Introduction
Public Health Theories and Theorizing Public Health

Introduction

What we can eat, what hazards we face at work, what diseases we should immunize our children against, how we should respond to the health impacts of climate change, where we should smoke and drink alcohol, what is placed in the water we drink, what impact income redistribution policies have on health – these and a great deal else besides are the province of public health. Public health is a collective response to threats against people's health (Eberhart-Phillips 1999). It can be divided into two major phases. What is called 'the old public health' primarily concerned itself with health protection and disease prevention. Such concerns related to issues of water quality, sewerage disposal, food quality, and the use of vaccinations. The new public health has not replaced the old public health, but has added on concerns for health promotion and health development (Beaglehole 1992). This is a more educative function, where stress is placed on individual responsibilities for health and the idea of empowerment, so that people are able to make informed choices about health. New public health may also emphasize ecological principles that can take into account broader conditions of living such as the state of the urban environment and sustainable development (Knight 1999). It can also focus on the social determinants of health – those particular features of society, such as the state of the housing stock, the level of discrimination and inequality in a society, protective measures taken in the workplace and much else besides, that impact upon our life chances.

As public health initiatives involve collective action or treatments that affect the population it is a thoroughly social and political enterprise. Many issues in public health lead to disputes and controversies. Debates are had over the fluoridation of the water supply, the introduction of new vaccines to established vaccine schedules, the relationship between pharmaceutical companies and the World Health Organization (WHO), and the efficacy and value of mass screening programmes for such

diseases as prostate cancer. The stance we take on these issues may relate to any number of factors, such as whether commercial or vested interests are involved, our faith in experts and science, or the political acceptability of a particular initiative. Views on how individual rights should be balanced against the public good are central to debates about public health. As such, public health is an immensely rich and intriguing discipline to view from a sociological perspective.

Public health can mean many different things and act in many different settings. It can mean healthy school dinners, community-level neighbourhood renewal, marsh drainage, sewerage systems, public transport and cultural revivals. Public health concerns can take in global trade, the natural environment, the built environment, the local economy, the community and lifestyle (Orme et al. 2007b: 671). The public health workforce includes public health physicians, environmental health officers, public health nurses, youth workers, health promotion specialists, and a range of others whose work incorporates elements of public health, such as teachers and social workers (Barrett et al. 2007).

As an academic discipline, public health has some intriguing elements. Besides attempting to understand the relationships between health and society, many public health researchers see themselves as advocates, and have strong links with policy development. For many, public health is about a commitment to change (Orme et al. 2007a). From this perspective public health is not conservative; it is not preserving the status quo. It is transformational and utopian in vision. Public health advocates may, for example, envisage a society where there is no inequality in health outcomes.

Public health draws on a vast array of disciplines, including sociology, psychology and demography in the social sciences, biology and physiology and the myriad of sub-disciplines in the natural sciences, and a range of interdisciplinary entities such as urban planning and resource management. One uniting concept of the diverse institutional spaces of public health is a focus on the population, and not the individual (Orme et al. 2007b). In terms of official pronouncements, public health was defined in 1988 by Donald Acheson, Chief Medical Officer for England, as 'the science and art of preventing disease, prolonging life and promoting health through the organized efforts of society' (Acheson, cited ibid.: 13). Although the first medical officer of health was appointed in Britain in 1847, it was not until 1972 that public health medicine became formally recognized within the medical profession in the U.K. with the establishment of the Faculty of Public Health (ibid.). This is suggestive of the marginal status that public health has had within the profession of medicine itself.

The focus of public health has changed over the modern period, and within public health today we can see a number of different orientations to the objectives of public health and the values underpinning the discipline. The sanitation movement in the nineteenth century has a particular focus on infectious diseases. In the mid-twentieth century, risk factor epidemiology developed which was oriented to chronic disease and a 'downstream' focus on lifestyle factors. In the latter part of the twentieth century the sub-discipline of social epidemiology came into

its own with its focus on the social determinants of disease – looking 'upstream' at issues of housing, employment and social organization more generally.

