NIH's mission, how it enhances "customer satisfaction," how it improves or maintains efficiency in service delivery, and how it maximizes cost-benefit outcomes to "maintain an acceptable level of performance."<sup>630</sup> Additionally, it considers how the distribution and qualifications of human capital would best implement and support

---

<sup>628</sup> The NIH is organized into 27 centers and institutes, including the National Cancer Institute, the National Heart, Lung, and Blood Institute, the NIH Clinical Center, and the National Center for Research Resources, among many others.

<sup>629</sup> General Accounting Office - United States, "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance," 37.

<sup>630</sup> General Accounting Office - United States, "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance."

programs under consideration: appropriate level of staff to fulfilling function, a close match between workforce skills and program needs, and the willingness of staff to conduct cost-comparison studies to ensure ongoing compatibility between the level of human capital resources and the requirements of the program.<sup>631</sup> Finally, when evaluating candidates for competitive sourcing, the Committee considers the provider's operational resource capacity (financial, staffing, facilities) to meet current demand for the program or function; the ability of the potential provider to make the program "available in the marketplace," and to adjust for "periodic fluctuation in demand" for the program – in other words, to be flexible and responsive to changing conditions that affect demand.<sup>632</sup>

On the basis of these decision-making criteria, the Commercial Steering Committee is fulfilling policy requirements set forth in the *Circular A-76*. As of July 2003, the NIH had only two competitive sourcing contracts under way; by the end of 2005, more than 4600 NIH contracts will be competitively sourced in such areas as medical arts, laboratory safety, veterinary and animal sciences, materials management and logistical support, and information technology.<sup>633</sup> And as much as the NIH may wish to retain public employees and to provide services in-house, if the mandates of cost efficiency and mission effectiveness do not support that outcome, competitive sourcing will result in private contractors for public health services. As the NIH Deputy Director for Management asserts:

---

<sup>631</sup> General Accounting Office - United States, "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance," 37.

<sup>632</sup> General Accounting Office - United States, "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance," 37.

<sup>633</sup> National Institutes of Health Deputy Director for Management (Tim Wheelles), "NIH A76 All Hands E-Mail Relative to 2004 Study Considerations," ed. NIH-STAFF-URGENT@LIST.NIH.GOV (2003).

As we work to comply with this requirement, it is our intention to be as competitive as possible and to win competitions against the private sector through an open and fair process. We truly believe that we have the best employees at NIH; we have been working at these jobs longer and know them better than anyone else. [But] if we find ways to increase efficiencies and improve our operations, we have an obligation to do so.<sup>634</sup>

To date, the NIH has not aggressively pursued organizational de-layering and administrative consolidation. This, however, does not mean that organizational reform is not on the horizon; rather, the NIH has focused on ways to increase flexibility without expanding into new institutes. Such activities have been consonant with concerns to avoid operational excess. A 2002 report on potential changes to the operational structure of the NIH emphasizes the need to generally avoid expansion of new structures, and to ensure that any changes are undertaken to improve performance and/or decrease costs:

The greater administrative burden of those added structures can be a legitimate cost of including valid constituent interests that may arise from time to time. However, we remain generally skeptical of the need to create additional Institutes and Centers... Organizational rationality should not be an end in itself. Rather, the purpose of any reorganizations should be to significantly improve functionality and/or reduce administrative costs.<sup>635</sup>

A major mechanism by which the NIH is pursuing organizational restructuring without expansion is to provide for “trans-NIH initiatives” improve its operational flexibility without increasing administrative cost. These initiatives are designed to key in on risk factors:

---

<sup>634</sup> National Institutes of Health Deputy Director for Management (Tim Wheelles), "NIH A76 All Hands E-Mail Relative to 2004 Study Considerations."

<sup>635</sup> Council of Public Representatives, Report to the Director of the National Institutes of Health on the Organizational Structure and Management of the NIH (Washington: Council of Public Representatives, 2002), 4.

Scientific mechanisms, risk factors, and social and behavioral influences on health and disease cut across traditional disease categories...For example, there have been recent calls for the establishment of an institute on obesity, which is a major public health concern. Because obesity is associated with diabetes, coronary artery disease, and arthritis, multiple NIH institutes could logically claim obesity as a critical component of their research portfolio. This is one of many potential topics that lend themselves to a strategic, coordinated trans-NIH response...that cuts across administrative structures in terms of planning, funding, sharing and disseminating results.<sup>636</sup>

The NIH estimates that together with competitive sourcing of contracts, trans-NIH initiatives and other measures to increase operational flexibility resulted in a cost savings of \$41 million for 2003.<sup>637</sup> What these features illustrate is how a federal health agency primarily responsible for public health and medical research has come to organize its activities in accordance with the models, values, and norms of the private sector.

The NIH is not alone in applying the principles of the private sector to health practice; the other major wing of the federal government's public health establishment, the CDC, is also pursuing such strategies. In its 2004 budget request to the Congress, CDC outlined efforts that mirrored the competitive sourcing pursued by the NIH and the strategies pursued more generally by the DHHS: organizational de-layering and administrative consolidation. These efforts to date have resulted, according the CDC, in a cost savings of over \$55 million.<sup>638</sup> With regard to these efforts, in 2003 CDC converted 5% of available commercial contracts – those that

---

<sup>636</sup> Institute of Medicine, Enhancing the Vitality of the National Institutes of Health: Organizational Change to Meet New Challenges (Washington, DC: Institute of Medicine, 2003), 86.

<sup>637</sup> National Institutes of Health, Summary of the FY 2004 President's Budget (Washington, DC: NIH, 2003), 7.

<sup>638</sup> Centers for Disease Control and Prevention, Budget Request Summary for FY 2004 (Atlanta: Centers for Disease Control and Prevention, 2003), 21.

could be supplied by either government or the private sector, and hence are actionable arenas for competition – to the private contracts, and is expecting to expand the scope of competitive sourcing for 2004 and 2005. Moreover, the CDC has de-layered to only four levels of management, and has abolished more than 200 organizational positions; it has also cut the number of supervisors, increasing the supervisory ratio by 82%, and is currently “consolidating a number of business services for improved efficiency and quality.”<sup>639</sup>

This emphasis on organizational streamlining is consonant with additional and more general efforts to reorient the structure and practice of public health. For example, CDC’s recent *Futures Initiative*, first announced in June, 2003, reexamines not only its organizational mission in protecting the public’s health, but also the techniques employed to carry out that mission. The initiative was developed in response to a changing environment that has introduced both new challenges for the public health system – such as terrorism preparedness – and highlighted lingering issues such as an aging population, NCDs and their associated risk factors, and new and re-emerging infectious diseases. To that it end, it has adopted a series of six “strategic imperatives” which are to guide this restructuring. The CDC articulates these strategic goals as follows:

**Health Impact.**

CDC will prioritize its science, research and programs to achieving measurable health impact for the public, and emphasize prevention of early risk factors and support of healthy behaviors.

**CDC will be a customer-centric organization.**

CDC’s primary customers are the people whose health we are working to protect. We will work with our current valued partners, and new

---

<sup>639</sup> Centers for Disease Control and Prevention, Budget Request Summary for FY 2005 (Atlanta: Centers for Disease Control and Prevention, 2004), 301.

partners in health care, education, and business to increase health impact.

**Public Health Research.**

Science will remain the foundation on which all CDC programs, policies, and practices are based.

**Leadership for the nation’s health system.**

CDC will assume greater leadership to strengthen the health impact of the state and local public health systems.

**Global Health.**

CDC will establish clear priorities for its global programs and increase global connectivity to ensure rapid detection and response to emerging health threats.

**Effectiveness and Accountability.**

CDC will modernize its management and business practices to become more efficient, effective, and accountable.<sup>640</sup>

To achieve these goals, the CDC will further reorganize its structure, and will be implementing four coordinating centers that “help the agency leverage its resources to be more nimble in responding to public health threats and emerging issues as well as chronic health conditions.”<sup>641</sup>

With this emphasis on client-focus, modernization of business practices to emphasize efficiency and accountability, strategic partnerships outside the health arena, and prevention directed toward risk factors and supporting “healthy behaviors,” we see in the organization’s own words the tropes that have come to signal an underlying rationale of neoliberal government.

---

<sup>640</sup> Centers for Disease Control and Prevention, Outside-in Approach, August 20, 2004 2004, Available: <http://www.cdc.gov/futures/outside-in.htm>, October 13 2004b.

<sup>641</sup> Centers for Disease Control and Prevention, Cdc Announces New Goals and Organizational Design, May 20, 2004, Available: <http://www.cdc.gov/od/oc/media/pressrel/r040513.htm>, October 13 2004.

*Neoliberal Governmentality and the Nation's Public Health Agenda*

The application of the principles discussed above is evidenced in the latest articulation of the nation's public health agenda, *Healthy People 2010*. This initiative was developed through the ongoing efforts of the *Healthy People Consortium* - an alliance of more than 250 state public health, mental health, and substance abuse agencies, and more than 350 private organizations - and has been adopted by the Department of Health and Human Services. An update of an ongoing series of *Healthy People* initiatives, its goal - like that of its predecessors - is the improvement of health outcomes for Americans via strategies of health promotion, education, prevention, and surveillance measures. A massive exercise in public health planning, *Healthy People 2010* articulates 467 specific health goals in 28 areas; these areas include specific conditions such as heart disease, diabetes, and arthritis, risk factors like tobacco usage, overweight, physical inactivity, and general public health issues such as health education, family planning, and public health infrastructure.<sup>642</sup>

According to the DHHS, outcomes in these areas are the product of six broad groups of health determinants: biology, behavior, social environment, physical environment, policy, and access to quality health care.<sup>643</sup> Despite *conceptual* attenuation to a broad range of health determinants, the indicators selected as to chart progress toward the ten-year goals do not reflect as comprehensive an approach; ten were selected "based on their ability to motivate action, the availability of data to measure their progress,

---

<sup>642</sup> United States Department of Health and Human Services, *Healthy People 2010: Understanding and Improving Health* (Washington, DC: Government Printing Office, 2000).

<sup>643</sup> Each category in the *Healthy People* agenda is treated distinctly, despite obvious cross connections; for example, access to health care is most assuredly affected by existing national and local policies and behaviors are conditioned by the environments in which they occur.

and their relevance as broad public health issues.”<sup>644</sup> Half of the ten are directly and explicitly geared toward either biology or behavior – from diet and activity, to substance and tobacco abuse and sexual behavior, while another three (violence, mental health, and immunization) all have a distinct biological and/or behavioral component.<sup>645</sup>

That the task of securing the public’s health is weighted toward the efforts of the private citizen is indicated by the distinction drawn about the comparative responsibilities of the initiative. In the text of the agenda, the state, although traditionally, integrally involved in the work of securing the population’s health, is viewed by the Consortium as more of a facilitator and administrator. Rather, in the day-to-day work of improving the public’s health, emphasis is lent to what individuals can do, in their families and communities, to bring the *Healthy People 2010* goals into effect:

Although administrative responsibility for the Healthy People 2010 initiative rests in the U.S. Department of Health and Human Services...we all have a role in building a healthier Nation.

Regardless of your age, gender, education level, income, race, ethnicity, cultural customs, language, religious beliefs, disability, sexual orientation, geographic location, or occupation, Healthy People 2010 is designed to be a valuable resource in determining how you can participate most effectively in improving the Nation’s health. Perhaps you will recognize the need to be a more active participant in decisions affecting your own health or the health of your children or loved ones. Perhaps you will assume a leadership role in promoting healthier behaviors in your neighborhood or community. Or perhaps you will use your influence and social stature to advocate for and implement policies and programs that can improve dramatically the health of dozens, hundreds, thousands, or even millions of people.

---

<sup>644</sup> United States Department of Health and Human Services, Healthy People 2010: Understanding and Improving Health, 24.

<sup>645</sup> United States Department of Health and Human Services, Healthy People 2010: Understanding and Improving Health.

Whatever your role, this document is designed to help you determine what *you* can do—in your home, community, business, or State—to help improve the Nation’s health.<sup>646</sup>

What is suggested, if not explicitly stated, by this passage is a sense of responsibility that hearkens to John F. Kennedy’s declaration immemorial: in this context, ask not what public health can do for you, but what you can do for public health! This coupling of self-care with care of the population brings into stark relief the simultaneous injunction of neoliberalism: at once individualizing and totalizing in the pursuit of the good. In so doing, it is also the manifestation of a reflexive neoliberal government that achieves “its apex when it works through ‘self-governing’ individuals and communities, giving the appearance of not governing at all.”<sup>647</sup>

Moreover, as a health agenda designed to improve outcomes along the aforementioned indicators, it is, as evidenced above, presented as a panacea: ubiquitously accessible to and appropriate for all, regardless of distinctions in culture, poverty, gender, ethnicity, or education. These distinctions are de-privileged, set aside – for in the endeavor of securing better health, they are not core to the task in the way that assumed shared abilities are: to learn, to be motivated, and to act in a way that enhances health for self and society. This is the essence of Dean’s concept of “manipulable man” discussed in Chapter 4; a neoliberal reformulation of *homo oeconomicus*, where the choice-making actor can be brought by technologies of government in the external environment (in this case, expertise deployed by

---

<sup>646</sup> United States Department of Health and Human Services, Healthy People 2010: Understanding and Improving Health, 4.

<sup>647</sup> Eudaily, The Present Politics of the Past: Indigenous Legal Activism and Resistance to (Neo)Liberal Governmentality 53.

campaigns like *Healthy People 2010*) to govern themselves – without coercion, and for their own good.

#### Social Marketing as a Microtechnology of Public Health Government

No discussion of neoliberal technologies of government would be complete without addressing the microtechnologies carried out by public health agencies that aim at empowering individuals to take control of their own health. This aspect is developed more fully in Chapter 8, which assesses specific health education programs in the case countries for their construction of neoliberal subjectivities, but one microtechnology employed in the U.S. public health arena merits a detailed discussion here – that of social marketing.

At its core, social marketing involves applying the principles of commercial marketing to encourage individuals in a target market to consume a good, service, or behavior that enhances their personal welfare; however, the end goal of this type of marketing is not profit, but the realization of a personal and/or social good. Thus, Kotler, et al. have defined social marketing as:

...the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify or abandon a behaviour for the benefit of individuals, groups, or society as a whole.<sup>648</sup>

While the specific initiatives change depending on the behavior or activity being marketed, there is a structured procedure to conducting social marketing that is

---

<sup>648</sup> Philip Kotler, Ned Roberto and Nancy Lee, *Social Marketing: Improving the Quality of Life*, 2nd ed. (Thousand Oaks: Sage, 2002) 5. This definition echoes closely that of A.R. Andreason, *Marketing Social Change* (San Francisco: Jossey-Bass, 1995) 7.: “[social marketing is] the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of their society.”

consistent. Consider them in relation to the example of marketing physical activity. The major elements include conducting competition analyses of alternative behaviors (such as sedentary leisure activities as opposed to exercise), identifying and profiling a target market (such as physically inactive youth), creating demand through promotional campaigns (such as public service announcements, paid advertising, corporate partnerships and sweepstakes), and reducing barriers and other costs (promoting policies that emphasize exercise in schools, or extending hours or services at community fitness centers).<sup>649</sup>

Although social marketing has been deployed in various arenas since the early 1970s, in recent years it has blossomed as a technique of public health work that complements traditional health education. While sharing similar goals, they are not synonymous as Neiger, et al. argue:

The critical difference in approaches between health education and social marketing is a persistent focus on consumers...Social marketing is based on the fundamental principle that its practitioners must be aware of and responsive to the needs, preferences, and lifestyles of the consumer audience. Too often, health educators limit their needs assessment to demographic and epidemiological data and create “top-down” (practitioner-driven) interventions in isolation, with relatively little or no input from prospective consumers.<sup>650</sup>

In the context of public health approaches to NCDs, social marketing has become a popular technique to combat major risk factors in the U.S.<sup>651</sup>

---

<sup>649</sup> Edward W. Maibach, "Recreating Communities to Support Active Living," American Journal of Health Promotion 18.1 (2003): 117.

<sup>650</sup> Brad L. Neiger, Rosemary Thackeray, Michael D. Barnes and James F. McKenzie, "Positioning Social Marketing as a Planning Process for Health Education," American Journal of Health Studies 18.2/3 (2003): 78. Citations therein.

<sup>651</sup> On diet, nutrition, and obesity prevention, see Thackeray, et al's (2002) review of a social marketing campaign to promote fruit and vegetable intake - Rosemary Thackeray, Brad L. Neiger, Heather Leonard, Joan Ware and Gregory J. Stoddard, "Comparison of a 5-a-Day Social Marketing Campaign and School-Based Curriculum," American Journal of Health Studies 18.1 (2002).; and Rudd and Goldberg (1999), who review a Boston initiative to promote healthy eating generally, with special

Emphasizing four key elements of commercial marketing – product, price, place, and promotion – this technology is coming to be employed in public health as a key means by which chronic prevention activities can be effectively promulgated. According to the CDC:

Scientific approaches to social marketing, health education, and consumer research must be applied to public health initiatives—everything from simple brochures to public service announcements to comprehensive media campaigns. We must market health effectively *just like corporations market their products and images* [Emphasis added].<sup>652</sup>

To this end, in 2001 CDC was granted \$125 million to develop a media campaign to change risky health behaviors among America's youth. It launched the national VERB media campaign in 2002 to promote physical activity in "tweens" -- children aged 9-13 -- and was expressly designed to employ social marketing techniques.<sup>653</sup>

Specifically, the product marketed is a particular health behavior – physical activity; the price, as with conventional marketing, is the perceived costs and benefits of the product to the consumer; place identifies the locales where consumers can practice

---

attention to the preparation of healthy ethnic foods - Rima Rudd and Jeanne Goldberg, "A Five-Stage Model for Sustaining a Community Campaign," Journal of Health Communication 4 (1999). On physical activity and exercise, see Maibach's (2003) review of social marketing techniques in the promotion of active-living communities - Maibach, "Recreating Communities to Support Active Living."; and Black, et al's (2000) study of social marketing techniques to promote exercise among blue-collar workers - David R. Black, C.L. Blue, Kathleen Kosmoski and Daniel C. Coster, "Social Marketing: Developing a Tailored Message for a Physical Activity Program," American Journal of Health Behavior 24.5 (2000). On tobacco use, see Zapata, et al's (2004) analysis of factors associated with youth smoking that have been used to develop social marketing messages - Lauren B. Zapata, Melinda Forthofer, Danice K. Eaton and et. al, "Cigarette Use in 6th through 10th Grade: The Sarasota County Demonstration Project," American Journal of Health Behavior 28.2 (2004).

<sup>652</sup> Centers for Disease Control and Prevention, "The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease," 9.

<sup>653</sup> Wong, Huhman, Heitzler, Asbury, Bretthauer-Mueller and McCarthy, VERB™ -- a Social Marketing Campaign to Increase Physical Activity among Youth. See also: M Huhman, C. Heitzler and F. Wong, The Verb™ Campaign Logic Model: A Tool for Planning and Evaluation, July 2004 2004, Available: [http://www.cdc.gov/pcd/issues/2004/jul/04\\_0033.htm](http://www.cdc.gov/pcd/issues/2004/jul/04_0033.htm), November 9 2004.; and A. Bauman, Commentary on the Verb™ Campaign - Perspectives on Social Marketing Encourage Physical Activity among Youth, 2004, Electronic J, Available: [http://www.cdc.gov/pcd/issues/2004/jul/04\\_0054.htm](http://www.cdc.gov/pcd/issues/2004/jul/04_0054.htm), November 9 2004.

the behavior or access the “product”; and promotion refers to the techniques of communication and advertising that are used to communicate the benefits of the behavior, incorporating elements from the other three principles.<sup>654</sup> The application of commercial logic in this public health initiative is extensive – with youth constructed as consumers, the program itself established as a brand to be sold and thus amenable to marketing techniques:

Advertising and promotions do more than merely sell the features of a product; they depict a lifestyle that consumers aspire to achieve. By association, consumers perceive the product as providing the means to a desired outcome. In commercials for example, a soft drink is more than a drink; it is a social experience. Running shoes are more than footwear; they make a statement about an individual’s lifestyle. In the VERB™ campaign, commercial strategies are applied to public health and used to “sell” physical activity to tweens, creating a distinct brand culture for VERB™.<sup>655</sup>

Through the application of microeconomic principles of business promotion to health issues, the VERB™ campaign, as well as other U.S. public health campaigns targeting diet and tobacco use, systematically construct public health as a domain not only amenable to, but best governed by the logic of the market. This assumption is manifest in the very term – social *marketing* – and its stated purpose to “create voluntary exchange between a marketing organization and members of a target market based on mutual fulfillment of self-interest.”<sup>656</sup>

Moreover, because social marketing operates at the level of the “consumer,” it further decontextualizes the lifestyle choices and risks associated with illness. Such a decontextualization functions to cast chronic disease prevention initiatives as a

---

<sup>654</sup> Wong, Huhman, Heitzler, Asbury, Bretthauer-Mueller and McCarthy, VERB™ -- a Social Marketing Campaign to Increase Physical Activity among Youth.

<sup>655</sup> Wong, Huhman, Heitzler, Asbury, Bretthauer-Mueller and McCarthy, VERB™ -- a Social Marketing Campaign to Increase Physical Activity among Youth.

<sup>656</sup> Maibach (2003), 115-116.

neoliberal technology par excellence in the building of human capital – prompting individuals to invest in themselves for the purpose of achieving a fuller, healthier, and more productive life. In doing so, the nebulous and often thorny issues of social, economic, and political determinants of health are brushed aside:

Social marketing is a seductive concept. It serves as common ground for media outlets, community groups, government agencies and advertisers to work together. Unfortunately, the condition for this cooperation is too often the avoidance of controversial issues and the definition of health in narrow disease-oriented terms. It tends to be noncontroversial because it focuses on individual behaviors as the cause of disease...and deflects attention away from harmful products and the environment through which these products are made available.<sup>657</sup>

So long as public health approaches to NCDs employ technologies like social marketing, the evolution of a more comprehensive, socioeconomically and politically astute public health system will remain difficult to realize. Continued reliance on microtechnologies that ground both problem and solution in individual behavior, complemented by macrotechnologies that are reforming public health entities to operate more as market entities reinforce a scenario whereby these entities view “the overall social system as fundamentally sound and attribute problems to corrupt, irresponsible, or simply unfortunate individuals...the flaw is not in the fabric of the society but in the loose thread of the individual.”<sup>658</sup>

While the public health system of the United States has aggressively pursued these technologies of neoliberal government, it is not alone. In the cases of Britain and Sweden, the neoliberal impulse is manifest – if to a lesser degree – in the deployment of technologies of public health government, even as it takes forms

---

<sup>657</sup> Wallack, et al. (1993), 24-25. On this point, see also Goldberg (1995), 357.

<sup>658</sup> Wallack, et al, 69.

similar, but not identical to those manifest in the United States. It is to a closer examination of these technologies that I now turn.

### The United Kingdom

The NHS is a 1940s system operating in a 21<sup>st</sup> century world. It has a lack of national standards; old fashioned demarcations between staff and barriers between services; a lack of clear incentives and levers to improve performance; over-centralisation and disempowered patients...The principles of the NHS are sound, but its practices need to change.

- *The NHS Plan: A plan for investment, a plan for reform*

#### Overview of Reform: The Evolving National Health Service

Unlike the United States, the United Kingdom's approach to the health sector has been predicated upon a longstanding dedication to universal access and comprehensive health coverage through the National Health Service (NHS). With its genesis in the 1946 NHS Act, the NHS officially came into effect in 1948; since that time, its mission has historically focused on ensuring access to health services based on need, not on the ability to pay, and also coordinating the nation's public health system.<sup>659</sup> Primarily financed through general tax revenue, the NHS constitutes one of the largest proportions of overall public spending at 14%, and employs over a million people – accounting for a full quarter of the public sector wage bill.<sup>660</sup>

The organizational structure of the NHS for many years remained centralized; in 1973, an updated version of the NHS Act further reified a hierarchical organization in the planning and execution of NHS responsibilities; under the auspices of the

---

<sup>659</sup> National Health Service - United Kingdom, The NHS Plan: A Plan for Investment, a Plan for Reform (London: NHS, 2000).

<sup>660</sup> Vincent Koen, Public Expenditure Reform: The Health Care Sector in the United Kingdom (Paris: OECD, 2000). Even after market reforms were implemented in the 1990s, the NHS remained largely funded through tax revenue (72%); on this point, see Yvonne Erdmann and Renate Wilson, "Managed Care: A View from Europe," Annual Review of Public Health 22 (2001): 276.

Minister of Health, and in the situational context of the Ministry of Health, there were several regional health authorities that coordinated health planning activities disseminated through more than 90 districts.<sup>661</sup>

Even as the NHS pursued its goals of universal access and comprehensive coverage, in the decades since its inception it confronted challenges that ultimately led to the market reform initiatives of the 1990s. In the 1970s and 1980s, health sector spending as a percentage of GDP in the United Kingdom was approximately 15% less than the OECD average, and nearly 25% less than the average of other Western European countries.<sup>662</sup> With comparatively lower spending on health care, the NHS enforced budget limits on hospitals and other actors in the health sector; this factor, combined with the evolution of costly diagnostic and other medical technology, increased demand for services leading to long queues for care. Such factors led a number of policymakers to push for widescale reform of the NHS by the end of the 1980s.

Under the Thatcher government, reform-minded policymakers found a sympathetic ear. One of the early steps leading up to reform was a 1983 inquiry into the management practices of the NHS. Led by Sir Roy Griffiths, a successful British entrepreneur, the commission argued for the institutional reform of the NHS to emphasize streamlining and accountability:

Adopting private sector business principles, the Griffiths Inquiry reporting in 1993 recommended a move away from the old-style 'consensus' management towards a system of 'general' management

---

<sup>661</sup> European Observatory on Health Care Systems, Health Care Systems in Transition: United Kingdom (European Observatory on Health Care Systems, 1999). Additional organizational reforms were implemented over the course of the next decade; for example, an additional administrative layer was created in 1982 with the implementation of 192 district health authorities.

<sup>662</sup> OECD, Economic Survey of the United Kingdom (Paris: OECD, 2000).

with general managers at the unit, district and regional levels. New boards, responsible for policy and strategic planning on the one hand and operational management on the other, were also established at the centre. This system, based upon local management decision-making and a clear line of accountability from the top to the bottom of the NHS, was designed to replace the previous system, which was based largely on administration within a bureaucratic hierarchy. General management was an important precursor of more dramatic market-based reforms which were to follow.<sup>663</sup>

The activities of the Griffiths Inquiry were followed by the publication of a White Paper on the state of the NHS in 1989, which laid out the Conservative party's agenda for reform. This agenda was ultimately reified in legislation through the NHS and Community Care Act of 1990, which went into effect a year later. While not pushing for a completely privatized system, a hallmark of this agenda was to encourage competition through the creation of an internal market for health services:

The aim was to preserve largely free access to health care, essentially financed by taxation (for over three fourths) and national insurance contributions (for over one-eighth), but to have providers of specialist services compete in a "quasi" or "internal" market for secondary health care by separating them from, and having them contract with, purchasers.<sup>664</sup>

These purchasers included the health authorities, who traditionally had served as coordinators and providers of care, especially at the district level; they were now charged with assessing health care needs for the population and contracting with other providers under the rubric of competitive bidding. The second category of purchasers under this arrangement was the General Practice (GP) fundholders, who were "self-employed primary care doctors or groups of doctors with a large enough number of

---

<sup>663</sup> European Observatory on Health Care Systems, Health Care Systems in Transition: United Kingdom, 8.

<sup>664</sup> Koen, Public Expenditure Reform: The Health Care Sector in the United Kingdom, 7.

patients, volunteering to take part in this scheme.”<sup>665</sup> These GP fundholders were allotted and managed a budget to contract out for hospital and specialist services, as well as pharmaceuticals, for their enrolled patients. By separating the purchasers of health care from the providers – a bold departure from previous arrangements within the NHS – the Thatcher and (later) Major governments hoped to achieve increases in cost efficiency through the adoption of competitive bids for health service contracts.

Competition in the form of the internal market, while perhaps the key feature of the Conservative reform agenda, was not the only one. Other aspects included allowing private care facilities to compete with publicly owned ones for patients; allowing public care facilities to be acquired by private investors; and implementing budgetary criteria as the primary measurement and evaluation mechanism for health care services.<sup>666</sup>

Following the passage of the NHS and Community Care Act, these market-based reforms were implemented over the course of the next seven years; with the election of a Labour government in 1997, yet another vision of health care reform was offered. Critical of the internal market system, the Labour Party sought to scale back on the pervasiveness of contractualism that annual competitive bidding brought.<sup>667</sup> Although running on a platform to abolish the internal market altogether, in Labour’s 1997 White Paper, *The new NHS: modern, dependable*, it upheld the

---

<sup>665</sup> Koen, Public Expenditure Reform: The Health Care Sector in the United Kingdom, 7.

<sup>666</sup> Richard Laughlin and Jane Broadbent, "The Managerial Reform of Health and Education in the UK: Value for Money or Devaluing Process?" Political Quarterly 65.2 (1994).

<sup>667</sup> This was only one dimension of Labour’s dissatisfaction with the Conservative reforms. Two other major points of critique included concerns about equity of care, with patients in the GP fundholding system receiving priority treatment vis-a-vie patients of non-GP fundholders; and the transaction costs of running a market system, especially with annual turnover of contracts. On these points, see C. Ham, "An Alternative for the Nhs," British Medical Journal 308 (1994).; and Labour Party - United Kingdom, Health 2000: The Health and Wealth of the Nation in the 21st Century (London: Labour Party, 1994).

basic principle of the system by maintaining the separation of responsibilities of purchasers and providers – only changing a system of annual contracts with a new one of multi-year service agreements.<sup>668</sup> The new reform agenda also included the abolition of GP fundholding, which had been critiqued as propagating unequal access, with patients under the fundholding system receiving quicker, more responsive care; in its place, the Labour government created local primary care groups (later called Primary Care Trusts, or PCTs), to which GPs are assigned; nearly 500 of these primary care trusts have been formed since 1999.<sup>669</sup> Finally, to ensure that patients' needs were being met and to ensure quality of care, it called for the creation of a National Institute for Clinical Excellence and a Commission for Health Improvement, both charged with setting guidelines and overseeing quality control. These and other provisions were brought into effect with the passage of the *NHS Act of 1998*, one which continues to inform the organization and practices of the health sector, even as a complementary reform strategy was added in 2000, designed to improve customer satisfaction with the NHS; elements of this reform plan included guidelines that all patients could see a GP within 48 hours, the implementation of patient advocacy services, and the establishment of a U.K. council to coordinate and monitor the regulatory organizations pertaining to medicine, nursing, public health, and other health sector professions.<sup>670</sup>

---

<sup>668</sup> European Observatory on Health Care Systems, Health Care Systems in Transition: United Kingdom, 99.

<sup>669</sup> Geoffrey Rivett, Organisational and Financial Issues (1997-2000), September 16, 2002, Available: <http://www.nhshistory.kirion.net/first%20wave.htm>, November 11 2004.

<sup>670</sup> Linda Beecham, "Tony Blair Launches Radical Nhs Plan for England," British Medical Journal 321 (2001): 317.

## Macrotechnologies Applied: Towards Efficiency and Flexibility in the NHS

Having highlighted the contours of the general reform efforts that took place in the 1990s and into the new century, it is necessary to delve more deeply into specific macrotechnologies deployed as a consequence of these reform efforts, and to demonstrate how they exhibit a neoliberal rationality of government. These technologies are organizational, in terms of the creation of new and reconfiguration of existing institutions to promote consumer responsiveness and operational efficiency and flexibility. They are also procedural – including streamlining and promoting efficiency in the policy guidance issued to the NHS, performance evaluations tied to earned autonomy and fiduciary discretion, and financial incentives to promote productivity and efficiency. Additionally, several procedural dimensions of the health planning process exhibit a neoliberal rationale: decision-making criteria predicated upon affordability and profit-maximization, as well as increased cooperation with the private sector in the execution of new health initiatives.

As with the United States, organizational reform – in terms of the configuration and relation of institutional entities as well as operational procedures – is a hallmark technology of the contemporary British health system. One of the elements of organizational reform in the NHS has involved the creation of a Modernisation Agency (MA) to promulgate “best practice” – or the delivery of modern, convenient, and high quality services to patients - among the primary care trusts and other sectors of the NHS. First proposed in the NHS reform plan of 2000, the MA has been charged with oversight of local organization efforts become more efficient and more consumer focused – specifically, helping “local clinicians and

managers redesign local services around the needs and convenience of patients.”<sup>671</sup>

That this model represents the application of market principles to the arena of health is articulated by the NHS itself – which asserts that the creation of the MA “mirrors the change management approach taken in much of the private sector.”<sup>672</sup>

In addition to the creation of new entities such as the MA at the macrolevel, the Department of Health has moved to reconfigure organizations at regional and local levels in order to promote operational flexibility. To achieve this goal and to encourage innovation in the delivery of services, the DH abolished eight regional health authorities, while establishing a more decentralized presence in the form of 28 Strategic Health Authorities and several hundred Primary Care Trusts. Moreover, the vast majority of NHS funding will be shifted to the local level, with 75% of the budget allocated to the PCTs.<sup>673</sup> Additional steps toward devolution are planned and include the shifting of responsibility for inspection and regulation from the Department of Health to an independent commission; the redesign of NHS planning systems to emphasize local, as opposed to top-down, health plans – subject to review by the NHS; and the removal of barriers to innovative service, exemplified by the program to train and license nurses, pharmacists, and other health professionals to prescribe medicine.<sup>674</sup>

Aggressive movements toward ensuring operational flexibility emerge out of a more general 2002 Department of Health report on ongoing and planned initiatives

---

<sup>671</sup> National Health Service - United Kingdom, The NHS Plan: A Plan for Investment, a Plan for Reform, 60.

<sup>672</sup> National Health Service - United Kingdom, The NHS Plan: A Plan for Investment, a Plan for Reform, 60.

<sup>673</sup> United Kingdom Department of Health, Lifting Bureaucratic Burdens - the Department of Health Story (London: Department of Health, 2002), 9.

<sup>674</sup> United Kingdom Department of Health, Lifting Bureaucratic Burdens - the Department of Health Story, 10.

to curtail “red tape” in the organization and delivery of health care. In addition to the organizational changes just described, this report indicates two *procedural* areas in which the logic of neoliberalism infuses the reform efforts. These include more streamlined and efficient policy guidance and earned autonomy for better performing sectors.<sup>675</sup>

On the issue of guidance by the overarching Department of Health to the NHS, the Department specifies the need for “less, but more focused guidance, with a greater emphasis on support toolkits and the promulgation of best practice.”<sup>676</sup>

“Guidance” is understood as encompassing such things as technical reports, circulars covering departmental policy, consultation documents and the like. One of the ways that greater efficiency in guidance has been achieved is the Gateway, introduced in 2001, which has three aims: to reduce planning burdens, to limit new targets introduced to the health service, and to “manage down” the volume of guidance disseminated to the NHS. All of these aims work, in the DH’s own words, “to ensuring that guidance has a *corporate*...feel to it [emphasis added].”<sup>677</sup>

The move toward earned autonomy reflects the DH’s desire to link all health organizations’ – health authorities, national health trusts, primary care trusts, and others – performance with greater freedom and self-regulation. Organizations that meet all operational goals and score in the top 25% of all organizations in the Performance Assessment Framework, a quality review system that enables

---

<sup>675</sup> United Kingdom Department of Health, Lifting Bureaucratic Burdens - the Department of Health Story.

<sup>676</sup> United Kingdom Department of Health, Lifting Bureaucratic Burdens - the Department of Health Story, 5.

<sup>677</sup> United Kingdom Department of Health, Lifting Bureaucratic Burdens - the Department of Health Story, 5.

comparison across organizations, receive several rewards that promote autonomy. These “green-light” organizations, as they are called, may be granted fewer inspections (one mandatory every four years – others at the request of the organization) or greater discretion in spending income (e.g., setting their own management costs without oversight, or dispersing grant money on the basis of perceived priority rather than the conditions stipulated in the grant).<sup>678</sup> Moreover, they may, at the discretion of the NHS Modernisation Agency, be allowed to take over organizations that consistently fail to meet national guidelines – the so-called “red-light organizations.”

The introduction of financial incentives for improving efficiency in the delivery of health services is yet another component of procedural reform in the NHS. Beginning in April 2001, the British government introduced a National Health Performance Fund, valued in FY 2003/2004 at £500 million (approximately \$891 million). Health authorities are granted on average £5 million each annually to disperse to the aforementioned green-light organizations that meet and exceed expectations on operational and national health goals, as well as other organizations who demonstrate progress toward meeting national health goals.<sup>679</sup> Specific efficiency criteria used to determine the distribution of rewards include procedures to reduce waiting times, the introduction of booked admissions, the adoption of referral protocols to ease demand on overextended service providers, and the establishment of

---

<sup>678</sup> NHS (2000b), 62-64; DH (2002), 7-8. For purposes of comparison, “yellow-light” organizations are those that meet most national health goals and local performance objectives, but who do not score in the top 25% of the Performance Assessment Framework. “Red-light” organizations are those who do not meet national health targets, regardless of performance on the Assessment Framework.

<sup>679</sup> National Health Service - United Kingdom, The NHS Plan: A Plan for Investment, a Plan for Reform, 64.

protocols that ensure such hospital referrals are appropriate and medically necessary.<sup>680</sup>

It is interesting to note that it is only the green-light organizations that have full autonomy for the dispersal of funds. Even yellow-light organizations, those that meet most national health performance targets but do not score in the top 25% in the Performance Assessment Framework, must submit and have approved by the regional health authority, detailed plans for how they will improve efficiency and delivery of service with access to the fund. Once dispersed, they are also subject to review to ensure that the plan is being carried out and efficiency standards improving. As for the poorly performing red-light organizations, access to the fund is restricted in that monies devoted to improving health delivery are to be managed by the Modernisation Agency until such time as these organizations are no longer categorized as red-light.<sup>681</sup>

Additional procedural reforms predicated upon a distinctly neoliberal logic pertain to several dimensions of the health planning process: how decisions are made to prioritize new health projects, and how those projects are to be funded. These dimensions are characterized by the application of cost-efficiency principles as the key criterion of decision-making, the introduction of profit-maximizing norms into the decision-making stage of the planning process, as well as increased cooperation and reliance upon the private sector in the execution of health initiatives.

---

<sup>680</sup> National Health Service - United Kingdom, The NHS Plan: A Plan for Investment, a Plan for Reform, 65.

<sup>681</sup> National Health Service - United Kingdom, The NHS Plan: A Plan for Investment, a Plan for Reform.

Before the reforms of 1990, health planning priorities in the U.K. were determined by regional health offices and were established on the basis of “service needs.” That is, by accounting for demographic projections, morbidity and mortality trends, and past and projected trends in service utilization, regional health authorities would allocate funding for particular programs, estimate the number of hospital beds needed, and make other planning decisions.<sup>682</sup>

Since the reforms, health planning has come to emphasize in the first instance not service needs, but economic efficiency. In 1994, the NHS issued new guidelines on health planning and investment; its *Capital Investment Manual* identifies affordability as the key value to be maximized in planning.<sup>683</sup> As a result, health planning among the regional authorities now begins not with an assessment of service needs, but of affordability and cost constraint. Priorities are set based on the development of Strategic Outline Cases (SOC) that allow the Department of Health to determine which capital projects should receive priority funding. These SOC's must demonstrate how the proposed capital investment contributes to the more efficient use of resources, establishing the ability to:

improve productivity and make better use of cash, human and estate resources; deliver revenue savings within the health community, enabling service needs within available resources; realise other financial benefits such as opportunities for generating income and for transferring risk cost-effectively; provide better value for money overall to the public sector.<sup>684</sup>

---

<sup>682</sup> Allyson Pollock, Matthew G. Dunnigan, Declan Gaffney, David Price and J. Shaoul, "The Private Finance Initiative: Planning the 'New' NHS: Downsizing for the 21st Century," *Lancet* 319 (1999): 180.

<sup>683</sup> National Health Service Management Executive - United Kingdom, *Capital Investment Manual* (London: NHSME, 1994).

<sup>684</sup> United Kingdom Department of Health, *The Strategic Outline Case: Guidance Regarding 2004 Prioritisation Round* (London: Department of Health, 2004), 6.

Once an SOC is completed and ultimately approved, the planning project moves forward only upon completion of two “business case” models that set up involvement with the private sector to create the most economically efficient planning scheme; the “model business case” is the initial planning exercise that establishes proposed configurations of services and puts in motion bids for private finance, and the “full business case,” which sets out the final arrangement agreed upon by the health trusts and private providers.<sup>685</sup> The result, as Pollock, et al, note, is that:

These departures from normal planning methods suggest that the main function of the current planning process is to justify cost restructuring: projected clinical activity has to be brought in line with the income and hospital capacity that will be available to cater for it.<sup>686</sup>

In addition to this dimension of the planning process, decisions on funding are to be informed by guidelines that mandate a minimum acceptable level of profit maximization. Especially when investing in capital-intensive projects such as the construction of new hospitals or research facilities, an expected return-on-capital must be demonstrated. In this context, the NHS’ duties in the planning process take on an especially economic dimension:

the sole statutory duties of National Health Service provider trusts (hospital and community services) are financial and not health-care duties; National Health Service bodies must break even after having made a profit for their owners (the government) equivalent to a 6% return on capital.<sup>687</sup>

The introduction of profit-maximizing norms has also paved the way for increased public-private cooperation. This is especially the case with capital-intense

---

<sup>685</sup> Pollock, Dunnigan, Gaffney, Price and Shaoul, "The Private Finance Initiative: Planning the 'New' NHS: Downsizing for the 21st Century."

<sup>686</sup> Pollock, Dunnigan, Gaffney, Price and Shaoul, "The Private Finance Initiative: Planning the 'New' NHS: Downsizing for the 21st Century," 181.

<sup>687</sup> D. Price, A.M. Pollock and J. Shaoul, "How the World Trade Organisation Is Shaping Domestic Policies in Health Care," *Lancet* 354 (1999): 1891.

projects such as hospital refurbishment or new construction, and the implementation of subsidies to court private sector involvement in health care.<sup>688</sup>

In the U.K., the substitution of market mechanisms and competition has fractured the traditional mechanisms for local accountability. National Health Service providers are governed by trust boards, with no democratic or legal mechanisms to ensure that they uphold the interests of the local communities from which they draw patients. Increasingly, the goals of universality and equity are being replaced by consumer sovereignty. This effect is reflected in the growing governmental emphasis on league tables, performance measures, and quality frameworks, rather than on substantive health-care rights, such as to a universal, comprehensive health-care service.<sup>689</sup>

What is perhaps most noteworthy about these macrotechnologies of health governance is that the shift from a Conservative to Labour government in the late 1990s did not radically alter the neoliberal rationale underlying the practices that govern the health system. Reconfiguring – but also retaining – key features of the internal market, it is under the Blair government that the NHS has moved toward becoming more efficiency- and “customer-focused.” The implementation of the Modernisation Agency, the decentralization of the regional health authorities to focus on local access and care, the 2002 DH plan to streamline bureaucracy in the area of guidance and tie “earned autonomy” to organizational performance, and the introduction of the National Health Performance Fund – all were developed and implemented under a Labour government. Moreover, key provisions of earlier Conservative reforms – such as the decision-making criteria and procedures for health planning, and developing relationships with the private sector, continue to be upheld.

---

<sup>688</sup> Price, Pollock and Shaoul, "How the World Trade Organisation Is Shaping Domestic Policies in Health Care." See also: D. Gaffney, A.M. Pollock, D. Price and J. Shaoul, "NHS Capital Expenditure and the Private Finance Initiative: Expansion or Contraction," *British Medical Journal* 319 (1999).; D. Gaffney, A.M. Pollock, D. Price and J. Shaoul, "PFI in the NHS," *British Medical Journal* 319 (1999).

<sup>689</sup> Price, Pollock and Shaoul, "How the World Trade Organisation Is Shaping Domestic Policies in Health Care," 1892.

And even as all of these factors indicate both a continuity of the neoliberal impulse and its infusion of the overall health system, a closer examination of its manifestation in British public health is warranted.

#### Macrotechnologies in Context: Contemporary Public Health in the United Kingdom

The above trends in the macrotechnologies guiding health governance in Britain condition the specific practices of public health itself. Reform measures have prompted those in the public health sector to reevaluate how they accomplish their mission, and to bring it in line with the directives set forth in macropolicy.

The application of private sector techniques and practices are apparent, for example, in the growing use of business plans as a foundation for public health practice. The Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom (hereafter, Faculty of Public Health, or FPH), has been a key actor to embrace this approach. The FPH, founded in 1974 as a standard-setting body for public health training and practice, engages in activities toward that end in three interrelated areas: education and training, professional support for public health workers, and advocacy and policy work.<sup>690</sup> In this capacity, the FPH remains committed to its objective of promoting “for public benefit the advancement of

---

<sup>690</sup> Specifically with regard to education and training the FPH sets standards for and oversees procedures for professional exams, licensing and accreditation, and approving placements, among other responsibilities. Their involvement in professional support for health workers involves developing public health networks, advising the NHS and other government offices on workforce planning, and implementing practices to reward excellence in public health work. Finally, in the area of advocacy and policy work, the FPH consults with the NHS on public health policy, shapes policy discussions through consultations and publications on different health issues, and coordinates international public health contacts and work.

knowledge in the field of public health medicine.”<sup>691</sup> In doing so, however, it has recently moved toward adopting private sector practices to guide operations, such as the development and implementation of business plans. The first such plan, developed in 2003, is characterized by the recurring theme of cost efficiency in achieving their public health objectives: affordable public relations strategies, managing the FPH’s investments to maximize growth, establishing private sector and other relationships to support organizational change in the NHS, and maintaining a commitment to a balanced budget, just to name a few.<sup>692</sup>

Moreover, with the devolution and other mechanisms of reform in the NHS, *public* finance of public health research has decreased dramatically. Chalmers, et al. have analyzed the trends of non-commercial support of randomized control trials – one investigative technique of public health – between 1980 and 2002. These non-commercial sources include the NHS itself, the Medical Research Council, and a number of individual research charities. Across all disease phenomena, three diseases account for nearly 60% of these studies: cancer, cardiovascular disease, and mental illness.<sup>693</sup> While a decline was evident across all sources, it was most notable with regard to the NHS. Between 1991 and 2002, the NHS funded 615 randomized

---

<sup>691</sup> Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom, Business Plan 2003 (London: Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom, 2003), 1.

<sup>692</sup> Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom, Business Plan 2003, 3 5.

<sup>693</sup> Calculations based on figure data from I. Chalmers, C. Rounding and K. Lock, "Descriptive Survey of Non-Commercial Randomised Controlled Trials in the United Kingdom, 1980-2002," British Medical Journal 327 (2003): 1019.

control trials; 514, or 83.6% were funded through programs decommissioned in the reorganization of the NHS between 1998-2002.<sup>694</sup>

Additionally, over the time period the distribution of noncommercial studies of health interventions – especially by the Medical Research Council and charities – increasingly came to mirror those pursued by the private sector; this is especially the case with drug trials. Chalmers, et al. point to the fact that the majority of industry funded intervention trials in the United Kingdom are drug studies; between 1980 and 2002, the number of noncommercial drug studies increased such that they now account for approximately 35% - more than double the next most funded trials pertaining to education and training (15%).<sup>695</sup> This trend, as well as the overall decline in noncommercial funding of public health studies, has led the authors to conclude that

the future of non-commercial randomised controlled trials in the United Kingdom has been threatened by the discontinuation or demise of national and regional NHS research and development programmes. Support also seems to be declining from the Medical Research Council and the medical research charities. It is unclear what the future holds for randomised controlled trials that address issues of no interest to industry but are of great importance to patients and practitioners.<sup>696</sup>

Public health in the context of the reformed NHS trusts has further closed the gap between the population focus that historically characterized public and the patient-level focus of primary and acute care. As Jackson notes in a recent report on public health in the hospital setting:

---

<sup>694</sup> Chalmers, Rounding and Lock, "Descriptive Survey of Non-Commercial Randomised Controlled Trials in the United Kingdom, 1980-2002," 1018.

<sup>695</sup> Calculations based on figure data from Chalmers, Rounding and Lock, "Descriptive Survey of Non-Commercial Randomised Controlled Trials in the United Kingdom, 1980-2002," 1019.

<sup>696</sup> Chalmers, Rounding and Lock, "Descriptive Survey of Non-Commercial Randomised Controlled Trials in the United Kingdom, 1980-2002," 1017.

The public health role is to: play ‘honest broker’ in dialogue between specialties and across primary and secondary care on the development of clinical guidelines and pathways; be the driving force behind many aspects of policy development, particularly around clinical governance and research and development; prioritise healthcare decisions by, for example, reviewing the cost-effectiveness of new drugs and new services in diabetes [and] stroke...<sup>697</sup>

One of the key roles for public health practice under the reformed trusts is that of auditing clinical guidelines and interventions. Specific responsibilities that fall under this rubric include reducing delays by “monitoring demand and supply through referral patterns”; reducing unnecessary deaths “using control charts and control charts in quality assurance”; designing new and redesigning existing services to better meet the needs of the health care consumer; and facilitating a “health promoting” hospital that educates patients about strategies they can employ to improve their health.<sup>698</sup> John Wright, Consultant in Public Health Medicine at the Bradford Royal Infirmary, justifies in the following terms what many may view as a role inconsistent with the traditional function of public health:

Audit is something that public health professionals feel very comfortable with, both methodologically in being able to undertake robust audit, but also in terms of familiarity with analysis and presentation of data. Audits of clinical interventions may not be seen by many as a public health intervention but they are very cost-effective and clinically effective.<sup>699</sup>

In this regard, public health activity in the U.K. is taking on a role far removed from the traditional focus on explaining determinants of population health and identifying strategies to secure it. Rather, in the context of the new NHS trusts, it becomes both the “cost-effective” solution for clinical audits, and in that auditing capacity, ensures

---

<sup>697</sup> David Jackson, Public Health in Hospitals: A Prerequisite for Clinical Excellence (British Association for Medical Managers, 2004), 12.

<sup>698</sup> John Wright, Local Public Health (British Association of Medical Managers, 2004).

<sup>699</sup> Wright, Local Public Health, 13.

that clinical practice not only operates efficiently, but also reacts to the needs of patients as *consumers* of health care: that public health practitioners like Wright describe their duties in terms of “quality assurance,” and “monitoring demand and supply” demonstrates how the economic principles of efficiency, competitiveness, and consumer responsiveness have come to be the bones upon which the body of public health practice is built. This illustrates again the decidedly neoliberal rationale of government that extends market principles and styles of management to arenas historically governed by other means.

Health Promotion and the Development of Human Capital: Microtechnologies of British Public Health

As with the United States, the focus of this analysis is largely devoted to macrotechnologies, if only because Chapter 8 offers the opportunity to examine a key microtechnology of public health – health education – in context; that is, in terms of their implications for constructing neoliberal subjectivities. But as before, a brief discussion of a common microtechnology of public health is appropriate. As detailed in Chapter 5, health promotion campaigns are an especially potent technology of government, geared as they are toward conditioning individuals to see their bodies and their lifestyles as a site of continual investment and improvement.

In the context of U.K. public health efforts, this privileging of “human capital” is evident in several major programs geared toward the prevention of NCDs by targeting major risk factors. One program, the Walking the Way to Health Initiative (WHI), began in 2000 as a joint endeavor by the British Heart Foundation, the Countryside Agency, and the New Opportunities Fund; it has as its goal the

improvement of health and fitness for a million people by 2005.<sup>700</sup> In the context of advocating walking as a way to reduce the risk of heart disease, cancer, diabetes, and other NCDs, the WHI markets the activity in such a way as to not only appeal to one's sense of self-preservation – as in a longer life expectancy – but also to their sense of self-image and worth; those who walk regularly are slimmer, more confident, more energetic – they are vibrant people living full lives.<sup>701</sup>

The emphasis on human capital evident in the WHI initiative is also manifest in one geared toward smoking cessation. The Department of Health's "Don't give up giving up" campaign was launched in 1999 and is geared toward the goal of getting 1.5 million people to quit smoking by 2010; the main target audiences include adult smokers ages 25-49, pregnant women, youth aged 11-16, and ethnic minorities.<sup>702</sup> In one of its promotional resources, a bulletin guide entitled *Giving Up for Life*, the benefits of cessation are marketed in such a way as to appeal to consumer's desires for instant results. Emphasis is placed on tangible benefits one can experience in as little as twenty minutes of giving up smoking. By that time, blood pressure and pulse return to normal and circulation improves; within eight hours, the chances of experiencing a heart attack start to fall; within twenty-four hours, the lungs start to clear, and within three days, one experiences more energy and less difficulty breathing.<sup>703</sup>

---

<sup>700</sup> Walking for Health Initiative, About Us, Available: <http://www.whi.org.uk/details.asp?key=AX303|0|2E465997877|p|46|0>, October 9 2004.

<sup>701</sup> Walking for Health Initiative, What's the Point? Available: <http://www.whi.org.uk/details.asp?key=AX707|1|741163149739|p|116|0&parentkey=AX707|0|71113314327|p|113|0>, October 9 2004.

<sup>702</sup> United Kingdom Department of Health, 'Don't Give up Giving up' Campaign - Background, Available: <http://www.givingupsmoking.co.uk/CNI/Background/>, October 9 2004.

<sup>703</sup> National Health Service - United Kingdom, Giving up for Life (London: NHS, 2003), 3.

And even as the campaign appeals to an individual's desire to see immediate benefit for a health behavior – a pattern echoing the instantaneity of market transactions – it also makes clear that this is an investment in oneself for the long term – even to the point of using that very language:

Think about how good you're going to feel when you've given up. You'll be smoke-free, healthier and in control of your life. It's a long-term investment, so be patient with yourself, take it one day at a time and be proud of your achievements.<sup>704</sup>

Other elements of the campaign echo a marketing strategy employed by WHI – appealing to one's sense of image and worth – while also emphasizing financial benefits and one's sense of responsibility. As such, the campaign markets the following benefits to “sell” the health promoting behavior:

- Be more attractive to the opposite sex
- Your clothes, hair, breath and skin no longer smell of stale smoke
- More confidence and self-esteem, knowing you've had the determination and willpower to give up
- You'll be a lot richer!
- Your energy levels are higher making you feel more alive and positive\
- You no longer put those around you at risk
- Increased chance of conceiving and having a healthy pregnancy and baby<sup>705</sup>

Health promotion techniques like this one construct the human body and the lifestyles that condition it as a domain of capital investment; following guidelines – in this case, quitting smoking – leave one not only healthier, but more attractive, more confident, more able to effectively manage their lives and live as a responsible citizen – not endangering family, friends, and coworkers. In this regard, it is possible to see

---

<sup>704</sup> National Health Service - United Kingdom, *Giving up for Life*, 29.

<sup>705</sup> United Kingdom Department of Health, *The Good News*, Available: [http://www.givingupsmoking.co.uk/why\\_give\\_up/good\\_news/](http://www.givingupsmoking.co.uk/why_give_up/good_news/), October 9 2004.

how the microtechnology of health promotion underscores the application of neoliberal principles to manage and secure population health: the practice of social marketing is the application of private sector principles to traditional health education. In this regard, at risk individuals are not just patients as such, they are *consumers* who must be wooed, must be sold on the benefits of the product – not just for improving their health, but all aspects of their lives: physical, emotional, financial, and they must begin to see these benefits quickly, as the campaign promotes.

In pointing out this feature of contemporary public health practice, one should not misconstrue the reason for doing so. It is not to critique the goals or the outcomes of these programs – public health should be engaged in promoting solutions that prolong life and improve health, at the sites of individual bodies, communities, and societies. However, there is an implicit, if subtle, political dimension to how such campaigns are carried out – and this analytical exercise is geared toward casting a spotlight on that dimension that has too long remained in shadow, to enable it to be interrogated not only as a matter of public policy, but as an object of political discourse. This analytical impulse is carried through to a final discussion of micro- and macrotechnologies of health, as they have manifested themselves in the case of Sweden.

### Sweden

Representatives of the Physicians' Union, the Federation of County Councils, and the Ministry of Health, and some journalists tried to present a case that there was a new consensus in Sweden that the Swedish model had failed. It had created an elaborate bureaucracy that stifled initiative and generated costs beyond the taxation capacity of the state. To be modern, one had to endorse markets, competition, and privatization as the solution.

- Anders Milton, former Secretary-General of Swedish Physicians' Union

## What Goes Up...: The Genesis and Context of Welfare Reform in Sweden

Throughout much of the twentieth century, Sweden garnered a reputation for a generous and comprehensive welfare system predicated upon the norm of collective responsibility – especially regarding the care of the more vulnerable members of society – children, the elderly, and the poor. As a consequence, the history of the Swedish welfare state during this time frame is largely one of growth. For example, the expansion of public sector spending as a percentage of GNP grew from 31% in 1960 to 65% by 1986.<sup>706</sup> The rate of this growth far outpaced other OECD countries, which also averaged 30% GNP in public sector spending in 1960, to approximately 40% in the 1980s, and at the same time was coupled expansion in public sector employment and strong patterns of investment.<sup>707</sup> Thus, until the closing decades of the twentieth century,

the only change known to Swedish public administration was that of expansion. It was a consequence of strong economic growth and the widespread belief that social problems could only be solved by collective measures such as legislation, creation of public institutions and organizations, and national labor-market agreements.<sup>708</sup>

Fueled by consistent economic growth and the values embraced by welfare liberalism, social problems demanded a collectivist and social response. It is in this context that what has come to be termed the “Swedish model” of health care, and of welfare more generally, evolved. Core elements of the model include tax-generated public provision of basic health services to all, including insurance, primary care, and

---

<sup>706</sup> Brian Burkitt and Philip Whyman, "Public Sector Reform in Sweden: Competition or Participation," *The Political Quarterly* (1994): 276.

<sup>707</sup> Burkitt and Whyman, "Public Sector Reform in Sweden: Competition or Participation."

<sup>708</sup> Ehn, Isberg, Linde and Wallin, "Swedish Bureaucracy in an Era of Change," 432.

specialist consults; a special emphasis on the most disadvantaged members of society, in terms of prioritization for services; a corporatist mode of decision-making, and for those working in the health sector, policies emphasizing wage solidarity and strong participation by labor unions.<sup>709</sup>

However, several trends in the Swedish political economy of the 1970s and 1980s came to undermine the halcyon arrangements that had grown up in previous decades. By the mid 1970s, the public sector found itself expanding rapidly – from 45% of GDP in 1973 to 60% in 1978 – even as taxes were raised to finance the spending, and the record economic growth of the 1960s had slowed down. Thus, the welfare state increasingly found itself under scrutiny for operating “slowly and inefficiently compared to private companies.”<sup>710</sup> And despite continued economic growth during the 1980s, a large and complex system of public administration evaporated finances, leading to a record deficit equal to 16% of GNP by 1993.<sup>711</sup>

Moreover, specific trends in the political economy of health care further complicated the scenario leading up to reform. Burkitt and Whyman structure an explanation of these trends in economic terms of demand and supply. On the demand side, an aging population increasingly utilized medical and other welfare services,

---

<sup>709</sup> For a more detailed discussion on general aspects of the Swedish model, see Alexander Hicks and Lane Kenworthy, "Cooperation and Political Economic Performance in Affluent Democratic Capitalism," American Journal of Sociology 103 (1998). For specific analyses of the application of the Swedish model to the health sector, see: Diane Duffy, "The Effect of Sweden's Corporatist Structure on Health Policy and Outcomes," Scandinavian Studies 61 (1989).; and Ellen Immergut, "Procedures for Conciliation: The Institutional Basis for Swedish National Health Insurance," Scandinavian Studies 61 (1989).

<sup>710</sup> Ehn, Isberg, Linde and Wallin, "Swedish Bureaucracy in an Era of Change," 432. Others have pointed to the efficiency critique of the Swedish model: see A. Bergmark, M. Thorslund and E. Lindberg, "Beyond Benevolence - Solidarity and Welfare State Transition in Sweden," International Journal of Social Welfare 9 (2000): 241.; and A. Lindbeck, Welfare State Disincentives with Endogenous Habits and Norms (Stockholm: Industrial Institute for Economic and Social Research, 1995).

<sup>711</sup> Ehn, Isberg, Linde and Wallin, "Swedish Bureaucracy in an Era of Change," 430.

and a changing composition of demand preferences required the flexibility offered by a “menu” of services – inconsistent with uniform and programmed distribution of welfare under the Swedish system. In terms of supply-related trends leading up to reform, a system of rationing based on queue meant long-waiting lists for medical procedures and other services; furthermore, the public sector, while a significant source of employment (33% in 1980), experienced understaffing and other resource shortages in the face of increased utilization of health care services.<sup>712</sup> As a result, health care costs increased by 145% between 1980 and 1990.<sup>713</sup>

At the time that demand for services was increasing and economic conditions were beginning to stagnate, Alain Enthoven visited Sweden in 1988 to evaluate its health system’s performance and organization. In identifying ways for the Swedish system to improve its “incentives for efficiency and equity,” he indicated that the most promising solutions could be adapted from private business. As he laments:

How can Swedes pretend to be managing their health care system efficiently without the basic management systems that any successful industrial company in a competitive industry routinely has?<sup>714</sup>

In response to pressures both within and without the health sector, the election of 1991 saw the Social Democrats, long committed to a deep-rooted welfare state, lose power to a more conservative coalition government. High on the agenda of the new government was to institute reforms to address the broad economic issues and specific trends in the health sector that compromised its performance. And despite

---

<sup>712</sup> Burkitt and Whyman, "Public Sector Reform in Sweden: Competition or Participation," 276-78.

<sup>713</sup> Ministry of Health and Social Affairs - Sweden, Health Care for the Future - Three Models (Stockholm: Ministry of Health and Social Affairs, 1993).

<sup>714</sup> Enthoven quoted in Stefan Håkansson and Sara Nordling, "The Health System of Sweden," Health Care and Reform in Industrialized Countries, ed. Marshall Raffel (University Park, PA: Pennsylvania State University Press, 1997) 210.

inherent party differences, there was a great deal of convergence on the overall direction that the reforms should take. The Parliamentary Committee on Health and Welfare was formed and charged with task of managing reform proposals on medical and health care and for implementing party policies. Among the parties, the vast majority supported market-oriented reform, the only question was the extent to which it should occur. The right wing New Democrats and the Conservatives were the most vocal for implementing privatization policies, though these were not supported by the other parties; however, the Christian Democrats, the Center Party, and the Liberals were all ready to support some market-oriented reform, particularly in the arena of purchaser-provider splits and other competition inducing measures.<sup>715</sup> For the new coalition government, “public administration reform became a tool in fighting the fiscal crisis...Neoliberal ideas about competition, marketization, and privatization in the public sector had some impact on all the major parties, but the neoliberal ideology became the trademark of the new government.”<sup>716</sup>

This neoliberal impulse was manifest in the specific reforms made to the health sector in subsequent years. Under the auspices of a welfare state “modernization program,” termed the Stockholm Revolution, this reform program evolved between 1992 and 1995, and constituted a new way of organizing and financing health care, to achieve “more and better health for less money.”<sup>717</sup> Important elements of the system included an expansion of patient choice to select their care provider – even a private provider – and as a corollary to this principle

---

<sup>715</sup> Andrew C. Twaddle, Health Care Reform in Sweden, 1980-1994 (Westport, CN: Auburn House, 1999).

<sup>716</sup> Ehn, Isberg, Linde and Wallin, "Swedish Bureaucracy in an Era of Change," 434.

<sup>717</sup> Håkansson and Nordling, "The Health System of Sweden," 213.

competition between hospitals and primary care clinics for patients; and finally, a separation of purchaser and provider functions in health care.<sup>718</sup> Hjertqvist further describes features of the Revolution, which include:

Privatization, opening up opportunities for private ownership of hospitals and other health facilities; the establishment of diagnosis related groups (DRGs), which ascribe a cost to every health or medical procedure, payable only upon verification that the service is actually completed – designed to encourage efficiency and eliminate waste; competitive contracts for providers, open to private suppliers, as well; guaranteed access for consumers, with a limit of three months as a waiting period for treatment; expansion of consumer information campaigns, to encourage awareness and monitoring of patient conditions, and to facilitate healthy behaviors; provision of legal and other forms of support to public medical and health employees to facilitate new businesses, which are then eligible to bid on competitive contracts.<sup>719</sup>

Themes of consumer responsiveness (and responsibility), the separation of purchasers and providers (as in the British case), and increased competition were thus hallmarks of the reform initiative. The effects of the Stockholm Revolution were evaluated in a 1994 study that charted productivity and cost savings prior to the implementation of the Model in 1992, and found that after the change, productivity in the acute care sector increased by 5%, patient turnover increased by 18% (moving more people through the system), with a cost savings of 25%.<sup>720</sup> After only several years, the goals of introducing a greater degree of cost efficiency, productivity, and consumer responsiveness in the form of facilitated access were well on the way to being realized.

---

<sup>718</sup> Håkansson and Nordling, "The Health System of Sweden," 214.

<sup>719</sup> Johan Hjertqvist, "Meeting the Challenges to European Healthcare: Lessons Learned from the 'Stockholm Revolution'," *Pharmacoeconomics* 20.3 (2002): 50.

<sup>720</sup> E. Jonsson, Has the Stockholm Model Generated More Care for the Money? (Stockholm: Stockholm University, 1994).

Macrotechnologies: County Councils in an Age of Organizational Reform,  
Competition, and Consumer Responsiveness

As with the United States and Great Britain, one of the key macrotechnologies associated with health reform in Sweden is that of organizational restructuring. In the context of the health sector, the entities historically responsible for the administration of medical and health services are the county councils. Formed in 1862, “the county councils are responsible for financing, planning and providing/purchasing medical care for their inhabitants. This responsibility also includes care that others carry out, for example, private care.”<sup>721</sup> Unlike systems such as in the United States, where public health activities and medical practice are mostly carried out under separate auspices and institutional arrangements, the county councils also are responsible for promoting population health, as in disseminating information about prevention and engaging in health education activities.<sup>722</sup> As of 1999, there are 18 county councils, ranging from responsibility for 60,000 people (Gotland) to 1.8 million (Stockholm). To finance health care, the county councils have the authority to charge a proportional income tax specifically for health care – in 2000, an average of 10%; this covers 80% of health care system costs, with the balance funded by patients (3%) and the state (17%).<sup>723</sup>

Under reform initiatives instituted by the conservative coalition government, and upheld and continued after the Social Democrats regained power in 1994, the councils have been subject to administrative streamlining. From the inception of the

---

<sup>721</sup> Gudrun Lindberg and Måns Rosén, eds., National Atlas of Sweden (Stockholm: National Atlas of Sweden, 2000) 83-84.

<sup>722</sup> Lindberg and Rosén, eds., National Atlas of Sweden.

<sup>723</sup> Lindberg and Rosén, eds., National Atlas of Sweden 85.

Stockholm Revolution in 1992, and through 1999, the number of personnel in the county councils decreased by 21%, even as the hours worked – especially by health care staff such as doctors and full-time nurses, remained fairly constant.<sup>724</sup> Moreover, the county councils have devolved certain traditional responsibilities to local health organizations in order to further streamline their operational focus; for example, under the reform initiatives, long-term care was shifted away from the administrative responsibilities of the county councils to local care coordinators. In addition to giving greater focus to the councils' administrative responsibilities, there was a cost efficiency justification for this change, as well. Even as health care costs continued to rise, the new coalition government mandated that counties could not raise taxes between 1991 and 1994 to secure additional funds for the system. The devolution of this responsibility allowed the counties to fend off additional costs; local councils now assume responsibility for payment once acute care was complete, but given their own budget constraints, this has had the effect of shuffling patients through the hospital system as quickly as possible, to move them into nursing homes or to receive long-term care in their own homes.<sup>725</sup>

A second, and perhaps even more key, organizational reform was to shift the role of the county councils from providers of health care, to purchasers that made contracts available for competitive bidding. Under the old system, the councils dispersed funds to hospitals and other care facilities in the form of global budgets – a fixed sum to be dispersed for all services. Under the new arrangement, health care services were devolved from a global budget and competitively bid upon by

---

<sup>724</sup> Lindberg and Rosén, eds., National Atlas of Sweden 92.

<sup>725</sup> Ministry of Health and Social Affairs - Sweden, Annual Report on Local Councils and Their Responsibility for Elderly Long-Term Care (Stockholm: Ministry of Health and Social Affairs, 1995).

providers. Approximately 1000 medical procedures were analyzed using the abovementioned Diagnosis Related Groups, which assign a cost to each, based on a point system (two DRG points for one procedure, three for another, etc). Providers are then compensated by the councils based on what the DRG points dictate, which encourages “less efficient hospitals to increase efficiency in order to get revenue that matches their costs.”<sup>726</sup>

While the purchaser provider split was implemented at the level of the county councils, the Ministry of Health shared in the vision of applying market principles to the health system, especially in the context of promoting competition. Former Minister of Health Bo Könberg, who headed the Ministry at the time that the reforms were being debated and implemented, has concluded:

...much has to do with getting more value for the money within the county council system, or a system with more competition...That’s the debate we have with the Social Democrats. We are trying to get more competition between the public clinics, also in some cases between public hospitals and private hospitals.<sup>727</sup>

The push to implement competition in the provision of health care was complemented by other specific reforms. Beginning in 1992, the Stockholm regional government began providing entrepreneurial training to those working in the public sector system to develop business models for bidding on service provider contracts. And as of 1998, all health care services not related to emergency medicine were put up for competitive bidding. The result has been that by 2003, the monolithic system

---

<sup>726</sup> Ragnar Lofgren, The Swedish Health Care System: Recent Reforms, Problems, and Opportunities (Vancouver: The Fraser Institute, 2002), 4. Gerdtham, et al (1997) conclude that under the new system that casts county councils as purchasers, the councils have realized an average of 13% cost savings over using global budgets - U.G. Gerdtham, C. Rehnberg and M. Tambour, The Impact of Internal Markets on Health Care Efficiency: Evidence from Health Care Reforms in Sweden (Center for Health Economics, Stockholm School of Economics, 1997).

<sup>727</sup> Quoted in Twaddle, Health Care Reform in Sweden, 1980-1994 119 20.

of publicly provided health care had been adjusted to accommodate more than 200 private providers, dispersed throughout the country.<sup>728</sup>

In addition to employing competitive contracts as a technology of health government, the councils have also more assertively shifted their operational focus on the patient, or health care consumer. Beginning in 1992, the county councils began implementing the Patient Choice and Care Guarantee; under this reform, patients were guaranteed treatment within three months of receiving a diagnosis, and the right to seek treatment at another facility if their chosen provider could not provide care within that time frame. This measure was augmented when the Federation of County Councils in 1997 drafted an initiative that called for the councils to further “strengthen the patients’ position by increasing accessibility and emphasizing freedom of choice.”<sup>729</sup> Specific measures in this regard call for granting the individual the right to speak to a medical worker on the day of contact; see a general practitioner within eight days, and see a specialist, if necessary within either one month (if ambiguous diagnosis), or three (if diagnosis is clear).<sup>730</sup>

Given Sweden’s increased emphasis on other neoliberal technologies in the health system, it is not surprising to see the valorization of the consumer as a major element of the reform initiative. Indeed, Hjertqvist views the shift toward a customer-oriented focus as the thread that binds all other reforms together:

Once the foundation has been laid, the system can be reshaped to make the consumer a partner. Supporting infrastructure enhancements...is not only rational from an economic point of view, but also empowers the individual consumer with knowledge, encourages the development

---

<sup>728</sup> Montreal Economic Institute, Turning to the Private Sector in Health Care: The Swedish Example (Montreal: Montreal Economic Institute, 2003).

<sup>729</sup> Lindberg and Rosén, eds., National Atlas of Sweden 93.

<sup>730</sup> Lindberg and Rosén, eds., National Atlas of Sweden.

of patient groups, and builds credibility in the system. Consumer power has been increasingly recognised as an instigator of change, a tool for implementing necessary reforms, and an efficient indicator of low performing institutions. Assessments made by the consumers should become the standard evaluation, rather than those with no bearing on either performance or outcome.<sup>731</sup>

#### Bringing Reform into Effect: Pressure within the System

These changes to streamline bureaucracy, promote competition, and become customer-focused emerged out of critiques that the administrative system of the county councils was bloated, inefficient, and unresponsive to consumer needs. And while the reforms initiated under the Stockholm Revolution were generated at the macropolicy level, they were accepted, and in some cases embraced, by those internal to the health sector. Johannes Vang, a WHO doctor and co-author of the Federation of County Councils' 1992 *Crossroads Report*, chastised the pre-reform Swedish health sector for not operating more in accord with market principles, especially in the above-mentioned arenas of consumer responsiveness and monopoly organization.<sup>732</sup> He concluded that a focus on bureaucratic organization and administrative capacity

underlined the faults of the administrative system because the patient became less and less important as centralization became also more and more expressed, as hospitals became bigger and bigger...

At the same times as the patient/customer lost importance, it always appeared a total monopoly. In our situation here, we had a total monopoly. It was the *landstinget*, the county councils. They financed it. They produced it. They controlled some of it. The product was

---

<sup>731</sup> Hjertqvist, "Meeting the Challenges to European Healthcare: Lessons Learned from the 'Stockholm Revolution'," 52.

<sup>732</sup> The *Crossroads Report* had, as its goal, a discussion of various options for reform of health care organization and financing.

very bad. And they could even improve demand, if they wanted to, simply by increasing taxes.<sup>733</sup>

Vang was not alone in his conclusions, either. Anders Milton, Secretary General of the Physician's Union (*Läkarförbundet*), remarked on the 1990s reforms:

You see a lot of layers of bureaucracy and you create a lot of confusion within the command structure of health care that is not efficient...We proposed a system...that gives the patients a much stronger position than they used to have, meaning the patients make the choice. They carry the money with them, meaning that their choice has a budgetary implication. Also, on the provision side, there should be free competition...within quality boundaries. I mean once you pass the society's need when it comes to quality, then it should be a free market.<sup>734</sup>

And Inger Ohlsson, President of the Nurse's Union (*Vårdförbundet*), concluded in a 1993 interview that the long-standing health care system based on social solidarity and equality of access was giving way to a leaner, meaner, more market-oriented approach to the health.

The ideological grounds for the system are threatened. People want a greater say, greater choice. Public health care has neglected public demand for a greater say and choice. There is economic pressure on the health care system to do more for less cost...Equality is a value that has become unfashionable.<sup>735</sup>

While Ohlsson remained skeptical of the direction of the reforms, the Nurse's Union itself ultimately contributed to actualizing this vision by creating a committee to research new ways to introduce entrepreneurship into nursing practice, and by supporting private practice alternatives.<sup>736</sup>

---

<sup>733</sup> Quoted in Twaddle, *Health Care Reform in Sweden, 1980-1994* 115.

<sup>734</sup> Twaddle, *Health Care Reform in Sweden, 1980-1994* 124-25.

<sup>735</sup> Twaddle, *Health Care Reform in Sweden, 1980-1994* 100.

<sup>736</sup> Montreal Economic Institute, *Turning to the Private Sector in Health Care: The Swedish Example*, 2.

As one can see, the application of neoliberal technologies of government to the health system was facilitated not only by politicians at the national level, but also by actors in all sectors of health care. Twaddle thus concludes that while the presence of a conservative coalition government set the tone of policy, “it was also clear that the proposals for change were coming from the Ministry of Health, the Federation of County Councils, and the Physicians’ Union.”<sup>737</sup>

#### Neoliberal Macrotechnologies in the Context of Public Health

With the reform of government technologies to espouse a more market ideology in the 1990s, it is not surprising that the organization and practices of Swedish public health would come to demonstrate at least some of them. What is surprising, however, is that a national, comprehensive public health system did not have to change in response to the new imperatives: it was developed in conjunction with them, mitigated to a certain extent by the long-standing tradition of collectivism that proved impossible to thoroughly abandon.

This is not to assert that public health did not exist prior to the late 1980s and early 1990s; rather, it was organized not as an arena of national policy, but in accordance with the directives of the county councils. In this regard, Sweden had long been criticized for having “no comprehensive public health policy.”<sup>738</sup> Even in a system that has emphasized collective responsibility for many years, the notion of collectivity under the auspices of a central public health organization was not, until

---

<sup>737</sup> Andrew C. Twaddle, Restructuring Medical Care: Swedish Opinion Leaders on the Medical Care Crisis (If There Is One) (Linköping: Tema H, Universitet i Linköping, 1994) 10-11.

<sup>738</sup> Gunnar Agren, “The New Swedish National Health Policy,” Scandinavian Journal of Public Health 29 (2001): 246.

recently, a defining feature of the system. Thus, "it has been recognized that politics is a health determinant in different sectors of society, but there has not been any effort to coordinate different governmental offices in order to promote public health."<sup>739</sup>

This aspect may partly be due to the relatively recent emergence of a national strategy on public health in Sweden. The first attempts to coordinate such a strategy were begun in 1987, with the creation of a task force involving both administrative officials as well as public health scientists to develop an overarching national health strategy, one that could be integrated into the existing system of social welfare. From this task force emerged a recommendation to create a National Institute of Public Health (NIPH), organized in 1992. Its focus was "to direct health promotion and disease prevention activities at a national level and to cooperate with other national authorities and NGOs in health matters."<sup>740</sup> At the time that the NIPH was organized, however, Sweden was already implementing market reforms to emphasize streamlined bureaucracy, competition, and consumer responsiveness. Agren has pointed to the tangible effects that these neoliberal changes had on the direction of activities and research pursued by the NIPH. Where it had been chartered with an agenda that focused on socioeconomic and other structural determinants of health,

the institute did not take on its intended strategic role in the Swedish public health work. Instead its activities focused on programmes directed towards health problems such as alcohol, illicit drugs, HIV/AIDS, injuries, allergic disorders and tobacco use. There was a quite strong emphasis on information directly to the public.<sup>741</sup>

This focus on behavioral risk factors underscores the fact that the health system was reorienting toward the consumer not only in terms of marketing service

---

<sup>739</sup> Agren, "The New Swedish National Health Policy," 246.

<sup>740</sup> Agren, "The New Swedish National Health Policy," 246.

<sup>741</sup> Agren, "The New Swedish National Health Policy," 246.

delivery, but also in terms of engaging individuals as consumers of *information* so that they might be better equipped to monitor risk factors and engage in self-care. By focusing on behavioral risk factors in its research and promotion activities, the NIPH contributed to the construction of the individual as both the site of disease risk and the solution for its mitigation.

As the national public health system evolved over the course of the 1990s, it was caught amidst continuing public sector cutbacks and welfare reform. After the Social Democrats regained control of the government in 1994, a move was made to develop broader consensus about the role and function of the national public health system. In 1997, a new committee was formed to articulate not only the content of specific public health objectives, but also organizational responsibilities for achieving them. That this was a multilateral effort is indicated by the diversity of interests and perspectives represented on the committee: representatives from all major political parties, labor and other interest groups, as well as experts in the fields of public health and medicine more generally.<sup>742</sup> A number of public health goals have been identified, encompassing structural dimensions – supportive social environments, high levels of employment and safe working environments, as well as behavioral factors such as healthy diet, adequate physical activity, and avoidance of drugs, alcohol, and tobacco. By emphasizing both structural and behavioral public health issues, Sweden's approach to public health in this instance very much mirrors the overall health system that evolved in the 1990s: one that retained a general commitment to the social unit, even as neoliberal principles – in this case, attention to

---

<sup>742</sup> Agren, "The New Swedish National Health Policy."

behavioralism and individual risk factors – became intertwined with that commitment.

In early 2001, a bill brought before the *Riksdag* (Swedish Parliament) proposed that the National Institute of Public Health be reorganized and re-tasked effective July, 2001. The new mission charged the NIPH with coordinating activities between the public, private, and nonprofit sectors to achieve major public health goals, evaluating programs pertaining to them, acting as a clearinghouse of information for public health research, and assuming responsibility of supervising tobacco and alcohol health initiatives from the National Board of Health and Welfare and the National Alcohol Board.<sup>743</sup>

In the process of this reorientation, the Swedish government commissioned an international panel evaluation of public health research in the country, to identify strengths and weaknesses and to guide the reorientation process. And again, while Sweden's public health system does not demonstrate the hyper-liberal tendencies of the U.S., or even Great Britain, the panel's 2004 report reflects the diffusion away from population approaches to public health towards those that emphasize clinical treatment of individual bodies. In this regard, the panel concluded that the direction of publicly funded health research was improperly skewed *away* from population health, as it has been comparatively pushed aside in favor of research fitting the biomedical paradigm:

Considering the outstanding Swedish contribution to international research knowledge in public health as well as national contributions to policy-making, the panel finds it difficult from an international perspective to understand why the Swedish society has allocated so

---

<sup>743</sup> Ministry of Health and Social Affairs - Sweden, [Towards Public Health on Equal Terms](#) (Stockholm: Ministry of Health and Social Affairs, 2001), 3.

much more priority to basic biomedical and clinical research. For future policy-making in Sweden, the panel recommends that the Swedish society challenge this previous prioritization of research funding – and change the balance towards much more PHR [public health research].<sup>744</sup>

While Sweden retains a national public health system organized and coordinated by the NIPH, the practice and dissemination of much public health work occurs at the local levels. Here, too, recent developments demonstrate the application of market principles – in this case, decentralization and greater autonomy for local organizations to manage health activities and to disperse budgets, provided that they develop and implement “comprehensive health action plans.” These plans enumerate a series of public health measures consonant with the national public health goals, provide or identify funding for their implementation, and demonstrate activities for evaluation and follow-up. Since 1995, the number of municipalities implementing comprehensive health action plans has more than doubled, from 20% to 53% in only nine years.<sup>745</sup> With the implementation of these health action plans, and in concert with the overall theme of reform, the county councils have further devolved responsibility for public health activities to local public health councils. In the wake of reform measures emphasizing decentralization, the local public health councils have increasingly gained more autonomy in deciding which public health initiatives to pursue. Prior to the late 1990s, public health councils retained mostly an advisory

---

<sup>744</sup> Kamper-Jørgensen, Finn, Sara Arber, Lisa Berkman, Johan Mackenbach, Linda Rosenstock and Juha Teperi, International Panel Evaluation of Swedish Public Health Research (Stockholm: Swedish Council for Working Life and Social Research and the Swedish National Institute of Public Health, 2004), 5. Among the specific issues identified by the panel were the need to increase research productivity in terms of the publication of scientific articles, the need to shift research foci away from descriptive studies and studies pertaining to disease determinants and toward studies pertaining to health promotion and health services, and a need to focus more on innovation in public health research

<sup>745</sup> National Institute of Public Health - Sweden, The Organization of Public Health in the Municipalities in 2003, Available: [http://www.fhi.se/templates/Page\\_\\_\\_\\_1612.aspx](http://www.fhi.se/templates/Page____1612.aspx), September 27 2004.

role vis-a-vie the county councils, with little decision-making authority.<sup>746</sup>

Complementing this greater degree of autonomy is the trend toward local health councils' managing and dispersing their own budgets, and deciding how particular initiatives will be funded. As of 2003, 57% of local public health councils controlled their own budgets, a figure that more than doubled since 1995.<sup>747</sup>

In addition to demonstrating a trend toward decentralization and local control in the public health arena, the distribution of public health activities pursued by the local councils have focused primarily on behavioral elements of the nation's public health goals. A 2004 NIPH study revealed the majority of initiatives outlined in the comprehensive action programs were directed toward the national health objective pertaining to tobacco, alcohol and other drug use.<sup>748</sup> The dissemination of public health activities that target educating and modifying individual behavior, taken in concert with trends toward decentralization and local autonomy of public health councils, as well as an orientation of health research toward biomedicine as opposed to population health, all reveal the particular manifestations of neoliberal rationality in contemporary Swedish public health.

Though these changes are not so nearly dramatic as, for example, the ongoing transformation of the CDC in its *Futures Initiative*, or the new role of British public health organizations as auditors of clinical practice, it is to be expected that with the overall health system demonstrating features of market reform, that the values and

---

<sup>746</sup> National Institute of Public Health - Sweden, The Organization of Public Health in the Municipalities in 2003.

<sup>747</sup> National Institute of Public Health - Sweden, The Organization of Public Health in the Municipalities in 2003.

<sup>748</sup> National Institute of Public Health - Sweden, The Organization of Public Health in the Municipalities in 2003. While these comprised the majority, initiatives pertaining to healthy childhood and a safe environment were also cited as numerous. Exact figures were not provided.

technologies associated with that reform would manifest in the structure and practices of public health. This manifestation carries over necessarily to the microtechnologies of Swedish public health; in this arena, we witness the same emphasis on the primacy of individual risk factors and an orientation toward human capital development that characterized the British health promotion campaigns, though nothing as hyperliberal as the social marketing campaigns pursued in the United States.