Public Health Foundation Stories

Foundation stories are important. They tell us something of the values and aspirations of institutions, disciplines, organizations and nation-states that invoke them. We can consider two quite distinct public health foundation stories. One is of John Snow and the Broad Street pump, the other is of Rudolf Virchow and Prussian mining communities.

The John Snow story is elaborated upon in chapter 1. This foundation story of modern public health dates back to 1854 when Dr John Snow removed the handle of the Broad Street drinking-water pump in London as he had hypothesized that the water from this pump was the cause of a cholera epidemic. This is a story of the foundations of epidemiology, which is the study of diseases and their causes at a population level, and also of the role of public health in bringing about change. The story is illustrative of the core values of public health – rational science and passionate advocacy (Green 2008). Not only did Snow identify the cause of disease via an epidemiological strategy, but he took action to prevent it by removing the pump handle. This supports the definition of public health that includes a commitment to change, based on rational, scientific principles.

The Rudolf Virchow story has a slightly different flavour. We can see the John Snow story as a technical solution to a disease problem uncovered by the workings of science. Virchow, at a very similar time to Snow, 1848, studied a typhoid epidemic in Prussia. He studied it by living with the miners and their families in the areas afflicted by the epidemic. He noted that these families were affected by many other diseases, and that the reason for this lay in their social condition. These families suffered from poor housing, poor working conditions and a poor diet. The solution to this situation was not a simple technical one, but required a transformation in the way society was organized. It required better wages, education, food production and progressive tax reform (Green and Labonté 2008b).

In these two examples we can see quite different approaches to public health. Both aimed to improve the health of the population, and both required collective effort to bring about change. But the Snow version, as received, was a collective effort to identify the causes of disease and provide the resources to bring about some improvement. The status quo at the economic and political level could be maintained. But even here there is a hint of something more radical in that the whole society was responsible for protecting all citizens from disease – and so the ideas of individual responsibility and laissez-faire or free-market politics are subject to critical analysis. But the Virchow version of public health was radical to its roots – calling for fundamental change and social justice.

The vision of public health has been articulated in different ways. Reducing human suffering is one aspect, but creating the conditions of human health is

another (Zierler and Krieger 2008). Public health researchers and practitioners can draw upon a variety of frameworks to orient their practices. These include biomedical and lifestyle frameworks, but also feminist, political economy, human rights and ecosocial frameworks (ibid.). For example, the drug economy of the U.S. and the social and political forces that brought about that economy can be seen as important variables explaining the increase in HIV among poor black and Hispanic American women (ibid.). Racism, gender inequalities, and the outcomes of a particular form of capitalist production, are salient features in explaining such a situation.

The radical and critical element in public health is not marginal to the discipline. The journal *Radical Community Medicine* clearly expressed this stance in its title, which continued with its name change to *Critical Public Health*. The Virchovian values can now be seen as part of mainstream public health (Green and Labonté 2008a). Such a critical element raises concerns about the determinants of the determinants – that is, what are the conditions that give rise to the particular distributions of the current social determinants of health? What powers are at play? How can we facilitate social justice and overcome health inequality? In the words of Green and Labonté, 'Critical public health is not a disinterested academic discipline, but one that engages with structures of power to challenge as well as describe them' (ibid.: 4). Such an enterprise is partisan and adversarial.

The 'new' public health, which was coined as a concept in the latter part of the twentieth century, called for a renewed focus on social and economic determinants of health in contrast to the curative services more commonly associated with health care (Green and Labonté 2008a). A watershed in the development of the new public health was WHO's *Ottawa Charter for Health* of 1986 (ibid.). In this charter, the prerequisites of health were articulated as including social justice and equity, sustainable resources, education, income and peace. Health promotion was then the province of all sectors in society, not just public health (World Health Organization 1986). Unequal health outcomes are a particular problem to be remedied in this version of the new public health.