#### Health Education in the Swedish Context: Microtechnology and Neoliberal Government

The manifestation of neoliberal rationality in the government of health is not limited to the macro-practices that have evolved in Sweden over the twelve years. Specific public health programs have also reflected neoliberal-style microtechnologies of government, especially in the area of promoting human capital in the context of health education. Sweden's longest running public health prevention program for CVD, the Malmö Preventative Project, began in 1974 as a way to identify at-risk adults for intervention and prevention measures to reduce the burden of cardiovascular disease. Since its inception, over 30,000 men and women have participated in the screening program.<sup>749</sup>

A key component of the program is a comprehensive risk factor screening, including a physical, laboratory tests, and a self-administered questionnaire. The questionnaire itself is useful for illustrating which risk factors are privileged as a site of data collection, and salient to prevention and intervention practices; given that

---

<sup>749</sup> G. Berglund, P. Nilsson, K.F. Eriksson, J.A. Nilsson, B. Hedblad, H. Kristenson and F. Lindgarde, "Long-Term Outcome of the Malmö Preventative Project: Mortality and Cardiovascular Morbidity," *Journal of Internal Medicine* 247 (2000): 21.

Sweden's public health goals include several directed toward macrosocial and economic determinants of health and illness, one would expect to find questions that address these aspects. However, the questionnaire reflects more the application of the biomedical model to public health, with questions that deal primarily with genetic predispositions and behavioral practices: family history of CVD, hypertension, and diabetes; patterns of smoking and alcohol consumption; physical activity levels (including work and leisure); dietary patterns and history of weight gain; and the presence of symptoms of CVD.<sup>750</sup>

This focus on individual level risk factors in public health program is not limited to the Malmö Preventative Project. In Northern Sweden, the Norsjö prevention program emerged as a result of statistical trends in the 1980s showing that CVD morbidity and mortality was significantly higher in the rural north, while the region also had comparatively fewer public health resources to address the problem. Västerbotten County, for example, demonstrated one of the highest rates of ischaemic heart disease in the country (634 per 100,000); the Norsjö municipality within the county had the highest mortality rates, prompting the county government to launch the Norsjö initiative in 1985.<sup>751</sup>

---

<sup>750</sup> Berglund, Nilsson, Eriksson, Nilsson, Hedblad, Kristenson and Lindgarde, "Long-Term Outcome of the Malmö Preventative Project: Mortality and Cardiovascular Morbidity," 21.

<sup>751</sup> L. Weinehall, C. Lewis, A.N. Nafziger, P.L. Jenkins, T.A. Erb, T.A. Pearson and S. Wall, "Different Outcomes for Different Interventions with Different Focus! - a Cross-Country Comparison of Community Interventions in Rural Swedish and Us Populations," Scandinavian Journal of Public Health 29, Supplement 56 (2001). For additional details on the Norsjö project, see: I. Brännström, M. Rosén, S. Wall and L. Weinehall, "Local Health Planning and Intervention - the Case of a Swedish Municipality," Scandinavian Journal of Primary Health Care Supplement.1 (1988).; and L. Weinehall, G. Westman, G. Hellsten, K. Boman, G. Hallmans and T.A. Pearson, "Shifting the Distribution of Risk: Results of a Community Intervention in a Swedish Vascular Risk Profile," Journal of Epidemiology of Community Health 53 (1999).

The initiative was targeted at identifying high-risk individuals between 30 and 60 on the basis of three risk factors: plasma lipids, blood pressure, and smoking. These individuals participated in an annual survey pertaining to these risk factors, received a clinical evaluation, and were counseled on the basis of their test results; those at higher levels of risk received additional lifestyle counseling about ways to decrease their risk for CVD. A review of the program has identified that its population strategy “concentrated on messages about lifestyle factors (i.e. eating habits, smoking, physical activity, social networking, and emotional support).”<sup>752</sup> Even when pursued as a population health initiative, the analytical lens and techniques of practice of the Norsjö project were firmly rooted in atomistic individualism and the behaviorist imperative such an approach generates:

The Norsjö model of community intervention planned to address and counsel each and every individual at certain ages, at the same time conveying messages about lifestyle changes, eating habits, alcohol consumption, physical activity, and psychosocial conditions to the general public of the local community.

The overall goal of the individually oriented primary care approach was wider than simply screening individuals for high CVD risk. The main idea was to reach everyone individually and to create an arena for communication between individuals and health professionals regarding health problems.<sup>753</sup>

That a public health education and prevention program such as Norsjö consciously adopts a primary care model emphasizing individual interactions and lifestyle counseling, illustrates how the population approach, so long an entrenched

---

<sup>752</sup> Weinehall, Lewis, Nafziger, Jenkins, Erb, Pearson and Wall, "Different Outcomes for Different Interventions with Different Focus! - a Cross-Country Comparison of Community Interventions in Rural Swedish and U.S. Populations," 47.

<sup>753</sup> L. Weinehall, G. Hellsten, K. Boman and G. Hallmans, "Prevention of Cardiovascular Disease in Sweden: The Norsjö Community Intervention Programme--Motives, Methods and Intervention Components," *Scandinavian Journal of Public Health* 29.Supplement 56 (2001): 15.

feature of public health, is being eclipsed by an orientation toward biomedicine. Moreover, it demonstrates, in conjunction with examples gleaned from Britain and the U.S., how public health approaches to NCDs are predicated upon the notion that individual behaviors are both problem and solution, if the at-risk person can only be educated to change. The notion that bodies are sites of investment – to maximize health, longevity, or as the *Giving up for life* campaign in Britain illustrates, attractiveness, money, and confidence – only brings into sharp focus how the neoliberal imperative to convert life and its processes into capital has embedded itself in the microtechnologies of modern public health.

### Conclusion

In terms of government technologies, macropolicy reforms in all three case countries have introduced elements of neoliberalism to the overall health system, as well as to the specific arena of public health. Sweden remains, on the whole, not so nearly hypermarketized as the United States, or even Britain; yet across all three, we are witnessing convergences bearing the stamp of neoliberal rationality in the macrotechnologies of public health – organizational reform to streamline bureaucracy, the privileging of competition and internal markets, movements toward decentralization and in some cases privatization, and a reorientation toward consumer responsiveness.

It is also noteworthy that the neoliberal reforms undertaken in each of the case countries was in part carried out under the administration of historically *welfarist* parties (the American Democrats, British Labour, and the Swedish Social

Democrats). However, more interesting still is the lack of differentiation in the two cases (Britain and Sweden) when these welfarist parties assume control from conservatives. In the case of Britain especially, one could make a strong case for an extension of neoliberal principles even beyond that what the Conservative party had envisioned under its tenure. Under the Blair government, internal markets – though modified – have been upheld, decentralization has been accelerated under the Department of Health bureaucratic reforms, and new entities such as the Modernisation Agency and the National Health Performance Fund have been created to promote efficiency and accountability. And in Sweden, the move to competitively source all non-emergency health services, as well as the 1997 initiative to strengthen the position of the health care consumer, were implemented under the Social Democrats. Taken in context with the United States, where neoliberal reforms begun under a Democratic administration have only been accelerated under President Bush, health reform in these three countries reveals a divorce between party politics and the subtle politics of neoliberal rationality.

As demonstrated in the analysis, not all neoliberal technologies are equally emphasized across the three cases, and they have been implemented in different ways. That is to be expected; neither Sweden nor Britain is re-creating from whole cloth the U.S. model, and the historical and cultural legacy of each country continues to shape the way reforms are pursued and implemented. But when these technologies are assessed in conjunction with the micro-practices of public health – social marketing, and health education campaigns predicated upon targeting individual risk factors and enhancing human capital – it becomes difficult to deny that economics has no

monopoly on market rationality. The technologies of public health may claim to it as well, manifesting as a key element of a distinctly neoliberal governmentality.

## Chapter 8: The Production of Healthy Subjects

...Medicine forms part of an historical system. It is not a pure science, but is part of an economic system and of a system of power. It is necessary to determine what the links are between medicine, economics, power and society in order to see to what extent the model might be rectified or applied.  
- Michel Foucault

Thus far, we have explored how the systems of knowledge and the technologies of power that give shape to the public health discipline are directed toward government at a distance – a hallmark feature of neoliberal governmentality. The third axis, yet to be explored, is the realm of the subject, the sense of self that is cultivated as part and parcel of the activities of government. To accomplish this and illustrate the theoretical argument in more concrete and practical terms, it is necessary to explore how specific public health programs – the microtechnologies of public health alluded to in Chapter 5 and discussed further in Chapter 7 – are implicated in the construction of particular kinds of subjects. To that end, the analysis probes in depth the aims, content, discursive frames, and methods of three chronic disease prevention initiatives – WISEWOMAN in the United States, *Expert Patients* in Britain, and *Smoke free Children* in Sweden – in order to discern how these various aspects of the program are directed toward not only the rehabilitation of the body, but of the relationship of the subject to the self.

It should be stressed at the outset that given the fact that public health activities have long been an integral institutional and practical element in the three countries, and the fact that chronic NCDs have comprised a significant morbidity and mortality burden in them for decades, there are a number of health promotion

campaigns that could have been selected for analysis. It is worth addressing in brief, then, why these three. The first reason is that all three are national campaigns and therefore are broad in scope; as illustrated in the previous chapter, public health activities are often enacted in very decentralized settings, and there may not be cohesion as to the content or direction across different locales. This feature does not disappear with these cases; however, the fact that national institutions of public health – the CDC in the case of WISEWOMAN, the NHS in the case of *Expert Patients*, and the NIPH in the case of *Smoke-free Children* – coordinate and set guidelines for these activities ensure that variation in program content is kept within boundaries. As such, one is able to speak of a public health initiative as something more than a district campaign that is completely unique and particular, and not necessarily applicable elsewhere.

A second reason for selecting these health education initiatives is that they facilitate an examination of subject formation with regard to different stages of the disease process – prevention as well as intervention and management. *Expert Patients* is a program designed, for example, to assist those already living with chronic disease, while the other two are geared toward the containment of risk and disease prevention.

Finally, and this aspect will be illustrated more fully and in greater detail in each of the cases, is that all three programs are targeted either toward the entirety of the population experiencing chronic disease, as in the case of *Expert Patients*, or toward especially vulnerable populations to NCD risk – older, uninsured women in

the U.S. case, and pregnant or new mothers and their children in Sweden.<sup>754</sup> If we are to examine how public health is implicated in the construction of healthy subjects, it stands to reason that the campaign should either be universal in scope – so no one is excluded - or directed towards those who are most at risk, and thus have the most to gain from a transformation in how they relate to and manage themselves.

While there are necessarily differences between program content, we will see emerge consistent themes, such as an emphasis on producing empowered, autonomous people who manage risk because they desire to, not because they are coerced or required. Informing this aspect, a core component of all three initiatives operates at the level of individual: the management of the body and the daily practices that condition its health, as well as the management of one's relationship with the self – one's sense of identity, empowerment, and capability that are the province of subjectivity. As Lorig and Holman note, "*self-management* is now a common term in health education and is the name attached to many health promotion and patient education programs."<sup>755</sup>

Additionally, the privileged role of surveillance, especially self-monitoring, as a means to the end of producing "healthy" subjects is a prominent feature across the cases, as is the design by which individuals come to see themselves as entrepreneurs

---

<sup>754</sup> It should be noted that in the case of *Expert Patients*, the fact that it is still in a pilot phase means that not every person living with chronic disease is reached by it at this point; this is further informed by the fact that participation is voluntary. However, we can speak to the program being directed toward all patients with chronic disease in two senses: first, the Department of Health has declared that *Expert Patients* is to be the national chronic disease management program - The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century; second, and to that end, after the pilot phase, chronic disease self-management programs (CDSPs) affiliated with *Expert Patients* will be available in all Primary Care Trusts, and thus available to all those who wish to participate.

<sup>755</sup> K. Lorig and Halsted R. Holman, "Self-Management Education: History, Definition, Outcomes, and Mechanisms," Annals of Behavioral Medicine 26.1 (2003): 1.

of their lives and health, treating the self as a site of investment – health for its own sake, certainly, but also infused with the motive toward productivity in other spheres. It is this last dimension, the cultivation of a productive self, that is also implicated in the construction of healthy subjects as healthy citizens; thus, to speak of subjectivity in this context entails not only an examination of the relationship of the self to the self, but of the self to others around it. These themes all recur across the three cases, and as we will see, speak to the role of public health as a project complicit in the construction of neoliberal subjects.

*Constructing the Subject: Elements of the Project of Self-Craft*

Before launching into a treatment of the three case programs, it is helpful to further explicate the theoretical concepts that guide the analysis. “Subjectivity” as a concept is rather flexible, and although the approach to it employed in this project has been laid out in previous chapters, some additional context here not only provides a greater sense of depth, but also a structure by which we can frame the analysis of the case programs.

The core task of this analysis is to delve into the process of *subjectivation*, or an examination of how subjectivities – the relationship of individual to self – are constructed in accordance with particular rules and values, and ultimately implicated in the government of self. Foucault elaborates on the subjectivation process:

...a history of the way in which individuals are urged to constitute themselves as subjects of moral conduct would be concerned with the models proposed for setting up and developing relationships with the self, for self-reflection, self-knowledge, self-examination, for the

decipherment of self by oneself, for the transformations that one seeks to accomplish with oneself as object.<sup>756</sup>

In the context of public health approaches to chronic disease, an evaluation of how subjectivities are constructed takes into account how particular education and promotion programs facilitate and reformulate the way in which individuals understand and relate not only to their bodies, but also how the management of those bodies and the risks they confront is itself implicated in the cultivation of an ideal state of being – such as “health,” “empowerment,” or “autonomy.” The cultivation of this state of being is, as Foucault stresses, ultimately a project in which the government of self is intimately tied to the cultivation of morality:

...all moral action involves a relationship with the reality in which it is carried out, and a relationship with the self. The latter is not simply “self-awareness” but self-formation as an “ethical subject,” a process in which the individual delimits that part of himself that will form the object of his moral practice, defines his position relative to the precept he will follow, and decides on a certain mode of being that will serve as his moral goal. And this requires him to act upon himself, to monitor, test, improve, and transform himself...Moral action is indissociable from these forms of self-activity.<sup>757</sup>

Thus, the government of self that emerges out of its cultivation is an activity that encompasses the realms of the body, mind, as well as soul, and is geared toward government for *the good* as opposed to merely government *for itself*. As is demonstrated in the program content of WISEWOMAN, *Expert Patients*, and *Smoke-free Children*, as well as participant reactions to them, the multidimensional nature of self-craft for the purposes of moral or ethical good is perhaps the defining nature of subjectivation.

---

<sup>756</sup> Michel Foucault, The Use of Pleasure, The History of Sexuality, vol. 2 (New York: Vintage Books, 1990 [1985]) 29.

<sup>757</sup> Foucault, The Use of Pleasure 28.

*The Evolution of Neoliberal Subjectivity in the Context of Public Health*

Exploring the construction of subjectivities in the context of these public health approaches to NCDs and their risk factors is to simultaneously account for the values and norms that infuse the subjectivation process. As argued and demonstrated throughout this project, contemporary public health privileges the values and norms of neoliberalism; they are manifest in how knowledge is produced and disseminated within the discipline, the macrotechnologies that shape the environment in which national public health systems operate, and in the microtechnologies that are the work of public health. In this chapter, we discern in much greater depth the microtechnologies of health education and promotion, with detailed reference to three programs in the case countries; but we also engage how these technologies are implicated in the subjectivation process. And as before, a neoliberal rationale both underlies them and is extended to the construction of subjectivities, and how individuals are brought to relate to and govern themselves.

Determination of Ethical Substance

To further develop the concept of subjectivity in the public health context, and to highlight several defining features of neoliberal subjectivities in relation to, for example, classical liberal modes of subjectivation, Foucault's elaboration of four key aspects or questions pertaining to "the subject" merit greater exploration. The first is the *determination of the ethical substance*, or the work that must be performed or

accomplished in order to achieve an ethical subjectivity.<sup>758</sup> In the context of health, subjectivity in the classic liberal and neoliberal context is geared toward the actualization of the self as “healthy,” thus the obstacles to that goal are the content of the ethical work on the self; but what are these obstacles, and how are they managed or overcome? In both the liberal and neoliberal context, risk constitutes the primary ethical substance: as has been demonstrated throughout this project, risk is perhaps a defining feature of public health work. Moreover, it is risk – whether behavioral, genetic, or environmental – that must be managed and overcome if one is to achieve an ethical subjectivity predicated upon being “healthy.”

Despite this similarity, in the evolution of liberal rationality we witness a relocation of the analytical focus from the risks affecting *populations* to those affecting *individual bodies*. Under the classic and later welfare liberalism that modern public health practices evolved, the sources of risk attended by public health activists and institutions were situated to a great extent in the external environment. By-products of rapid industrialization such as the slum environment or contaminated water supplies created a situation in which:

[T]he major concerns of public health reformers were the state of the streets, housing and sewerage in towns and cities, and the increasing burdens placed by ever-growing populations of the poor upon welfare institutions...Space and place were therefore the dominant features of the discourses of nineteenth-century public health, which tended to pathologize certain regions, to render them sites of filth and toxicity to be avoided by “decent” citizens...Public health strategies at this time, therefore, were directed at regulating the spaces between the bodies of the poor, the working class and the ethnic minorities and at preventing these groups from mingling with members of the bourgeoisie.<sup>759</sup>

---

<sup>758</sup> Foucault, *The Use of Pleasure* 26.

<sup>759</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk* 91-93. On the general issue of the physical environment as a source of risk in 19<sup>th</sup> century public health, see also: P. Stallybrass and A. White, *The Politics and Poetics of Transgression* (London: Methuen, 1986).; and S.

In the management of risk, populations – such, as was emphasized by the reformers, the bourgeoisie and the upper classes – were thus induced to avoid pathological areas, or classes of citizens – in the name of realizing a “healthy” self. But whereas the health risks associated with earlier incarnations of liberalism focused on threats to population existing the external environment and managed with reference to population, neoliberal approaches to risk management identify a different locus for the “ethical substance”: management of risks that are the product of lifestyle choices and actualized in the individual body. This claim has been developed and substantiated throughout this project, so a brief treatment will suffice here. The minutiae of daily life that are understood to be key risk factors associated with NCDs - dietary choices, amount and kinds of physical activity, tobacco and alcohol consumption, and the like – are approached as risks governed by the choices free individuals make.<sup>760</sup>

It should be noted that despite the relative weight placed upon lifestyle choice in contemporary public health discourse, environmental risks do not disappear with the evolution of neoliberal rationality; it is how they are managed and the implications of that management for the realization of the ethical self that is different. Rather than the management of risk through the regulation of space, or the restriction of contact between populations seen as a source of risk to the healthy:

---

Craddock, "Sewers and Scapegoats: Spatial Metaphors of Smallpox in Nineteenth Century San Francisco," *Social Science & Medicine* 41 (1995). It is interesting to note that public health concerns regarding overcrowding were not limited to contagion; Rosen (1973) and Lindheim and Syme (1983) chart the beliefs of health reformers at this time that miasma was also implicated in NCDs, as well as crime and other social ills: G. Rosen, "Disease, Debility, and Death," *The Victorian City: Images and Realities*, eds. H. Dyos and M. Wolff (London: Routledge and Kegan Paul, 1973).; R. Lindheim and S.L. Syme, "Environments, People, and Health," *Annual Review of Public Health* 4 (1983).

<sup>760</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk* 15.

the new public health adopts a largely neo-liberal approach, focusing on the citizen as rational consumer, one who engages as an autonomous individual in activities to prevent or reduce environmental damage and to protect herself or himself from health risks believed to be generated by the environment.<sup>761</sup>

In this regard, the management of risk is still predominantly undertaken by the individual, who, by virtue of their proactiveness and discipline, evolves a particularly neoliberal subjectivity; this subjectivity is predicated upon autonomy and empowerment, and directed toward the fulfillment of a healthy and full life.

#### Mode of Subjection

The second issue to be discerned in the evaluation of subjectivity is that of the mode of subjection, or “the way in which the individual establishes his relation to the rule and recognizes himself as obliged to put it into practice.”<sup>762</sup> In other words, how is one made aware of and motivated to undertake the ethical work at hand? Under classic liberalism, such a concern would direct our attention to why governments employ public health experts to worry about the sources of risk aforementioned, and to develop concomitant programs pertaining to such things as sanitation. The logic exists in the liberal imperative, discussed in Chapter 5, to secure the well-being of the population:

After all, health is a matter for government in so far as the health of the population is a concern of the state...[L]iberal forms of government direct health policy always at a certain distance or remove. They embrace the indeterminate character of health policy. They seek to bring about health as a kind of deliberately intended by-product of their activities. A liberal capacity to govern will tend to stress the provision of infrastructural conditions of healthy living – sewage

---

<sup>761</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 90.

<sup>762</sup> Foucault, The Use of Pleasure 27.

systems, clean water-supply, a state-regulated but not state-controlled medical profession...<sup>763</sup>

Thus, the motivation for the state to engage in risk management is ultimately to secure the population so that it may achieve productive ends. Under liberal government in the public health context, the motivation of the singular patient is immaterial; they exist, in congress, as a population to be governed. Eckermann characterizes this dimension of objectification as being especially facilitated by the tools of public health that emerged to categorize, compare, and discipline population: “With the development of epidemiology, statistical techniques for aggregating social data, clinical medicine and the application of science to the social sphere, bodies could be transformed into objects.”<sup>764</sup>

This feature changes significantly with the emergence of a neoliberal rationale of government, where the individual – physical body and intangible self – becomes privileged as the locus of responsibility for achieving health. Osborne describes this process of “responsibilization” as one that

...works like a moving force throughout the whole system, giving it coherence as its principle of functioning. So managers are to be responsible for managing hospitals as businesses, general practitioners are to be responsible for managing and budgeting their practices, and patients, and, of course, *potential patients are to be responsible for being entrepreneurs of their own health* [emphasis added].<sup>765</sup>

The motivation for the state to shift toward responsibilization – not only of the individual for the management of risk, but also of other elements of the health system – is accounted for on one hand as a mechanism to introduce greater efficiency into

---

<sup>763</sup> Thomas Osborne, "Of Health and Statecraft," *Foucault: Health and Medicine*, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998) 182.

<sup>764</sup> Eckermann, "Foucault, Embodiment and Gendered Subjectivities: The Case of Voluntary Self-Starvation," 156.

<sup>765</sup> Osborne, "Of Health and Statecraft," 186.

health care. As Osborne demonstrates with regard to the *forms* that responsabilization takes – managing hospitals as businesses, physicians managing practices with reference to budgets, and managing lifestyle as a domain of entrepreneurship – the application of market principles to arenas outside the traditional market is a paramount neoliberal maneuver.

But this shift toward neoliberal rationality also introduces a new element missing from its earlier incarnation: the responsabilization of the individual is a move that necessitates motivation from within, for how can one sustain the ethical work of self-management if there is no impulse that drives it, and little to no coercion from external authority – as is the case under neoliberalism? As we will see in the cases in this chapter, this motivation is constructed in terms of the desire to be self-sufficient, empowered, and to live as full and as healthy a life as possible. This feature takes several forms, two of which are crucial here: individual autonomy and personal development. First, through the privileging of the individual and the private sphere, one’s personal development and sense of autonomy is promoted; specifically, the state is not a coercive entity that compels one to health, but one resource among many that one may employ in achieving their goal of health and the sense of autonomy and satisfaction that often accompany it. Petersen and Lupton clarify this aspect in their assertion that:

This is a crucial feature of neo-liberalism: the recognition that in modern societies the state is positioned not as domineering, repressive or authoritarian, but rather as part of a set of institutions and agencies that are directed at enhancing personal freedoms and individual development.<sup>766</sup>

---

<sup>766</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 12.

In this regard, a neoliberal subjectivity fostered by public health programs emphasizes how individuals, through participation that educates them to relate to themselves in a new way, can enhance in the first place their sense of autonomy. In concrete terms, this may take the form of a decreased dependency on the health care system, or on family or other care-givers; it may also take the form of enhanced freedom to *do* – to engage in work, leisure pastimes, to recapture or perhaps gain for the first time the ability to participate in activities previously restricted as a consequence of chronic disease or the risk factors associated with it. The ability to engage in such activities, or to develop an overall sense of autonomy and hence capability is intimately tied to the second dimension of motivation, touched on by Petersen and Lupton: that of individual development. Somewhat of a nebulous phrase, it encompasses multiple aspects fostered by public health programs: the aforementioned capacity to engage in activity, but also such things as the ability govern one's body and lifestyle in such a way as to feel in control – a captain in an ongoing voyage of self-mastery, rather than flotsam on the shifting seas of external dictates or influences. Thus, personal autonomy (and the individual development it promotes) demonstrate a key element of the exercise of neoliberal government and the dissemination of power:

Personal autonomy, therefore, is not antithetical to political power, but rather is part of its exercise since power operates most effectively when subjects actively participate in the process of governance.<sup>767</sup>

In considering themes such as personal autonomy and self-development, we are prompted to engage with subjectivation from the perspective of motivation. For the purposes of this project, therefore, the mode of subjection in the neoliberal context

---

<sup>767</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 11.

directs our attention to the ways in which this motivational impulse facilitates the individual to manage their bodies and lives in such a way as to realize the moral goal of health as a virtuous state of being.

#### Evaluation of Ethical Work

A third dimension to be explored is the evaluation of ethical work, or the concrete strategies and actions by which one aims “to transform oneself into the ethical subject of one’s behavior.”<sup>768</sup> For both classic liberalism as well as neoliberalism a key strategy and the actions it entails is that of surveillance. However, we witness in the evolution of the ethical work of subjectivity from a liberal to a neoliberal incarnation a shift from a relative emphasis on surveillance by health experts to one of the surveillance by oneself. This is not to imply that professional expertise has no place in the regulation of neoliberal subjectivity – it is more of a shift in the relative weight, a question of emphasis.

Foucault charts several aspects of surveillance in the classical liberal domain, including the evolution of the hospital, especially as regarding the physician visit; unlike the medical apparatus of the seventeenth century – where physicians only occasionally visited the hospital – by the late eighteenth and early nineteenth centuries, physicians were expected to routinely – and in cases where rotation was possible, daily – visit hospitals to examine patients in sessions lasting at least two hours.<sup>769</sup> The extension of the clinical “gaze” was furthered in the nineteenth century

---

<sup>768</sup> Foucault, The Use of Pleasure 27.

<sup>769</sup> Foucault, Discipline and Punish: The Birth of the Prison 185.

with the evolution of statistical and other techniques employed by health experts to enable the categorization and comparison of individuals:

Training was accompanied by permanent observation; a body of knowledge was being constantly built up from the everyday behavior of the [individual]; it was organized as an instrument of perpetual assessment.<sup>770</sup>

The crowd, a compact mass, a locus of multiple exchanges, individualities merging together, a collective effect, is abolished and replaced by a collection of separated individualities...it is replaced by a multiplicity that can be numbered and supervised.<sup>771</sup>

Through observation, calculation, and categorization, the processes of health and life were subject to expert surveillance. The evolution of neoliberal subjectivity in the public health context marks a shift in the deployment of technologies of surveillance from an external authority – such as a medical or public health expert to the individual herself. As one is educated – via health promotion programs, for example - to monitor all aspects of their habits and routine lifestyle choices, and brings them into accord with prescribed norms of behavior, they are able to chart concretely the evolution of self-governance toward the moral goal. This emphasis on self-monitoring for the purpose of evolving the disciplined body and lifestyle is critical for the evolution of a particularly neoliberal subjectivity:

Under the neoliberal approach to government, it is expected that the subject *qua* citizen will conform to the goals of the state voluntarily, in most cases needing no direct coercion. Such self-discipline is vital to this form of government.<sup>772</sup>

---

<sup>770</sup> Foucault, Discipline and Punish: The Birth of the Prison 294. On this point, see also Beaglehole and Bonita, Public Health at the Crossroads. They provide a worthy account of the history of the early public health movement's emphasis on statistical tracking, measurement, and expert knowledge.

<sup>771</sup> Foucault, Discipline and Punish: The Birth of the Prison 201.

<sup>772</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 64.

Those who do not engage in self-monitoring of risk and concomitant lifestyle adjustment are thus constructed as falling short of the moral imperative to be healthy. Petersen clarifies: “Individuals whose conduct is deemed contrary to the pursuit of a ‘risk-free’ existence are likely to be seen, and to see themselves, as lacking self-control, and as therefore not fulfilling their duties as fully autonomous, responsible citizens.”<sup>773</sup> For progress to be made then, one must manage their bodies and lives responsibly – the knowledge and understanding necessary to achieve this goal emerges from ongoing self-monitoring. This component is key in all three of the education programs evaluated in this chapter. As will be demonstrated in the context of WISEWOMAN, for example, participants in one common public health intervention monitor their weekly intake of a whole range of foods and nutrients, as well as a range of very specific forms of physical activities in light of weekly goals pertaining to that consumption, as well as overall goals such as having a healthier quality of life or improving longevity.

A few final issues pertaining to self-surveillance and the construction of self in the public health context. First, in order for it to function successfully and bring about the desired relationship of the self to the self, it must not be a sporadic phenomenon, but rather one of consistent reflexive engagement. Specifically, it

---

<sup>773</sup> Petersen, "Risk, Governance, and the New Public Health," 198. On this point, see also Robin Bunton, "Popular Health, Advanced Liberalism, and *Good Housekeeping Magazine*," Foucault: Health and Medicine, eds. Alan Petersen and Robin Bunton (New York: Routledge, 1998) 229. This aspect of responsabilization of the individual is developed more extensively in the literature on “healthism” – a concept which posits, at the most basic level, that individuals control to a great extent, through the choices they make, whether or not they become susceptible to disease. For those who do fall ill, it is understood as “a failure of the self to take care of the self” Greco, "Psychosomatic Subjects and the 'Duty to Be Well': Personal Agency within Medical Rationality," 361. On healthism, see Greco, "Psychosomatic Subjects and the 'Duty to Be Well': Personal Agency within Medical Rationality."; and K.R. Dutton, The Perfectible Body: The Western Ideal of Physical Development (London: Cassell, 1995).

“should have the form of a steady screening of representations: examining them, monitoring them, sorting them out...it is a constant attitude that one must take toward oneself.”<sup>774</sup>

Second, even as surveillance is a tool in the general evolution of self-craft and subjectivity, in the neoliberal context it is not geared toward self-mastery that is the result of injunctions against failure and the guilt associated with it. Rather, self-surveillance is geared toward generative, productive ends. Foucault is clear on this:

The subject's relation to himself in this examination is not established so much in the form of a judicial relationship in which the accused faces the judge; it is more like an act of inspection in which the inspector aims to evaluate a piece of work, an accomplished task...The purpose of the examination is not therefore to discover one's own guilt, down to its more trifling forms and its most tenuous roots. If one “conceals nothing from oneself,” if one “omits nothing,” it is in order to commit to memory, so as to have them present in one's own mind, legitimate ends, but also rules of conduct that enable one to achieve these ends through the choice of appropriate means.<sup>775</sup>

That self-surveillance would be geared toward generative, as opposed to repressive ends is a function of the more general proposition that self-government is directed toward “the good” – an increase in health, well-being, autonomy, competence, and the like. Thus, while self-craft and the surveillance that enables it “still belong to an ethics of control,” a subjectivity evolving from their application “is not simply that of a force overcome, or a rule exercised over a power on the point of rebelling; it is the experience of a pleasure that one takes in oneself. The individual who has finally succeeded in gaining access to himself is, for himself, an object of

---

<sup>774</sup> Michel Foucault, The Care of the Self, The History of Sexuality, vol. 3 (New York: Vintage Books, 1988 [1986]) 63.

<sup>775</sup> Foucault, The Care of the Self 62.

pleasure.”<sup>776</sup> In the prevention of NCDs, therefore, monitoring one’s diet and adjusting it to conform to strictures associated with “healthy eating” is not ultimately a project of denial; rather, it is a mechanism by which one can ultimately achieve a happier, more productive relationship with herself – whether conceptualized in terms of increased energy, sense of mastery over the body rather than the body’s mastery over the soul, or the feelings of confidence and satisfaction that may accompany resulting weight loss, for example.

#### *Telos of the Ethical Subject*

The final issue pertaining to the analysis of subjectivities – neoliberal or otherwise – is the *telos* of the ethical subject; Foucault characterizes this dimension as indicative of the significance of the moral action – not only as singular entity or phenomenon, but also in terms of its role in a larger pattern of conduct through which the individual actualizes and lives the moral goal. As Foucault explains:

A moral action tends toward its own accomplishment; but it also aims beyond the latter, to the establishing of a moral conduct that commits the individual, not only to other actions in conformity with values and rules, but to a certain mode of being, a mode of being characteristic of the ethical subject.<sup>777</sup>

As with the evaluation of ethical work, we witness another divergence between classic liberal and neoliberal subjectivities along this dimension. While the prudent management of the body as ethical work is an ancient principle, Foucault notes that the emergence of classic liberalism in the late eighteenth century conditions and infuses this principle with several new features. Principally, it is the disciplined

---

<sup>776</sup> Foucault, *The Care of the Self* 65-66.

<sup>777</sup> Foucault, *The Use of Pleasure* 28.

management of the body *as an individual entity* to prompt it function more “economically” – consonant with key market values on individualism and efficiency.

He elaborates:

...it was a question not of treating the body, *en masse*, ‘wholesale’, as if it were an indissociable unity, but of working it ‘retail’, individually; of exercising upon it a subtle coercion, of obtaining holds upon it at the level of the mechanism itself – movements, gestures, attitudes, rapidity: an infinitesimal power over the active body. Then there was the object of control: it was not or no longer the signifying elements of behaviour of the language of the body, but the *economy, the efficiency of movements*, their internal organization...[emphasis added]<sup>778</sup>

. Through the performance of activities designed to facilitate the efficient operation of the body, the *telos* of the ethical liberal subject could be realized: the useful life achieved through discipline and mastery of the physical. As Foucault notes:

The historical moment of the disciplines was the moment when the art of the human body was born, which was directed not only at the growth of skills, nor at the intensification of its subjection, but at the formation of a relation that in the mechanism itself makes it more obedient as it becomes more useful, and conversely.<sup>779</sup>

While classic liberal subjectivity involved the docilization of the body for the purpose of living economically and usefully, it did not extend to treating the physical shell and life practices that conditioned it as capital.<sup>780</sup> Conversely, the *telos* of neoliberal subjectivity is predicated upon a different ethical relation of the individual to herself; it is in the treatment of the body – of the life itself as capital, as a site of investment. In this regard, “the notion of individual-as-enterprise seems to have emerged as a basic premise of neo-liberal rationality.”<sup>781</sup> The day-to-day activities of managing risk are directed toward effecting an overall improvement not only in the general

---

<sup>778</sup> Foucault, *The Care of the Self* 136-37.

<sup>779</sup> Foucault, *The Care of the Self* 137-38.

<sup>780</sup> Dean, *Governmentality: Power and Rule in Modern Society* 169.

<sup>781</sup> Petersen, "Risk, Governance, and the New Public Health," 198.

quality of “health”, but in the development of knowledge, abilities, and skill-sets applied in that domain and elsewhere. Consider, for example, the outcomes emblazoned in large print across the cover of Britain’s guidance report on *Expert Patients*: “Decisionmaking”; “Self-Esteem”; “Empowerment”; “Medication knowledge”; “Better Quality of Life.”<sup>782</sup> These specific outcomes are attributed to those who invest the time and effort to manage chronic disease risk responsibly. But they also operate in concert to produce a particular kind of subject, one who employs these acquired skills and abilities to productive ends

Consonant with previous discussions of human capital, which understands the individual body as a site and the habits of daily life as opportunities in which to invest, the productive self is one that seeks improvement and in doing so fosters contribution. The productive self can take many forms, such as the ability to participate in gainful employment, or the ability to care not only for self, but also family or the larger community. On this latter point, for example, in the context of public health approaches to NCDs, certain WISEWOMAN sites and the *Expert Patients* Programme avail themselves of trained tutors – who are themselves former program participants – to counsel and motivate new participants or to help in the office-oriented execution of the program. In this regard, the care of the self ultimately facilitates the ability to care or provide for others. Infinito elaborates:

By contending that one must care for oneself in order to *be* a self, Foucault’s theory of the self eliminated the *care of the self* versus *care of others* dichotomy...Foucault’s reasoning suggested that bringing about positive, creative, productive human freedom depends on how

---

<sup>782</sup> The Expert Patients Task Force, [The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century](#).

we act with others, as well as whom we wish to be in relation to those others and to the world.<sup>783</sup>

The linkage of the productive self with the “healthy” self is the key aspect of the citizenship dimension of neoliberal subjectivity touched upon in Chapter 5. The ability to be productive is predicated upon the state of one’s health, to be sure; but it is also constructed as an obligation of the healthy – an element of good citizenship and a key trait of the moral subject. As Petersen and Lupton discuss:

Citizenship as it is represented in the new public health emphasizes both the rights and the obligations of individuals to take up and conform to the imperatives of “expert” public health knowledges. A useful citizen engages in work, participates in social relationships and reproduces...[G]ood health is required for a person to become a good citizen, for ill-health removes individuals from the workforce and other responsibilities, and places an economic burden on others. It is one’s duty to achieve and preserve good health, so that one might fulfill the other obligations of citizenship.<sup>784</sup>

The emphasis on the realm of the economic – not only in terms of contributing to the economy in the form of work, but also in reducing the burdens placed on health infrastructure and individual caregivers – highlights a neoliberal rationale in the cultivation of self. It is the reorientation of the self to relate in such a way as to understand the body as a site of investment – the application of market logic to traditionally non-market spheres; but it is also the injunction to be healthy for productive, and often economic reasons. Why be healthy? Why, to work, of course – whether in a paid position or in other contributions to economy and society – for it is in doing so that one achieves self-actualization in the form of being a “good” citizen.

---

<sup>783</sup> Justen Infinito, "Ethical Self-Formation: A Look at the Later Foucault," *Educational Theory* 53.2 (2003): 156-57.

<sup>784</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk* 61, 65.

In exploring these four dimensions of subjectivation, or the process by which subjectivities are constructed, we are able to move well beyond a treatment of “subjectivity” as a monolithic yet nebulous concept. Rather, the construction of subjectivity – whether in public health or other discursive contexts – demonstrates concrete features that enable a more contextual and specific discussion of “subjectivity.” As stressed above, it is directed toward the management of a problem or obstacle (such as risk), is predicated upon the recognition of and motivation to manage that obstacle, involves the “ethical work” that enables it to be overcome, and is ultimately directed toward the development of a relationship with the self predicated upon ethical and moral virtue. Bearing these features in mind facilitates the evaluation of the three case programs of this chapter in a much more theoretically informed light.

*United States: Producing “Wise Women” in the Context of NCD Prevention*

Overview

Recognizing that NCDs such as heart disease and cancer are responsible for the vast majority of adult morbidity and mortality in the United States, the CDC initiated a public health program in 1995 to combat the risk factors associated with such diseases in an especially vulnerable population. The WISEWOMAN project (Well-Integrated Screening and Evaluation for Women Across the Nation) was developed as a means to reach a population both at great risk for these diseases as well as limited in its ability to access care or preventative services. Piloted in three states between 1995 and 1998, WISEWOMAN’s mission has been to “provide low-

income, underinsured, or uninsured 40- to 64-year-old women with the knowledge and skills needed to improve diet, physical activity, and other life habits to prevent, delay, or control cardiovascular and other chronic diseases.”<sup>785</sup> Since 1998, eleven additional centers have been added, implementing public health promotion techniques where “women are given the tools and knowledge they need to become more physically active, adopt healthy eating habits, lead smoke-free lives, and address high blood pressure and high cholesterol.”<sup>786</sup> Between 1995 and 2002, more than 12,000 economically disadvantaged and un(der)insured women were served as a result of the demonstration projects; since the addition of new WISEWOMAN sites, CDC estimates that more than 30,000 are now being seen annually.<sup>787</sup>

In deciding to pursue the WISEWOMAN program, CDC identified several public health reasons for targeting low-income, uninsured, and underinsured women between 40 and 64. The first is that NCDs are the predominant killers of women in the United States; cardiovascular disease is the number one killer of women overall at 29.4%, and women account for more than half of annual CVD deaths in the United States.<sup>788</sup> Cancer is also a major killer, accounting for 21.6% of women’s mortality in 2001.<sup>789</sup>

---

<sup>785</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents (Atlanta: Centers for Disease Control and Prevention, 2002), 5.

<sup>786</sup> Claire I. Viadro, "Taking Stock of WISEWOMAN," Journal of Women's Health 13.5 (2004): 480. Seven of these sites were opened in 2000 alone, with two more following in 2001.

<sup>787</sup> Centers for Disease Control and Prevention, The WISEWOMAN Program: Capitalizing on Opportunities to Improve the Health of Women (Atlanta: Centers for Disease Control and Prevention, 2003).

<sup>788</sup> Centers for Disease Control and Prevention, WISEWOMAN: A Crosscutting Program to Improve the Health of Uninsured Women - 2004 (Atlanta: Centers for Disease Control and Prevention, 2004).

<sup>789</sup> Centers for Disease Control and Prevention, "Deaths: Leading Causes for 2001," National Vital Statistics Reports 52.9 (2003).

A second reason is that many women also continue to be un- or under insured. In 2002, 17% of American women were uninsured, while that percentage more than doubled for adult women living below the poverty line. If one also takes into account those women who are above, but near the poverty line, the figure jumps to 60%.<sup>790</sup> Also sobering is the fact that one third of American women between the ages of 45 and 64 have no insurance at all.<sup>791</sup>

A reason for focusing on older women specifically is indicated by the distribution of NCDs among women as a whole; those between the ages of 45 and 64 are three times more likely to have cancer or heart disease than those between 18 and 44, and four times more likely to have hypertension.<sup>792</sup> Low-income women – those at or below the poverty level – not only were more likely to be uninsured, but experience a greater prevalence NCDs and NCD risk factors than middle- or upper-income women. For example, in 2001, 41% of low-income women suffered from hypertension, compared to 27% of women above the poverty line; additionally, one quarter of women in this group were clinically obese, as opposed to 15% of higher income women; these discrepancies held for a range of conditions, including diabetes, heart disease, arthritis, asthma, osteoporosis, and depression.<sup>793</sup>

---

<sup>790</sup> Henry J. Kaiser Family Foundation, Health Insurance Coverage of Women Ages 18-64, by State, 2001-2002 (Women's Health Policy Fact Sheet, 2004). For reference, the federal poverty level in the United States in 2001 was \$14,255 for a family of three. According to the Kaiser Foundation, those in the “near-poor” category are defined as 100%-199% of the poverty line, or \$14,255-\$28,367 for a family of three.

<sup>791</sup> Henry J. Kaiser Family Foundation, Women's Health in the United States: Health Coverage and Access to Care (Kaiser Women's Health Survey, 2002), 15.

<sup>792</sup> Henry J. Kaiser Family Foundation, Women's Health in the United States: Health Coverage and Access to Care, ix.

<sup>793</sup> Henry J. Kaiser Family Foundation, Women's Health in the United States: Health Coverage and Access to Care, 8.

As we will also see in the other cases, WISEWOMAN is geared toward the management and reduction of risk; as mentioned above, the fact that the pilot centers are engaged in projects to assist women in the cultivation of healthy eating habits, physical activity, quitting or avoiding tobacco altogether attest to this fact. Thus, we see at the outset that in the context of a public health promotion like WISEWOMAN, a major obstacle toward the cultivation of an ethical relation to self is the preponderance of risk; behavioral risks especially are the “ethical substance” that must be mastered in the context of self-craft.

To reach out to this at-risk population, WISEWOMAN engages in three realms of activity: outreach, screening, and intervention in the form of such activities as lifestyle counseling and health education classes and workshops. The specific structure of activities varies with locale, though there are omnipresent themes: universal screening of participants, lifestyle counseling (group and/or individual), and different tiers of intervention. The Massachusetts WISEWOMAN project, for example, when first initiated in 1995 performed an initial risk factor screening of eligible participants, and then participants received either minimal intervention (resources such as fact sheets on risk factors such as hypertension or physical inactivity, and on-site group counseling on nutrition and stress reduction) or enhanced intervention (above resources, as well as individual nutrition and activity counseling, walking groups, and weekly support meetings).<sup>794</sup>

In contrast, the Arizona project employs a three tiered model: all participants engage in the initial risk factor screening, and those in the least-intensive intervention

---

<sup>794</sup> Anne M. Stoddard, Ruth Palombo, Philip J. Troped, Glorian Sorensen and Julie C. Will, "Cardiovascular Disease Risk Reduction: The Massachusetts WISEWOMAN Project," Journal of Women's Health 13.5 (2004).

receive nutrition and activity counseling tailored to each individual; those in the second group receive not only the individual counseling, but also two health education classes over a twelve month period and a monthly newsletter; those in the most intensive intervention group receive in addition to the resources of the first two, routine support from a community health worker. This support includes bi-weekly to monthly phone calls to provide motivation and address concerns, and periodic organization of walks and other activities to promote healthy behaviors. Unlike the Massachusetts – and indeed, any other WISEWOMAN project – it is the first to specifically test the role and impact of community health workers in effecting the goals of the overall project.<sup>795</sup>

While the decentralized nature of the program allows for variety in specific activities, there are points of consistency across different sites in accordance with the legislative mandate for the program and guidelines established by the CDC. For example, all sites must engage in tracking of participants, with a minimum of 75% returning for annual rescreens.<sup>796</sup> Additionally, the CDC must approve all lifestyle interventions in advance, and performance standards require that sites have 75% of eligible participants attend at least one intervention session, and at least 60% attend all of them.<sup>797</sup> Quarterly progress reports to the CDC are mandated for evaluation purposes, as are twice annual reports detailing cost disbursement and data collection efforts.

---

<sup>795</sup> Lisa K. Staten, Karen Y. Gregory-Mercado, James Ranger-Moore, Julie C. Will, Anna R. Giuliano, Earl S. Ford and James Marshall, "Provider Counseling, Health Education, and Community Health Workers: The Arizona WISEWOMAN Project," *Journal of Women's Health* 13.5 (2004): 555.

<sup>796</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents.

<sup>797</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents.

On the issue of performance, although WISEWOMAN has been an ongoing project for nearly ten years, conclusions as to the *overall* efficacy of the program in securing better population health are still outstanding. Efficacy reports tend to focus on individual sites' compliance with program requirements, and resultant health profile change for participants at that site. According to the CDC, performance indicators for WISEWOMAN sites cover the minimum number of women enrolled annually (no less than 2500 across all sites), as well as targets for receiving "reliable screening results," participating in at least one, as well as multiple intervention sessions, and returning for annual rescreens.<sup>798</sup> Given these guidelines, it is not surprising that efficacy reports tend to emphasize these dimensions. Viadro, et al's review of three WISEWOMAN sites frames "success" in terms of compliance – the percentages of women returning for counseling visits as well as periodic rescreening.<sup>799</sup> Additionally, Finkelstein, et al's review of multiple program sites note the importance of individual "impact measures," such as changes in behavioral patterns of diet, activity, and smoking, as evaluative criteria for the program.<sup>800</sup> Compliance with program requirements, and changes in individual behavior, however, are only part of the picture: they do not necessarily constitute overall

---

<sup>798</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents, 8-5. Note on pagination format for this source: 8-5, as well as subsequent page citations, do not refer to sequence of pages, but a single page – e.g.; fifth page of eighth section.

<sup>799</sup> Claire I. Viadro, Rosanne P. Farris and Julie C. Will, "The WISEWOMAN Projects: Lessons Learned from Three States," Journal of Women's Health 13.5 (2004): 535-36. And by these criteria, the sites evaluated have had mixed success; 85% of participants in the North Carolina program have participated in at least one counseling session, better than CDC requirements, and at enhanced sites, 60% returned for all three counseling sessions – on target with CDC expectations. Additionally, in Massachusetts, 75% of participants at enhanced sites participated in counseling, but only half pursued an intervention activity, well below the CDC guidelines of 75% participation in at least one intervention session.

<sup>800</sup> Eric A. Finkelstein, John S. Wittenborn and Rosanne P. Farris, "Evaluation of Public Health Demonstration Programs: The Effectiveness and Cost-Effectiveness of WISEWOMAN," Journal of Women's Health 13.5 (2004).

improvements in population health. What is absent from these evaluative criteria is the impact of the program on improving health, manifest as a reduction in incidence or prevalence of disease phenomena in the target population – ostensibly a defining goal of *public* health work. Evaluative criteria that track these changes are at best secondary, to be implemented at a later time. Finkelstein, et al, point out:

Later stages of the WISEWOMAN evaluation will assess changes in overall population health and impacts on community health delivery systems, resources, and the environment using such measures as community-level indicators...It is the cost-effectiveness outcome evaluation, however, that will likely be the ultimate measure of a program's worth.<sup>801</sup>

This last element is particularly interesting, in that cost-efficiency, not efficacy in reducing the burdens posed by NCDs, is lent priority in determining the worth of the program; this aspect is supported by the CDC evaluative mandate that requires each site to chart how cost-effective the program is in periodic reports, and to identify ways to enhance the “fiscal management of its resources.”<sup>802</sup> To the extent that market values such as cost minimization and accountability are privileged beyond even that reducing the prevalence of chronic disease in a population in the evaluation of WISEWOMAN, public health practices function to promote a neoliberal rationality of government – not only in the government of self, as we will see in the context of this case, but also in the management and execution of the programs that produce the responsible, entrepreneurial self.

#### The Work of WISEWOMAN

---

<sup>801</sup> Finkelstein, Wittenborn and Farris, "Evaluation of Public Health Demonstration Programs: The Effectiveness and Cost-Effectiveness of WISEWOMAN," 631-32.

<sup>802</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents, 8-3.

If federal mandates provide one semblance of consistency across diverse projects, a second dimension is manifest in a commonly used intervention; indeed, is through the lens of this intervention that we will witness how the WISEWOMAN program functions to construct a particular kind of subject. Developed for the North Carolina WISEWOMAN project in 1995, the *New Leaf* intervention has subsequently come to be employed across multiple WISEWOMAN projects.<sup>803</sup> A product of the Center for Health Promotion and Disease Prevention at the University of North Carolina, *New Leaf* constitutes “a structured nutrition and physical activity assessment and counseling program for cardiovascular disease risk reduction among low-income individuals.”<sup>804</sup>

The developers of the *New Leaf* intervention construct their program on theoretical foundations that emphasize a number of components compatible with the privileging of neoliberal subjectivity. The foundations emphasize particular assumptions and models of *why* people change their behavior. One of the core principles, self-efficacy, reifies the concept of the perfectible subject – one who can be brought, through a system of surveillance and reward, to view themselves as

---

<sup>803</sup> Rosanne P. Farris, Dawn Haney and Diane O. Dunet, "Expanding the Evidence for Health Promotion: Developing Best Practices for WISEWOMAN," Journal of Women's Health 13.5 (2004). Among the other sites adopting versions of New Leaf are the Massachusetts project, two Alaska projects, the South Dakota project, and one California site that adapted it to a Spanish-language version. The decision to do so emerged out of research that charted the success of New Leaf in modifying risk propensity among low-income women involved in the North Carolina project; on this aspect, see W.D. Rosamond, A.S. Ammerman and J.L. Holliday, "Cardiovascular Disease Risk Factor Intervention in Low-Income Women: The North Carolina WISEWOMAN Project," Preventative Medicine 31 (2000).

<sup>804</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program (Chapel Hill: Center for Health Promotion and Disease Prevention, 2001), 45. In addition to being adopted by other WISEWOMAN sites, New Leaf has been adapted for use in more general public health programs addressing diabetes care, obesity prevention, and cancer prevention.

empowered and particularly as empowered to make the health-maximizing choices in their daily lives. In this regard:

The counseling strategies in *New Leaf* are designed to increase participants' confidence (i.e., self-efficacy) in making lifestyle changes. Practical suggestions for gradual change over time, along with monitoring and rewarding small steps toward change, help the participant achieve goals which, in turn, boosts their confidence.<sup>805</sup>

Thus, the mode of subjection manifest in the *New Leaf* intervention is one predicated upon motivating people through a system of empowerment and reward. Participants thus undertake the ethical work of managing their lifestyle and choices because they desire to. For example, in a section of the handbook provided to participants that deals with increasing physical activity, exercise is marketed in terms of its benefits for making people “feel healthy”; according to the handbook, being physically fit will give one more energy, help them sleep better, lose weight, be less likely to get injured while engaging in exercise, decrease their chances of chronic lower back pain, and make one feel better about herself.<sup>806</sup>

This is augmented by other elements of the workbook that aim to motivate by creating conditions for success. In the handbook section on quitting smoking, participants are reminded to “Tell yourself you can do it!” by establishing small goals to work toward that, once achieved, bring a sense of confidence and ability; such goals include choosing a quit date, or, for those who are taking a gradual approach, switching to lower nicotine cigarettes, or delaying the first cigarette of the day

---

<sup>805</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program, 47.

<sup>806</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, A New Leaf: Choices for Healthy Living (Chapel Hill: Center for Health Promotion and Disease Prevention, 2001), F-1.

gradually a little longer over time. In all cases, participants are encouraged to “reward yourself for the big AND small successes.” [emphasis (capitals) in original]<sup>807</sup> Conversely, backsliding is constructed as typical, normal, and not an overwhelming obstacle given a committed participant. The handbook counsels patients to “be prepared for slips, everyone does it!” and that “it’s OK if you get off track every now and then.”<sup>808</sup>

What such aspects of the intervention indicate is that participants are encouraged to approach the work of cultivating a healthy self as an endeavor that promises very tangible and desirable benefits – such as increased energy or better self-image – as the end result; also factoring in an approach that emphasizes small goals, rewards for *any* progress, and the normalcy and understandability of setbacks, the program is designed to inculcate in the patient a genuine desire to engage in the work of managing risk and produce a healthy and active self. Thus, the project of governing health from a distance is fostered to the extent that interventions such as *New Leaf*, and the health promotion campaigns that use them, are able to bring individuals to a point where they recognize themselves as empowered agents capable of managing the myriad risks that, unchecked, preclude the possibility of a “healthy” life.

Complementing the emphasis on self-efficacy is the principle of surveillance not only at the initial stages of the program, but throughout and thereafter. According to the developers, surveillance is conceptualized as the principle of “self-monitoring

---

<sup>807</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, *A New Leaf: Choices for Healthy Living*, F-1.

<sup>808</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, *A New Leaf: Choices for Healthy Living*, H-12, D-1.

and reinforcement.”<sup>809</sup> In order to promote self-efficacy, participants engage in periodic risk self- assessments of dietary and physical activity habits that establish goals and measure progress toward them; although these are then reviewed in consult with a health counselor, it is the patient who assumes responsibility for charting her own habits, foibles, and successes.

As a core component of the program, the risk assessments are especially relevant for facilitating a subjectivity predicated upon ethical work directed toward self-surveillance. That implementation in the context of *New Leaf* is not surprising, since CDC’s WISEWOMAN guidance document emphasizes the need to “involve patients in their own care through self-monitoring” as a means to improve adherence to interventions and the desired goal of reducing chronic disease risk.<sup>810</sup> To promote self-monitoring, the patient is brought to reflect on many aspects of their daily habits and choices; in the *New Leaf* intervention, no aspect of the minutiae of daily life is excluded. In the dietary assessment, for example, participants chart on a weekly basis not only the overall amounts of meat, dairy, snack food, breads and cereals, salad dressings and condiments, and fruits/vegetables, but also the distribution of specific foods in each category and how those foods are prepared. Just the survey on meat consumption inquires the following of participants: weekly consumption of bacon or sausage; lower fat versions of the same; hamburger; cuts of beef or pork such as roasts or chops, and whether the fat is trimmed off and the serving size is smaller than a deck of cards; weekly consumption of chicken and turkey, and whether it is fried

---

<sup>809</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, [Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program](#), 47.

<sup>810</sup> Centers for Disease Control and Prevention, [WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents](#), 3-3.

and whether the person eats the skin; consumption of different kinds of fish, and whether those are fried; if legumes are ever substituted for meat in a meal, and if so, what kinds and how often.<sup>811</sup> Similarly detailed assessments are completed for the other food categories.

The level of detail in the dietary assessment is evident as well in the activity survey. Participants consider both professional and leisure activities, and chart: the kind of job they have, and how often they work at it; the amount of time on a typical day of work spent doing sedentary activities, moderately active work such as walking, and hard physical labor like stocking shelves or heavy lifting; the amount of time spent each day watching television or participating in sedentary hobbies; the amount of time spent doing light housework, moderately active housework such as sweeping or vacuuming, and heavy housework like scrubbing and carrying; the amount of time devoted to child or elder care activities that are fairly sedentary (feeding, talking), moderately active such as light play or pushing a stroller, or intense, such as active sports; the amount of time and distribution of various levels of activity of yard work and gardening, church and social activities, walking, and targeted exercise or sports.<sup>812</sup>

In the process of assessing in a very detailed and specific way the dietary and activity patterns of daily life, the program facilitates a scenario where participants see those as calculable domains that can be governed and managed more effectively and

---

<sup>811</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program, Appendix 3, A-34.

<sup>812</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program, A38-39.

productively with appropriate guidance. In this manner, two techniques are employed to facilitate this outcome. The first is the inclusion next to each survey question a space to indicate whether the participant met the previous assessment's goals, and to indicate new ones – such as decreasing the consumption of sugary snacks, or increasing by a specific amount the time spent doing moderately active housework.<sup>813</sup> The second technique is the pairing of each assessment with a tip sheet that provides guidance and alternatives to risky behaviors. Returning to the example of the assessment on meat consumption, it is paired with tips on each specific question: participants are told to cut down on bacon and sausage consumption by using smaller portions, substituting lean ham or other options, and filling up on carbohydrates and lean proteins; the tip sheet also instructs individuals to eat less hot dogs and lunch meat, restrict consumption of hamburger, and cut back on high fat cuts of beef and pork, with each of these guidelines augmented by suggestions pertaining to substitutions and different preparation techniques, among other things. These guidelines also include the times per week and amounts by which the individual should limit consumption of these individual foods, and space to identify personal consumption goals.<sup>814</sup>

By pairing the assessment with the tip sheets, the participant confronts not only a range of behavioral choices detrimental to their health, but also is

---

<sup>813</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program.

<sup>814</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program, 49. In addition to the tip sheets, the New Leaf intervention provides participants with a cookbook of health-conscious, regionally and culturally based recipes. Since it was developed in North Carolina, the initial cookbook was geared toward Southern cuisine, though it has been adapted in other WISEWOMAN settings for different regional ingredients and cultural tastes.

simultaneously educated as to “appropriate” choices designed to reduce disease risk and improve health. This is achieved through the very performance of the assessments, and is only reinforced by how scores are employed. In the process of scoring, each response is assigned a point value, and points are totaled for each category of dietary habits, as well as overall levels of physical activity and smoking; in all cases, higher numbers indicate more risky behaviors, and the scores are used to “provide a ranking of the areas in greatest need of attention. The scores also provide a measure of overall risk that can be used to monitor behavior change over time.”<sup>815</sup> These scores are then employed in a multi-step process of counseling and behavioral change: an assessment of initial or current lifestyle patterns, an assessment of barriers to change, the provision of guidance and recipes (in the case of diet) to facilitate healthful choices; counseling pertaining to positive reinforcement as a component of monitoring; and the documentation of progress toward goals and the establishment of new goals, if appropriate.<sup>816</sup>

The fact that assessments are an ongoing phenomenon – with participants routinely scored in such a way as to communicate either progress or atrophy, and with goals established, measured, and refined – further reinforces the notion that surveillance is not a limited or isolated event. Rather, is an on-going process that is largely executed and managed by the at-risk individual. WISEWOMAN participants using the *New Leaf* intervention do have three one-on-one sessions with a public

---

<sup>815</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, [Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program](#), 52.

<sup>816</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, [Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program](#), 53.

health counselor, the first lasting 25-45 minutes, and the last two 15-30 minutes.<sup>817</sup> These are augmented by two short, follow-up phone calls twice a year, and six newsletters.<sup>818</sup> Thus, while counselors consult and advise participants, contact is limited and brief; moreover, they cannot properly advise if the women do not chart the particular habits of their daily lives. Participants, by the nature of the program, are brought to self-monitor – and in so doing, ultimately govern – their health and risk propensity through a process of behavioral rehabilitation guided by expert advice.

What infuses a particularly neoliberal contour to this style of surveillance, however, is that it is not imposed by an external authority out of coercion, but rather constitutes a process where the subject surveils herself out of the *desire* to be healthy. A microtechnology of public health in this regard facilitates the construction of subject who calculates, evaluates, and monitors their actions and behaviors not out of compulsion or under duress, but out of a desire to achieve self-efficacy and improve their quality of life. Thus, the principle of self-monitoring and reinforcement functions to promote an autonomous, self-regulating entity not entirely unlike the idealized vision of the market.

As evidenced by the principles of self-efficacy and monitoring, the *New Leaf* program is constructed around the primacy of the individual. Such an approach is consonant with the overall direction of the WISEWOMAN program, as the overall initiative is obligated under federal mandate to spend 60% of funds on individually

---

<sup>817</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program, 56.

<sup>818</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program, Appendix 4, A-48.

oriented interventions.<sup>819</sup> These interventions include such things as diagnostic screening for risk factors, laboratory tests, counseling sessions pertaining to lifestyle modification and medication options, and follow-up and tracking measures. The remaining 40% of funds are devoted to activities associated with population-based approaches to public health. Among these are broad-based public education, to include materials development, cultivation of media support, and establishing coalition support with other organizations and group outreach; and surveillance and evaluation of aggregate data and program efficacy.<sup>820</sup> The emphasis on diagnostic tests, and interventions and evaluations targeted more at the individual level brings into sharp focus how in the context of the WISEWOMAN program, the foundation of this public health initiative is very much rooted in the values and methods of biomedicine. As such, Viadro, et al, note, “These funding requirements support a clinical orientation that may constrain WISEWOMAN’s ability to fully implement a socioecological approach to chronic disease prevention.”<sup>821</sup>

This feature manifests itself in two additional principles that manifest in WISEWOMAN’s major intervention, the *New Leaf* program. First, even as the program acknowledges a “socioecological” model of disease causation – one that recognizes illness is the product of biological, behavioral, and environmental influences – and that “health promotion and disease prevention efforts are most effective in changing individual “lifestyle” behaviors when they intervene at multiple levels,” the program is not predicated upon them. Rather, “[t]he *New Leaf* program

---

<sup>819</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents, 1-3.

<sup>820</sup> Centers for Disease Control and Prevention, WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents, 1-4.

<sup>821</sup> Viadro, Farris and Will, "The WISEWOMAN Projects: Lessons Learned from Three States," 536.

primarily targets individual and interpersonal influences on CVD preventive behaviors.”<sup>822</sup> Acknowledging the influence of environmental factors is not the same as directing the content of a program to addressing them; in this regard, *New Leaf*, as an intervention of WISEWOMAN, continues to reify the privileged place of the individual. This approach is consonant with the overall strategy of WISEWOMAN to focus on the rehabilitation of one’s approach to self to better manage their risk propensity:

Obesity, physical inactivity, poor diet, and smoking are known to be modifiable risk factors for CVD and other chronic diseases. Modifying these risk factors through lifestyle intervention offers the potential to prevent disease and is proven effective in lowering cardiovascular disease risk factors at relatively little cost and with minimal risk. *Participants should be strongly encouraged to adopt lifestyle modifications*, particularly if they have risk factors for cardiovascular disease...

WISEWOMAN strongly encourages the use national guidelines for heart healthy eating, physical activity, and tobacco cessation to guide intervention development [emphasis added].<sup>823</sup>

An additional principle espoused by program developers in this regard is that successful public health promotion cannot be reduced to a one-size-fits-all approach.

Rather:

*New Leaf* uses risk assessments for each lifestyle behavior addressed by the program. The individualized risk assessments allow the health counselor to efficiently identify problem areas and barriers to change, as well as identifying areas where program participants are doing well. In this way, the counseling efforts can be personalized to focus on a

---

<sup>822</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, [Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program](#), 47.

<sup>823</sup> Centers for Disease Control and Prevention, [WISEWOMAN Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents](#), 5-1.

participant's areas of greatest need, and counselors can offer encouragement for positive behaviors.<sup>824</sup>

By constructing the program in such a way as to facilitate a distinctive tailoring for each participant, *New Leaf* valorizes the individual as a level of analysis and site of practice. Beyond demonstrating a neoliberal privileging of the individual in a general sense, this feature also emphasizes a market attribute in the tailoring of product – in this case, health education – to the specific needs of the consumer. In so doing, it facilitates the construction of a subject position not predicated so much on belonging or commonality as on individuation and uniqueness; a subject who, by engaging in the assessments and activities associated with the *New Leaf* intervention, can chart a path to better health and personal empowerment.

In engaging in the ethical work of self-monitoring and properly managed life practices such as those affiliated with the *New Leaf* intervention, participants in WISEWOMAN are brought to cultivate the appropriate knowledge and skills of governing not only their bodies in the pursuit of health, but their relation to self in the pursuit of happy, full lives. It is through the disciplined management of the body and of impulses that exacerbate disease risk that individuals are brought to invest in themselves, in their future, and to relate to themselves as empowered, autonomous subjects. As a participant in the Massachusetts program described, “ I knew I needed to make some changes in my life, or I would follow in the footsteps of my mother’s poor health. The WISEWOMAN program at the Women’s Health Network identified

---

<sup>824</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, [Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina WISEWOMAN Program](#), 47.

my health problems, and I began to make changes to better myself.”<sup>825</sup> The emphasis on betterment of self is what ultimately enables participants to undertake the ethical work of managing risk – it is the promise, or the motivation, and it ultimately is the end, as well. It is necessary to emphasize this aspect given that WISEWOMAN is designed to be facilitative, not a directive program; as CDC notes, “WISEWOMAN offers ongoing support and motivation and fosters a supportive environment among participants.”<sup>826</sup>

It is also a means by which to achieve an ethical subject position predicated upon a keyword of the program: wisdom. The “wise” woman is one who not only recognizes the risks she exposes her health to, but also takes proactive steps to minimize those risks, extend her life, and improve her health. Thus, the construction of the ethical subject in the context of this public health program is predicated upon the facilitation of the individual to relate to herself as a wise person would; and it is in the latent assumptions, methods, evaluative criteria, and other factors associated with public health practice that communicates to that person what “wisdom” constitutes. The wise woman makes herself available for diagnostic screening, consults in partnership with health workers to develop a lifestyle management plan but is ultimately responsible for its execution, and self-surveils to monitor progress and ensure compliance with it – not because she is coerced to, but because she is brought to desire it as an investment in her own welfare, something she can do for her own good. Moreover, as evidenced by screening tests that emphasize individual level

---

<sup>825</sup>Centers for Disease Control and Prevention, WISEWOMAN: A Crosscutting Program to Improve the Health of Uninsured Women - 2004, 1.

<sup>826</sup>Centers for Disease Control and Prevention, WISEWOMAN: A Crosscutting Program to Improve the Health of Uninsured Women - 2004, 2.

factors like blood cholesterol and blood pressure; by interventions like *New Leaf* that condition women to self-surveil as a constant practice and reduce risk through behavioral modification; and by the construction of an ethical relation to self predicated upon investment and a productive life, we witness in the values and practices out of which “wisdom” emerges a distinct privileging of neoliberal rationality.

This feature comes into even sharper focus when considering how WISEWOMAN cultivates a situation in which the transformation of the self is tied to the ability, and perhaps duty, to better care for others – from family to the community at large. This is evidenced in the intervention discussed throughout this case – that of *New Leaf*. The handbook provides a number of suggestions for participants to help others – family, friends, and co-workers – make healthier choices pertaining to diet and exercise. Many of these suggestions are designed to work on the basis of fostering a sense of ability and empowerment on the part of the target person; the use of praise, focusing on small achievements, avoiding nagging or frightening people “by saying how bad habits hurt.”<sup>827</sup> In essence, the manual directs people to “be a good role model” in order to promote good health among a wider audience.<sup>828</sup> Although the work of self-craft will ultimately fall to each person in their own right, the healthy self is one who takes on the responsibility to promote healthy habits, and to provide encouragement to those who choose to embark on this path. This, in its

---

<sup>827</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, *A New Leaf: Choices for Healthy Living*, D-21.

<sup>828</sup> Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill, *A New Leaf: Choices for Healthy Living*, F-16.

own way, is very much a dimension of the productive self directed toward ethical relations with others.

This feature is also evidenced by the CDC's approach to marketing the efficacy of WISEWOMAN; as one dimension of this approach, the CDC deploys the use of testimonials that emphasize not only the benefits to self, but how the empowered "wise woman" is better positioned, as a result of the program, to care for others. For example, the CDC's collection of "success stories" about events at multiple WISEWOMAN sites, markets the progress that participants make, not only in enhancing their own lives, but also in their ability to care for others. One such story focuses on Rose, a participant in the Michigan WISEWOMAN program who credits the work she did in the context of her program to cultivate a healthy self better equipped to take care of family:

WISEWOMAN gave me a mental break and allowed me to exercise in addition to changing my eating habits for the best. As a result, I have lost weight, reduced my cholesterol, and have more stamina to take care of my husband.<sup>829</sup>

Additionally, these success stories have been deployed as a means of highlighting the abilities and motivation one can acquire to "give back" to the program that helped them, and to the community at large. Participating in the Southeast Alaska Regional Health Consortium's (SEARHC) WISEWOMAN project, Vicki Jackson has taken steps to not only improve her own health, but the experience has also enabled her to take a proactive leadership role in the community – and to become a marketing

---

<sup>829</sup> Centers for Disease Control and Prevention, WISEWOMAN Works: A Collection of Success Stories from Program Inception through 2002 (Atlanta: Centers for Disease Control and Prevention, 2003), 39.

campaign in and of herself for WISEWOMAN. A health specialist affiliated with the Alaska program notes:

Although she enrolled in SEARHC just a short while ago, she is very excited and proud to be part of WISEWOMAN: “I’m a WISEWOMAN!” declares Vicki. Her excitement and joy radiate to everyone she is around... Vicki takes care of herself and others as she uses SEARHC’s WISEWOMAN services, models the behavior she wants others to replicate, and builds relationships with women in need. She not only uses her influential position to help others, but she also taps into her resources to provide outreach for SEARHC and social support for women.<sup>830</sup>

Testimonials such as these that are included in the context of promotional materials emphasize several aspects pertinent to this analysis. First, as illustrated in the SEARHC success story, is the emphasis placed on the generative effects of engaging in a responsible lifestyle. In the case of Rose, one notices the enhancement of health through the lowering of cholesterol and shedding of pounds. For Vicki, it is the outward, demonstrative attributes of happiness and excitement. As to this latter point, to the extent that one emphasizes the “excitement” and “radiation of joy” as a result of participating in a program like WISEWOMAN, it becomes clear that the cultivation of self, even as it involves the discipline of the body and the daily habits, is simultaneously a project in which one can take pleasure. This aspect not only hearkens to Foucault’s point that “gaining access” to oneself in the context of self-craft is ultimately a project through which one comes to develop a “whole” or “happy” life, it also illustrates how health promotion campaigns function to motivate potential participants. If only one learns the correct techniques, adopts the correct practices, and cultivates the correct attitude toward self – one predicated upon

---

<sup>830</sup> Centers for Disease Control and Prevention, WISEWOMAN Works: A Collection of Success Stories from Program Inception through 2002, 29.

capability and empowerment – then can that person experience a fuller, more vibrant, joyful, and healthy life.

A second feature worth noting is that by deploying multiple references to the ability to care for others – whether a husband, as in the case of Rose, or other women in the community, as with Vicki – the *telos* of the ethical self is implicated in ethical relations with others. It is as a result of investing in one’s own health as a good in and of itself that individuals in WISEWOMAN are enabled and empowered to contribute for the good of others. This dimension of the productive self – the self that can provide for family, provide outreach to other women, and most importantly, perhaps, serve as a model student of the “good” life, is thus implicated in the citizenship aspect of subjectivity described by Petersen and Lupton.

It is in this latter dimension especially, functioning as a model of the ethical relationship with the self, a moral subject who values health and manages her life to maximize it, that the “wise woman” develops into a model citizen. For in doing so, in “modeling the behavior she wants others to replicate,” she functions as a living, breathing testimonial for what *all* women, indeed all people, should aspire toward: a subjectivity predicated upon empowerment and self-management that is directed toward the cultivation of a healthy, full life. And in the context of government, if the hallmark of *neoliberal* government is that it operates at distance, it is hard to envision a feature more neoliberal than this: the production of self-managing individuals who, in their role as model citizens, are implicated in the expansion of self-government.

If such a vision does not speak to the eventual obsolescence of public health, and I do not believe it does, it does in the least recast it as a project that casts a long

shadow over its status as a *public* endeavor. I use the term here in two senses, both of which bolster the point. First, to the extent that public health programs like WISEWOMAN foster private responsibility through the construction of self-monitoring, self-governing subjects, they privilege the individual and move farther and farther away from the population – or public – that has historically constituted the locus of their work. Moreover, to the extent that health promotion programs enable individuals – especially economically and socially vulnerable ones such as those served by WISEWOMAN – to reduce their chronic disease risk, extend their lives, and enhance their health, the less need there is for the state to secure health for them, whether in the form of public insurance, medical subsidies, or the like. While such public functions were consonant with earlier forms of liberalism, as discussed previously, it is not a feature of the current era of neoliberal government rationality.

*United Kingdom: Producing Expert Patients in the Management of Chronic Disease*

Overview

In 1999, the British government established a task force to develop a new approach to managing the public health challenge posed by chronic NCDs; known as the *Expert Patient Programme* (EPP), the logic behind its development centered on several observations made by those in the health community – both clinical and public health. The first is that for those individuals living with chronic diseases such as diabetes, health professionals had for some time noted that “my patient understands their disease better than I do”; complementing this perspective was one that acknowledged that the knowledge and experience gained by those managing

chronic diseases were a resource yet to be fully embraced by those professionals guiding their care. Finally, the government acknowledged that the emphasis in practical care in North America and elsewhere was coming to place more responsibility on the shoulders of those living with chronic disease.<sup>831</sup> The *Expert Patients* proposal asserts:

[T]oday's patients with chronic diseases need not be mere recipients of care. They can become key decision-makers in the treatment process. By ensuring that knowledge of their condition is developed to a point where they are empowered to take some responsibility for its management and work in partnership with their health and social care providers, patients can be given greater control over their lives. Self-management programmes can be specifically designed to reduce the severity of symptoms and improve confidence, resourcefulness and self-efficacy.<sup>832</sup>

The logic behind the *Expert Patients* initiative is not predicated upon traditional models of health education – where at risk individuals or patients are given information about their condition and associated risk factors, and tools and techniques for maximizing health. Rather, the activities associated with *Expert Patients* are very much targeted at not only managing illness, but also evolving a subjectivity of empowerment necessary to that successful management. The Department of Health explains:

Patient self-management programmes, or *Expert Patients* Programmes, are not simply about educating or instructing patients about their condition and then measuring success on the basis of patient compliance. They are based on developing the confidence and motivation of patients to use their own skills and knowledge to take effective control over life with a chronic illness.<sup>833</sup>

---

<sup>831</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century.

<sup>832</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 5.

<sup>833</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 6.

In the context of its development as a national public health strategy for managing NCDs and other chronic illnesses, *Expert Patients* was the evolution of a number of prior existing chronic disease self-management programs (CDSPs) in the United Kingdom. These programs, covering such illnesses as arthritis, multiple sclerosis, and mental illness, among others, were all developed by patient groups and/or advocacy organizations, and covered a range of issues for participants, from exercise and nutrition, symptom recognition and management, and communicating with health care professionals.<sup>834</sup>

The decision to move forward with a more cohesive and broad-based approach to CDSPs in the form of *Expert Patients* was informed by several factors. First was a review of these and other CDSPs for their efficacy. Barlow, et al, in their review of CDSPs, found that self-management programs were consistently associated with several positive outcomes, regardless of illness. These included a reduction in the severity of symptoms, a significant decrease in pain, improved activity levels, and greater life satisfaction.<sup>835</sup> When assessing the impact of these programs on service

---

<sup>834</sup> The Expert Patients Task Force, [The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century](#). The programs referred to in the United Kingdom include the Arthritis Self-Management Course, known as “Challenging Arthritis”; the Self-Management Training Program for Manic Depression, developed in 1998; and the Multiple Sclerosis Society’s self-management training course, in which tutors, who themselves have MS, instruct and motivate participants to better manage their symptoms, and engage in health promoting behaviors.

<sup>835</sup> J.H. Barlow and et al., [Self-Management Literature Review](#) (Psychosocial Research Center, Coventry University, 2000). Barlow, et al’s conclusions are supported by several other disease-specific studies. Gillies, et al (1996) found that self-management programs directed toward childhood asthma reduced the need for medication - J. Gillies, D. Barry, J. Crane, D. Jones, L. MacLennan, Neal Pearce, J. Reid and L. Toop, "A Community Trial of a Written Self-Management Plan for Children with Asthma," [New Zealand Medical Journal](#) 109.1015 (1996). Additional studies indicated a reduction in symptom severity for a range of diseases, including: diabetes, P.P. Horan, M.C. Yarborough, G. Besigel and D.R. Carlson, "Computer Assisted Self Control of Diabetes by Adolescents," [Diabetes Educator](#) 16.3 (1990).; adult asthma, R.M. Allen, M.P. Jones and B. Aldenburg, "Randomised Trials of an Asthma Self-Management Programme for Adults," [Thorax](#) 50.731-738 (1995).; arthritis, J.H. Barlow, B. Williams and et al., "Instilling the Strength to Fight the

use – such as GP consults or emergency room visits – evidence has also pointed to the efficacy of these programs. For example, for general chronic pain conditions as well as specific diseases like arthritis, health professional consults were reduced by up to 80%.<sup>836</sup> Additionally, studies charting the effects of self-management programs on service use by asthma patients reveal a reduction in GP consults by up to 44%, and a reduction in emergency room visits by 39%.<sup>837</sup>

A second factor was the number of people estimated who could be helped by making self-management programs a systematic feature of chronic disease management techniques of the NHS. At the time of the *Expert Patients* proposal in 2001, approximately 17.5 million Britons were living with chronic diseases, the majority of them NCDs; the Department of Health Task Force estimated that with the Expert Patient program in full effect, approximately 14.4 million could experience tangible benefits.<sup>838</sup> The specific benefits, and the ways and degrees to which they would be achieved, was assumed to be variable across illnesses and across patients – largely due to the variable nature of the illnesses themselves, the management issues they raise, and the attitudes of patients:

---

Pain and Get on with Life': Learning to Become an Arthritis Self-Manager through an Adult Education Programme," Health Education Research 14.4 (1999).; and HIV/AIDS, A.L. Gifford, D.D. Laurent, V.M. Gonsales, M.A. Chesney and K.R. Lorig, "Pilot Randomized Trial of Education to Improve Self Management Skills of Men with Symptomatic HIV/AIDS," Journal of AIDS 18.2 (1998).

<sup>836</sup> Barlow, Williams and et al., "Instilling the Strength to Fight the Pain and Get on with Life': Learning to Become an Arthritis Self-Manager through an Adult Education Programme."; and J.D. Cole, "Psychotherapy with the Chronic Pain Patient Using Coping Skills Development: Outcome Study," Journal of Occupational Health Psychology 3.3 (1998).

<sup>837</sup> On GP visits, see I. Charlton, G. Charlton, J. Broomfield and M.A. Mullee, "Evaluation of Peak Flow and Symptoms Only Self-Management Plans for Control of Asthma in General Practice," British Medical Journal 301 (1990).; and on emergency room visits, see D.K. Choy and et al., "Evaluation of the Efficacy of a Hospital-Based Asthma Education Programme in Patients of Low Socio-Economic Status in Hong Kong," Clinical and Experimental Allergy 29.1 (1999).

<sup>838</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 15. Of the approximately 14 million people, 8.5 million suffer from arthritis; asthma accounted for 3.4 million; diabetes accounts for approximate 1.5 million; epilepsy, 420,000; heart failure, 500,000; and multiple sclerosis, 80,000-90,000.

The degree of pain and discomfort also varies from one chronic disease to another. In some cases pain can be constant, as with some types of arthritis; with sickle cell disease the pain associated with an acute phase is extreme. For others there is also the embarrassment caused by the symptoms of disease and their impact on others, for example the sudden epileptic seizure.

Faced with these physical, mental and social restrictions it is not surprising that people with chronic disease often experience anger, bitterness, depression and despair.

The experience of people with chronic diseases in using health services is very variable. The doctor or nurse may discuss with the patient the nature of the treatment and care that he or she needs and agree a plan for managing the disease. In other situations most attention may be given to the technical aspects of care with inadequate attention paid to the social or emotional consequences of the disease.<sup>839</sup>

As laid out by the *Expert Patients* report, the program has evolved in two stages. The first constituted a pilot phase between 2001 and 2004 that monitored and evaluated programs pursued by local health authorities; the second phase of implementation, targeted for 2004-2007, will systematize the programs throughout the NHS.<sup>840</sup> Eight programmatic elements are to be emphasized throughout the development of the program, and cover issues from NHS-created programs, to improving partnerships with patient organizations, to the training of health care professionals. These include the promotion of awareness of the critical role of the patient in managing chronic disease; establishment of new user-led self-management courses designed to help patients “develop the confidence, knowledge and skills to

---

<sup>839</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 16.

<sup>840</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 8. According to the National Primary Care Research and Development Centre (2004), 62 PCTs were selected for participation in the *Expert Patients Program* - National Primary Care Research and Development Centre - United Kingdom, National Evaluation of Expert Patients Programme: Assessing the Process of Embedding EPP in the NHS (London: National Primary Care Research and Development Centre, 2004).

manage their conditions better, and thereby gain a greater measure of control and independence to enhance their quality of life”; identification of barriers to mainstreaming self-management programs in the NHS, and the development of solutions to these barriers; greater integration of existing user-led programs into the current NHS framework; ensuring that Primary Care Trusts have or establish self-management programs for specific conditions, such as heart disease or diabetes; expand financial and other support for patient organizations pursuing their own self-management courses; incorporating into health care curricula coursework highlighting the benefits of “*Expert Patients*” programs to health professionals; and the establishment of a National Coordinating and Training Resource to assist health professionals in keeping abreast of theoretical and practical developments in the evolution of self-management programs.<sup>841</sup>

#### The Work of Expert Patients

Given these broad goals and the relatively early stages of the EPP, it is helpful to clarify exactly what the content of self-management courses executed under the auspices of the program includes. The CDSPPs in the British context are based upon the original chronic disease self-management course developed by Kate Lorig at the Stanford Patient Research Education Center. Whether focused on arthritis, heart disease, cancer, or other conditions, there is a standard format that is followed. Participants attend six weekly sessions, each lasting two and half hours; the size of the class ranges from 8-16 patients, with the idea that small groups facilitate greater

---

<sup>841</sup> The Expert Patients Task Force, *The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century*, 34.

interaction and contact with tutors. Two tutors – themselves chronic disease patients and often former participants in the program – lead each session, and cover topics in a self-management manual such as diet, exercise, and symptom recognition and management. While this dimension speaks to an educational impulse, “the primary aim of the intervention is not to impart medical information, but to facilitate the development of self-management skills, such as problem solving and goal setting, which will in turn increase participants’ confidence or self-efficacy.”<sup>842</sup>

By enabling the individual to recognize an innate ability and desire to manage the challenges that impede better health, *Expert Patients* is geared toward the enhancement of self-government. To the extent that these challenges, or the substance of the ethical work to be undertaken, are constructed as “risk,” we witness a more complex manifestation than in WISEWOMAN – directed explicitly at behavioral risks associated with CVD – or in *Smoke free Children*, which targets a single risk factor, tobacco usage. Management of risk is certainly a major feature of *Expert Patients*, hence the multiple weeks spent on strategies to improve diet and increase exercise, or sessions spent on relaxation techniques to reduce stress. But unlike the other two programs, which are distinctly preventative in their orientation, *Expert Patients* is directed toward the management of illness *already* manifest – risk exploded beyond the realm of probability into the tangible experience of cancer, arthritis, CVD, or many other conditions. Hence, the ethical substance of *Expert Patients* constitutes the management of risk, yes – for it is omnipresent, and a person a chronic disease such as asthma may yet fall prey to another like heart disease.

---

<sup>842</sup> Long-term Medical Conditions Alliance, Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions (London: LMCA, 2001) Information Sheet 2.

However, the obstacles to health under this program also include the effects and travails that one confronts when already living with an NCD: issues pertaining to treatment, medication, as well as emotional components such as anger, frustration, or fear. These dimensions, therefore, are part and parcel of *Expert Patients* self management courses, and of training people to govern their own health, in a way that that they are not in the other two programs.

In addition to the educational component, another important element is that of the “action plan” or “contract.” Towards the end of each session, tutors initiate this component by describing the contract they are making with themselves for the following week about how “to establish more control over their lives with a long-term condition.”<sup>843</sup> These contracts involve specific goals, often pertaining to the specific content covered for that week – such as getting some form of activity three times a week, or implementing strategies to manage fatigue. At that point, participants develop and share publicly their own action plans for the following week, and review their progress or success in fulfilling their contract the previous week. One of the major reasons that the course extends over a six week period is the importance of this dimension: “sessions are spaced to enable participants to practise new skills, do their reading assignments, reflect on the last session and *crucially carry out their ‘contracts’* [emphasis added].”<sup>844</sup>

Two points are especially relevant here; the first, and perhaps most obvious dimension of the infiltration of economic logic to the execution of public health

---

<sup>843</sup> Long-term Medical Conditions Alliance, Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions Information Sheet 2.