Within the particular discipline of social epidemiology there has been debate about the specific causal pathways that lead to health inequalities. Social epidemiology rejects the notion that the causal pathways can simply be related to genetics or individual choice, and claims that there is something about the relationship between the social world and the biological world that helps explain disparities in health outcomes. Social epidemiology has been described as 'a marriage of sociological frameworks to epidemiological inquiry' (Krieger 2001: 669). Although the term social epidemiology appeared for the first time in an article in *American Sociological Review* in 1950, it was not until the end of the twentieth century that the first textbook with that term appeared (ibid.). Social epidemiology has proffered a number of theories to explain the different patterns of disease in populations (ibid.). These could be captured in three overarching positions – the materialist, psychosocial and ecosocial positions.

The materialist argument, very closely related to the social production of disease argument, suggests that unequal access to material factors such as good

nutrition, decent housing, health care, and the socially organized production and distribution of health hazards has the major impact on the health of individuals. The unequal access to resources and unequal exposure to health hazards points to political processes as a root cause of health inequalities, whether those political processes are politicized, developed and articulated at a national level that foster free markets, or international policies imposing structural adjustment programmes on nation-states. The free market, or unhindered capitalism, exacerbates social, and therefore health, inequalities.

The political economy perspective challenges current capitalist processes including those that foster uneven economic development (Whiteis 2008). Dramatic and disturbing figures describing the unequal distribution of wealth as a variable explaining health inequalities are highlighted, such as that less than 25 per cent of the planet's population live in industrialized countries but these countries have over 80 per cent of global GNP, that poor debtor countries in the south remit billions of dollars a month in interest repayments alone to the rich north, or that the infant mortality rate in developed countries is around 6 per thousand whereas in developing countries the rate averages 200 per thousand (Larkin 2008). In the U.S. the top 1 per cent of households experienced a 17 per cent gain in real net worth between 1983 and 1995 whilst the poorest 40 per cent suffered an 80 per cent decline in net worth (Whiteis 2008). Poverty is associated with the most prevalent mortalities and morbidities, such as postnatal infectious diseases, lead poisoning and violence (ibid.). With economic segregation paralleling racial segregation, higher mortality rates are experienced by minority and indigenous groups. U.S. black mortality rates are over 50 per cent higher than the rates for whites (ibid.).

Economic differences alone do not account for differences in mortality rates between ethnic groups (Tobias et al. 2009). In addition to political economy approaches and the explicit focus on unequal access to resources, public health research has also described and theorized the impact of colonization on indigenous peoples. For almost every measure of morbidity and mortality, indigenous peoples fare worse than the colonizers and their descendents (Labonté 2008). In Australia, the gap in life expectancy between indigenes and settlers is as much as 21 years, and in the U.S. it is 4–5 years (ibid.). Indigenous peoples have been forced into the market economy through displacement from traditional sources of food as traditional land has been altered or taken in the name of economic development (Lambert and Wenzel 2008). In this context, diseases of poverty have been called diseases of colonization and racism, where colonization and racism mean the experience and consequences of poverty are different for indigenes and settlers (Robson 2008). For example, an indigenous person in poverty is likely to be exposed to poverty for longer, have fewer assets, have less choice in relation to housing, be more likely to come under the surveillance of the police, and so on (ibid.).

In contrast to the materialist position, the psychosocial position emphasizes the stresses that rigid social hierarchies can have in damaging health. In this view, both physical and psychological stress explain the observation that there are differences in people's susceptibility to disease (Krieger 2001). Psychological stress

can lie in rigid hierarchies, but also rapid social change, marginal social status and traumatic social events such as bereavement (ibid.). Terms such as social capital and social cohesion have been deployed within this approach to public health – the focus being on the support networks available in social settings that provide greater resilience to disease for some people.