<sup>844</sup> Long-term Medical Conditions Alliance, Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions Information Sheet 2.

programs like *Expert Patients* is the explicit application of contractualism to the program content. Participants in this regard are brought to view and manage their lifestyle in such a way as to mimic the relations between agents in a market environment – the fulfillment of obligation for the generate end, in this case, not of wealth, but rather of health and well-being. A second point pertaining the role of the contract with the self as a vehicle for ethical work concerns the role of voluntary surveillance. In order to assess, whether in weekly public meetings, or in the private space of the home on a daily basis, whether or not the contract is being fulfilled, the expert patient necessarily engages in an ongoing basis the surveillance of their habits, choices, concerns, worries, and successes.

The self-management course illustrates the domain of this surveillance activity in the content that it covers: not only aforementioned issues of diet, activity, and symptom management, but also activities pertaining to relaxation, managing fatigue, use of medications, communication with family, friends, and co-workers, communication with health workers, making treatment decisions, developing future plans, improving problem-solving, and managing anger, fear, and depression.<sup>845</sup> Thus, the domain of life is the domain monitored, and while for a finite time the self-monitoring is reinforced by the commitment to share its results in a public setting, the aim of the program is to engender this attitude well beyond the last meeting. Moreover, it should be emphasized that the context of the public dimension of this surveillance activity is not akin to the expert gaze directed at the patient in a clinical setting. Rather, the environment fosters a sense of community in laity status – even

---

<sup>845</sup> Long-term Medical Conditions Alliance, [Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions.](#)

as the program cultivates the expertise of that laity: “these feed-back sessions are exciting, funny, and almost always moving as people rediscover their potential.”<sup>846</sup>

The privileging of the individual so consonant with neoliberalism is a key element of the *Expert Patients* program. As stressed before, key components of this privileging include an emphasis on the development of one’s autonomy and sense of capability. According to the Department of Health Task Force, one of the key aims of the program is to develop:

user-led self-management courses to allow people with chronic diseases to have access to opportunities to develop the confidence, knowledge and skills to manage their conditions better, and thereby gain a greater measure of control and independence to enhance their quality of life.<sup>847</sup>

By developing programs in such a way as to emphasize the generative effects of risk and disease management – a fuller, more healthy life, greater self-esteem, enhanced abilities, and the like – *Expert Patients* does not need to engage in project of coercion to good health. Rather, it is structured in such a way as to facilitate in the potential participant the desire to govern their health. Here we witness in practice Foucault’s notion of the mode of subjection, as the expert patient is motivated to undertake the ethical work of self-craft by the ultimate rewards that the cultivation of self promises. And while the engagement in risk monitoring and management is indeed predicated upon the degree of will, desire, and follow-through of the expert patient, one must not assume that this motivation originates in the internal, *sui generis*; it is cultivated in part by the deployment of certain practices designed to

---

<sup>846</sup> Long-term Medical Conditions Alliance, Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions Information Sheet 2.

<sup>847</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 34.

recruit participants in the first place. The first major evaluation of the pilot phase of *Expert Patients*, published in 2004, identifies that a number of advertising strategies have been pursued to bring target patients into the fold: mailbox leaflets, posters at grocery stores, libraries, and pharmacies, advertising in local newspapers or other circulars, and many others.<sup>848</sup> In order to raise awareness and more importantly interest, *Expert Patients* communicates the benefits of participating – as outlined above. In this regard, the mode of subjection to engage the ethical work does not originate internally, but is the product of marketing, whose success depends on the internalization of the message by the “consumer” – such that they come to view it as generating from their own interests, desires, or needs.

Reinforcing the subtlety of this maneuver is the fact that the most heavily pursued recruitment strategy by Primary Care Trusts involved in *Expert Patients* was the sending of leaflets and flyers to individuals, medical practices, and other organizations; such a method increases the likelihood of self-referral, as opposed to other methods such as direct intervention, lectures, or “awareness days.” As a result, “recruitment to date has occurred predominately as a result of direct contact with potential participants responding directly to adverts or leaflets. This fits with the ethos of self-referral which is stressed as an important component of some self-management programmes.”<sup>849</sup> The effect of this advertising practice – and its intended consequence of generating self-referral – is to highlight once again the

---

<sup>848</sup> National Primary Care Research and Development Centre - United Kingdom, National Evaluation of Expert Patients Programme: Assessing the Process of Embedding EPP in the NHS, 12-13.

<sup>849</sup> National Primary Care Research and Development Centre - United Kingdom, National Evaluation of Expert Patients Programme: Assessing the Process of Embedding EPP in the NHS, 14. The report does not provide a specific figure regarding the percentage of Primary Care Trusts that employed this technique. However, the second-most widely used practice was media advertising, with 78% of PCTs using this strategy. Thus, we can surmise that the proportion of PCTs using leaflet advertising was quite high.

primacy of the individual, of cultivating individual motivation in the pursuit of self-efficacy. These principles are affirmed by Tony Burgess, of the West Norfolk

Primary Care Trust, who characterizes the program in this manner:

The Expert Patient Programme started with the premise of addressing a patient with problem, not of addressing an example of a disease process. So it's talking about an individual having a problem and how they deal with it. Saying to the individual, "you are a patient with arthritis, or diabetes, or cancer, or CHD: not a diabetic like every other". In other words, avoiding the sausage-factory approach. The programme is about letting patients consider and address their own needs...<sup>850</sup>

While a major component of the EPP has been to emphasize the worth of the individual in their illness experience, and to guide them toward a subjectivity of empowerment in the way they relate to their bodies and the diseases that affect them, a concomitant aspect of the program is geared toward the empowerment of the individual in how they relate to health care professionals. Rather than a hierarchical system predicated upon division of expert knowledge and lay experience, the Expert Patients Program is geared toward the transformation of the patient's subject position to one of equality. This is stressed by both health professionals involved in the EPP as well as participants. Hilary Daniels, Chief Executive of the West Norfolk Primary Care Trust, thus views an expert patient as "someone who is able or enabled to have a conversation with their clinician(s) as an equal partner in their care."<sup>851</sup> This is echoed by Nicola Jones, a GP who first became involved with the EPP in 2002. In her experience:

---

<sup>850</sup> National Primary and Care Trust Development Programme, How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities (London: NHS Modernisation Agency, 2003), 7-8.

<sup>851</sup> National Primary and Care Trust Development Programme, How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities, 4.

[t]hey have the confidence to manage their condition. They demonstrate resourcefulness, not asking "what should I do?" but rather "do you think this will work?" It's about control. People with chronic conditions get that back. It is a thing you take for granted until you have lost it.<sup>852</sup>

Such a perspective is echoed by participants in the program, one of whom characterizes the transformation of self in such a way as to emphasize empowerment and confidence in the patient/clinician relationship:

I now see him [the GP] as more of an equal whom I can refer to, rather than a God whom I can't approach. I feel I have more of a right to be there talking to him, and that it's more of a partnership than anything else.<sup>853</sup>

That sense of empowerment in the doctor-patient relationship is echoed by Norman Johnson, an expert patient who is now training to be a tutor for new participants.

It's about gaining self-confidence and taking control. Those who have completed it are more confident with being able to go up to a health professional and be able to talk to them more. It brings people out of themselves more. Having the confidence to go to your doctor and talk with them about what you really want done makes a real difference.<sup>854</sup>

As we have witnessed, *Expert Patients* operates toward much the same end as WISEWOMAN, though the content of the program differs. Another feature shared by both that harkens back to the notion of the productive self; yet another aspect of subjectivity highlighted by the *Expert Patients* program is the emphasis on self-management for the purpose of leading a more productive life. In this sense, "productive" refers not only to the ability to do day-to-day activities such as housework or hobbies, but also with regard to employment. Siobhan Long, a

---

<sup>852</sup> Nicola Jones, How Are Expert Patients Different? 2003, Available [http://www.expertpatients.nhs.uk/stories\\_hp-001.shtml](http://www.expertpatients.nhs.uk/stories_hp-001.shtml), December 6 2004.

<sup>853</sup> National Primary and Care Trust Development Programme, How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities, 23.

<sup>854</sup> National Primary and Care Trust Development Programme, How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities, 25.

participant in an *Expert Patients* pilot program for chronic pain, links the contribution the program has made to her life to goals of financial independence and economic gain:

The main thing is that it gave me encouragement to still have goals in life, but to break them down into more manageable pieces and accept that reaching them may take time. For me personally, I am hoping to get back into paid work, as I want to be able to regain the economic independence that I used to have.<sup>855</sup>

That participants such as Siobhan would evolve this orientation toward the project is perhaps not surprising, given that economic productivity is one of the aims of *Expert Patients* cited by the Department of Health. In its stated vision for a successful program, the DH asserts that *Expert Patients* should ultimately enable “many people with chronic disease gain and retain employment” and help “people with chronic disease make greater use of Adult Education and employment training programmes.”<sup>856</sup>

A second dimension through which *Expert Patients* facilitates the construction of the productive self is via the privileged role it grants to its tutors and trainers, who are often themselves “graduates” or former participants of the program.<sup>857</sup> By contributing – often in a volunteer capacity – their time, counseling and experience, they aid in the growth and expansion of the CDSP model. For example, the Heart Manual, a program in use in Britain for management of cardiovascular disease risk, has grown in recent years to include over 1500 trainers, who reach approximately 5000 patients every year.<sup>858</sup> The

---

<sup>855</sup> National Primary and Care Trust Development Programme, How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities, 21.

<sup>856</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century, 14.

<sup>857</sup> According to National Primary and Care Trust Development Programme, PCTs were considered successful if they recruited two or more volunteer tutors for the self-management programs.

<sup>858</sup> The Expert Patients Task Force, The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century.; by working with people to better manage their heart disease risk, trainers affiliated with the Heart Manual are implicated in approximately 10% of all cardiac rehabilitation in the United Kingdom

expansion of this particular model of self-management training is informed by the fact that all tutors, having gone through training, do not have subjective control over the content of the *Expert Patients* courses; rather, the CDSP “is delivered from a rigorously followed script, so all participants experience the same course content, regardless of who is leading it.”<sup>859</sup> Thus, the production of new tutors facilitates the reproduction of the consumable good: in this case, a health promotion program designed to empower patients to manage their lives and health better.

Related to the expansion of self-management programs under the auspices of *Expert Patients* is a corollary dimension of cultivating the productive self; that is, the productive self also emerges as a consequence of tutors’ facilitating the development of new *Expert Patients*. Insofar as they assist new participants in taking control of their lives, they facilitate the expansion of self-government. The impulse for these actions is often informed by a desire to contribute something in return for the value they feel they have gotten out of the program. The *Expert Patients* pilot phase report evaluates the motivations for former participants to undergo training as tutors: “Many tutors saw becoming involved in EPP as a chance to be reciprocal – to give something back as a result of regaining a focus to their lives.”<sup>860</sup> This dimension of giving back, of making a positive contribution to the further development of the program, also ties the practice of the reproduction of *Expert Patients* to the citizenship impulse described by Petersen and Lupton. The good citizen invests in self as a means to achieve well-being and to unburden the state in its responsibility to secure his or her health. Tutors, however, in not only managing their lives and diseases responsibly, but also by helping to facilitate

---

<sup>859</sup> Long-term Medical Conditions Alliance, Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions Information Sheet 1.

<sup>860</sup> National Primary and Care Trust Development Programme, How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities, 25-26.

the development of new *Expert Patients*, manifest, in a neoliberal context, an especially ethical relation not only to self, but also society.

Through all of these dimensions of the EPP – the responsabilization of the individual, an emphasis on autonomy and empowerment, the development and hence investment in one’s health and life through the acquisition of new knowledge and skills, and the emergence of a productive and ethical self – we are able to encounter how this health promotion program is implicated in the production not only of health but also of a dominantly neoliberal subjectivity. And there is no doubt that the construction of *Expert Patients* is simultaneously an exercise in the construction of subjects. The NHS captures this notion in a promotional tagline for the EPP that has been subsequently employed by several Primary Care Trusts: “Moving from patient to person...”<sup>861</sup> Such a catch-phrase is revealing in that the governing institution responsible for the deployment of this public health strategy frames it in such a way that the process of developing the skills and abilities of an “expert patient” is really an exercise in the process of acquiring personhood, or subjectivity. Thus, Wilson concludes that with regard to the EPP, “there has been a move away from the objectifying of patients, to the subjectification of patients where they are looked at holistically by practitioners.”<sup>862</sup> More importantly, perhaps, for the subjectification of patients is not so much the views that are engendered between practitioners and patients (though these are indeed relevant), but rather the ones that the patient – subject – engenders toward herself. More specifically, *Expert Patients* speaks not

---

<sup>861</sup> National Health Service - United Kingdom, Moving from Patient to Person, Available: <http://www.expertpatients.nhs.uk/>, December 16 2004.

<sup>862</sup> Patricia M. Wilson, "A Policy Analysis of the Expert Patient in the United Kingdom: Self-Care as an Expression of Pastoral Power," Health and Social Care in the Community 9.3 (2001): 138-39.

only to the rehabilitation of one's body or life regimen, but also of the relationship to the self . The process of acquiring an ethical relation toward the self – one predicated upon good health, empowered and proactive management of life, investment in one's knowledge and skills – is the process by which subjectivity is constructed in the context of the EPP. And it is when we consider the other elements aforementioned that hearken to the rationality privileged by neoliberalism, that we come to see that the program is indeed implicated in the construction of a *particular* kind of subject: one that attests, at least in part, to the manifestation of contemporary public health as a project of neoliberal governmentality.

*Sweden: Producing Responsible Mothers in the Context of Smoke-free Children*

Overview

At the time that the National Institute of Public Health was emerging in Sweden in 1992, a public health strategy to combat tobacco usage among pregnant women was developed. Termed *Rökfria Barnor* *Smoke-free Children*, the logic behind the program was to provide newborns a healthier start to life and to reduce the prevalence of tobacco usage among women. This education program was executed in the context of training maternity and pediatric health workers in interviewing techniques, and was part of a larger strategy to reduce tobacco consumption in Sweden, with complementary legislation restricting tobacco access and usage enacted in 1993.<sup>863</sup>

---

<sup>863</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*. The 1993 Tobacco Act was consolidated with additional legislation in 1994, 1997, and 2002. As of 2002, the Act bans almost all

One of the major reasons for developing a comprehensive public health program around women and their infants was both the relatively high prevalence of smoking of women overall, and their comparatively much slower decline in usage than men. Overall, since 1980, daily smoking prevalence among men and women has declined in Sweden by nearly half: from approximately 35% of the adult population (aged 16 to 84), to about 20% in 2000. However, over that period the decline has been much more pronounced among men. In 1980, 36% of adult Swedish males were habitual smokers, compared to 29% of women; by 1992, when the program was enacted, the rate among men had declined to 27%, while the prevalence rate among women had stagnated at around 28% - only a small decline from a decade earlier.<sup>864</sup>

Another aspect of the decision to focus on especially pregnant women and mothers of newborns was informed by the prevalence rates among women in their reproductively fertile years. In the years prior to the 1992 program, the prevalence rate of daily smoking among women 25-44 ranged between 30-35% - higher than that of adult women overall; moreover, prior to the initiation of the program, the prevalence rate among women in the early stages of pregnancy was quite high – 25% in 1990.<sup>865</sup> Whether talking about these women, women in their reproductively fertile years, or as a population overall, a key element of the public health motivation

---

tobacco advertising, stipulates a minimum legal age for consumption and purchase of 18, and restricts smoking in public places, and in areas involving care of children (schools, day-care facilities).

<sup>864</sup> Statistics Sweden, "Percentage of Daily Smokers among Adults (16-84)," (ULF, Statistics Sweden, 2001). Charting the decline rates through the rest of the 1990s, the prevalence among men and women continued to decrease; however, as of 2000, women still smoked at higher rate than men overall, and had continued to experience a slower rate of decline.

<sup>865</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 7. Since 1990, prevalence rates have decreased for both groups; however, as of 2000, women aged 25-44 still smoke at a higher rate than adult women overall, and the pace of the decline has been slower. Among pregnant women, the decline has been more pronounced – by 2000, less than 15% of women in this category were habitual smokers.

to develop a new education program was directed toward educating those who had least assimilated the risk discourse prompting tobacco cessation and a smoke-free lifestyle. The National Institute of Public Health characterizes the problem in these terms:

In the early 1990s, it was clear that there was a stable downward trend as regards smoking among Swedish men. No clear reduction of this kind was seen among women. From having been considerably more common among men, smoking began to be evenly distributed between the sexes, and then gradually Swedish women began smoking more than men.<sup>866</sup>

Although the program was directed to a very specific population, by 1996, *Smoke-free Children* evolved into a national public health program disseminated, as with other public health activities, through the county councils. At that time, funding from the coordinating organizations of *Smoke-free Children* enabled midwives and pediatric nurses from each county public health council, as well as additional representatives from more local health organizations, to receive training in the interviewing method and to become lecturers on it in order to recruit new participants. Between 1996 and 2001, more than 300 lecturers have been trained, and the NIPH and fellow coordinating organizations estimate that 85% of practicing midwives and pediatric nurses “received some kind of training in the *Smoke-free Children* interviewing method.”<sup>867</sup>

---

<sup>866</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 11.

<sup>867</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 21. The report does not, unfortunately, elaborate on this figure with additional details pertaining to the scope of this training. It does make clear that while lecturers are trained to a specific program, their educational networking with other health care workers who might employ the interviewing method varies in terms of the amount of information passed on – hence, the “some kind of training.”

While a number of factors certainly influence smoking prevalence rates, since the program has been running, public health officials have charted an increasing decline in tobacco usage among pregnant women. In the ten years prior to the implementation of *Smoke-free Children*, prevalence rates declined only by 8%; between 1992 and 2001, prevalence rates decreased by another 12%, and women overall are now, finally, quitting at the same rate as men.<sup>868</sup>

#### The Work of *Smoke-free Children*

With public health concern about smoking prevalence among women, and the implications of that risk factor for their own lives as well as the lives of their children, the *Smoke-free Children* campaign began in 1992 as a coordinated effort between the NIPH, as well as two private, non-profit entities: the Swedish Cancer Society and the Swedish Heart-Lung Foundation. Though since its inception it has been involved with a number of different projects, all have been directed toward the key goals of “reduc[ing] the exposure of unborn babies to the hazardous effects of the mother inhaling smoke and to reduce the passive smoking of young babies.”<sup>869</sup> Thus, as with WISEWOMAN and *Expert Patients*, the concept of risk – in this case, the risk to health posed by tobacco usage or exposure – is a central feature, and constitutes the

---

<sup>868</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Progress and Challenge: Tobacco Control [Swedish Style] (Stockholm: NIPH, 2003), 7. The NIPH is careful not to attribute this decline exclusively to *Smoke-free Children*; charting the exact effects has been difficult, it notes, for two reasons. First, “smoking habits and attitudes to tobacco in Swedish society as a whole have undergone a rapid change over the last ten years. How could we know how much of the reduction in smoking during pregnancy and when children are small, is due to developments in society in general, and how much is due to *Smoke-free Children*?” National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years. Second, *Smoke-free Children* has become such a widely instituted program that it has been difficult to identify control groups in regions that have had no exposure at all.

<sup>869</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 13.

problem, or substance of ethical work that the individual must tackle in the pursuit of health.

From the beginning, one of the key dimensions of the program was focused on education – not only of health care workers dealing with women in maternity and pediatric settings, but through them, also of the women themselves. One of the earliest elements of the campaign was an ongoing, touring seminar entitled “Tobacco – a threat to womanhood and women’s health.”<sup>870</sup> The full-day seminar was organized and executed by six public health and tobacco prevention experts from across the three organizations, and all were women – a move designed to create a sense of community or solidarity, and to decrease the likelihood of resistance among the target population.<sup>871</sup>

Unlike *Expert Patients* and WISEWOMAN, which use more direct methods of intervention, *Smoke free Children* is oriented more – though not exclusively – toward training maternity and pediatric health workers to reach parents about the risks of tobacco. The logic of training health workers in counseling techniques as opposed to producing numerous brochures and educational guides for parents is that information alone is insufficient to prompt behavioral change:

The attitude is that information is useful as a tool, but that the most important thing is for it to allow the professional groups who meet parents to communicate effectively. Written documents do not make people change their behaviour: this is achieved by human communication pondering on thoughts, knowledge and feelings.<sup>872</sup>

---

<sup>870</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 12.

<sup>871</sup> The seminar was an ongoing phenomenon over the first four years of the program; between 1992 and 1993, more than 30 seminars were held across Sweden. By 1995, the number had decreased to 16.

<sup>872</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 27. The NIPH notes that while the major emphasis in the program content is on training, some informational materials are provided directly to expectant mothers and new parents; for example, *Smoke-free Children* developed a folder of

Given this emphasis on communication as a vehicle to promote responsible behavior, a major emphasis in program content has directed itself toward guiding effective communication between health workers and parents. Though the program encompasses an array of measures to accomplish this task (such as the touring seminars, as well as a newsletter series for staff trained in the *Smoke free Children* program), “the most important tool is the interviewing method developed within the scope of the programme... This method has formed the basis for discussion models for maternity health care and child health care respectively, and instructions have been produced for both of these areas of application.”<sup>873</sup>

The interviewing method, which trains midwives and other health workers to educate and motivate pregnant women and new mothers about smoking risks and cessation strategies, has gone through several incarnations. The first, which was employed from the program’s inception in 1992, focused on reaching women during the pregnancy phase through discussions between the parents-to-be and midwives. Precluded from lecturing in a moralizing tone or directly telling the parents what to do, midwives were encouraged to engage the women as partners in dialogue, *listening* to what the women had to say. Discussions were facilitated by the use of a video and booklet on a twelve-day program to quit smoking which were provided to the pregnant mothers. In concert:

The method would help midwives to start a constructive discussion on smoking, a discussion characterised by mutual respect in which, in a

---

educational materials entitled “Women, smoking, and health” that is made available in maternity clinics.

<sup>873</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 13.

best-case scenario, women would come closer to making a decision to give up smoking and would gradually make this decision.<sup>874</sup>

The decision to approach interviewing this way emphasized the need to have the promotion technique be more than the mere transmission of knowledge in a health education context; as the NIPH stresses, “the new interviewing method was based on the fact that passing on knowledge is not sufficient to influence behaviour.”<sup>875</sup>

With the development of this interviewing method, a pilot study was established in which 28 maternity and childcare nurses employed it in consultations with 128 families. After initial counseling sessions, follow-up interviews were scheduled at three months and six months after the first follow-up. At the first follow-up interview, all parents responded that they had adjusted their smoking habits to now smoke outside – reducing the exposure of their children to carcinogens; at the second follow-up, all participants responded that they had cut back on smoking, and 17.5% reported that they were working on quitting entirely.<sup>876</sup>

An extension of this interviewing strategy was directed toward the engagement of new mothers in a pediatric setting with their young children. This setting was primarily the child health care clinic, but interviews could also take place in the context of district health clinics, as well. Elisabeth Arborelius, a psychologist and long-time researcher in maternity and health care, was contracted in 1994 to help develop the discussion model to be used in this context. Her characterization of the model emphasizes again the need to avoid didacticism or proselytization; discussions

---

<sup>874</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 14.

<sup>875</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 14.

<sup>876</sup> E. Arborelius and Sven Bremberg, "Child Health-Centre-Based Promotion of a Tobacco-Free Environment--a Swedish Case Study," Health Promotion International 16.3 (2001): 248.

must be centered on the needs, desires, and motivations of the individual in order to bring about the desired change – in this case, the management of tobacco risk for the purpose of a healthy life for self and baby:

Respectful discussions in which you work on the basis of people's own situations and thoughts and together discuss what he or she wants to change and how, is both more human and more effective.<sup>877</sup>

The theoretical basis of this interviewing method was predicated upon the concept of self-efficacy, which is “a person's own ability to change his or her behaviour, and it is this ability which the discussion is able to research and reinforce.”<sup>878</sup> The content of discussions was designed to prompt mothers to reflect on how much their children were exposed to tobacco (whether or not they themselves), and to minimize as much as possible children's exposure. Taking this approach in the interview sidestepped the delicate issue of assigning blame and facilitated the mothers' ability to identify ways to minimize risks. Arborelius asserts:

The aim of this interviewing method is to get parents to think about what they themselves can do to make sure that their children have as much smokefree air in their environment as possible. The basic principle involves working on the basis of parents' views and persuading them to come up with their own suggestions for possible changes to their smoking habits. It is important for you to support all the suggestions put forward by the parents – even those which propose very small changes. If you do this, you will reinforce parents' feeling *that they themselves have the ability to come up with and implement good solutions* [emphasis added].<sup>879</sup>

---

<sup>877</sup> Quoted in National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 15.

<sup>878</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 15. For a more detailed overview of self-efficacy theory, see Bandura, "Self-Efficacy: Toward a Unifying Theory of Behavioral Change."

<sup>879</sup> Quoted in National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 15.

Under the program, therefore, women are not coerced or instructed what to do, but rather engaged as active subjects who can be brought to recognize and value the decision to reduce the exposure of their children to tobacco as a vehicle to promote health.

Moreover, this approach not only is designed to inculcate in the individual a desire or motivation to pursue a healthier lifestyle, but to empower them to undertake the work themselves. Hence, the NIPH's guidance to health workers that emotional support or positive reinforcement is a means to the end of prompting individuals to feel empowered to develop and implement "good solutions." Such a dimension illustrates the means by which *Smoke free Children* facilitates the construction of a neoliberal subject position on the part of participants; even as the program trains "experts" to train at-risk individuals, the whole purpose of the training is geared toward the manifestation of responsible, health-affirming self-government by those individuals. As a microtechnology of public health, *Smoke-free Children* in this regard is implicated in the realization of government at a distance.

As a technology of health promotion, *Smoke-free Children* thus employed in the early 1990s methods predicated upon the empowerment of the individual – that the mothers or parents can be brought to choose health supporting outcomes, without coercion, and for the good of themselves and their children. As a mode of subjection, this is a key element in the fostering of a neoliberal subjectivity: for it is through, among other things, a sense of empowerment and duty to the health of self and child, that individuals are motivated to undertake the ethical work and to govern their lives responsibly. Although external expertise (the health care worker) is not absent in this

context, we witness the shift in emphasis from instructor, or external authority, to facilitator and partner.

Moreover, the example of the interviewing method used in *Smoke-free Children* reinforces the intersecting relationships of the three axes of governmentality: knowledge (self-efficacy theory that emphasizes the responsabilization of the individual), the microtechnology of health promotion that deploys that knowledge (interviews in the *Smoke free Children* program), and the construction of subjectivity that not surprisingly manifests, in the responsabilization of the individual, qualities that promote it: namely, empowerment and ability.

This interviewing method, in its two contexts, remained a key part of the *Smoke-free Children* program throughout the 1990s. In 2000, however, the coordinators of the program decided it was time to update the approach. This decision was informed in part by continuing research in the 1990s about the emotional dynamics of addiction experienced by pregnant and new mothers who smoked. The NIPH and others generated a number of health surveys of this population that identified that “these women feel a sense of distress and blame for failing to conquer their nicotine dependence, and that they have difficult, conflicting thoughts and feelings every day.”<sup>880</sup> One woman in just such a survey described the feelings of guilt that accompanied the addiction: “...you never escape your bad conscience...it pursues you...”<sup>881</sup>

---

<sup>880</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 17.

<sup>881</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 17.

As a consequence, *Smoke-free Children* evolved a second incarnation of the interviewing method: motivational interviewing. Motivational interviewing retains some of the earlier elements of the interviewing method employed in the program – respectful and supportive dialogue that views the mothers and parents as partners, rather than objects to be instructed, and an emphasis on the needs and motivations of those individuals to change their behavior. However, with motivational interviewing, “the method has now been supplemented with more techniques and principles on how to implement discussions so that people are more motivated to change.”<sup>882</sup> Specifically, these techniques have emphasized to a much greater degree the responsabilization of the individual, and the need for the health-care workers to set very clear boundaries on their role in prompting mothers to adopt a healthy lifestyle.

As the NIPH describes in its review of the *Smoke free Children* program:

One thought behind the interviewing method is that discussions are more constructive and perceived more positively by both parties if midwives do not take on all responsibility for resolving the situation. *They have to accept that they cannot make decisions for other people, and to realise that they are helping the unborn baby most by really communicating with its parents.* If midwives restrict their own responsibility in their own minds, their work will also be less frustrating and more pleasurable [emphasis added].<sup>883</sup>

By more explicitly acknowledging that the decision to manage tobacco risk and adopt a healthy lifestyle must come from the mothers themselves, the interviewing strategy used in *Smoke-free Children* further fosters the responsabilization of the individual, and places an increased emphasis on the

---

<sup>882</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 18. For a detailed treatment on the components of motivational interviewing, see W. Miller and S. Rollnick, *Motivational Interviewing* (London: Guilford, 1991).

<sup>883</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, *Smoke-Free Children--a Report: The First Ten Years*, 18.

individual's autonomy for action. They cannot depend on the midwife, or other health-care workers to do the "ethical work" for them; rather, the impulse to undertake this work must be fostered as a cultivation of self – hence the need for or emphasis on motivation.

The guide developed for training midwives and pediatric workers in motivational interviewing emphasizes that the desired outcome is facilitated by several principles: showing empathy – even if the worker does not agree with the mother's lifestyle or reasoning; pointing out discrepancies, such as a woman's desire to protect her baby and lifestyle choices that may operate contrarily to that goal; working with the woman through her resistance, or not arguing should a woman claim her choices are not harmful – the logic emphasizing that starting an argument only reinforces resistance; and "supporting the mother's self-confidence in her own abilities."<sup>884</sup>

In order for the ethical work to be successful, the health promoter is relegated to facilitator – one whose role is defined in terms of supporting women who engage in risky behaviors to see in themselves the promise and ability for positive change. As the guide illustrates through sample dialogue, the fostering of self-confidence emphasizes positive reinforcement and an acknowledgment of the challenges that might inhibit right action:

Midwife: I reckon it's brilliant that you can talk to me about your smoking. You're really brave, because it's not so easy to talk about

---

<sup>884</sup> E. Arborelius and A. Ecklund Brandell, Smoke-Free Pregnancy/Motivational Interviewing (Stockholm: Swedish Cancer Society, Swedish Heart-Lung Foundation, and the National Institute of Public Health, 2001). As with the development of the earlier interviewing method, the NIPH, Swedish Cancer Society, and Swedish Heart-Lung Foundation contracted Arborelius and others to actually write the guide adopted by the *Smoke-free Children* program.

smoking when you maybe think you really shouldn't be smoking at all.<sup>885</sup>

Positive reinforcement in the form of compliments on bravery and self-courage is designed to break down resistance, and subtly prompt at-risk women to undertake the ethical work of risk management. For this to be fostered internally from an active subject, it must be the result of motivation. Hence the emphasis on self-confidence, which in the end, is not only a *means* by which the moral goal is achieved, but also a component of the goal itself; to manage one's lifestyle responsibly not only requires self-confidence and ability, it promotes it –it is a specific investment that one can make in herself and life. In this regard, one sees very clearly the relationship between a mode of subjection predicated upon empowerment and confidence, and the neoliberal *telos* that prompts the fostering of life as a site of entrepreneurial work.

Whether in its original incarnation or in the form of motivational interviewing that now comprises the core content of *Smoke-free Children*, the construction of an empowered, internally motivated and self-regulating subject has been a defining feature of this health promotion initiative. However, there are other elements of neoliberal subjectivity that manifest themselves in the context of the program. The first concerns the role of self-surveillance; although mothers-to-be and new parents have multiple consults with health workers trained in the *Smoke-free Children* method, the day-to-day work of monitoring their habits falls to their own initiative. Two forms have been employed in the context of the program. The first is the daily charting of tobacco exposure of their children in the home – a simple record that is

---

<sup>885</sup> Arborelius and Brandell, *Smoke-Free Pregnancy/Motivational Interviewing*.

designed to again, minimize personal feelings of culpability, guilt, or blame, while at the same time recording very specifically the presence of a key health risk.<sup>886</sup>

For women who have not yet had their children, a second form of self-surveillance is the use of a pregnancy journal; after an initial consult with a maternity health worker such as a midwife, women are advised in accordance with National Board of Health and Welfare guidelines of the risks of tobacco exposure to unborn children. Their smoking habits are recorded in the journal the first week they are enrolled in a maternity health clinic, and are recorded again in week 32 of the pregnancy.<sup>887</sup> Additional entries pertaining to smoking habits, impulses, concerns, and emotional reactions are encouraged; in sum, these provide a tangible means for the mother to account for and monitor her habits. And though the journal is a clear example of self-surveillance, the fact that it is done in concert with a program such as *Smoke-free Children*, and in consultation with professional health workers, does not remove the dimension of external, expert monitoring. This dimension does not disappear with the rise of neoliberal subjects, but it becomes less an authority, and more, as we have seen in the interviewing dimension of *Smoke-free Children*, a source of partnership and support.

In addition to surveillance, a final component in the construction of the neoliberal subject in *Smoke-free Children* is directed toward the *telos* of the ethical subject: that is, the emphasis on manifesting an entrepreneurial attitude to health: an investment, as presented in the *Smoke-free Children* report, in the first place the

---

<sup>886</sup> Arborelius and Bremberg, "Child Health-Centre-Based Promotion of a Tobacco-Free Environment--a Swedish Case Study."

<sup>887</sup> National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 7.

health of the child. This may seem an incongruous claim, given that one of the stated goals of the program is for women to realize benefits for themselves. Margaretha Haglund, a tobacco prevention advocate affiliated with the National Institute of Public Health when the *Smoke-free Children* project began, characterized the goal of the program in these terms:

...it was important to get the message across to women that stopping smoking was not just important for their babies, but also for their own sakes. Women have to feel that they are important, not only when they give birth.<sup>888</sup>

I do not dispute that this is a dimension, that the program aims to help women make health-affirming changes to improve their own lives. But the fact that the key component of the program – interviewing – focuses on behavioral changes affecting the environment the child is in, rather than on lifestyle lectures about changing parental behaviors for their own sake, is evidence of the primacy lent to the life of the child. In this context, the health of the young is a site for investment – not necessarily for their ultimate contributory value to the economy, though in a graying population such as Sweden’s this is certainly a factor. No, rather the emphasis is on the investment in the health of children as a moral goal in and of itself: the extension and preservation of life, life yet unborn or newly arrived to this world. In this context, the dimension of the productive self for mothers is emphasized; I do not mean to direct this analysis towards a feminist critique, but one cannot but help recognize the age-old emphasis of the value of women as life-givers given a contemporary contour: old bones in new clothes, indeed.

---

<sup>888</sup> Quoted in National Institute of Public Health - Sweden, Swedish Cancer Society and Swedish Heart-Lung Foundation, Smoke-Free Children--a Report: The First Ten Years, 11.

And herein also lies the citizenship dimension of subjectivity that we have seen carried through the two previous cases: the tying of citizenship and the *telos* of the ethical subject with production. Whether by design or no, the content of *Smoke-free Children* as a public health initiative demonstrates that the duty to invest in the health of one's child is productive not only as an end, but as a mean: a mean by which the responsible mother, the dutiful mother, the disciplined mother, achieves the fullest expression of citizenship and of the ethical relation of the self to the self.

### Conclusion

While WISEWOMAN, *Expert Patients*, and *Smoke-free Children* are health promotion programs executed under different institutional auspices and in different cultural contexts, it is nonetheless possible to witness key themes recurring. All three operate on the basis of theoretical underpinnings that emphasize the self-efficacy of the patient or participant; programs predicated upon such an assumption are inherently tied to the privileging of the individual as a site of practice – of the ethical work of managing risk towards the end of achieving a full, healthy life, and of the cultivation of health as a good in and of its own right. Thus, to the extent that the health of the population is to be secured, it is now pursued, at least as evidenced in these three cases, in such a way as to construct “population” as an aggregate of *individuals*, and to work through though the private, as opposed to the social body as a means of achieving health; each of us responsible for the daily choices and habits pertaining to diet, exercise, medication, tobacco use, stress, and so many other factors. Through the discipline of these impulses, simultaneously infused with the

rhetoric of empowerment, autonomy, ability, and productivity that has been so evident in the public health discourse, one may perfect the self-government of their health and well-being.

Complementing the primacy lent to the individual as a site of risk and a source of solution, all three programs emphasized the technologies of self-surveillance. Notwithstanding periodic counseling sessions with health workers, or in the British case, lay tutors, the daily work of monitoring progress falls to the individual in question: from the extensive and frequent activity and diet surveys in WISEWOMAN's *New Leaf* intervention, to the weekly contracts of *Expert Patients*, to the tobacco logs and pregnancy journals employed in the context of *Smoke-free Children*. These endeavors further institute the aims of government at a distance that is the hallmark of neoliberal governmentality; to the extent that the state, as manifest in the institutions of public health, shifts more of the responsibility of monitoring away from itself and toward the surveilled, the more that the neoliberal impulse infuses the practices of public health.

Finally, the emphasis across all three programs on the investment in self – the development of life management skills, the acquisition of new knowledge, the enhancement of confidence and a sense of ability – represents a construction of the human body and the life choices that affect it as a site of capital. In such a context, health itself becomes an asset, and the healthy are assets in their function as citizens. This dovetails with lingering constructions of the ethical subject as one who cultivates their health to be useful; thus, the productive self is very much a part of the contemporary subjectivity privileged by Western public health. This dimension

manifested itself across the three cases, but in different contexts. In WISEWOMAN, the use of success stories as a marketing tool, as well as the *New Leaf* intervention, promoted a productive self capable of contributing to family or community, but most especially in the context of serving as an example of proper living – the moral subject. *Expert Patients* emphasized especially a productive self capable of contributing back to the program in the form of recruiting lay tutors as a key component of the intervention course – tutors who, in that capacity, work toward the re-production of the program and the cultivation of new *Expert Patients*, thus furthering the project of government at a distance. Finally, Sweden’s *Smoke-free Children* program, through its emphasis on enhancing the health and well-being of the unborn or new-born child, privileged the productive role of women as life-givers and mothers.

As illustrated in the cases of Britain and Sweden, self-management courses executed under the auspices of *Expert Patients* and the interviewing method of *Smoke-free Children* have both been linked with tangible results; with the CDSPPs, these have included less pain, less frequent trips to the hospital, and the need for less medication, and in Sweden, the prevalence of smoking among pregnant women has decreased. In the United States, population results for WISEWOMAN interventions have yet to be established, largely because the evaluative criteria measure compliance with program requirements, and changes in behavior, if not risk propensity, and cost-effectiveness of the program.

While highlighting these features is an appropriate element to any discussion of a public health program – a natural impulse when encountering public health

programs is to gauge their effectiveness – the issue of their effectiveness is still ultimately only tangential to the analysis at hand. For in the analytics of government, we are concerned less with the question of *whether* technologies of power work, and more with that of *how* they work. As demonstrated throughout this chapter, the microtechnology of health promotion operates to a great extent via the construction of subjects. For the purpose of demonstrating how such public health work is implicated in the expansion of specifically neoliberal government, we must concern ourselves with how it is directed toward the cultivation of the self-governing, empowered, and entrepreneurial self. Despite different institutional dynamics, cultural milieu, and program content, all three health promotion campaigns analyzed herein are explicitly engaged in the production of just such a subject. In so doing, they illustrate the dominant values and political logic guiding the execution of public health as a project of government; probing the relative success of that project is a task for another time.

## Chapter 9: The End of It All

Discourse is not life; its time is not yours; in it you will not reconcile yourself with death; it is quite possible that you have killed God under the weight of all that you have said; but do not think that you will make, from all that you are saying, a man who will live longer than he. In each sentence you pronounce – and very precisely in the one that you are busy writing at this moment, you who have been so intent, for so many pages, on answering a question in which you have felt yourself personally concerned and who are going to sign this text with your name – in every sentence their reigns the nameless law, the blank indifference: ‘What the matter who is speaking; someone has said: what matter who is speaking.’

- Michel Foucault

Through the general elucidation of how public health government of chronic disease manifests neoliberal rationality, as well the illustration of this argument in the particular context of the United States, the United Kingdom, and Sweden, we return to the general imperatives underlying the analysis: to speak to the twin silences surrounding the political implications of public health approaches to chronic disease. The discipline of political science - most especially when considered from the position of the international relations sub-field – has for so long limited its concern with health and disease to a fairly limited range: the use of agents and toxins as weapons, the general problem of infectious diseases as potential social and economic de-stabilizers, and the implications of changing technology and globalization for the spread of new and resurgent diseases.<sup>889</sup>

This project has augmented that analytical scope in two ways, subjecting both the discipline of public health and the phenomenon of chronic, noncommunicable

---

<sup>889</sup> This point was elaborated more fully in Chapter 2. On the issue of disease as an object of analysis, see, for example: Burkhalter, "The Politics of AIDS."; Price-Smith, "Ghosts of Kigali: Infectious Disease and Global Stability at the Turn of the Century."; Price-Smith, The Health of Nations: Infectious Disease, Environmental Change, and Their Effects on National Security and Development.; Lee and Dodgson, "Globalization and Cholera: Implications for Global Governance."; and Pirages and Runci, "Ecological Interdependence and the Spread of Infectious Disease."

disease to a political critique. This critique opens up the field of inquiry even further, from assessing how public health systems in other cases – especially those in less industrialized countries – approach the general challenges posed by NCDs, to exploring strategies of resistance to a system of power predicated upon a hegemonic political rationality. It is this latter avenue I shall sketch in more detail shortly.

In addition to addressing the first silence, this project has interrogated the public health discipline's approach to the understanding, management, and prevention of these diseases that functions to depoliticize them. The general analytical and practical imperatives of public health have often been framed as value-free, neutral science, and come from various elements within the public health community. As the American Public Health Association frames it: "Science is the basis for much of our public health knowledge. The scientific method provides a relatively objective means of identifying the factors necessary for health in a population, and for evaluating policies and programs to protect and promote health."<sup>890</sup>

Others have echoed this position, whether in the general context of public health or in sub-fields such as epidemiology, primarily concerned as it is with identifying the causes of disease in populations. Rothman and Poole are thus concerned that public health science in the main not be corrupted by political imperatives that could compromise its neutrality:

Therefore, the job of scientists should be to formulate and evaluate scientific hypotheses, rather than muster support for or marshal evidence against specific policies. This is not to deny the rights and responsibilities of scientists to participate, like any concerned citizens, in the political process that determines policy. It is important, however, for scientists to safeguard their scientific objectives as much

---

<sup>890</sup> American Public Health Association, Public Health Code of Ethics, Available: <http://www.apha.org/codeofethics/ethics.htm>, January 31 2005.

as they can from secular influences. *The conduct of science should be guided by the pursuit of explanations for natural phenomena, not the attainment of political or social objectives.*<sup>891</sup>

This general imperative understandably also extends to sub-fields of public health such as epidemiology, which likewise is expected to retain a commitment to the objectivity and neutrality that science is assumed to command. Savitz, et al illustrate this principle in their claim that “as a scientific discipline, epidemiology follows the rules of research, contributes knowledge over time, and proposes hypotheses, subject to testing and refutation; its goal is the generation of accurate and useful information.”<sup>892</sup>

This project has taken as its core argument that such a position cannot be substantiated, and has developed it through the general approach of governmentality and the content lens of chronic disease. Through the interactive and mutually reinforcing domains of *episteme*, *techne*, and *ethos*, a governmentality approach enables the appraisal of political rationality in public health. Such an approach is especially vital in the interrogation of the public health of chronic diseases, which have been approached internally to that discipline in a manner consonant with political silence; as we have witnessed both in a general context, as well as in the context of disciplinary publishing and education, institutional frameworks, and health promotion campaigns in the United States, United Kingdom, and Sweden, NCDs are constructed as the product of a confluence of risk factors, largely situated in individual bodies and the unfortunate choices of a lax lifestyle.