The psychosocial argument has been given credence from a famous research programme studying the stress effects of hierarchy, known as the Whitehall study (Brunner and Marmot 1999). This programme studied seventeen thousand British civil servants. It found that there was a relationship between the employment grade in the civil service and health-related psychosocial factors. These factors included low control over work, a lack of variety in work, and a lack of social contact. The researchers found that there were metabolic changes associated with a person's position in the workplace hierarchy, including changes in blood glucose levels and blood-clotting mechanisms. The research supports the view that long-term exposure to psychosocial stresses in the workplace may lead to increased risk of conditions such as heart disease and diabetes. Although these studies have been limited to workplaces, the mechanisms affecting health could apply to the general population. The psychosocial argument has led to discussion of the influence of social hierarchy and the implication that relative inequality (not just absolute inequality, where material factors are most influential) might affect health outcomes.

Ecosocial theories attempt to encompass both materialist and psychosocial positions. They foster, as Krieger (2001) states, an 'analysis of current and changing population patterns of health, disease and well-being in relation to each level of biological, ecological and social organization'. This analysis can go from the cell through to the ecosystem. Proponents argue that it includes the materialist or social production of disease perspective, but links this to biology. In explaining racial differences in the experience of health conditions, the psychosocial focus on stress can be included, alongside analyses of institutional discrimination, disparities in socio-economic status and the biological impact of economic deprivation (ibid.). There is an attempt to integrate across all these levels.

More recently, in exploring public health interventions, there has been an interest in the contribution that complexity theory can make. Complexity theory developed out of the sciences of mathematics, biology and physics and has increasingly been articulated as a theory to explain the behaviour of non-linear systems in the social sciences. It promotes a non-linear view of causality, with interrelationships between systems and within systems (social, ecological, political, economic systems and so forth) being a central focus for understanding causal processes, and has specifically been applied to public health interventions (Matheson et al. 2009).

In sum, public health theorizing is as diverse as the disciplinary foundations of public health. Understandings of causality will undoubtedly continue to change, drawing on the ideas of other disciplines, with some particular perspectives being foregrounded at times while others recede into the background. The relationship between public health understandings and the environment have also changed

over time. In chapter 1 we will see the early development of public health with its focus on the urban environment and its links to disease. In the twentieth century there was an increasing focus on non-communicable diseases, like lung cancer and heart disease, which shifted the focus from the environment to the individual in terms of explanations for outcomes and interventions to improve health. But in the latter part of that century a renewed focus on the social and economic determinants of health brought the environment back into focus (Green 2008). The development of concerns around environmental change has considerably changed the focus again, and newer developments have attempted to integrate the social and the biological.

Sociological Positions on Public Health

The argument made in this book is that a Durkheimian perspective can provide insights into the place of public health in contemporary society. Public health researchers have been influenced by Durkheimian theorizing in a number of ways, in particular the concept of anomie developed in his book *Suicide* (for example Rhoades 2003), and also more indirectly with the deployment of the concept of social capital in relation to the integrative mechanisms in communities (Razzell and Spence 2005; Whitley and McKenzie 2005). It is suggested here that there are other valuable concepts articulated by Durkheim, such as those found in his discussions on the role of religion in society, that can be drawn on to understand public health. An organizing concept for this book is considering public health as a religion in Durkheimian terms. A religion of modern society, as predicted by Durkheim, is variously called a cult of humanity, of man, of the personality and of the individual. The cult of humanity is the term preferred here. An argument is put forward that public health may function as the cult of humanity.