---

<sup>891</sup> Rothman and Poole, "Science and Policymaking," 341. On this point, see also H.O. Adami and D. Trichopoulos, "Epidemiology, Medicine, and Public Health," *International Journal of Epidemiology* 28 (1999).

<sup>892</sup> Savitz, Poole and Miller, "Reassessing the Role of Epidemiology in Public Health," 1158.

Such a framing functions to effectively depoliticize the phenomenon of chronic disease – not only from the perspective of downplaying the sociopolitical and economic contexts which facilitate such behaviors and lifestyles, but also, and most importantly for this project, from that of disciplinary practice itself. Inasmuch as those within public health characterize its work and foundations in terms of scientific objectivism and value neutrality, they compromise their ability to generate a self-reflective critique that acknowledges the latent political values and norms – the rationality – that infuses the objects of public health knowledge and the strategies that are deployed to prevent chronic disease.

The demonstration of such rationality has been a key preoccupation of this project. While articulated in a general way in Chapter 5, the case countries of the United States, United Kingdom, and Sweden in the latter chapters provided a concrete illustration of this theoretical argument. Without such an approach to inform the analytical exercise, all one has are disparate phenomena: the publishing trends in the health disciplines, curriculum content and research imperatives at public health schools, economic reform in the health sector, patterns of institutional organization and practices, and the content of health promotion campaigns. Woven together in a systematic manner, however, we are able to discern consistent themes not constrained by geographical boundaries, or by historically different patterns of social welfare and cultural values.

These themes include the privileging of risk as an analytical concept in public health, and especially behavioral risks in the analysis of NCDs; the training of public health practitioners in such a manner as to reflect the dominance of behavioralism and

this risk-mentality; and the macrotechnologies of economic and health reform characterized by such phenomena as competitive sourcing of contracts, organizational decentralization, privatization of public services and institutions – implemented, and in certain instances, accelerated, by parties historically more aligned to a more welfarist imperative, such as the American Democrats, British Labour, and the Swedish Social Democrats. These themes also include the microtechnologies of health promotion as evidenced by WISEWOMAN, *Expert Patients*, and *Smoke free Children*; such programs are oriented toward the government of health via very specific means – the cultivation of a responsible, self-governing subject via techniques of empowerment, self-surveillance, and towards the end of achieving a healthy and productive life. The body, and the daily choices of everyday life, thus become a site of opportunity and investment – the cultivation of self as an entrepreneur.

On this latter element and, we are called to heed the implications of *episteme* and *techne* for the subjectivation of individuals. In the current era, the exercise of power and the practice of government are increasingly actualized at a distance, and are not solely bound to the realms of knowledge and strategy. For their most efficacious execution, the practices of government must be *accepted* as the right and proper mode of action by those to whom it is devolved. In the context of a specific form – government at a distance, or neoliberal government – its credibility thus also depends on the cultivation of an ethical relationship of the subject with the self: one must not only possess the knowledge of how to manage their lifestyle and exposure to chronic disease risk, she must embrace the activity of that management as proper,

life-affirming, and to her own benefit: this is the ethical subject-position in the context of disease prevention, this is the execution of power in its most generative form.

Such themes reflect the multi-dimensional character of neoliberal rationality; while at its root, it is directed toward the rather general proposition of governing life and its processes, as well as “society,” via the same principles and values that govern the market, in practice this rationality is deployed in very specific ways. Some are immediately grasped as techniques of economic reform – such as the aforementioned decentralization and privatization in health care. Others require the placing of the public health discipline under the microscope to discern how the valorization of the private sphere manifests itself in this domain. Our analytical attention is thus drawn to the means by which this valorization is instituted: the individual and her ability to rationally choose (as evidenced in the Health Belief Model and other guiding theories of health promotion), the devolution of health responsibility to this operational level, and the impulse to approach life and its processes (such as those associated with the management of health risks) as an entrepreneur approaches an investment opportunity, seeking ever-greater productivity and returns-to-capital.

The fact that these themes manifest so prominently across the three cases is quite illustrative. As discussed in Chapter 1, the United States, the United Kingdom, and Sweden have historically been viewed as existing along a spectrum in their respective approaches to health and other forms of social welfare – from a generous provision system of universal coverage and corporatist enterprises in Sweden, to the comparatively modest approach to social welfare in the United States. In the

contemporary context, however, this “spectrum” perspective becomes somewhat more complicated, as macropolicy reforms throughout the 1990s and in recent years across the three countries have functioned to bring the British and Scandinavian models of health and welfare more in accordance with that of the U.S. Such reforms need not point to an ultimate convergence – as discussed earlier, significant differences between the respective systems remain, especially in areas such as the commitment to universal coverage, and the circumstances of state involvement in the provision of public health.

Differences also exist in other contexts; the case countries, for example, exhibit quite distinct approaches to the execution of public health education, from a highly decentralized system such as that of the United States, to a single national school in Britain, to a supraprivate institution and a single department of public health at the major Swedish medical school. And in the case of health promotion campaigns, we witnessed differences in two programs targeted at the direct education of at-risk individuals (WISEWOMAN and *Expert Patients*), and the *Smoke free Children* campaign that worked through the training of midwives and pediatric workers.

Despite these differences and the unique historical, institutional, and cultural milieu in which public health programs in the case countries are implemented, the consistent manifestation of neoliberal rationality across the three cases communicates something quite noteworthy: that the political rationality underlying public health knowledge and practice is not dependent on the specific sociopolitical or cultural contexts in which it is deployed. Thus, it allows us to speak simultaneously of not only political rationality in a general sense, but *disciplinary* rationality as well.

*Future Directions: The Critical Impulse and the Possibility of Resistance*

Having demonstrated the consistent manifestation of such rationality in the public health practices of multiple cases, we still confront the legitimate question: what of this phenomenon? More specifically, of what significance is it, and to what implications does it give rise? Beyond having problematized the common construction of public health as a value-free, neutral science, which seems a contribution of import in and of itself, the demonstration of such rationality opens up a critical space, in two senses: the first being that of the space to critique, to interrogate the systematic and subtle ways in which the government of our bodies, our health, and our lives is promoted and actualized; the second builds upon the first in directing our attention to the necessity, the *criticality* of such a space to begin with. For without it, the possibilities of conceptualizing and actualizing a different mode of politics in the context of health and other spheres of government diminish greatly.

As presented by both the discourses of public health and political science, the realm of NCD prevention is not posed as a domain of choice. In this sense, I refer not to choice as a human faculty – clearly that is privileged, as if one would be healthy, they need only choose not to smoke, or to exercise more. I refer instead to the fact that only certain choices are presented as “healthy” in the prevention of such illnesses; more importantly, perhaps, this constraint applies to the practice of contemporary public health in accordance with a single dominant political rationality. In this regard, there are certain values which are the accepted standard underlying the production of health knowledge, how experts are trained, the programs that are deployed, and the kinds of “healthy” subjects to be produced – values which are

enshrined in the valorization of the private sphere and the language of neutrality and objective, scientific truth. Thus, a proper diet, regular exercise, and the avoidance of tobacco are not so much *choices* as they are the normalized *calculation* of health risks under the mindset of the liberal individual. What this work has tried to do is to undermine those claims to self-evidence and objectivity in order to expressly open such a potential space for political and ethical contestation.

By adopting the framework of Foucault's analytics of government it is indeed possible to open up such a space. In employing this framework, one adopts a genealogical style of argument; in the Foucauldian sense, genealogy is research that: 1) is primarily concerned with power relations; 2) investigates things at the level of practice; 3) systematically analyzes how subjects are created through knowledge, power, and ethics; and 4) situates its inquiry in historical context.<sup>893</sup> An analysis of this type opens up the possibility of our thinking, acting, and being otherwise than we are constructed to be by the dominant set of power relations in our historical era. In opening up this possibility of alterity, one also adopts Foucault's ethical imperative of scholarship: "to give new impetus, as far and wide as possible, to the undefined work of freedom."<sup>894</sup>

This "undefined work" calls us to problematize the unproblematic, to interrogate the seeming natural character of systems of power and practice. As Dean notes:

By making explicit the forms of rationality and thought that inhere in such regimes of practices, by demonstrating the fragility of the ways in which we know ourselves and are asked to know ourselves, and the

---

<sup>893</sup> Michel Foucault, "What Is Enlightenment?" *The Foucault Reader*, ed. P. Rabinow (New York: Pantheon Books, 1984) 47-49.

<sup>894</sup> Foucault, "What Is Enlightenment?" 46.

tissue of connections between how we know ourselves and how we govern and are governed, an analytics of government can remove the taken-for-granted character of these practices.<sup>895</sup>

Such a perspective speaks in the broadest sense to the possibilities of resistance, of opening up the space to think differently about practices and problems, and perhaps evolve alternative approaches to the work of government. But this evolution requires in the first place an account of the hegemonic rationality, and the subtle ways in which it is implicated in the exercise of power and the process of government – the aforementioned exercise of problematization. This element of resistance to the current constitution of governmentality is theorized in Hardt and Negri's *Empire*, when they write: "The first question of political philosophy today is not if or even why there will be resistance and rebellion, but rather how to determine the enemy against which to rebel."<sup>896</sup>

Now, some might legitimately ask whether resistance must actually wait on such theorizing. But the divorce of action from a framework to inform it ignores the mutually reinforcing and complementary relationship between theory and practice. As Deleuze has noted: "Practice is a set of relays from one theoretical point to another, and theory is a relay from one practice to another. No theory can develop without eventually encountering a wall, and practice is necessary for piercing this wall."<sup>897</sup> When considering this project, the aim has been throughout the re-theorization of public health practices. This in turn creates the possibility for a series

---

<sup>895</sup> Dean, *Governmentality: Power and Rule in Modern Society*.

<sup>896</sup> Michael Hardt and Antonio Negri, *Empire* (Cambridge, MA: Harvard University Press, 2000) 210-11.

<sup>897</sup> Gilles Deleuze and Michel Foucault, "Intellectuals and Power: A Conversation between Michel Foucault and Gilles Deleuze," *Language, Countermemory, Practice*, ed. D.F. Bouchard (Ithaca: Cornell University Press, 1977) 206.

of new practices or modes of inquiry to emerge – a space of contestation and reactualization.

In the first instance, therefore, one could justifiably view this extended analytical exercise as a necessary step in the evolution of a politics of resistance. It should be stressed that the phenomenon of resistance to the exercise of neoliberal power does not necessarily presage either open conflict or social upheaval. To provide a clearer sense, we might draw upon Gordon's circumspect characterization of Foucauldian politics exhibited in the various contributions to a 1991 compendium on governmentality:

The kinds of political analysis presented in this volume are not liable or designed to inspire and guide new political movements, transform the current agendas of the political debate, or generate new plans for the organization of societies. Their claim would be, at most, to help political thought to grasp certain present realities, thus providing a more informed basis for practical choice and imagination.<sup>898</sup>

This characterization might be the clearest articulation of the spirit of critique that has infused this project: the expansion of awareness, and an informed engagement with the systems of power in which we find ourselves embedded – both of which seem to be important for any future efforts to systematically account for specific challenges to that system.

Such an accounting would appear to be an appropriate venue for further and future inquiry, for even now, resistance to neoliberal governmentality in the public health sphere is not without possibility or precedent. Petersen and Lupton note that “although rules for personal conduct are recommended to the individual by the social context, often issuing forth from institutions such as public health, different contexts

---

<sup>898</sup> Gordon, "Introduction," 46.

provide different degrees of freedom to act and interpret, negotiate and resist norms.”<sup>899</sup> Referring to examples of continued tobacco consumption and an unwillingness or inability to switch to healthier diets, they conclude that “such activities may be conscious floutings of public health advice or may simply represent attempts to construct subjectivity through alternative practices, privileging the pleasures of smoking, for example, over its imputed long-term health effects.”<sup>900</sup>

We see in such examples, whatever their genesis or logic, the possibility for thinking, responding, and acting differently than is prescribed by the dominant rationality of government. This does not, however, necessitate the abandonment of an approach to subjectivity and human action that rejects a priori assumptions about human faculty, rationality, or behavior – the substance of “agency.” Indeed, Foucault is quite clear that an accounting of subjectivity must simultaneously account for the practices and forms of knowledge that make such subjectivation possible:

Q: But you have always “forbidden” people to talk to you about the subject in general?

M.F.: No, I have not “forbidden” them. Perhaps I did not explain myself adequately. What I rejected was the idea of starting out with a theory of the subject—as is done, for example, in phenomenology or existentialism—and, on the basis of this theory, asking how a given form of knowledge was possible. What I wanted to try to show was how the subject constituted itself in one specific form or another, as a mad or a healthy subject, as a delinquent or non-delinquent subject, through certain practices that were also games of truth, practices of power, and so on. *I had to reject a priori theories of the subject in order to analyze the relationships that may exist between the constitution of the subject or different forms of the subject and games of truth, practices of power, and so on* [emphasis added].<sup>901</sup>

---

<sup>899</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk* 179-80.

<sup>900</sup> Petersen and Lupton, *The New Public Health: Health and Self in the Age of Risk* 180.

<sup>901</sup> Foucault, "Sex, Power, and the Politics of Identity," 290.

Thus, as much as practices in a system of power create the conditions for the emergence of particular kinds of subjects, configurations between different practices and systems of knowledge also allow the possibility of difference. In a more specific context, inasmuch as public health discourse is oriented toward the production of healthy subjects, it may also be implicated in the genesis of resistance to how this production is achieved. Despite a cohesive program oriented toward the responsabilization of the individual, for example, the particular strategies of that responsabilization that we are supposed to embrace are not always coherent. Those who confront a seemingly constant barrage of prescriptions of how to manage risk are faced with complicated and not always complementary recommendations.

Consider the example of alcohol; not only has there been a longstanding linkage of alcohol consumption with the onset of diseases like cirrhosis, in 2001 the U.S. Department of Health and Human Services for the first time included it in its annual report on known carcinogens.<sup>902</sup> However, moderate consumption – 1 or 2 drinks per day – has been attributed in more than sixty studies to have a beneficial effect in moderating coronary heart disease risk, and has also been linked with lowering the risk of diabetes onset in women<sup>903</sup> How to navigate the wealth of information that does not always provide a clear or easy path to action? We are

---

<sup>902</sup> United States Department of Health and Human Services, 9th Report on Carcinogens (Washington, DC: Department of Health and Human Services, 2001).

<sup>903</sup> On a review of findings from these studies, see: E.B. Rimm, A.L. Klatsky and D. Grobbee, "Review of Moderate Alcohol Consumption and Reduced Risk of Coronary Heart Disease: Is the Effect Due to Beer, Wine, or Spirits?" British Medical Journal 312 (1996).; on the beneficial effects of moderate alcohol intake, see also A.L. Klatsky, M.A. Armstrong and G.D. Friedman, "Red Wine, White Wine, Liquor, Beer, and Risk for Coronary Artery Disease Hospitalization," American Journal of Cardiology 80 (1997).; and Ira J. Goldberg, Lori Mosca, Mariann Piano and Edward A. Fisher, "Wine and Your Heart," Circulation 103 (2001). On the diabetes findings, see Michael J. Davies, David J. Baer and Joseph T. Judd, "Effects of Moderate Alcohol Intake on Fasting Insulin and Glucose Concentration Sensitivity in Post-Menopausal Women," Journal of the American Medical Association 287.19 (2002).

supposed to educate ourselves about risk and its management and to take appropriate courses of action; those appropriate courses, however, are not always readily discernable, and the sense of either futility or the hard and constant work of self-education and management may open the possibility of resistance. Thus, we confront one avenue by which the knowledge and practices of public health, implicated as they are in government-at-a-distance, may also open the space to its resistance, as well.

As illustrated by the example of alcohol consumption, this feature of contemporary public health – the particularist and often disjointed accountings of risk that emerge out of persistent and revisionary recommendations – suggest one potentially fruitful avenue of exploration of resistance to neoliberal government in public health. Such an avenue would situate an exploration of resistance on the part of those targeted by public health campaigns against the internal tensions of a discipline whose narratives of risk may lack unity or cohesion. Moreover, such an exploration facilitates a critical examination of specific phenomena that permeate public health knowledge and practice: authority, expertise, the constitution of “truth” and the manufacturing of “reality.”

Of course, if resistance is possible from the perspective of the individuals to whom public health programs and strategies are aimed, it may also be pursued through the workings of the discipline itself. But how might such a resistance to the dominant rationality of neoliberalism be accomplished? From what counterhegemonic discourses could it conceptually take its cues?

It might be argued that the seeds of such a resistance exist already in the legacy of a public health movement that evolved under a more socially minded and

conscious welfarist governmentality. While a precise return to this former rationality of government is unlikely, a reinvigoration of the civic impulse of public health to focus on those structural factors – processes pertaining to globalization and economic liberalization, and access to health resources that are constrained by pervasive inequities of social position, class, gender, and race – may serve as a touchstone to evolving a more nuanced and responsive public health discipline. Those, for example, whose analytical commitment to social epidemiology reflects an upholding of this civic-minded spirit must be empowered as decisionmakers within the discipline to put into practice programs that reflect such a commitment. Currently, this is not the case; as we have seen in the orientation of public health systems to NCDs, an analytics at the margin has not translated into praxis in the main.

One way of facilitating such a transformation and ultimately achieving such a praxiological resistance to neoliberal governmentality is to return to how decisionmakers and experts within the discipline are produced. As we have seen in the case countries, public health education is oriented toward clinicians and several fundamental tenets of biomedicine; moreover, training often includes econometric and business approaches in the context of administration curricula – the content of how to manage and execute public health programs. Not surprisingly, then, do we come to see public health experts approaching the content of their discipline in a manner consonant with economic or market rationality. By expressly opening the discipline to those trained in critical social inquiry, political theory and sociology, and by making these and other related subjects an essential part of graduate public health education, it may be possible to produce experts who approach matters of public

health, and the discipline itself, in a more contextual and critical manner – and thereby evolve programs and practices that reflect such an orientation.

Whatever these specific practices might be, whatever their form and trajectory, the time is approaching when their need will be great. Inasmuch as this analysis has highlighted the problematics of chronic disease, the processes and factors that condition their emergence in areas historically dominated by other illnesses also affect patterns of other disease phenomena. Processes of urbanization and deforestation expose new species all the time, including novel pathogens; moreover, the rapidity and facility of global travel mean that no population is isolated or safe from exposure. Climate change and trends in global warming mean that new habitats are available for old enemies; vectors such as mosquitoes whose transmission of illnesses such as dengue fever have typically been constrained to equatorial regions are now infiltrating historically more temperate zones. The work of public health, if it is to be effective on a large scale, must find ways to address these processes at their structural roots. Counseling individuals to change their behavior or manage their lifestyle is a simple and straightforward mode of intervention, but it is a narrow one, and one that by no means can address the broader social, economic, and political conditions that have a tremendous influence on the trajectory of population health.

If the need to address a broader array of conditions that affect population health is one justification for resisting neoliberal government, it is not the only one. Certainly, skeptics remain, and may point out that if public health discourse is directed toward (and ultimately succeeds in) the production of empowered subjects,

and the problems of chronic disease are diminished in the process, then so much the better; is this not what we all would want?

Clearly, the alleviation of suffering, the unburdening of the body and mind from the ills of disease are noble goals; only the most stringent and unsympathetic minds would argue otherwise. From such a perspective, I do not place the ends of public health practice in question; that does not, however, relieve one of the duty to interrogate the means by which such an end could be achieved. The management and prevention of NCDs are very much predicated upon a discourse of empowerment, a phenomenon that displays the twin impulses of responsibility and duty (to be healthy) and liberation (from the authority of the clinic or the programs of the state). As others have noted, such liberation is not an unqualified blessing: “attempts at emancipation, well meaning as they are, often serve to further constrain and disadvantage those individuals to whom they are directed by prescribing specified ways of behaving.”<sup>904</sup> These specified ways might be understood to constitute an idealized vision of what one should aim for or live up to, an end not always easily achieved. Moreover, and perhaps most importantly, it is the privileging of a narrowly conceived subject-position, this valorization of an ideal “healthy” subject, that constitutes a form of domination; true, one that often operates in generative and empowering terms, but one that also delimits the boundaries of the acceptable. In so doing, it thus opens the possibility for the marginalization of and discrimination against those who do not meet it.

It is with such marginalization – even its possibility – that critical scholarship must concern itself, and against that marginalization that it must marshal its analytical

---

<sup>904</sup> Petersen and Lupton, The New Public Health: Health and Self in the Age of Risk 180-81.

weapons. To engage in that process is to commit oneself to the identification and interrogation of the self-evident, the natural, and in the context of this project, the seemingly apolitical. From such a point it becomes possible to move towards a resistance predicated not upon negation but upon the emergence of contested and different ways of thinking, acting, and understanding. In their 1982 interview with Foucault, Gallagher and Wilson noted the importance of this form of resistance:

Politically speaking, probably the most important part of looking at power is that according to previous conceptions, “to resist” was simply to say no. Resistance was conceptualized only in terms of negation. Within your understanding, however, to resist is not simply a negation but a creative process; to create and recreate, to change the situation, actually to be an active member of that process.<sup>905</sup>

In confronting and documenting the dominant mode of government in the context of public health, one moves closer towards a resistance in this generative sense. As the leading sources of morbidity and mortality throughout the world – not only in the industrialized countries among which the cases here are included – chronic, noncommunicable diseases pose a significant challenge; the duty to open a space for contesting how they are recognized, understood, and prevented is the very least owed to the millions who must ultimately confront them.

---

<sup>905</sup> Foucault, "Sex, Power, and the Politics of Identity," 168.

## Appendix 1: Publishing Trend Data

<b>Range</b>	<b>PUBMED Risk</b>	<b>PUBMED</b>	<b>PUBMED % Articles on Risk</b>
1992-2004	9936	46668	21.3
1992-1996	2441	12517	19.5
1997-2000	3064	14493	21.1
2001-2004	4431	19658	22.5

<b>Range</b>	<b>Medline Risk</b>	<b>Medline</b>	<b>Medline % Articles on Risk</b>
1992-2004	9465	44473	21.3
1992-1996	2424	12407	19.5
1997-2000	3003	14150	21.2
2001-2004	4038	17916	22.5

<b>Range</b>	<b>Cancer Risk</b>	<b>Cancer Total</b>	<b>Cancer % Articles on Risk</b>
1992-2004	1822	5135	35.5
1992-1996	498	1359	36.6
1997-2000	541	1504	36.0
2001-2004	783	2272	34.5

<b>Range</b>	<b>WHO Bulletin Risk</b>	<b>WHO Bulletin Total</b>	<b>WHO Bulletin % Articles on Risk</b>
1992-2004	146	2385	6.1
1992-1996	32	471	6.8
1997-2000	20	721	2.8
2001-2004	94	1193	7.9

<b>Range</b>	<b>AJPH Risk</b>	<b>AJPH Total</b>	<b>AJPH % Articles on Risk</b>
1992-2004	1267	4784	26.5
1992-1996	552	1777	31.1
1997-2000	351	1430	24.5
2001-2004	450	1933	23.3

<b>Range</b>	<b>BMJ Risk</b>	<b>BMJ Total</b>	<b>BMJ % Articles on Risk</b>
1992-2004	2668	41604	6.4
1992-1996	605	11120	5.4
1997-2000	962	14183	6.8
2001-2004	1101	16301	6.8

<b>Range</b>	<b>SJPH Risk</b>	<b>SJPH Total</b>	<b>SJPH % Articles on Risk</b>
1992-2004	107	471	22.7
1992-1996	0	0	0.0
1997-2000	24	131	18.3
2001-2004	83	340	24.4
<b>Range</b>	<b>AJE Risk</b>	<b>AJE Total</b>	<b>AJE % Articles on Risk</b>
1992-2004	2282	4199	54.3
1992-1996	809	1511	53.5
1997-2000	718	1274	56.4
2001-2004	755	1414	53.4
<b>Range</b>	<b>WHO TRS Risk</b>	<b>WHO TRS Total</b>	<b>WHO TRS % Articles on Risk</b>
1992-2004	20	145	13.8
1992-1996	10	78	12.8
1997-2000	3	39	7.7
2001-2004	7	28	25.0
<b>Range</b>	<b>ARPH Risk</b>	<b>ARPH Total</b>	<b>ARPH % Articles on Risk</b>
1992-2004	99	307	32.2
1992-1996	53	127	41.7
1997-2000	28	94	29.8
2001-2004	18	86	20.9
<b>Range</b>	<b>Epidem. Risk</b>	<b>Epidem. Total</b>	<b>Epidem. % Articles on Risk</b>
1992-2004	1066	1856	57.4
1992-1996	372	647	57.5
1997-2000	366	632	57.9
2001-2004	328	577	56.8
<b>Range</b>	<b>AJPM Risk</b>	<b>AJPM Total</b>	<b>AJPM % Articles on Risk</b>
1992-2004	148	570	26.0
1992-1996	0	0	0.0
1997-2000	77	242	31.8
2001-2004	71	328	21.6
<b>Range</b>	<b>IJE Risk</b>	<b>IJE Total</b>	<b>IJE % Articles on Risk</b>
1992-2004	1171	3035	38.6
1992-1996	422	936	45.1
1997-2000	371	756	49.1
2001-2004	378	1433	26.4

<b>Range</b>	<b>JCE Risk</b>	<b>JCE Total</b>	<b>JCE % Articles on Risk</b>
1992-2004	796	2256	35.3
1992-1996	309	885	34.9
1997-2000	244	671	36.4
2001-2004	243	700	34.7

<b>Range</b>	<b>AE Risk</b>	<b>AE Total</b>	<b>AE % Articles on Risk</b>
1992-2004	625	1077	58.0
1992-1996	236	427	55.3
1997-2000	155	286	54.2
2001-2004	234	364	64.3

<b>Range</b>	<b>JAMA Risk</b>	<b>JAMA Total</b>	<b>JAMA % Articles on Risk</b>
1992-2004	3131	17213	18.2
1992-1996	967	6984	13.8
1997-2000	1005	5487	18.3
2001-2004	1159	4742	24.4

<b>Range</b>	<b>Articles on NCD (ARPH)</b>	<b>Total Articles (ARPH)</b>	<b>% Articles on NCDs (ARPH)</b>
1992-2004	49	307	16.0
1992-1996	20	127	15.7
1997-2000	12	94	12.8
2001-2004	17	86	19.8

<b>Range</b>	<b>NCD Art. Behav. Risk (ARPH)</b>	<b>NCD Articles (ARPH)</b>	<b>% NCD Art. Behav. Risk (ARPH)</b>
1992-2004	34	49	69.0
1992-1996	12	20	60.0
1997-2000	11	12	91.7
2001-2004	11	17	64.7

<b>Range</b>	<b>Articles on Method (ARPH)</b>	<b>Total Articles (ARPH)</b>	<b>% Articles on Method (ARPH)</b>
1992-2004	65	307	21.2
1992-1996	17	127	13.4
1997-2000	20	94	21.3
2001-2004	28	86	32.6

## Bibliography

- "Government Performance and Results Act." 1st ed, 1993.
- "Threat to the U.S. From Emerging Infectious Diseases." Committee on International Relations. Washington, DC, 1997 of House of Representatives.
- World Tobacco File 1998. London: International Trade Publications, Ltd., 1998.
- Adami, H.O., and D. Trichopoulos. "Epidemiology, Medicine, and Public Health." International Journal of Epidemiology 28 (1999): S1005-08.
- Agren, Gunnar. "The New Swedish National Health Policy." Scandinavian Journal of Public Health 29 (2001): 246-47.
- Airhihenbuwa, Collins O., and Rafael Obregon. "A Critical Assessment of Theories/Models Used in Health Communication for Hiv/Aids." Journal of Health Communication 5.Supplement (2000): 5-15.
- Akinkugbe, O.O. "Lifestyle and Cardiovascular Disease: Emerging Problems of Health Development in the Third World." The Health of Nations: Medicine, Disease and Development in the Third World. Eds. B. Iyun, Yola Verhasselt and J. Anthony Hellen. Brookfield: Avebury, 1995.
- Alberts, David S., and Lois J. Loescher. "Cancer Prevention, Screening, and Risk Assessment." Everyone's Guide to Cancer Therapy: How Cancer Is Diagnosed, Treated, and Managed Day to Day. Eds. Malin Dollinger, Ernest H. Rosenbaum and Greg Cable. Kansas City: Andrews Medical Publishing, 2002.
- Allen, R.M., M.P. Jones, and B. Aldenburg. "Randomised Trials of an Asthma Self-Management Programme for Adults." Thorax 50.731-738 (1995).
- American Cancer Society. Cancer Facts and Figures. Atlanta: American Cancer Society, 2003.
- . "Guide to Quitting Smoking". May 24 2004.  
<[http://www.cancer.org/docroot/PED/content/PED\\_10\\_13X\\_Guide\\_for\\_Quitting\\_Smoking.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp?sitearea=PED)>.
- . "Protect Your Skin from U.V." May 25 2004.  
<[http://www.cancer.org/docroot/PED/content/ped\\_7\\_1x\\_Protect\\_Your\\_Skin\\_From\\_UV.asp?sitearea=PED](http://www.cancer.org/docroot/PED/content/ped_7_1x_Protect_Your_Skin_From_UV.asp?sitearea=PED)>.
- American Journal of Epidemiology. "Editorial Board". 2004. 02/19/2005 2005.  
<<http://www3.oup.co.uk/jnls/list/aje/edboards/>>.
- American Public Health Association. "Public Health Code of Ethics". January 31 2005. <<http://www.apha.org/codeofethics/ethics.htm>>.
- Andreason, A.R. Marketing Social Change. San Francisco: Jossey-Bass, 1995.
- Arborelius, E., and A. Ecklund Brandell. Smoke-Free Pregnancy/Motivational Interviewing. Stockholm: Swedish Cancer Society, Swedish Heart-Lung Foundation, and the National Institute of Public Health, 2001.
- Arborelius, E., and Sven Bremberg. "Child Health-Centre-Based Promotion of a Tobacco-Free Environment--a Swedish Case Study." Health Promotion International 16.3 (2001): 245-54.
- Armstrong, David. Political Anatomy of the Body. Cambridge: Cambridge University Press, 1983.

- Arney, W.R. Power and the Profession of Obstetrics. Chicago: University of Chicago Press, 1982.
- Ashmore, M., M.J. Mulkay, and T.J. Pinch. Health and Efficiency: A Sociology of Health Economics. Open University Press, 1989.
- Asma, S., and et al. "Tobacco." Oxford Textbook of Public Health. Eds. R. Detels and et al. 4th ed. Oxford: Oxford University Press, 2002.
- Aspalter, Christian. Different Worlds of Welfare Capitalism: Australia, the United States, the United Kingdom, Sweden, Germany, Italy, Hong Kong and Singapore: Australia National University, Asia Pacific Schools of Economics and Government, 2001.
- Azjen, I., and M. Fishbein. Understanding Attitudes and Predicting Social Behavior. New Jersey: Prentice-Hall, 1980.
- Ballantyne, Peri J. "The Social Determinants of Health: A Contribution to the Analysis of Gender Differences in Health and Illness." Scandinavian Journal of Public Health 27 (1999): 290-95.
- Bandura, A. "Self-Efficacy: Toward a Unifying Theory of Behavioral Change." Psychological Review 84.2 (1977): 191-215.
- Barker, D.J.P., and C. Osmond. "The Maternal and Infant Origins of Cardiovascular Disease." Coronary Heart Disease Epidemiology. Eds. M. Marmot and P. Elliot. New York: Oxford University Press, 1995.
- Barlow, J.H., and et al. Self-Management Literature Review: Psychosocial Research Center, Coventry University, 2000.
- Barlow, J.H., B. Williams, and et al. "'Instilling the Strength to Fight the Pain and Get on with Life': Learning to Become an Arthritis Self-Manager through an Adult Education Programme." Health education Research 14.4 (1999): 533-44.
- Barnett, T., and A. Whiteside. The Social and Economic Impact of HIV/Aids in Poor Countries: A Review of Studies and Lessons. Geneva: UNAIDS, 2000.
- Bauman, A. "Commentary on the Verb™ Campaign - Perspectives on Social Marketing Encourage Physical Activity among Youth". 2004. Electronic J. Preventing Chronic Disease. November 9 2004. <[http://www.cdc.gov/pcd/issues/2004/jul/04\\_0054.htm](http://www.cdc.gov/pcd/issues/2004/jul/04_0054.htm) >.
- Baunach, Dawn Michelle. "Gender, Mortality, and Corporeal Inequality." Sociological Spectrum 23 (2003): 331-58.
- Beaglehole, Robert, and R. Bonita. Basic Epidemiology. Geneva: World Health Organization, 1993.
- Beaglehole, Robert, and Ruth Bonita. Public Health at the Crossroads. New York: Cambridge University Press, 1997.
- Beaglehole, Robert, and D. Yach. "Globalisation and the Prevention and Control of Noncommunicable Disease: The Neglected Chronic Diseases of Adults." The Lancet 362.9387 (2003): 903-09.
- Beck, Ulrich. Risk Society: Towards a New Modernity. London: Sage, 1992.
- . What Is Globalization? Malden: Blackwell, 2000.
- Becker, Gary. Human Capital. New York: National Bureau of Economic Research, 1964.
- Beecham, Linda. "Tony Blair Launches Radical Nhs Plan for England." British Medical Journal 321 (2001): 317.

- Bell, Claire L., and Donna M. Hammal. "Case-Control Versus Cohort Studies in the Investigation of Childhood Cancer." Pediatric Hematology and Oncology 19 (2002): 289-93.
- Benatar, Solomon R. "South Africa's Transition in a Globalizing World: Hiv/Aids as a Window and Mirror." International Affairs 77.2 (2001): 347-75.
- Benowitz, N.L. "Nicotine Addiction." Primary Care 26 (1999): 611-31.
- Berglund, G., et al. "Long-Term Outcome of the Malmo Preventative Project: Mortality and Cardiovascular Morbidity." Journal of Internal Medicine 247 (2000): 19-29.
- Bergman, S.E. Purchaser-Provider Systems in Sweden: An Overview of Reforms in Swedish Health Care Delivery System. Stockholm: Swedish Institute for the Development of the Health Services, 1994.
- Bergmark, A., M. Thorslund, and E. Lindberg. "Beyond Benevolence - Solidarity and Welfare State Transition in Sweden." International Journal of Social Welfare 9 (2000): 238-49.
- Bettcher, D., D. Yach, and E. Guindon. "Global Trade and Health: Key Linkages and Future Challenges." Bulletin of the World Health Organization 78.4 (2000): 521-34.
- Bingenheimer, J.B., and S.W Raudenbush. "Statistical and Substantive Inferences in Public Health: Issues in the Application of Multilevel Models." Annual Review of Public Health 25 (2004): 53-77.
- Black, David R., et al. "Social Marketing: Developing a Tailored Message for a Physical Activity Program." American Journal of Health Behavior 24.5 (2000): 323-37.
- Blane, David. "Editorial: Social Determinants of Health - Socioeconomic Status, Social Class, and Ethnicity." American Journal of Public Health 85.7 (1995): 521-34.
- Bloom, Abby. "General Introduction." Health Reform in Australia and New Zealand. Ed. Abby Bloom. New York: Oxford University Press, 2000b.
- . "Introduction." Health Reform in Australia and New Zealand. Ed. Abby Bloom. New York: Oxford University Press, 2000a.
- Blue, C.L. "The Predictive Capacity of the Theory of Reasoned Action and the Theory of Planned Behavior in Exercise Research: An Integrated Literature Review." Research in Nursing and Health 18 (1995): 105-21.
- Bobak, Martin, and et al. "Poverty and Smoking." Tobacco Control in Developing Countries. Eds. Prabhat Jha and Frank Chaloupka. Oxford: Oxford University Press, 2000.
- Bodenheimer, Thomas S., and Kevin Grumbach. Understanding Health Policy: A Clinical Approach. New York: Lange Medical Books, 2002.
- Bone, M.R., et al. Health Expectancy and Its Uses. London: HMSO, 1995.
- Boone, Catherine, and Jake Batsell. "Politics and Aids in Africa: Research Agendas in Political Science and International Relations." Africa Today 48.2 (2001): 1-31.
- Bordo, S. "Reading the Slender Body." Body/Politics: Women and the Discourses of Science. Eds. M. Jacobus, E.F. Keller and S. Shuttleworth. New York: Routledge, 1990.

- Bouchard, C., and R.J. Shephard. "Physical Activity, Fitness and Health: The Model and Key Concepts." Physical Activity, Fitness and Health: International Proceedings and Consensus Statement. Eds. C. Bouchard, R.J. Shephard and T. Stephens. Champaign: Human Kinetics, 1994.
- Brandt, Allan M., and Martha Gardner. "Antagonism and Accommodation: Interpreting the Relationship between Public Health and Medicine in the United States in the Twentieth Century." American Journal of Public Health 90 (2000): 707-15.
- Brännström, I., et al. "Local Health Planning and Intervention - the Case of a Swedish Municipality." Scandinavian Journal of Primary Health Care Supplement.1 (1988): 57-64.
- Bunton, Robin. "More Than a Woolly Jumper: Health Promotion as Social Regulation." Critical Public Health 3.2 (1992): 4-11.
- . "Popular Health, Advanced Liberalism, and *Good Housekeeping* Magazine." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- Burchell, G. "Liberal Government and Techniques of the Self." Foucault and Political Reason: Liberalism, Neo-Liberalism and Rationalities of Government. Eds. Andrew Barry, Thomas Osborne and Nikolas Rose. London: University College London Press, 1996.
- Burkhalter, Holly. "The Politics of Aids." Foreign Affairs 83.1 (2004): 8-14.
- Burkitt, Brian, and Philip Whyman. "Public Sector Reform in Sweden: Competition or Participation." The Political Quarterly (1994): 275-28.
- Burt, V.L., et al. "Trends in the Prevalence, Awareness, Treatment, and Control of Hypertension in the Adult U.S. Population: Data from the Health Examination Surveys, 1960-1991." Hypertension 26 (1995): 60-69.
- Bury, Michael. "Postmodernity and Health." Modernity, Medicine and Health: Medical Sociology toward 2000. Eds. Graham Scrambler and Paul Higgs. New York: Routledge, 1998.
- Buzan, Barry. People, States, and Fear. London: Wheatsheaf Books, 1983.
- Cameron, D., and I.G. Jones. "John Snow, the Broad Street Pump and Modern Epidemiology." Journal of Clinical Epidemiology 41 (1988): 1215-16.
- Carter, Ashton B. "How to Counter Wmd." Foreign Affairs 83.5 (2004): 72-85.
- Cartwright, Frederick. Disease and History. New York: Barnes and Noble, 1972.
- Castel, Robert. "From Dangerousness to Risk." The Foucault Effect: Studies in Governmentality. Eds. G. Burchell, C. Gordon and P. Miller. Chicago: Chicago University Press, 1991.
- Castles, Francis G., and Deborah Mitchell. Three Worlds of Welfare Capitalism or Four? Australian National University, 1991.
- Center for Health Promotion and Disease Prevention - University of North Carolina at Chapel Hill. Integrating Cardiovascular Disease Prevention into Existing Health Services: The Experience of the North Carolina Wisewoman Program. Chapel Hill: Center for Health Promotion and Disease Prevention, 2001.
- . A New Leaf: Choices for Healthy Living. Chapel Hill: Center for Health Promotion and Disease Prevention, 2001.

- Center for Strategic and International Studies. Contagion and Conflict: Health as a Global Security Challenge. Washington, D.C.: Center for Strategic and International Studies, 2000.
- Centers for Disease Control and Prevention. Budget Request Summary for Fy 2004. Atlanta: Centers for Disease Control and Prevention, 2003.
- . Budget Request Summary for Fy 2005. Atlanta: Centers for Disease Control and Prevention, 2004.
- . "Cdc Announces New Goals and Organizational Design". (May 20, 2004). October 13 2004. <: <http://www.cdc.gov/od/oc/media/pressrel/r040513.htm> >.
- . "Chronic Disease Overview". (October 27, 2003). March 28 2004. <<http://www.cdc.gov/nccdphp/overview.htm> >.
- . "Data and Trends: Diabetes Surveillance System, Duration of Diabetes". (August 4, 2003). March 28 2004. <<http://www.cdc.gov/diabetes/statistics/duration/fig1.htm> >.
- . "Deaths: Leading Causes for 2001." National Vital Statistics Reports 52.9 (2003).
- . "Outside-in Approach". 2004. The Futures Initiative: Creating the Future of CDC for the 21st Century. (August 20, 2004). October 13 2004b. <<http://www.cdc.gov/futures/outside-in.htm> >.
- . "The Power of Prevention: Reducing the Health and Economic Burden of Chronic Disease." Atlanta: Centers for Disease Control and Prevention, 2003.
- . "Preventing Heart Disease and Stroke". (February 14, 2004). March 28 2004. <[http://www.cdc.gov/nccdphp/bb\\_heartdisease/index.htm](http://www.cdc.gov/nccdphp/bb_heartdisease/index.htm) >.
- . "Programs in Brief: Chronic Disease Prevention". Atlanta, 2003. Centers for Disease Control and Prevention. 02/19/2005 2005. <<http://www.cdc.gov/programs/chronic.htm> >.
- . "Programs in Brief: The Wisewoman Program: Capitalizing on Opportunities to Improve the Health of Women". Atlanta, 2002. Programs in Brief. Centers for Disease Control and Prevention. 06/22/2003 2003. <<http://www.cdc.gov/programs/health13.htm> >.
- . Wisewoman Guidance Document: Document Interpretation of Legislative Language and Existing Policies and Documents. Atlanta: Centers for Disease Control and Prevention, 2002.
- . The Wisewoman Program: Capitalizing on Opportunities to Improve the Health of Women. Atlanta: Centers for Disease Control and Prevention, 2003.
- . Wisewoman Works: A Collection of Success Stories from Program Inception through 2002. Atlanta: Centers for Disease Control and Prevention, 2003.
- . Wisewoman: A Crosscutting Program to Improve the Health of Uninsured Women - 2004. Atlanta: Centers for Disease Control and Prevention, 2004.
- Chalmers, I., C. Rounding, and K. Lock. "Descriptive Survey of Non-Commercial Randomised Controlled Trials in the United Kingdom, 1980-2002." British Medical Journal 327 (2003): 1017-20.
- Chaloupka, Frank, and M. Corbett. "Trade Policy and Tobacco: Toward an Optimal Policy Mix." The Economics of Tobacco Control: Towards an Optimal Policy Mix. Eds. I. Abedian and et al. Cape Town: University of Cape Town Press, 1998.