For Durkheim, in modern society a cult of humanity would perform the roles and functions of traditional religion in premodern society. This is not a cult in the popular sense. It does not involve brainwashing or conspiracy. It is, for Durkheim, a social institution like other religions, and Durkheim refers to religions as religious cults. The increasing division of labour and social differentiation in modern society requires a different form of religion. This new religion or cult of humanity would express the unity of society and would centre on our humanity – the one thing we hold in common in a highly differentiated society. This cult then could be seen as a humanist religion. It would be based on rationality and science, but would have a function that science alone is unable to perform – to act as a force of moral regulation. For Durkheim, new forms of moral regulation are required in modern society in order to constrain the anomic desiring that would be a consequence if social institutions did not provide a check on individuals. This new religion would emphasize social justice and sympathy for human suffering.

This book is not an examination of theories about the causation of the patterns of population health but an examination of the role that public health plays in

contemporary society, and an argument is made that public health in contemporary society can usefully be seen in terms of a moral force that functions like religious forces did in earlier societies.

In the analysis of public health itself and the way it can be conceptualized in contemporary society, Durkheimian concepts have not been explicitly drawn on. Sociologists and others who have analysed public health have tended to draw on conflict or collectivist perspectives and Foucauldian influenced analyses.

Conflict analyses in sociology align with public health materialist or political economy theories of causation, and are influenced by Marxist analyses. This approach focuses on power held by different groups or classes in society, the material influences on health and disease, the impact of production on disease, and the unequal distribution of public health resources that favour those who are privileged and disadvantage the poor. The latter is most famously captured in the concept of the inverse care law, which states that the availability of medical care varies inversely with the need for medical care in the population (Tudor Hart 2000). That is, the poor, who suffer a higher burden of illness, use fewer health care and medical resources than those who are more advantaged. From a conflict perspective public health, as part of medicine, could be conceptualized as 'an ideological expression of class domination' where 'medicine is revealed as an ideology stabilizing the power of the state and society's other established authorities' (Gerhardt 1989: 254). Feminist orientations to public health have varied and have included critiques of public health for focusing on diseases of middle-aged white men (Inhorn and Whittle 2001). Feminist perspectives have also exposed the tension between public health and the feminist movement in relation to screening campaigns (Hyde 2000; Willis 1999). Such analyses have leant themselves to critiquing health promotion programmes that focus on changing individual behaviours (Fox 1993).

Foucauldian analyses have been more explicitly concerned with an examination of the ontological status of disease and health. As will be further discussed in chapter 3, Foucault argued that one important dimension of the power over life that has been evolving since the seventeenth century is that of a biopolitics of the population that focuses on biological processes that become subject to regulatory controls (Foucault 1988). In this vein, Armstrong argues that the rise of surveillance medicine in the twentieth century was based on the problematization of the normal, in that it 'brings everyone within its network of visibility' (1995: 395). A notion of 'precarious normality' positions few as truly healthy and everyone as open to surveillance, calculations of risk, and intervention. Much of the focus here has been on the relationship between discourses and practices (Lupton 1994). In this framing, public health is one disciplinary technique that 'inveigles itself into our lives and identities' regulating our bodies and rendering us docile (Ryan 2005: 17). Petersen and Lupton encapsulate this position when they state that '[u]nder the imperatives of public health, personal/individual and public welfare are one and the same' (1996: 88). Coercive methods forcing conformity may still exist, but these have largely been replaced by self-regulation. Knowledge

and power are inseparable, so as knowledge and understandings change, new forms of power emerge. From this perspective the discipline of sociology itself no longer offers an oppositional stance (as it might from a conflict perspective where it could focus on the social causes of disease) but is an aspect of medicalization itself (Gerhardt 1989).

Postmodern perspectives critique the totalizing procedures of public health and health promotion, and seek to resist them by focusing on choice, otherness and difference, most notably captured in Nicholas Fox's concept of arche-health (Fox 1993). Such a perspective is founded on the notion that terms such as health and illness are no more and no less than discourses without any ontological basis (ibid.). These discourses have a constraining and moral purpose, and one that must be resisted in order to achieve an authentic ethical-political involvement in health.

Both the collectivist and Foucauldian-inspired analyses of the function of public health position the institution as negative and demanding resistance, either to combat and overcome social inequity or to lay claim to authenticity. A Durkheimian reading positions public health differently.