- Chaloupka, Frank, and A. Laixuthai. U.S. Trade Policy and Cigarette Smoking in Asia, 1996.
- Charlton, I., et al. "Evaluation of Peak Flow and Symptoms Only Self-Management Plans for Control of Asthma in General Practice." British Medical Journal 301 (1990): 1355-59.
- Chopra, Mickey. "Globalization and Food: Implications for the Promotion of Healthy Diets." Globalization, Diets, and Noncommunicable Disease. Geneva: World Health Organization, 2002.
- Chow, Jack C. "Health and International Security." The Washington Quarterly 19.2 (1996): 63-77.
- Choy, D.K., and et al. "Evaluation of the Efficacy of a Hospital-Based Asthma Education Programme in Patients of Low Socio-Economic Status in Hong Kong." Clinical and Experimental Allergy 29.1 (1999): 84-90.
- Clark, Noreen, and Elizabeth Weist. "Mastering the New Public Health." American Journal of Public Health 90.8 (2000): 1208-11.
- Clinton, Michael, and Michael Hazelton. "Towards a Foucauldian Reading of the Australian Mental Health Nursing Workforce." International Journal of Mental Health Nursing 11.1 (2002): 18-23.
- Colburn, Forrest D. "Statism, Rationality, and State Centrism." Comparative Politics. July (1988): 485-92.
- Cole, J.D. "Psychotherapy with the Chronic Pain Patient Using Coping Skills Development: Outcome Study." Journal of Occupational Health Psychology 3.3 (1998): 217-26.
- Colebatch, H.K. "Government and Governmentality: Using Multiple Approaches to the Analysis of Government." Australian Journal of Political Science 37.3 (2002): 417-35.
- Commercial Activities Panel. Improving the Sourcing Decisions of Government. Washington, DC: General Accounting Office - United States, 2002.
- Conner, M., and P. Sparks. "The Theory of Planned Behavior and Health Behaviors." Predicting Health Behavior. Eds. M. Conner and P. Norman. Buckingham: Open University Press, 1996.
- Copley, G.R. "National Security in a Pandemic Situation." Defence and Foreign Affairs Strategic Policy (1999): 7.
- Council of Public Representatives. Report to the Director of the National Institutes of Health on the Organizational Structure and Management of the Nih. Washington: Council of Public Representatives, 2002.
- Craddock, S. "Sewers and Scapegoats: Spatial Metaphors of Smallpox in Nineteenth Century San Francisco." Social Science & Medicine 41 (1995): 957-68.
- Crawford, Robert. "A Cultural Account of 'Health': Control, Release, and the Social Body." Issues in the Political Economy of Health Care. Ed. J.B. McKinlay. New York: Tavistock, 1984.
- . "Healthism and the Medicalization of Everyday Life." International Journal of Health Services 19 (1980): 365-88.
- . "Individual Responsibility and Health Politics." The Sociology of Health and Illness: Critical Perspectives. Eds. Peter Conrad and Rochelle Kern. New York: St. Martin's Press, 1994.

- Crosby, Alfred. Ecological Imperialism: The Biological Expansion of Europe, 900-1900. New York: Cambridge University Press, 1986.
- Cross, S., and A. Whiteside. Facing up to Aids: The Socio Economic Impact in Southern Africa. New York: St. Martin's Press, 1993.
- Cruikshank, Barbara. "Revolutions Within: Self-Government and Self-Esteem." Foucault and Political Reason: Liberalism, Neo-Liberalism and Rationalities of Government. Eds. Andrew Barry, Thomas Osborne and Nikolas Rose. London: University College London Press, 1996.
- . "The Will to Empower: Technologies of Citizenship and the War on Poverty." Socialist Review 23.4 (1994): 29-55.
- Curley, Melissa, and Nicholas Thomas. "Human Security and Public Health in Southeast Asia: The Sars Outbreak." Australian Journal of International Affairs 58.1 (2004): 17-32.
- Cusimano, Maryann. "Beyond Sovereignty: The Rise of Transborder Problems." Beyond Sovereignty: Issues for a Global Agenda. Ed. Maryann Cusimano. New York: Bedford/St. Martin's, 2000.
- Dalby, Simon. "Security, Modernity, Ecology. The Dilemmas of Post-Cold War Security Discourse." Alternatives 17.1 (1992): 95-134.
- Daly, D.W. Relapse: Conceptual, Research, and Clinical Perspectives. Hayworth Press, 1989.
- Das, Veena, et al. On Behavior and Health: Future Opportunities for the Johns Hopkins University Bloomberg School of Public Health. Baltimore: Johns Hopkins University, 2003.
- Davies, Michael J., David J. Baer, and Joseph T. Judd. "Effects of Moderate Alcohol Intake on Fasting Insulin and Glucose Concentration Sensitivity in Post-Menopausal Women." Journal of the American Medical Association 287.19 (2002): 2559-62.
- Davis, Glyn, Barbara Sullivan, and Anna Yeatman, eds. A New Contractualism. Melbourne: Macmillan, 1997.
- Davis, Peter, and Philippa Howden-Chapman. "Translating Research Findings into Health Policy." Social Science & Medicine 43.5 (1996): 865-72.
- Davis, Robert, and Ann Marie Kimball. "The Economics of Emerging Infections in the Asia-Pacific Region: What Do We Know and What Do We Need to Know?" Plagues and Politics: Infectious Disease and International Policy. Ed. Andrew T. Price-Smith. New York: Palgrave, 2001.
- Dawber, T. The Framingham Study. Cambridge, MA: Harvard University Press, 1980.
- Dean, Kathryn, Concha Colomer, and Santiago Perez-Hoyos. "Research on Lifestyles and Health: Searching for Meaning." Social Science & Medicine 41 (1995): 845-55.
- Dean, Mitchell. The Constitution of Poverty: Towards a Genealogy of Liberal Governance. London: Routledge, 1991.
- . "Governing the Unemployed Self in an Active Society." Economy and Society 24.4 (1995): 559-83.
- . Governmentality: Power and Rule in Modern Society. London: Sage, 1999.

- . "Powers of Life and Death Beyond Governmentality." Cultural Values 6.1-2 (2002): 119-38.
- Dean, Mitchell, and Barry Hindess. "Introduction: Government, Liberalism, and Society." Governing Australia: Studies in Contemporary Rationalities of Government. Eds. Mitchell Dean and Barry Hindess. New York: Cambridge University Press, 1998.
- Deleuze, Gilles, and Michel Foucault. "Intellectuals and Power: A Conversation between Michel Foucault and Gilles Deleuze." Language, Countermemory, Practice. Ed. D.F. Bouchard. Ithaca: Cornell University Press, 1977.
- Department of Health and Human Services Assistant Secretary for Administration and Management (Ed Sontag). "Restructuring Initiatives and Hiring Plans." Ed. OPDIV and STAFFDIV Heads. Washington, DC, November 8 2001.
- Diamond, Jared. Guns, Germs, and Steel: The Fates of Human Societies. New York: W.W. Norton and Company, 1998.
- Diez-Roux, Ana V. "Bringing Context Back into Epidemiology: Variables and Fallacies in Multi-Level Analysis." American Journal of Public Health 88.2 (1998): 216-22.
- Digeser, Peter. "The Fourth Face of Power." Journal of Politics 54.4 (1992): 977-1007.
- Doll, R., and A.B. Hill. "Smoking and Carcinoma of the Lung: Preliminary Report." British Medical Journal ii.739-748 (1950).
- Dollar, David. "Is Globalization Good for Your Health?" Bulletin of the World Health Organization 79.9 (2001): 827-33.
- Dollinger, Malin, Ernest H. Rosenbaum, and Greg Cable, eds. Everyone's Guide to Cancer Therapy: How Cancer Is Diagnosed, Treated, and Managed Day to Day. Kansas City: Andrews Medical Publishing, 2002.
- Donzelot, J. The Policing of Families. New York: Pantheon, 1979.
- Drewnowski, A., and B. Popkin. "The Nutrition Transition: New Trends in the Global Diet." Nutrition Review 55 (1997): 31-43.
- Duffy, Diane. "The Effect of Sweden's Corporatist Structure on Health Policy and Outcomes." Scandinavian Studies 61 (1989): 128-45.
- Duffy, John. "The American Medical Profession and Public Health: From Support to Ambivalence." Bulletin of the History of Medicine 53 (1979): 1-22.
- Dutton, K.R. The Perfectible Body: The Western Ideal of Physical Development. London: Cassell, 1995.
- Dye, T.R. Understanding Public Policy. 5th ed. Englewood Cliffs: Prentice Hall, 1985.
- Eckermann, Liz. "Foucault, Embodiment and Gendered Subjectivities: The Case of Voluntary Self-Starvation." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- Edwards, R., et al. "Teaching Public Health to Medical Students in the United Kingdom - Are the General Medical Council's Recommendations Being Implemented?" Journal of Public Health Medicine 21 (1999): 150-57.
- Ehn, Peter, et al. "Swedish Bureaucracy in an Era of Change." Governance: An International Journal of Policy, Administration, and Institutions 16.3 (2003): 429-58.

- Ehrensreich, B., and D. English. For Her Own Good: 150 Years of the Experts' Advice to Women. London: Pluto Press, 1979.
- Elo, I.T., and S.H. Preston. "Educational Differentials in Mortality: United States, 1979-85." Social Science & Medicine 42 (1996): 47-57.
- Enthoven, A.C. Reflections on the Management of the National Health Service. London: Nuffield Provincial Hospital Trust, 1985.
- Eppright, Charles T. "The U.S. As 'Hot Zone': The Necessity for Medical Defense." Armed Forces and Society 25.1 (1998): 37-58.
- Epstein, F.H. "Contribution of Epidemiology to Understanding Coronary Heart Disease." Coronary Heart Disease Epidemiology. Eds. M. Marmot and P. Elliot. New York: Oxford University Press, 1995.
- Epstein, Steven. Impure Science: Aids, Activism, and the Politics of Knowledge. Berkeley: University of California Press, 1996.
- Erdmann, Yvonne, and Renate Wilson. "Managed Care: A View from Europe." Annual Review of Public Health 22 (2001): 273-91.
- Esping-Andersen, Gosta. Three Worlds of Welfare Capitalism. Cambridge, MA: Polity Press, 1990.
- Essig, Maria. "Depression Leads to Obesity, but the Reverse Is Not True." Women's Health Weekly December 5 2002: 20-21.
- Eudaily, Sean P. The Present Politics of the Past: Indigenous Legal Activism and Resistance to (Neo)Liberal Governmentality. New York: Routledge, 2004.
- European Observatory on Health Care Systems. Health Care Systems in Transition: United Kingdom. European Observatory on Health Care Systems, 1999.
- European Opinion Research Group. Health, Food and Alcohol and Safety. European Opinion Research Group, 2003.
- Evans, M., et al. "Globalization, Diet, and Health: An Example from Tonga." Bulletin of the World Health Organization 79.9 (2001): 856-62.
- Evidence-Based Practice for Public Health Project. Top 25 Public Health Journals by Impact Factor. University of Massachusetts Medical School, 2003.
- Ewald, Francois. "Insurance and Risk." The Foucault Effect: Studies in Governmentality. Eds. G. Burchell, C. Gordon and P. Miller. Chicago: University of Chicago Press, 1991.
- Eyler, J.M. "The Conceptual Origins of William Farr's Epidemiology: Numerical Methods and Social Thought in the 1830s." Times, Places, and Persons. Aspects of the History of Epidemiology. Ed. A.M. Lilienfeld. Baltimore: Johns Hopkins University Press, 1980.
- Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom. Business Plan 2003. London: Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom, 2003.
- Fagerstrom, Karl. "The Epidemiology of Smoking: Health Consequences and Benefits of Cessation." Drugs 62.Supplement 2 (2002): 1-9.
- Fairbanks, Jo, and William Wiese. The Public Health Primer. New York: Sage, 1997.
- Farris, Rosanne P., Dawn Haney, and Diane O. Dunet. "Expanding the Evidence for Health Promotion: Developing Best Practices for Wisewoman." Journal of Women's Health 13.5 (2004): 634-43.

- Fee, Elizabeth, and Roy M. Acheson, eds. A History of Education in Public Health: Health That Mocks the Doctors' Rules. New York: Oxford University Press, 1991.
- Ferrera, Maurizio. "The Southern Model of Welfare in Social Europe." Journal of European Social Policy 6.1 (1996): 17-37.
- Fineburg, Harvey. "The Population Approach to Health". 1990. Association of Schools of Public Health. March 27 2004.  
<<http://www.asph.org/document.cfm?page=724> >.
- Finkelstein, Eric A., John S. Wittenborn, and Rosanne P. Farris. "Evaluation of Public Health Demonstration Programs: The Effectiveness and Cost-Effectiveness of Wisewoman." Journal of Women's Health 13.5 (2004): 625-33.
- Fisher, L.D., and D.Y. Lin. "Time-Dependent Co-Variates in the Cox Proportional-Hazards Regression Model." Annual Review of Public Health 20 (1999): 145-57.
- Foucault, Michel. "The Birth of Biopolitics." Ethics: Subjectivity and Truth. Ed. P. Rabinow. New York: New Press, 1994.
- . The Birth of the Clinic: An Archaeology of Medical Perception. 1994 ed. New York: Vintage, 1994 [1973].
- . The Care of the Self. The History of Sexuality. Vol. 3. New York: Vintage Books, 1988 [1986].
- . Discipline and Punish: The Birth of the Prison. London: Allen Lane, 1977.
- . "The Ethics of the Concern of the Self as a Practice of Freedom." Ethics: Subjectivity and Truth. Ed. P. Rabinow. New York: New Press, 1994.
- . "Governmentality." The Foucault Effect: Studies in Governmentality. Eds. G. Buchell, C. Gordon and P. Miller. London: Harvester, 1991.
- . "Politics and Reason." Politics, Philosophy, Culture: Interviews and Other Writings 1977-1984. Ed. L.D. Kritzman. New York: Routledge, 1988.
- . "The Politics of Health in the 18th Century." Power/Knowledge: Selected Interviews and Other Writings 1972-1977. Ed. Colin Gordon. Brighton: The Harvester Press, 1980.
- . "Power and Truth." Power/Knowledge: Selected Interviews and Other Writings 1972-1977. Ed. Colin Gordon. Brighton: The Harvester Press, 1980.
- . "Sex, Power, and the Politics of Identity." Ethics: Subjectivity and Truth. Ed. P. Rabinow. New York: New Press, 1997.
- . "The Subject and Power." Critical Inquiry 8 (1982): 777-95.
- . "Subjectivity and Truth." Ethics: Subjectivity and Truth. Ed. P. Rabinow. New York: New Press, 1994.
- . The Use of Pleasure. The History of Sexuality. Vol. 2. New York: Vintage Books, 1990 [1985].
- . "What Is Enlightenment?" The Foucault Reader. Ed. P. Rabinow. New York: Pantheon Books, 1984.
- Fox, D.M. "The Public Health Service and the Nation's Health Care in the Post-World War II Era." Public Health Reports 109 (1994): 725-27.
- Fox, William C. "Phantom Warriors: Disease as a Threat to U.S. National Security." Parameters. Winter (1997/1998): 121-36.

- Freedman, David A. "Statistical Methods and Shoe Leather." Sociological Methodology 21 (1991): 291-313.
- Freeman, Richard, and Michael Moran. "Reforming Health Care in Europe." Recasting European Welfare States. Eds. Maurizio Ferrera and Martin Rhodes. New York: Frank Cass and Company, 2000.
- Friedman, Milton. "Introduction." The Road to Serfdom. Chicago: University of Chicago Press, 1994 [1972, 1944].
- Fuchs, Victor. Who Shall Live? New York: Basic Books, 1974.
- Fujimura, and et al. "Dissent in Science: Styles of Scientific Practice and the Controversy over the Cause of Aids." Social Science & Medicine 38.8 (1994): 1017-35.
- Gabe, J. "Health, Medicine and Risk: The Need for a Sociological Approach." Medicine, Health and Risk: Sociological Approaches. Ed. J. Gabe. Oxford: Blackwell, 1995.
- Gaddis, John Lewis. "International Relations Theory and the End of the Cold War." International Security 17.3 (1992-1993): 5-58.
- Gaffney, D., et al. "NHS Capital Expenditure and the Private Finance Initiative: Expansion or Contraction." British Medical Journal 319 (1999): 48-51.
- . "PFI in the NHS." British Medical Journal 319 (1999): 116-69.
- Gajalakshmi, C.K., et al. "Global Patterns of Smoking and Smoking Attributable Mortality." Tobacco Control in Developing Countries. Eds. Prabhat Jha and Frank Chaloupka. Oxford: Oxford University Press, 2000.
- Garfield, E. "Which Medical Journals Have the Greatest Impact?" Annals of Internal Medicine 105 (1986): 313.
- Gastaldo, Denise. "Health Education and the Concept of Bio-Power." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- General Accounting Office - United States. "Competitive Sourcing: Greater Emphasis Needed on Increasing Efficiency and Improving Performance." General Accounting Office, 2004.
- . "Managing for Results: An Agenda to Improve the Usefulness of Agencies' Annual Performance Plans." General Accounting Office, 1998.
- . "Managing for Results: Opportunities for Continued Improvements in Agencies' Performance Plans." General Accounting Office, 1999.
- . "Managing in the New Millennium: Shaping a More Efficient and Effective Government for the 21st Century: Statement of David M. Walker, Comptroller General of the United States." Committee on Governmental Affairs. Washington, DC: General Accounting Office, 2000 of Senate.
- . "Reinventing Government: Status of Npr Recommendations at 10 Federal Agencies." General Accounting Office, 2000.
- . "Transforming the Civil Service: Building the Workforce of the Future - Results of a Gao Sponsored Symposium." General Accounting Office, 1995.
- Gerdtham, U.G., C. Rehnberg, and M. Tambour. The Impact of Internal Markets on Health Care Efficiency: Evidence from Health Care Reforms in Sweden: Center for Health Economics, Stockholm School of Economics, 1997.
- Gersh, Bernard, ed. Heart Book. 2nd ed. New York: William Morrow, 2000.

- Giddens, Anthony. Beyond Left and Right: The Future of Radical Politics. Stanford: Stanford University Press, 1994.
- . Modernity and Self-Identity. Cambridge: Polity Press, 1991.
- Gifford, A.L., et al. "Pilot Randomized Trial of Education to Improve Self Management Skills of Men with Symptomatic Hiv/Aids." Journal of AIDS 18.2 (1998): 136-44.
- Gill, T.P., V.J. Antipatis, and W.P.T. James. "The Global Epidemic of Obesity." Asian Pacific Journal of Clinical Nutrition 8.1 (1999): 75-81.
- Gillies, J., et al. "A Community Trial of a Written Self-Management Plan for Children with Asthma." New Zealand Medical Journal 109.1015 (1996): 30-33.
- Glanz, K., F. Marcus Lewis, and B. Rimer. Health Behavior and Health Education: Theory, Research, and Practice. San Francisco: Jossey-Bass, 1990.
- Glasgow, Sara, and Dennis Pirages. "Microsecurity." Plagues and Politics: Infectious Disease and International Policy. Ed. Andrew T. Price-Smith. New York: Palgrave, 2001.
- Glennester, H. "Internal Markets: Context and Structure." In, Ed. M. Jerome-Foget, J. White, and J.M. Wiener." Health Care Reform through Internal Markets. Eds. M. Jerome-Foget, J. White and J.M. Wiener. Washington, D.C.: Brookings Institution, 1995.
- Godin, G. "Theories of Reasoned Action and Planned Behavior: Usefulness for Exercise Promotion." Med Sci Sports Exerc 26.11 (1994): 1391-94.
- Goldberg, Ira J., et al. "Wine and Your Heart." Circulation 103 (2001): 472.
- Goodin, R.E., et al. The Real Worlds of Welfare Capitalism. Melbourne: Cambridge UP, 1999.
- Gordenker, Leon, and et al. International Cooperation in Response to Aids. London: Pinter Publishing, 1995.
- Gordon, C. "Introduction." The Foucault Effect: Studies in Governmentality. Eds. G. Buchell, C. Gordon and P. Miller. London: Harvester Wheatsheaf, 1991.
- Gordon, Scott. "The Political Economy of F.A. Hayek." The Canadian Journal of Economics 14.3 (1981): 470-87.
- Graham, H. "Gender and Class as Dimensions of Smoking Behaviour in Britain: Insights from a Survey of Mothers." Social Science & Medicine 38 (1994): 691-98.
- . "Women's Smoking and Family Health." Social Science & Medicine 25 (1987): 47-56.
- Greco, M. "Psychosomatic Subjects and the 'Duty to Be Well': Personal Agency within Medical Rationality." Economy and Society 22.3 (1993): 357-72.
- Green-Pedersen, C., and M. Haverland. "The New Politics and Scholarship of the Welfare State." Journal of European Social Policy 12 (2002): 43-51.
- Guralnik, J.M., K.C. Land, and D. Blazer. "Educational Status and Active Life Expectancy among Older Blacks and Whites." New England Journal of Medicine 329 (1993): 110-16.
- Håkansson, Stefan, and Sara Nordling. "The Health System of Sweden." Health Care and Reform in Industrialized Countries. Ed. Marshall Raffel. University Park, PA: Pennsylvania State University Press, 1997.

- Ham, C. "An Alternative for the Nhs." British Medical Journal 308 (1994): 485-86.
- Ham, Chris, and Mats Brommels. "Health Care Reform in the Netherlands, Sweden, and the United Kingdom." Health Affairs Winter (1994): 106-19.
- Hamlin, C. "State Medicine in Great Britain." The History of Public Health and the Modern State. Ed. Dorothy Porter. Amsterdam: Editions Rodopi B.V., 1994.
- Harding, Jennifer. "Bodies at Risk: Sex, Surveillance and Hormone Replacement Therapy." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- Hardt, Michael, and Antonio Negri. Empire. Cambridge, MA: Harvard University Press, 2000.
- Harrell, Joanne S., and Jennifer Leeman. "Promoting Healthier Behaviors." Key Aspects of Preventing and Managing Chronic Illness. Eds. Sandra Funk, et al. New York: Springer Publishing Company, 2001.
- Harvard School of Public Health. "About Hsph". (December, 2004). January 14 2005. <<http://www.hsph.harvard.edu/about.html#departments> >.
- . "Course Descriptions and Schedules". January 27 2005. <<http://www.hsph.harvard.edu/registrar/courses/> >.
- . "Course Information: Epidemiology". (January 12, 2005). January 14 2005. <<http://www.hsph.harvard.edu/registrar/courses/epi.shtml> >.
- . "Course Information: Nutrition". (January 12, 2005). January 14 2005. <<http://www.hsph.harvard.edu/registrar/courses/nut.shtml> >.
- . It's Not Just Cancer Anymore (Press Release): Harvard School of Public Health, 2004.
- . M.P.H. Program 2004-2005: Harvard School of Public Health, 2004.
- . "Master of Public Health Program". January 14 2005. <<http://www.hsph.harvard.edu/mph/questions.html> >.
- . Your Disease Risk: Relative Risks (Diabetes, Heart Disease, Osteoporosis): Harvard Center for Cancer Prevention, 2004.
- Hastings, G., and A. Haywood. "Social Marketing and Communication in Health Promotion." Health Promotion International 6.2 (1991): 135-45.
- Hausenblas, H.A., A.V. Carron, and D.E. Mack. "Application of the Theories of Reasoned Action and Planned Behavior to Exercise Behavior: A Meta-Analysis." Journal of Sport & Exercise Psychology 19 (1997): 36-51.
- Hayek, F.A. The Constitution of Liberty. Chicago: University of Chicago Press, 1960.
- Health Development Agency. "About the Hda". March 31 2004. <<http://www.hda.nhs.uk/html/about/index.html> >.
- . "Cancer Prevention: A Resource to Support Local Action in Delivering the Nhs Cancer Plan". 2002. March 31 2004. <[http://www.hda.nhs.uk/html/resources/cancer\\_prevention/introduction.html](http://www.hda.nhs.uk/html/resources/cancer_prevention/introduction.html) >.
- . Coronary Heart Disease: Guidance for Implementing the Preventative Aspects of the National Service Framework. London: Health Development Agency, 2001.

- Hecló, Hugh. Modern Social Politics in Britain and Sweden: From Relief to Income Maintenance. Yale Studies in Political Science. New Haven, CT: Yale University Press, 1974.
- Heidenheimer, Arnold, Hugh Hecló, and Carolyn Teich Adams. Comparative Public Policy: The Politics of Social Choice in Europe and America. 3rd ed. New York: Bedford/St. Martins, 1990.
- Helen, Ilpo. "Welfare and Its Vicissitudes." Acta Sociologica 43 (2000): 158-64.
- Henry J. Kaiser Family Foundation. Health Insurance Coverage of Women Ages 18-64, by State, 2001-2002: Women's Health Policy Fact Sheet, 2004.
- . Women's Health in the United States: Health Coverage and Access to Care: Kaiser Women's Health Survey, 2002.
- Hexter, J.H. "The Historical Method of Christopher Hill." On Historians: Reappraisals of Some of the Masters of Modern History. Cambridge: Cambridge UP, 1979.
- Hicks, Alexander, and Lane Kenworthy. "Cooperation and Political Economic Performance in Affluent Democratic Capitalism." American Journal of Sociology 103 (1998): 1631-72.
- Higgs, Paul. "Risk, Governmentality and the Reconceptualization of Citizenship." Modernity, Medicine and Health: Medical Sociology toward 2000. Eds. Graham Scrambler and Paul Higgs. New York: Routledge, 1998.
- Hill, Martha. "Closing the Gap between Information and Action." Key Aspects of Preventing and Managing Chronic Illness. Eds. Sandra Funk, et al. New York: Springer Publishing Company, 2001.
- Hindess, Barry. "Liberalism, Socialism and Democracy: Variations on a Governmental Theme." Foucault and Political Reason. Eds. Andrew Barry, Thomas Osborne and Nikolas Rose. Chicago: University of Chicago Press, 1996.
- . "Neoliberalism and the National Economy." Governing Australia. Eds. Mitchell Dean and Barry Hindess. Cambridge: Cambridge University Press, 1998.
- . "Politics and Governmentality." Economy and Society 26.2 (1997): 257-72.
- Hirst, Paul, and Grahame Thompson. Globalization in Question. 2nd ed. Malden, MA: Blackwell, 1999.
- Hjertqvist, Johan. "Meeting the Challenges to European Healthcare: Lessons Learned from the 'Stockholm Revolution'." Pharmacoeconomics 20.3 (2002): 47-53.
- Hobhouse, Henry. Forces of Change: An Unorthodox View of History. New York: Little, Brown and Company, 1989.
- Holland, Walter W. "Editorial: The Hazards of Epidemiology." American Journal of Public Health 85.5 (1995): 616-17.
- Holmes, Dave, and Denise Gastaldo. "Nursing as Means of Governmentality." Journal of Advanced Nursing 38.6 (2002): 557-65.
- Horan, P.P., et al. "Computer Assisted Self Control of Diabetes by Adolescents." Diabetes Educator 16.3 (1990): 205-11.
- Howson, Christopher, et al. Control of Cardiovascular Diseases in Developing Countries: Research, Development, and Institutional Strengthening. Washington, D.C.: Institute of Medicine, 1998.

- Hsiao, W. "Comparing Health Systems: What Nations Can Learn from One Another." Journal of Health Politics, Policy, and Law 17 (1992): 613-36.
- Hsieh, C.R., and T.W. Hu. The Demand for Cigarettes in Taiwan: Domestic Versus Imported Cigarettes. Nankang: Institute of Economics, 1997.
- Huhman, M, C. Heitzler, and F. Wong. "The Verb™ Campaign Logic Model: A Tool for Planning and Evaluation". 2004. Preventing Chronic Disease. (July 2004). November 9 2004.  
<[http://www.cdc.gov/pcd/issues/2004/jul/04\\_0033.htm](http://www.cdc.gov/pcd/issues/2004/jul/04_0033.htm) >.
- Illich, I., et al. Disabling Professions. London: Marion Boyars, 1977.
- Immergut, Ellen. "Procedures for Conciliation: The Institutional Basis for Swedish National Health Insurance." Scandinavian Studies 61 (1989): 146-68.
- Infinito, Justen. "Ethical Self-Formation: A Look at the Later Foucault." Educational Theory 53.2 (2003): 155-71.
- Institute of Medicine. Enhancing the Vitality of the National Institutes of Health: Organizational Change to Meet New Challenges. Washington, DC: Institute of Medicine, 2003.
- . The Future of Public Health. Washington, DC: National Academy Press, 1988.
- . Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century. Washington, DC: Institute of Medicine, 2003.
- Jackson, David. Public Health in Hospitals: A Prerequisite for Clinical Excellence: British Association for Medical Managers, 2004.
- Jacobs, Alan. "Seeing Difference: Market Health Reform in Europe." Journal of Health Politics, Policy, and Law 23.1 (1998): 1-33.
- Janis, I. "Improving Adherence to Medical Recommendations: Prescriptive Hypotheses Derived from Recent Research in Social Psychology." Handbook of Psychology and Health, Volume Iv: Social Psychological Aspects of Health. Ed. A. Baum. Hillsdale, NJ: Lawrence Erlbaum Associates, 1984.
- Janz, N., and M. Becker. "The Health Belief Model: A Decade Later." Health Education Quarterly 11.1 (1984): 1-47.
- Jha, Prabhat, Fred Paccaud, and Son Nguyen. "Strategic Priorities in Tobacco Control for Governments and International Agencies." Tobacco Control in Developing Countries. Eds. Prabhat Jha and Frank Chaloupka. Oxford: Oxford University Press, 2000.
- Johannison, K. "The People's Health: Public Health Policies in Sweden." The History of Public Health and the Modern State. Ed. Dorothy Porter. Amsterdam: Editions Rodopi B.V., 1994.
- Johns Hopkins Bloomberg School of Public Health. 2004-2005 Master of Public Health Full-Time Student Program Manual. Baltimore: Johns Hopkins University, 2004.
- . "The Anchor Project". January 24 2005.  
<[http://www.jhsph.edu/ShipStudies/Past\\_Projects/anchor.html](http://www.jhsph.edu/ShipStudies/Past_Projects/anchor.html) >.
- . "Center for Human Nutrition: Diet, Lifestyle and Chronic Disease". January 24 2005.  
<[http://commprojects.jhsph.edu/research/chnArea.cfm?Research\\_Area=3](http://commprojects.jhsph.edu/research/chnArea.cfm?Research_Area=3) >.
- . "Courses". January 27 2005. <<http://commprojects.jhsph.edu/courses/Results.cfm> >.

- . "Fundamentals of Health Education and Health Promotion". January 24 2005.  
<[http://apps1.jhsph.edu/courses/index.cfm?catalog\\_id=5365](http://apps1.jhsph.edu/courses/index.cfm?catalog_id=5365) >.
- . "The Lighthouse: Our Research". January 24 2005.  
<[http://www.jhsph.edu/ShipStudies/Our\\_Research/index.html](http://www.jhsph.edu/ShipStudies/Our_Research/index.html) >.
- . "Master of Public Health: Student Demographics 2004-2005". January 24 2005.  
<[http://www.jhsph.edu/Academics/MPH/admissions\\_MPH.html](http://www.jhsph.edu/Academics/MPH/admissions_MPH.html) >.
- . "Principles of Human Nutrition". January 24 2005.  
<[http://apps1.jhsph.edu/courses/index.cfm?catalog\\_id=4944](http://apps1.jhsph.edu/courses/index.cfm?catalog_id=4944) >.
- . "The School at a Glance". January 24 2005.  
<[http://www.jhsph.edu/PublicHealthNews/school\\_at\\_glance.html](http://www.jhsph.edu/PublicHealthNews/school_at_glance.html) >.
- . School to Establish Department to Study Ways to Enhance Healthy Behavior:  
Public Health News Center, May 2, 2003.
- . "The Shield Project". January 24 2005.  
<[http://www.jhsph.edu/ShipStudies/Current\\_Projects/shield.html](http://www.jhsph.edu/ShipStudies/Current_Projects/shield.html) >.
- Jones, Nicola. "How Are Expert Patients Different?" 2003. December 6 2004. <  
[http://www.expertpatients.nhs.uk/stories\\_hp-001.shtml](http://www.expertpatients.nhs.uk/stories_hp-001.shtml) >.
- Jonsson, E. Has the Stockholm Model Generated More Care for the Money?  
Stockholm: Stockholm University, 1994.
- Joosens, Luk, and Bungon Ritthiphakde. Role of Multinationals and Other Private  
Actors: Trade and Investment Practices. Geneva: World Health Organization,  
2000.
- Joyce, Paul. "Governmentality and Risk: Setting Priorities in the New Nhs."  
Sociology of Health and Illness 23.5 (2001): 594-614.
- Kamper-Jørgensen, Finn, et al. International Panel Evaluation of Swedish Public  
Health Research. Stockholm: Swedish Council for Working Life and Social  
Research and the Swedish National Institute of Public Health, 2004.
- Karolinska Institutet - Department of Public Health Sciences. "Evaluation Reports  
from the Research Groups of the Department". (December 7, 2001). January  
21 2005. <<http://www.phs.ki.se/evaluationphs/hpeval.htm> >.
- Karolinska Institutet. Annual Report 2002. Stockholm: Karolinska Institutet, 2002.
- . "Curriculum - Public Health Nutrition". (July 20, 2004). January 21 2005.  
<[http://info.ki.se/education/ects/Public\\_Health\\_Nutrition/pubnut\\_curr\\_en.htm](http://info.ki.se/education/ects/Public_Health_Nutrition/pubnut_curr_en.htm)  
1 >.
- . "Curriculum - Public Health Sciences". (December 29, 2004). January 21 2005.  
<[http://info.ki.se/education/ects/Public\\_Health\\_Science/pubsci\\_curr\\_en.html#  
disease](http://info.ki.se/education/ects/Public_Health_Science/pubsci_curr_en.html#<br/>disease) >.
- . "It Started with Army Surgeons". (July 20, 2004). January 20 2005.  
<[http://info.ki.se/ki/history\\_en.html](http://info.ki.se/ki/history_en.html) >.
- . "A Medical University". January 19 2005. <[http://info.ki.se/ki/index\\_en.html](http://info.ki.se/ki/index_en.html) >.
- . "Single Subject Courses in Public Health Nutrition". (July 20, 2004). January 21  
2005.  
<[http://info.ki.se/education/ects/Public\\_Health\\_Nutrition/pubnut\\_intro\\_en.ht  
ml](http://info.ki.se/education/ects/Public_Health_Nutrition/pubnut_intro_en.ht<br/>ml) >.
- . "Study Programme in Public Health Sciences". (July 20, 2004). January 20 2005.  
<[http://info.ki.se/education/ects/Public\\_Health\\_Science/pubsci\\_intro\\_en.html](http://info.ki.se/education/ects/Public_Health_Science/pubsci_intro_en.html)  
>.

- . "Women's Lifestyle and Health". (July 20, 2004). January 21 2005.  
 <[http://www.meb.ki.se/surveys/klh/index\\_en.html](http://www.meb.ki.se/surveys/klh/index_en.html)>.
- Kass, L. "Regarding the End of Medicine and the Pursuit of the Health." Public Interest 40.Summer (1975): 11-42.
- Katzenstein, Peter J., ed. The Culture of National Security. New York: Columbia, 1996.
- Kawachi, I., et al. "Social Capital, Income Inequality, and Mortality." American Journal of Public Health 87 (1997): 1491-98.
- Kellerman, A., and B.B. Hackman. "Emergency Department 'Patient Dumping': An Analysis of Inter-Hospital Transfers to the Regional Medical Center at Memphis, Tennessee." American Journal of Public Health 78 (1988): 1287-92.
- Kelly, Peter. "Youth at Risk: Processes of Individualisation and Responsibilisation in the Risk Society." Discourse: studies in the cultural politics of education 22.1 (2001): 23-33.
- Kendler, K.S., M.C. Neale, and C.J. MacLean. "Smoking and Major Depression." Archives of General Psychiatry 50 (1993): 36-43.
- King, Anthony. "Ideas, Institutions, and Policies of Government: A Comparative Analysis: Part Three." British Journal of Political Science 3.4 (1973): 409-23.
- . "Ideas, Institutions, and Policies of Government: A Comparative Analysis: Parts One and Two." British Journal of Political Science 3.3 (1973): 291-313.
- Kirscht, J. "The Health Belief Model and Predictions of Health Actions." Health Behavior: Emerging Research Perspectives. Ed. D. Gochman. New York: Plenum, 1988.
- Kitschelt, Herbert. The Transformation of European Social Democracy. Cambridge: Cambridge University Press, 1994.
- Klass, Gary. "Explaining America and the Welfare State: An Alternative Theory." British Journal of Political Science 15.4 (1985): 427-50.
- Klatsky, A.L., M.A. Armstrong, and G.D. Friedman. "Red Wine, White Wine, Liquor, Beer, and Risk for Coronary Artery Disease Hospitalization." American Journal of Cardiology 80 (1997): 416-20.
- Klein, Rudolf. "Why Britain Is Reorganizing Its National Health Service - yet Again." Health Affairs 17.4 (1998): 111-25.
- Koen, Vincent. Public Expenditure Reform: The Health Care Sector in the United Kingdom. Paris: OECD, 2000.
- Kolodziej, Edward A. "What Is Security and Security Studies? Lessons from the Cold War." Arms Control 13.1 (1992): 1-31.
- Kotler, Philip, Ned Roberto, and Nancy Lee. Social Marketing: Improving the Quality of Life. 2nd ed. Thousand Oaks: Sage, 2002.
- Krasner, Stephen. Sovereignty: Organized Hypocrisy. Princeton: Princeton University Press, 1999.
- Krause, Keith, and Michael Williams, eds. Critical Security Studies: Concepts and Cases. Minneapolis: University of Minnesota Press, 1997.
- . "From Strategy to Security: Foundations of Critical Security Studies." Critical Security Studies: Concepts and Cases. Eds. Keith Krause and Michael Williams. Borderlines. Minneapolis: University of Minnesota Press, 1997.

- Krieger, Nancy. "Epidemiology and the Web of Causation: Has Anyone Seen the Spider?" Social Science & Medicine 39.7 (1994): 887-903.
- Kuhnle, S., ed. The Survival of the European Welfare State. London: Routledge, 2000.
- La Berge, A.F. Mission and Method: The Early Nineteenth-Century French Public Health Movement. Cambridge: Cambridge University Press, 1992.
- Labarthe, D. "Coronary Risk Factors in Childhood." Coronary Heart Disease Epidemiology. Eds. M. Marmot and P. Elliot. New York: Oxford University Press, 1995.
- Labour Party - United Kingdom. Health 2000: The Health and Wealth of the Nation in the 21st Century. London: Labour Party, 1994.
- Laughlin, Richard, and Jane Broadbent. "The Managerial Reform of Health and Education in the Uk: Value for Money or Devaluing Process?" Political Quarterly 65.2 (1994): 152-67.
- Lazar, Harvey, and Peter Stoyko. "The Future of the Welfare State." International Social Security Review 51.March (1998): 3-36.
- Le Grand, J., and W. Bartlett, eds. Quasi-Markets and Social Policy. Houndsmills: Macmillan, 1993.
- Le Riche, W. Harding, and Jean Milner. Epidemiology as Medical Ecology. London: Churchill Livingstone, 1971.
- Lee, K., and R. Dodgson. "Globalization and Cholera: Implications for Global Governance." Global Governance 6 (2000): 213-36.
- Lefebvre, R.C. "The Social Marketing Imbroglia in Health Promotion." Health Promotion International 7.1 (1992): 61-64.
- Leibfried, Stephan. "Towards a European Welfare State?" Social Policy in Changing Europe. Eds. Z. Ferge and J.E. Kolberg. Frankfurt: Campus Verlag, 1992.
- Leitenberg, Milton. "Distinguishing Offensive from Defensive Biological Weapons Research." Critical Reviews in Microbiology 29.3 (2003): 223-57.
- Levinson, Richard. "Issues at the Interface of Medical Sociology and Public Health." Modernity, Medicine and Health: Medical Sociology toward 2000. Eds. Graham Scrambler and Paul Higgs. London: Routledge, 1998.
- Lijphart, A. "Comparative Politics and the Comparative Method." American Political Science Review 65 (1971): 682-93.
- Lindbeck, A. Welfare State Disincentives with Endogenous Habits and Norms. Stockholm: Industrial Institute for Economic and Social Research, 1995.
- Lindberg, Gudrun, and Måns Rosén, eds. National Atlas of Sweden. Stockholm: National Atlas of Sweden, 2000.
- Lindheim, R., and S.L. Syme. "Environments, People, and Health." Annual Review of Public Health 4 (1983): 335-59.
- Ling, J.C., et al. "Social Marketing: Its Place in Public Health." Annual Review of Public Health 13 (1992): 341-62.
- Lofgren, Ragnar. The Swedish Health Care System: Recent Reforms, Problems, and Opportunities. Vancouver: The Fraser Institute, 2002.
- London School of Hygiene and Tropical Medicine. Annual Report--2000-2001. London: London School of Hygiene and Tropical Medicine, 2001.

- . Annual Report--2001-2002. London: London School of Hygiene and Tropical Medicine, 2002.
  - . Annual Report--2002-2003. London: London School of Hygiene and Tropical Medicine, 2003.
  - . Description of Teaching Units - Term 1. London: London School of Hygiene and Tropical Medicine, 2004.
  - . Description of Teaching Units - Term 2. London: London School of Hygiene and Tropical Medicine, 2004.
  - . Description of Teaching Units - Term 3. London: London School of Hygiene and Tropical Medicine, 2004.
  - . "Introducing the London School". (November 18, 2004). January 18 2005.  
<<http://www.lshtm.ac.uk/prospectus/intro/>>.
  - . "Msc - Control of Infectious Diseases". January 18 2005.  
<<http://www.lshtm.ac.uk/prospectus/masters/mscid.html>>.
  - . "Msc. In Public Health". (November 18, 2004). January 18 2005.  
<<http://www.lshtm.ac.uk/prospectus/masters/msph.html>>.
  - . "Public Health - General". (November 18, 2004). January 18 2005.  
<<http://www.lshtm.ac.uk/prospectus/masters/msphg.html>>.
  - . "Research Area - Keywords". January 19 2005.  
<<http://www.lshtm.ac.uk/research/areas/acar>>.
- Long-term Medical Conditions Alliance. Supporting Expert Patients: How to Develop Lay-Led Self-Management Programmes for People with Long-Term Medical Conditions. London: LMCA, 2001.
- Lorig, K., and Halsted R. Holman. "Self-Management Education: History, Definition, Outcomes, and Mechanisms." Annals of Behavioral Medicine 26.1 (2003): 1-7.
- Lorig, K., and J. Laurin. "Some Notions About Assumptions Underlying Health Education." Health Education Quarterly 12.3 (1985): 231-43.
- Losagna, L. Life, Death and the Doctor. New York: Alfred Knopf, 1968.
- Lumley, T., et al. "The Importance of the Normality Assumption in Large Public Health Data Sets." Annual Review of Public Health 23 (2002): 151-69.
- Lupton, Deborah. The Imperative of Health: Public Health and the Regulated Body. London: Sage, 1995.
- Lupton, Deborah, and John Tulloch. "'Life Would Be Pretty Dull without Risk': Voluntary Risk-Taking and Its Pleasures." Health, Risk and Society 4.2 (2002): 113-24.
- Lynch, John, et al. "Income Inequality, the Psychosocial Environment, and Health: Comparisons of Wealthy Nations." Lancet 358 (2001): 194-200.
- Lyons, R., and L. Languille. Healthy Lifestyle: Strengthening the Effectiveness of Lifestyle Approaches to Improve Health: Health Canada, Population and Public Health, 2000.
- MacEachen, Ellen. "The Mundane Administration of Worker Bodies: From Welfarism to Neoliberalism." Health, Risk and Society 2.3 (2000): 315-26.
- MacInnes, A., and K. Milburn. "Belief Systems and Social Circumstances Influencing the Health Choices of People in Lochaber." Health Education Journal 53 (1994): 58-72.

- Maibach, Edward W. "Recreating Communities to Support Active Living." American Journal of Health Promotion 18.1 (2003): 114-19.
- Marcus, B.H., and A.L. Stanton. "Evaluation of Relapse Prevention and Reinforcement Interventions to Promote Exercise in Sedentary Females." Research Quarterly for Exercise and Sport 64 (1993): 447-52.
- Marks, James S., and David V. McQueen. "Chronic Diseases." Critical Issues in Global Health. Ed. C. Everett Koop. San Francisco: Jossey Bass, 2001.
- Marlatt, G.A., and J.R. Gordon, eds. Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors. New York: Guilford Press, 1985.
- Massing, Mark W., et al. "Income, Income Inequality, and Cardiovascular Disease Mortality: Relations among County Populations of the United States, 1985-1994." Southern Medical Journal 97.5 (2004): 475-84.
- McCallum, David. "Mental Health, Criminality, and the Human Sciences." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- McDonough, P., et al. "Income Dynamics and Adult Mortality in the United States, 1972 through 1989." American Journal of Public Health 87 (1997): 1476-83.
- McIsaac, S., and R.G. Wilkonson. "Income Distribution and Cause-Specific Mortality." European Journal of Public Health 7 (1997): 45-53.
- McKie, L. "The Art of Surveillance or Reasonable Prevention? The Case of Cervical Screening." Sociology of Health and Illness 17 (1995): 441-57.
- McKinlay, John, and Lisa Marceau. "U.S. Public Health and the 21st Century: Diabetes Mellitus." Lancet 356.9231 (2000): 757-61.
- . "Upstream Health Policy: Lessons from the Battle of Tobacco." International Journal of Health Services 30.1 (2000): 49-69.
- McMahon, Brian, Thomas F. Pugh, and Johannes Ipsen. Epidemiologic Methods. Boston: Little, Brown, 1960.
- McMichael, Anthony J. "The Urban Environment and Health in a World of Increasing Globalization: Issues for Developing Countries." Bulletin of the World Health Organization 78.9 (2000): 1117-26.
- McMurray, Christine, and Roy Smith. Diseases of Globalization: Socioeconomic Transitions and Health. London: Earthscan, 2001.
- McNay, L. Foucault and Feminism: Power, Gender and the Self. Cambridge: Polity Press, 1992.
- McNeill, William. Plagues and Peoples. New York: Doubleday, 1977.
- Mearsheimer, John J. "Back to the Future: Instability in Europe after the Cold War." The Perils of Anarchy: Contemporary Realism and International Security. Eds. Michael Brown and et al. Cambridge, MA: MIT Press, 1995.
- Mechanic, David, and David A. Rochefort. "Comparative Medical Systems." Annual Review of Sociology 22 (1996): 239-70.
- Miller, J. Laurence. "On the 'Chicago School of Economics'." The Journal of Political Economy 70.1 (1962): 64-69.
- Miller, P., and Nikolas Rose. "Governing Economic Life." Economy and Society 19.1 (1990): 1-31.
- Miller, W., and S. Rollnick. Motivational Interviewing. London: Guilford, 1991.

- Ministry of Health and Social Affairs - Sweden. Annual Report on Local Councils and Their Responsibility for Elderly Long-Term Care. Stockholm: Ministry of Health and Social Affairs, 1995.
- . Health Care for the Future - Three Models. Stockholm: Ministry of Health and Social Affairs, 1993.
- . Towards Public Health on Equal Terms. Stockholm: Ministry of Health and Social Affairs, 2001.
- Mishler, Elliot George. Social Contexts of Health, Illness, and Patient Care. New York: Cambridge University Press, 1981.
- Monteiro, C.A., and et al. "The Nutrition Transition in Brazil." European Journal of Clinical Nutrition 49 (1995): 105-13.
- Montreal Economic Institute. Turning to the Private Sector in Health Care: The Swedish Example. Montreal: Montreal Economic Institute, 2003.
- Moreno, L. "The Spanish Development of Southern European Welfare." The Survival of the European Welfare State. Ed. S. Kuhnle. London: Routledge, 2000.
- Morgenthau, Hans. Politics among Nations. Ed. Kenneth Thompson. 6th ed. New York: McGraw Hill, 1985.
- Murphy, Craig. "Political Consequences of the New Inequality." International Studies Quarterly 45 (2001): 347-56.
- Myers, Norman. "Environment and Security." Foreign Policy 74 (1989): 23-41.
- National Board of Health and Welfare - Sweden. Cancer Incidence in Sweden, 2002. Stockholm: Official Statistics for Sweden, 2003.
- . "The Cause of Death Register". (September, 2001). March 28 2004. <<http://www.sos.se/epc/english/dorseng.htm> >.
- . Health Care Services Statistical Yearbook 2000. Stockholm: National Board of Health and Welfare - Sweden, 2000.
- . Sweden's Health Care Report, 2001. Stockholm: National Board of Health and Welfare, 2002.
- National Center for Chronic Disease Prevention and Health Promotion. "Fact Sheet: Actual Causes of Death in the United States, 2000". (March 15, 2004). March 31 2004. <[http://www.cdc.gov/nccdphp/factsheets/death\\_causes2000\\_access.htm#graph1](http://www.cdc.gov/nccdphp/factsheets/death_causes2000_access.htm#graph1) >.
- . "Preventing and Controlling Cancer: The Nation's Second Leading Cause of Death". (March 29, 2004). March 31 2004. <[http://www.cdc.gov/nccdphp/aag/aag\\_dcpc.htm](http://www.cdc.gov/nccdphp/aag/aag_dcpc.htm) >.
- National Health Service - United Kingdom. Giving up for Life. London: NHS, 2003.
- . "Moving from Patient to Person". Expert Patients Programme. December 16 2004. <<http://www.expertpatients.nhs.uk/> >.
- . The NHS Plan: A Plan for Investment, a Plan for Reform. London: NHS, 2000.
- National Health Service Management Executive - United Kingdom. Capital Investment Manual. London: NHSME, 1994.
- National Institute of Public Health - Sweden. National Institute of Public Health in Sweden: A Presentation. Stockholm: National Institute of Public Health, 2000.

- . The National Public Health Strategy for Sweden in Brief. Stockholm: National Institute of Public Health, 2003.
- . "The Organization of Public Health in the Municipalities in 2003". September 27 2004. <[http://www.fhi.se/templates/Page\\_1612.aspx](http://www.fhi.se/templates/Page_1612.aspx)>.
- . Sweden on the Move 2001 - a Year of Success! Stockholm: National Institute of Public Health, 2002.
- . The Swedish Public Health Policy. Stockholm: National Institute of Public Health, 2004.
- National Institute of Public Health - Sweden, Swedish Cancer Society, and Swedish Heart-Lung Foundation. Progress and Challenge: Tobacco Control [Swedish Style]. Stockholm: NIPH, 2003.
- . Smoke-Free Children--a Report: The First Ten Years. Stockholm, 2003. National Institutes of Health. Summary of the Fy 2004 President's Budget. Washington, DC: NIH, 2003.
- National Institutes of Health Deputy Director for Management (Tim Wheelles). "Nih A76 All Hands E-Mail Relative to 2004 Study Considerations." Ed. NIH-STAFF-URGENT@LIST.NIH.GOV, 2003. Electronic Mail.
- National Intelligence Council. The Global Infectious Disease Threat and Its Implications for the United States. Washington, D.C.: National Intelligence Council, 2000.
- National Partnership for Reinventing Government. "Balancing Measures: Best Practices in Performance Management". 1999. (August 1999). October 14 2004. <<http://www.orau.gov/pbm/links/npr1.html>>.
- National Performance Review. Common Sense Government: Works Better and Costs Less: National Performance Review, 1995.
- . From Red Tape to Results: Creating a Government That Works Better and Costs Less. Washington, DC: National Performance Review, 1993.
- National Primary and Care Trust Development Programme. How Primary Care Trusts Have Communicated the New Patient/Public Involvement Agenda within Local Communities. London: NHS Modernisation Agency, 2003.
- National Primary Care Research and Development Centre - United Kingdom. National Evaluation of Expert Patients Programme: Assessing the Process of Embedding Epp in the Nhs. London: National Primary Care Research and Development Centre, 2004.
- National Service Framework for Coronary Heart Disease. Delivering Better Heart Services: Progress Report, 2003. London: National Health Service, 2003.
- Neiger, Brad L., et al. "Positioning Social Marketing as a Planning Process for Health Education." American Journal of Health Studies 18.2/3 (2003): 75-81.
- Nettleton, Sarah. "Governing the Risky Self: How to Become Healthy, Wealthy and Wise." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- Nordic School of Public Health. Course Catalogue--2004-2005: Nordic School of Public Health, 2004.
- . "Description of Aim from the Nordic Council of Ministers". (June 3, 2004). January 20 2005. <[http://www.nhv.se/index\\_e.html](http://www.nhv.se/index_e.html)>.

- . "NHV from a Historical Perspective". (June 3, 2004). January 20 2005.  
<[http://www.nhv.se/index\\_e.html](http://www.nhv.se/index_e.html)>.
- . "Research Policy". (December 22, 2004). January 20 2005.  
<[http://www.nhv.se/index\\_e.html](http://www.nhv.se/index_e.html)>.
- Nunn, Sam. "The Future of Public Health Preparedness." Journal of Law, Medicine, & Ethics 30.3 (2002): 202-09.
- O'Connell, J. "Utilization of the Health Belief Model in Predicting Dieting and Exercising Behavior of Obese and Non-Obese Adolescents." University of Toledo, 1984.
- O'Malley, Pat. "Risk, Power, and Crime Prevention." Economy and Society 21.3 (1992): 252-75.
- O'Neil, Andrew. "Terrorist Use of Weapons of Mass Destruction: How Serious Is the Threat?" Australian Journal of International Affairs 57.1 (2003): 99-112.
- Odell, John. "Case Study Methods in International Political Economy." International Studies Perspectives 2 (2001): 161-76.
- OECD. Economic Survey of the United Kingdom. Paris: OECD, 2000.
- Office of Management and Budget - United States. "Circular a-76 (Revised)." Ed. Executive Office of the President: OMB, 2003.
- . "Conducting Public-Private Competition in a Reasoned and Responsible Manner." Ed. Executive Office of the President: OMB, 2003.
- . "The Federal Government Is Results-Oriented: A Report to Federal Employees." Ed. Executive Office of the President: OMB, 2004.
- . "Performance Goals and Management Initiatives for the Fy 2002 Budget." OMB, 2001.
- . "The President's Management Agenda." Ed. Executive Office of the President: OMB, 2002.
- Oldridge, N., and D. Steiner. "The Health Belief Model: Predicting Compliance and Dropout in Cardiac Rehabilitation." Medical Science and Sports Exercise 22 (1990): 678-83.
- Organization for Economic Cooperation and Development. The Reform of Health Care Systems: A Review of Seventeen Oecd Countries. Paris: Organization for Economic Cooperation and Development, 1994.
- Osborne, Thomas. "Of Health and Statecraft." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- Ostergard, Robert L. "Politics in the Hot Zone: Aids and National Security in Africa." Third World Quarterly 23.2 (2002): 333-50.
- Palmer, G.R., and S.D. Short. Health Care and Public Policy: An Australian Analysis. Melbourne: Macmillan, 1994.
- Pan American Health Organization. "About the Carmen Initiative". September 5 2004. <<http://www.paho.org/English/HCP/HCN/IPM/cmn-about.htm>>.
- . "Carmen: An Initiative for Integrated Noncommunicable Disease Prevention in the Americas". September 5 2004.  
<<http://www.paho.org/english/ad/dpc/nc/carmen-info.htm>>.
- Pappas, G., et al. "The Increasing Disparity in Mortality between Socioeconomic Groups in the United States, 1960-1986." New England Journal of Medicine 329 (1993): 103-09.

- Parker, Loise. "Research Design and Methods." Pediatric Hematology and Oncology 19 (2002): 287.
- Parker, Richard. "The Global HIV/Aids Pandemic, Structural Inequalities, and the Politics of International Health." American Journal of Public Health 92.3 (2002): 343-46.
- Parmet, Wendy E. "The Impact of Law on Coronary Heart Disease: Some Preliminary Observations on the Relationship of Law to 'Normalized' Conditions." Journal of Law, Medicine, & Ethics 30.4 (2002): 608-20.
- Peabody, John W. "Economic Reform and Health Sector Policy: Lessons from Structural Adjustment Programs." Social Science & Medicine 43.5 (1996): 823-35.
- Pearce, Neal. "Traditional Epidemiology, Modern Epidemiology, and Public Health." American Journal of Public Health 86.5 (1996): 678-83.
- Peck, Jamie, and Adam Tickell. "Neoliberalizing Space." Antipode 34.3 (2002): 380-404.
- Peckenpugh, Jason. "Feds Win All Job Competitions at Health and Human Services Agency". 2003. GovExec.com. November 10 2004.  
<<http://www.govexec.com/dailyfed/0903/092203p1.htm> >.
- Petersen, Alan. "Risk, Governance, and the New Public Health." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- Petersen, Alan, and Deborah Lupton. The New Public Health: Health and Self in the Age of Risk. London: Sage, 1996.
- Peto, R., and et al. "Mortality from Tobacco in Developed Countries: Indirect Estimation from National Vital Statistics." Lancet 339 (1992): 1268-78.
- Peto, R., and D. Zaridze. Tobacco: A Major International Health Hazard. Lyon: International Agency for Research on Cancer, 1986.
- Pezza, Paul E. "The Impact of Dominant Paradigms on Contemporary Health Education Theory, Research, and Practice." Wellness Perspectives 9.3 (1993): 4-19.
- Pirages, Dennis, and Paul Runci. "Ecological Interdependence and the Spread of Infectious Disease." Beyond Sovereignty: Issues for a Global Agenda. Ed. Maryann Cusimano. New York: Bedford/St. Martin's, 2000.
- Poku, Nana K. "Poverty, Debt and Africa's HIV/AIDS Crisis." International Affairs 78.3 (2002): 531-46.
- Pollock, Allyson, et al. "The Private Finance Initiative: Planning the 'New' NHS: Downsizing for the 21st Century." Lancet 319 (1999): 179-84.
- Popay, J., M. Bartley, and C. Owen. "Gender Inequalities in Health: Social Position, Affective Disorders and Minor Physical Morbidity." Social Science & Medicine 36 (1993): 21-32.
- Popkin, B. "Nutrition in Transition: The Changing Global Nutrition Challenge." Journal of Clinical Nutrition 10. supplement (2001): S13-S18.
- . "The Nutrition Transition in Low-Income Countries: An Emerging Crisis." Nutrition Reviews 52 (1994): 285-98.
- . "Nutritional Patterns and Transitions." Population Development Review 19 (1993): 138-57.

- Popkin, B., S. Horton, and K. Soowon. "The Nutrition Transition and Prevention of Diet-Related Diseases in Asia and the Pacific." Food and Nutrition Bulletin 22.4 (2001).
- Porter, Dorothy. Health, Civilization and the State: A History of Public Health from Ancient to Modern Times. London: Routledge, 1999.
- Price-Smith, Andrew T. "Ghosts of Kigali: Infectious Disease and Global Stability at the Turn of the Century." Plagues and Politics: Infectious Disease and International Policy. Ed. Andrew T. Price-Smith. New York: Palgrave, 2001.
- . The Health of Nations: Infectious Disease, Environmental Change, and Their Effects on National Security and Development. Cambridge, MA: MIT Press, 2002.
- , ed. Plagues and Politics: Infectious Disease and International Policy. New York: Palgrave, 2001.
- Price, D., A.M. Pollock, and J. Shaoul. "How the World Trade Organisation Is Shaping Domestic Policies in Health Care." Lancet 354 (1999): 1889-92.
- Procacci, G. "Social Economy and the Government of Poverty." Ideology and Consciousness 4 (1978): 55-72.
- Pruitt, Sheri, and et al. Innovative Care for Chronic Conditions: Building Blocks for Action. Geneva: World Health Organization, 2001.
- QuitandWin.org. "Quit&Win - Targets to Reach a Million Smokers to Stop Smoking". (December 16, 2003). January 21 2005. <  
<http://www.quitandwin.org/fi/content/press/backgrounder> >.
- Rae, A., and T. Josling. Processed Food Trade and Developing Countries: Protection and Trade Reform: New Zealand Trade Consortium, 2001.
- Regan, Geoffrey. Brassy's Book of Military Blunders. Dulles, VA: Potomac Books, 2000.
- Reid, Elizabeth, ed. HIV and Aids: The Global Inter-Connection. Bloomfield, CT: Kumarian Press, 1995.
- Rimke, Heidi Marie. "Governing Citizens through Self-Help Literature." Cultural Studies 14.1 (2000): 61-78.
- Rimm, E.B., A.L. Klatsky, and D. Grobbee. "Review of Moderate Alcohol Consumption and Reduced Risk of Coronary Heart Disease: Is the Effect Due to Beer, Wine, or Spirits?" British Medical Journal 312 (1996): 731-36.
- Risse, G.B. "Medicine in the Age of Enlightenment." Medicine in Society: Historical Essays. Ed. A. Wear. Cambridge: Cambridge University Press, 1992.
- Rivett, Geoffrey. "Organisational and Financial Issues (1997-2000)". History of the NHS. (September 16, 2002). November 11 2004.  
<<http://www.nhshistory.kirion.net/first%20wave.htm> >.
- Robertson, Ann. "Embodying Risk, Embodying Political Rationality: Women's Accounts of Risks of Breast Cancer." Health, Risk and Society 2.2 (2000): 219-35.
- Rosamond, W.D., A.S. Ammerman, and J.L. Holliday. "Cardiovascular Disease Risk Factor Intervention in Low-Income Women: The North Carolina Wisewoman Project." Preventative Medicine 31 (2000): 370.
- Rose, G. "Sick Individuals and Sick Populations." International Journal of Epidemiology 14.1 (1985): 32-38.

- Rose, Nikolas. "Governing 'Advanced' Liberal Democracies." Foucault and Political Reason. Eds. Andrew Barry, Thomas Osborne and Nikolas Rose. Chicago: University of Chicago Press, 1996.
- . Governing the Soul: The Shaping of the Private Self. London: Routledge, 1990.
- Rose, Nikolas, and P. Miller. "Political Power Beyond the State: Problematics of Government." British Journal of Sociology 43.2 (1992): 173-205.
- Rosen, G. "Disease, Debility, and Death." The Victorian City: Images and Realities. Eds. H. Dyos and M. Wolff. London: Routledge and Kegan Paul, 1973.
- Rosenstock, I.M., V.J. Strecher, and M.J. Becker. "Social Learning Theory and the Health Belief Model." Health Education Quarterly 15 (1988): 175-83.
- Ross, H., and P. Mico. Theory and Practice in Health Education. Palo Alto: Mayfield, 1980.
- Rothman, K.J. "Types of Epidemiologic Study." Modern Epidemiology. Ed. K.J. Rothman. 2nd ed. Boston: Little, Brown, 1986.
- Rothman, K.J., H.O. Adami, and D. Trichopoulos. "Should the Mission of Epidemiology Include the Eradication of Poverty?" Lancet 352 (1998): 810-13.
- Rothman, K.J., and Charles Poole. "Science and Policymaking." American Journal of Public Health 75.4 (1985): 340-41.
- Royal College of Physicians. Nicotine Addiction in Britain: A Report of the Tobacco Advisory Group of the Royal College of Physicians. London: Royal College of Physicians, 2000.
- Rudd, Rima, and Jeanne Goldberg. "A Five-Stage Model for Sustaining a Community Campaign." Journal of Health Communication 4 (1999): 37-48.
- Saffer, Henry. "Tobacco Advertising and Promotion." Tobacco Control in Developing Countries. Eds. Prabhat Jha and Frank Chaloupka. Oxford: Oxford University Press, 2000.
- Salt, H., M. Boyle, and J. Ives. "HIV Prevention: Current Health Promoting Behaviour Models for Understanding Psycho-Social Determinants of Condom Use." AIDS Care 2.1 (1990): 69-75.
- Saltman, R.B. "The Context for Health Reform in the United Kingdom, Sweden, Germany, and the United States." Health Policy 41.Supplement (1997): S9-S26.
- Saltonstall, R. "Healthy Bodies, Social Bodies: Men's and Women's Concepts and Practices of Health in Everyday Life." Social Science & Medicine 36.1 (1993): 7-14.
- Sapp, Stephen G. "Incomplete Knowledge and Attitude-Behavior Inconsistency." Social Behavior and Personality 30.1 (2002): 37-44.
- Sassen, Saskia. Globalization and Its Discontents. New York: The New Press, 1998.
- Savitz, David A., Charles Poole, and William C. Miller. "Reassessing the Role of Epidemiology in Public Health." American Journal of Public Health 89.8 (1999): 1158-60.
- Schneider, Helen. "On the Fault-Line: The Politics of Aids Policy in Contemporary South Africa." African Studies 61.1 (2002): 145-67.
- Schuftan, Claudio. "Equity in Health and Economic Globalization." Development in Practice 9.5 (1999): 610-14.

- Schwartz, Sharon, and Kenneth M. Carpenter. "The Right Answer for the Wrong Question: Consequences of Type Iii Error for Public Health Research." American Journal of Public Health 89.8 (1999): 1178-79.
- Seefeldt, Vern, Robert M. Malina, and Michael A. Clark. "Factors Affecting Levels of Physical Activity in Adults." Sports Medicine 32.3 (2002): 143-68.
- Severin, W.J., and J.W. Tankard. Communication Theories. New York: Addison Wesley Longman, 2001.
- Sheppard, B.H., J. Hartwick, and P.R. Warshaw. "The Theory of Reasoned Action: A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research." Journal of Consumer Research 15.3 (1988): 325-43.
- Shy, C.M. "The Failure of Academic Epidemiology: Witness for the Prosecution." American Journal of Epidemiology 146.6 (1997): 479-84.
- Silverman, D. Communication and Medical Practice. Vol. 1987. London: Sage, 1987.
- Singer, Merrill, ed. The Political Economy of Aids. Amityville, NY: Baywood Press, 1998.
- Skocpol, Theda, and Margaret Somers. "The Uses of Comparative History in Macrosocial Inquiry." Comparative Studies in Society and History XXII (1980): 174-97.
- Skolbekken, John-Arne. "The Risk Epidemic in Medical Journals." Social Science & Medicine 40.3 (1995): 291-305.
- Smith, G., M. Davey, and D. Blane. "The Black Report on Socioeconomic Inequalities in Health. 10 Years On." British Medical Journal 301 (1990): 373-77.
- Somjen, Anne. "Distinguishing Features of Reform in Australia and New Zealand." Health Reform in Australia and New Zealand. Ed. Abby Bloom. New York: Oxford University Press, 2000.
- Sorlie, P.D., E. Backlund, and J.B. Keller. "U.S. Mortality by Economic, Demographic, and Social Characteristics: The National Longitudinal Mortality Study." American Journal of Public Health 85 (1995): 949-56.
- Spitler, Hugh D. "Medical Sociology and Public Health: Problems and Prospects for Collaboration in the New Millennium." Sociological Spectrum 21 (2001): 247-63.
- Stallybrass, P., and A. White. The Politics and Poetics of Transgression. London: Methuen, 1986.
- Stamler, J. "Established Major Coronary Risk Factors." Coronary Heart Disease Epidemiology. Eds. M. Marmot and P. Elliot. Oxford: Oxford University Press, 1992.
- Staten, Lisa K., et al. "Provider Counseling, Health Education, and Community Health Workers: The Arizona Wisewoman Project." Journal of Women's Health 13.5 (2004): 547-56.
- Statistics Sweden. "Percentage of Daily Smokers among Adults (16-84)." ULF, Statistics Sweden, 2001.
- Stoddard, Anne M., et al. "Cardiovascular Disease Risk Reduction: The Massachusetts Wisewoman Project." Journal of Women's Health 13.5 (2004): 539-46.

- Strange, Susan. The Retreat of the State: The Diffusion of Power in the World Economy. Cambridge: Cambridge University Press, 1996.
- Strecher, V.J., et al. "The Role of Self-Efficacy in Achieving Health Behavior Change." Health Education Quarterly 13.1 (1986): 73-92.
- Susan G. Komen Breast Cancer Foundation. 02/19/2005 2005. <[www.komen.org](http://www.komen.org)>.
- Susser, Mervyn. "Epidemiology in the United States after World War II: The Evolution of Technique." Epidemiology Review 7 (1985): 147-77.
- Susser, Mervyn, and A. Adelstein. "The Work of William Farr." Epidemiology, Health & Society. Ed. Mervyn Susser. New York: Oxford University Press, 1987.
- Susser, Mervyn, and Ezra Susser. "Choosing a Future for Epidemiology: I. Eras and Paradigms." American Journal of Public Health 86.5 (1996): 668-73.
- Syme, S.L. "Social Determinants of Health: The Community as an Empowered Partner". 2004. Preventing Chronic Disease. (January). July 27 2004. <[http://www.cdc.gov/pcd/issues/2004/jan/03\\_0001.htm](http://www.cdc.gov/pcd/issues/2004/jan/03_0001.htm)>.
- Tan, Perry. "Sars Brings out Taiwan's Sovereignty Issue." Asia Pacific Biotech News 7.10 (2003): 444-47.
- Taylor, Allyn, and Douglas Bettcher. "WHO Framework Convention on Tobacco Control: A Global "Good" for Public Health." Bulletin of the World Health Organization 78.7 (2000): 920-29.
- Taylor, Allyn, et al. "The Impact of Trade Liberalization on Tobacco Consumption." Tobacco Control in Developing Countries. Eds. Prabhat Jha and Frank Chaloupka. Oxford: Oxford University Press, 2000.
- Terris, M. "The Epidemiologic Tradition." Public Health Reports 94 (1979): 203-09.
- . "Healthy Lifestyles: The Perspective of Epidemiology." Journal of Public Health Policy 13.2 (1992): 186-94.
- Thackeray, Rosemary, et al. "Comparison of a 5-a-Day Social Marketing Campaign and School-Based Curriculum." American Journal of Health Studies 18.1 (2002): 46-54.
- Thatcher, Margaret. "Interview." Women's Own 1987: 8-10.
- The Expert Patients Task Force. The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century. London: UK Department of Health, 2001.
- Thompson, Paul B. "Risk, Consent and Public Debate: Some Preliminary Considerations for the Ethics of Food Safety." International Journal of Food Science and Technology 36 (2001): 833-43.
- Tirrell, B., and L. Hart. "The Relationship of Health Beliefs and Knowledge to Exercise Compliance in Patients after Coronary Bypass." Heart and Lung 3 (1980): 487-93.
- Tones, B.K. "Health Education and the Ideology of Health Promotion: A Review of Alternative Approaches." Health Education Research: Theory and Practice 1.1 (1986): 3-12.
- Toomey, Kathleen E. "Improving States' Capacity for Chronic Disease Epidemiology: Can State Health Officials Meet the Challenge?" Journal of Health Management and Practice 9.4 (2003): 256-57.

- Tuchman Matthews, Jessica. "Redefining Security." Foreign Affairs 68.2 (1989): 162-77.
- Tullao, Tereso S. "The Impact of Globalization on Noncommunicable Diseases: Opportunities and Threats." Globalization, Diets, and Noncommunicable Disease. Geneva: World Health Organization, 2002.
- Turner, B.S. "The Interdisciplinary Curriculum: From Social Medicine to Postmodernism." Sociology of Health and Illness 12.1 (1990): 1-23.
- Twaddle, Andrew C. Health Care Reform in Sweden, 1980-1994. Westport, CN: Auburn House, 1999.
- . Restructuring Medical Care: Swedish Opinion Leaders on the Medical Care Crisis (If There Is One). Linköping: Tema H, Universitet i Linköping, 1994.
- Tyler, Deborah. "At Risk of Maladjustment: The Problem of Child Mental Health." Foucault: Health and Medicine. Eds. Alan Petersen and Robin Bunton. New York: Routledge, 1998.
- U.S. News and World Report. "Health Disciplines: Public Health". 2003. America's Best Graduate Schools. 02/19/2005 2005.  
<[http://www.usnews.com/usnews/edu/grad/rankings/hea/brief/pub\\_brief.php](http://www.usnews.com/usnews/edu/grad/rankings/hea/brief/pub_brief.php)>.
- Ullman, Richard A. "Redefining Security." International Security 8.1 (1983): 129-53.
- UNAIDS. Report on the Global Hiv/Aids Epidemic. Geneva: UNAIDS, 2002.
- United Kingdom Department of Health. "'Don't Give up Giving up' Campaign - Background". October 9 2004.  
<<http://www.givingupsmoking.co.uk/CNI/Background/>>.
- . "The Good News". Don't Give Up Giving Up Campaign. October 9 2004.  
<[http://www.givingupsmoking.co.uk/why\\_give\\_up/good\\_news/](http://www.givingupsmoking.co.uk/why_give_up/good_news/)>.
- . Lifting Bureaucratic Burdens - the Department of Health Story. London: Department of Health, 2002.
- . The NHS Cancer Plan. London: The National Health Service, 2000.
- . Saving Lives: Our Healthier Nation (White Paper). London: Department of Health, 1999.
- . The Strategic Outline Case: Guidance Regarding 2004 Prioritisation Round. London: Department of Health, 2004.
- United Nations Development Program. "Redefining Security: The Human Dimension." Current History 94.592 (1995): 229-36.
- . World Population Prospects: The 2000 Revision, Volume Three. New York: United Nations Development Program, 2000.
- United States Department of Health and Human Services. 9th Report on Carcinogens. Washington, DC: Department of Health and Human Services, 2001.
- . Comments and Proposed Revisions to the Draft Who Strategy on Diet, Physical Activity and Health: Department of Health and Human Services, 2004.
- . Health Status of Minorities and Low-Income Groups. 3rd ed. Washington, DC: Department of Health and Human Services, 1991.
- . Health United States. Washington, DC: Department of Health and Human Services, 2000.
- . Healthy People 2010: Understanding and Improving Health. Washington, DC: Government Printing Office, 2000.

- . A Public Health Action Plan to Prevent Heart Disease and Stroke. Atlanta: Department of Health and Human Services, 2003.
- United States Department of State. "The U.S. Economy: A Brief History". 2001. An Outline of the U.S. Economy. (February, 2001). February 17 2005. <<http://usinfo.state.gov/products/pubs/oecon/chap3.htm> >.
- University of North Carolina School of Public Health - Departments of Health Behavior and Health Education, Epidemiology, and Nutrition. Grant Awards, Fy2000-2001. Chapel Hill: University of North Carolina School of Public Health, 2002.
- . Grant Awards, Fy2001-2002. Chapel Hill: University of North Carolina School of Public Health, 2003.
- . Grant Awards, Fy2002-2003. Chapel Hill: University of North Carolina School of Public Health, 2003.
- University of North Carolina School of Public Health. "Admissions: Master of Public Health, M.P.H." January 27 2005. <<http://www.sph.unc.edu/admissions/degrees/ MPH.htm> >.
- . "Agenda for the 21st Century". January 16 2005. <<http://www.sph.unc.edu/about/mission/agenda.htm> >.
- . "Courses". January 27 2005. <<http://www.sph.unc.edu/students/course/> >.
- . "Courses: Epidemiology". January 27 2005. <<http://www.sph.unc.edu/students/course/?subject=epid> >.
- . "Courses: Health Behavior and Health Education". January 27 2005. <<http://www.sph.unc.edu/students/course/?subject=hbhe> >.
- . "Courses: Nutrition". January 27 2005. <<http://www.sph.unc.edu/students/course/?subject=nutr> >.
- . "Empowering People to Lead Healthy Lives". January 26 2005. <[http://www.sph.unc.edu/flash/emp\\_news.cfm](http://www.sph.unc.edu/flash/emp_news.cfm) >.
- . School of Public Health Viewbook. Vol. 2. Chapel Hill: University of North Carolina School of Public Health, 2004.
- . "Student Demographics: Fall 2004". January 16 2005. <<http://www.sph.unc.edu/students/demographic/> >.
- Van Der Gaag, Jacques, and Tania Barham. "Health and Health Expenditures in Adjusting and Non-Adjusting Countries." Social Science & Medicine 46.8 (1998): 995-1009.
- van Kersbergen, K. "The Declining Resistance of Welfare States to Change." Survival of the Welfare State. Ed. S. Kuhnle. London: Routledge, 2000.
- Van Voorhis, Rebecca A. "Different Types of Welfare States? A Methodological Deconstruction of Comparative Research." Journal of Sociology & Social Welfare 30.4 (2002).
- Viadro, Claire I. "Taking Stock of Wisewoman." Journal of Women's Health 13.5 (2004): 480-83.
- Viadro, Claire I., Rosanne P. Farris, and Julie C. Will. "The Wisewoman Projects: Lessons Learned from Three States." Journal of Women's Health 13.5 (2004): 529-38.
- Walking for Health Initiative. "About Us". October 9 2004. <<http://www.whi.org.uk/details.asp?key=AX303|0|2E465997877|p|46|0> >.

- . "What's the Point?" October 9 2004.  
 <<http://www.whi.org.uk/details.asp?key=AX707|1|741163149739|p|116|0&parentkey=AX707|0|71113314327|p|113|0>>.
- Waltz, Kenneth. "The Emerging Structure of International Politics." The Perils of Anarchy: Contemporary Realism and International Security. Eds. Michael Brown and et al. Cambridge, MA: MIT Press, 1995.
- Wanless, Derek. Securing Good Health for the Whole Population: Final Report. London: United Kingdom Department of Health, 2004.
- Weber, Max. Essays in Sociology. Trans. H.H. Gerth and C.W. Mills. Eds. H.H. Gerth and C.W. Mills. London: Routledge and Kegan Paul, 1972.
- Weinehall, L., et al. "Prevention of Cardiovascular Disease in Sweden: The Norsjo Community Intervention Programme--Motives, Methods and Intervention Components." Scandinavian Journal of Public Health 29.Supplement 56 (2001): 13-20.
- . "Different Outcomes for Different Interventions with Different Focus! - a Cross-Country Comparison of Community Interventions in Rural Swedish and Us Populations." Scandinavian Journal of Public Health 29.Supplement 56 (2001): 46-58.
- . "Shifting the Distribution of Risk: Results of a Community Intervention in a Swedish Vascular Risk Profile." Journal of Epidemiology of Community Health 53 (1999): 243-50.
- White House. "A National Security Strategy for a New Century." Government Printing Office, 1999.
- White, Melanie, and Alan Hunt. "Citizenship: Care of the Self, Character and Personality." Citizenship Studies 4.2 (2000): 93-116.
- Whitman, Jim, ed. The Politics of Emerging and Resurgent Infectious Diseases. London: Macmillan, 2000.
- Wilensky, Harold L. Comparative Social Policy: Theories, Methods, Findings. Research Series, University of California, Berkeley International and Area Studies. Berkeley: University of California, 1985.
- . Welfare State and Equality: Structural and Ideological Roots of Public Expenditures. Berkeley, CA: University of California Press, 1975.
- Wilkinson, R.G. "Income, Inequality and Social Cohesion." American Journal of Public Health 87 (1997): 1504-06.
- . Unhealthy Societies. The Afflictions of Inequality. London: Routledge, 1996.
- Wilsford, D. "States Facing Interests: Struggles over Health Policy in Advanced Industrial Democracies." Journal of Health Politics, Policy, and Law 20.3 (1995): 571-613.
- Wilson, Patricia M. "A Policy Analysis of the Expert Patient in the United Kingdom: Self-Care as an Expression of Pastoral Power." Health and Social Care in the Community 9.3 (2001): 134-42.
- Winch, Sarah, Debra Creedy, and Wendy Chaboyer. "Governing Nursing Conduct: The Rise of Evidence-Based Practice." Nursing Inquiry 9.3 (2002): 156-61.
- Winkelstein, W. "A New Perspective on John Snow's Communicable Disease Theory." American Journal of Epidemiology 142 (1995): S3-S9.

- Wong, F., et al. "Verb™ -- a Social Marketing Campaign to Increase Physical Activity among Youth". 2004. Preventing Chronic Disease. (July 2004). November 9 2004. <[http://www.cdc.gov/pcd/issues/2004/jul/04\\_0043.htm](http://www.cdc.gov/pcd/issues/2004/jul/04_0043.htm) >.
- World Bank. Curbing the Epidemic: Governments and the Economics of Tobacco Control. Washington, DC: The World Bank, 1999.
- World Health Organization. Active Ageing: A Policy Framework. Geneva: World Health Organization, 2002.
- . "Cancer". March 28 2004. <<http://www.who.int/cancer/en/> >.
- . "Cardiovascular Disease". March 28 2004. <[Who.int/ncd/cvd/index.html](http://www.who.int/ncd/cvd/index.html) >.
- . Collaboration within the United Nations System and with Other Intergovernmental Organizations. Geneva: World Health Organization, 1998.
- . "Controlling the Global Obesity Epidemic". 2002. (September 14 2002). <<http://www.who.int/nut/obs.htm> >.
- . "Diabetes Estimates and Projections". March 28 2004. <<http://www.who.int/ncd/dia/databases4.htm> >.
- . Diet, Nutrition, and the Prevention of Chronic Diseases. Geneva: World Health Organization/FAO, 2002.
- . Diet, Physical Activity and Health. Geneva: World Health Organization, 2002.
- . "European Health for All Database". Geneva, 2003. Health For All Databases. World Health Organization. 02/19/2005 2005. <<http://hfadb.who.dk/hfa/> >.
- . Global Burden of Diabetes (Press Release). Geneva: World Health Organization, 1998b.
- . "Global Strategy on Diet, Physical Activity and Health." 57th World Health Assembly: World Health Organization, 2004.
- . Innovative Care for Chronic Conditions. Geneva: World Health Organization, 2002.
- . "NCD Surveillance: WHO Global Infobase". Geneva. World Health Organization. August 25 2004. <[http://www.who.int/ncd\\_surveillance/infobase/web/en/](http://www.who.int/ncd_surveillance/infobase/web/en/) >.
- . "Noncommunicable Diseases: Who Experts Warn against Inadequate Prevention, Particularly in Developing Countries". 1996. November 12 2003. <<http://www.who.int/inf-fs/en/fact106.html> >.
- . "Nutrition and Ncd Prevention." 2002.
- . Obesity: Preventing and Managing the Global Epidemic. Geneva: World Health Organization, 1998.
- . Ottawa Charter for Health Promotion. Geneva: World Health Organization, 1986.
- . Physical Inactivity: A Leading Cause of Death and Disability (Press Release). Geneva: World Health Organization, 2002.
- . Positioning Prevention in Health System Reform: A Focus on Integrated Noncommunicable Diseases Prevention. Geneva: World Health Organization, 1995.
- . Resolution of the World Health Assembly on Ncd. Geneva: World Health Organization, 1985.
- . U.N. Special Initiative on Africa: The Health Dimension (Press Release): World Health Organization, 1996.

- . "Women and the Rapid Rise of Noncommunicable Diseases." Noncommunicable Diseases and Mental Health Reader 1. WHO/NMH/02.01 (2002).
- . "World Health Day 1999". 1999. 02/19/2005 2005.
- . "World Health Day 2002". 2002. (September 14, 2002).  
<<http://www.who.int/world-health-day/package.en.shtml> >.
- . The World Health Report 1996. Geneva: World Health Organization, 1996.
- . The World Health Report 1997. Geneva: World Health Organization, 1997.
- . The World Health Report 1998. Geneva: World Health Organization, 1998.
- . The World Health Report 1999. Geneva: World Health Organization, 1999.
- . The World Health Report 2000. Geneva: World Health Organization, 2000.
- . The World Health Report 2001. Geneva: World Health Organization, 2001.
- . The World Health Report 2002. Geneva: World Health Organization, 2002.
- . The World Health Report 2003. Geneva: World Health Organization, 2003.
- Wright, John. Local Public Health: British Association of Medical Managers, 2004.
- Wright, Susan, ed. Biological Warfare and Disarmament: New Problems/New Perspectives. Lanham: Rowan and Littlefield, 2002.
- Wyn Jones, Richard. Security, Strategy, and Critical Theory. Boulder: Lynne Rienner, 1999.
- Wynder, E.L., and E.A. Graham. "Tobacco Smoke as a Possible Etiologic Factor in Bronchiogenic Carcinoma: A Study of 654 Proved Cases." Journal of the American Medical Association 143 (1950): 329-36.
- Yeatman, Anna. "Interpreting Contemporary Contractualism." Governing Australia. Eds. Mitchell Dean and Barry Hindess. Cambridge: Cambridge University Press, 1998.
- Zapata, Lauren B., et al. "Cigarette Use in 6th through 10th Grade: The Sarasota County Demonstration Project." American Journal of Health Behavior 28.2 (2004): 151-65.
- Zimmet, P. "Globalization, Coca-Colonization, and the Chronic Disease Epidemic: Can the Domsday Scenario Be Averted?" Journal of Internal Medicine 247 (2000): 301-10.
- Zola, Irving Kenneth. "Medicine as an Institution of Social Control." The Sociology of Health and Illness: Critical Perspectives. Eds. Peter Conrad and Rochelle Kern. New York: St. Martin's Press, 1994.