Durkheim has been presented in much sociological literature as a functionalist. However, Taylor and Ashworth (1987: 39) argue that 'Whereas functionalists sought to explain relationships between observable parts of a social system, Durkheim was concerned with structures that lie behind observable phenomena'. In other words, Durkheim is positioned here as a realist. The social facts that Durkheim was concerned with in such works as *Suicide* and *The Elementary Forms of Religious Life* were sources of moral authority in society (ibid.).

For Durkheim there are four contradictory moral forces in society, described as altruism (a commitment to a higher order outside of the self), egoism (individuality), fatalism (inescapable limits to human action) and anomie (uncertainty, change). Modern society is characterized as one that has high levels of egoism and anomie (Taylor and Ashworth 1987). Without social mechanisms to constrain egoism and anomie, pathological consequences – such as suicide – will follow. These social mechanisms would then need to promote altruism, and possibly fatalism. Durkheim looked to a number of possible sources to constrain egoism and anomie such as occupational groupings. Another constraining force is found in religion, which in contemporary society takes the form of a cult of humanity.

Considering public health in terms of a contemporary religion is not to claim that public health is an irrational discipline. Durkheim suggested that this cult of humanity would have to be based on science and subject to the critical elements of science (Durkheim 1915). But the social practice of religion would also go beyond science, as science is always incomplete and the social practices of science do not unite society in a collective fashion.

Durkheim argued that the historical growth of the state was a cause of the rise of the cult of humanity or the cult of the individual, and that 'the stronger the State, the more the individual is respected' (from *Leçons de Sociologie: Physique Des Moeurs et du Droit* cited in Lukes 1973: 270). More rights would be granted to the oppressed (Mestrovic 1991). The state was also:

> A special organ whose responsibility it is to work out certain representations which hold good for the collectivity. These representations are distinguished from the other collective representations by their higher degree of consciousness and reflection. (Durkheim 1957: 50)

For Durkheim the state had an important moral role in society:

> It is not merely a matter of increasing the exchanges of goods and services, but of seeing that they are done by rules that are more just; it is not simply that everyone should have access to rich supplies of food and drink. Rather, it is that each one should be treated as he deserves, each be freed from an unjust and humiliating tutelage, and that, in holding to his fellows and his group, a man should not sacrifice his individuality. And the agency of which this special responsibility lies is the State. (Durkheim 1957: 72)

On the other hand, Durkheim was very concerned about the possibility of an inflated state that could develop into the 'veritable sociological monstrosity' of absolutism (cited in Ramp 2003: 124).

So the cult of humanity is born from the state, but it is argued here that public health, as a cult of humanity, has an ambivalent relationship to the state. It can play a role in tempering the 'monstrous' tendencies of the state, but can also, at particular historical moments, play a role in facilitating the monstrous state. These tensions will be explored in the following chapters.

Green and Labonté argue that public health has always been marginal in policy and the academy (2008a). This may be the case, but the argument made in this book views public health, in its many forms, as an increasingly pervasive influence on social organization and social formations, even if individual practitioners of public health may have less status than their surgical and consultant medical colleagues.

Taking the view that public health fits as a cult of humanity within a Durkheimian framework provides public health advocates and academics with a way of integrating their own roles in relation to the politics and science of population health. The following chapters in this book will demonstrate how it allows for an exploration of the negative aspects of the moral constraints associated with the discourses of public health and health promotion, but also the positive functional aspects, and the way in which public health as an institution provides a means of resistance to dominant discourses in contemporary society around consumption and neo-liberal notions of freedom.

This book is not a survey or description of public health, but it provides an argument about the place of public health in contemporary society. Public health is an important moral force, and as such plays a significant role in mediating between different institutions, including the state and the market. But like all institutions, it too needs to be tempered and mediated, lest it shape society in its own image.