

Chapter 2

American Experiences

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If they can get you asking the wrong questions, they don't have to worry about answers.

—Thomas Pynchon, 1973

Introduction

This chapter will show that health inequalities in the United States as a nation are the worst of all wealthy developed countries: Americans die younger and suffer worse health than people in over 30 other nations. The situation is not improving despite enormous expenditures on medical services, with the US paying close to half of the world's health care bill. The reasons for these health inequalities relate to the political economy of the nation, rooted in its founding history and overlaid with recent changes wrought by neo-liberalism. Sixty years ago the nation was one of the world's healthiest, but as a consequence of political choices that have increased the wealth of a few, everyone's health has suffered. The US provides many lessons for other countries that want to avoid this health catastrophe.

National Description and Political Organization and Structure

It is impossible to understand a country without seeing how it varies from others. Those who know only one country know no country.

—Seymour Lipset, 1996

United States Political History

The United States of America was founded in 1776 with a Declaration of Independence espousing the right to life, liberty, and the pursuit of happiness. The statement at its time was revolutionary, as were its founders. Its subsequent history, however, is one of expansionism—termed “Manifest Destiny” in the 1800s—as the country sought to exert control over the Americas. The US was one of the last nations to declare slavery illegal because of the com-

parative advantage of this labour for its cotton production. With the end of slavery after the Civil War, the sanctioned reparations of “forty acres and a mule” were never carried out and legacies remain today. Increasingly, the nation became a big innovator and a stronghold of capitalist enterprise. President Coolidge stated it succinctly: “The business of America is business.” Federal economic policies stressed protectionism from outside competition and massive government subsidies of industry.

The founding fathers designed a system with a deliberately weak central government. A federal government came into being with separation of powers into the executive, judiciary, and legislative branches. The legislative branch had two houses, one (the House of Representatives) with seats apportioned on the basis of population, the other (the Senate) with seats apportioned equally to states regardless of size. Both operate under a first-past-the-post system whereby the candidate with the largest number of votes wins the seat. This arrangement has made it difficult to get legislation enacted without significant compromises that cater to various interests. In recent years these compromises responding to special interests have been through earmarks, specific provisions responding to powerful lobby and constituent forces. There were few state-owned industries and those that did exist have been privatized. Governments at all levels within the country, from the federal to the state to the county, do not have the power of those in other industrialized nations (Kingdon, 1999).

The Aboriginal population was decimated through imported diseases and violence. Besides the various Indian wars, some jurisdictions paid bounties for killing American Indians that varied depending on whether it was a man, woman, child, or chief. There were various attempts to eradicate the Native cultures. Treaties were signed with various tribes, but not honoured in many cases. Today they comprise less than 1 percent of the population.

There were periods of substantial immigration from Europe, and through diligence, hard work, and some luck, the so-called American Dream was perpetuated, encouraging immigrants to believe that it was possible to escape aristocracies in Europe and attain a modicum of wealth in the US. People looked to solve their problems at the local level. The myth of equality of opportunity helped foster support for limited government. Legislation such as the New Deal in the 1930s, in which major laws substantially benefited ordinary people during the Great Depression, was an aberration of these ideals. The country has the smallest public sector of any democracy with relatively few direct government services. Tax rates are similarly small in comparison to other nations.

The country is very litigious, with a higher concentration of lawyers than any other nation. There is less governmental regulation of industry and society than in other nations. Instead of government regulations, the dominant belief is that anyone who has been harmed has the right to bring suit and seek redress as a private individual matter. An important system of social regulation in the US is a strong tort system, which potentially allows everyone to “have their day in court.”

Spending on national defence has been a prominent way for the American public to fund government expenditure for other purposes. For example, the development of the modern commercial airliner was done mostly through the military, which developed bombers that were modified for passenger use. Military might and economic wealth allowed the country to become very powerful, and after the collapse of the Soviet Union, the US remained the only

superpower. The population has grown to 310 million, and the economy has transformed from manufacturing into service, together with a huge increase in the financial sector.

The political system of the US differs from that of most wealthy nations. Political parties in the US are weaker than parliamentary parties in many other democracies as party affiliation does not guarantee the direction of one's vote. Individuals have to raise their own funds to run their campaigns for election. Today there are two political parties that tend to be similar in their support for small government and tax cuts while supporting big business, resulting in substantial government expenditures that benefit the corporate sector. In recent years massive big business lobbies have had great influence over policies. The nation has both the greatest concentration of wealth as well as the most poverty of any wealthy developed nation. Voting rates in this nominal democracy are among the lowest in the world, with those who are young and poor tending to not exercise their franchise. The political left in the US is well to the right of what most other countries would consider the political centre.

Before the Great Depression, the richest 1 percent held nearly half of the country's wealth. Over the next four decades the wealth share of the richest 1 percent in the country dropped, reaching its nadir around 1975, when it represented less than a quarter of all US wealth. By means of various welfare cutbacks and tax cuts favouring the wealthy, inequality has since soared to record levels (Duménil & Lévy, 2004). The made-in-America economic crisis that began in 2008 was the result of bold efforts by the very rich to further enrich themselves. This crisis has affected most of the world and especially the US, yet people in the US remain remarkably complacent. In the Saint-Arnaud and Bernard typology (see Chapter 1), liberty predominates in the US and solidarity has eroded, resulting in a huge polarization in living standards.

At its founding, much power was delegated to states, but funding mechanisms are often controlled at the federal level. US states have the power to tax and spend and are responsible for education, contribution to the development and maintenance of roads, and much regulatory policy. Sources of revenue generation at the state level vary widely across the country, as do most other state functions. This heterogeneity results in greater resistance to national initiatives than in most other rich countries. The political system at the state level increases localism and contributes to the weakness of national parties.

Political cultures among the US states vary widely. Elazar grouped them into three categories: (1) individualistic (a marketplace where government interventions are limited to those who put the majority party into power); (2) traditionalistic (the government's role preserves existing order); and (3) moralistic (the government achieves "good community" through positive action) (Kunitz, McKee et al., 2010). While this grouping is not static, it can guide understanding of considerable state variation in political policies and resulting inequalities.

Class issues have never loomed large in US history, in contrast to Europe with its feudal past. Feudalism was never a part of US history. The French Revolution was fundamentally different than the American Revolution, since the US had no internal aristocracy to fight. Without the growth of class consciousness in the US, there has been less pressure for government programs to redress economic imbalances. Even US radical movements in the 1960s stressed decentralization and community control in contrast to those in Europe, which supported centrism. Civil rights legislation in the 1960s was a major milestone. Since then labour rights have been severely eroded and public welfare support is among the lowest of any rich nation.

US Health Policy

The US remains the only wealthy developed country without universal access to medical services. Major, centralized health initiatives in the country have been rare, although various efforts have been directed toward increasing access to health care. The enactment of Medicare in 1966—which had the federal government paying for hospital care for those aged 65 and over—was an attempt to reform the provision of medical care. Medicaid is a federally supported state program targeted at poor people, and its terms vary widely among states. Even with the passage of the Patient Protection and Affordable Care Act (PPACA) in 2010, substantial numbers still lack access to health care. Strong political forces in the country attempt to weaken or eliminate even that legislation.

At the federal level, the Department of Health and Human Services (HHS) is the principal agency for “protecting the health of all Americans.” It includes 10 regional offices and a number of institutions, including the Centers for Disease Control and Prevention (CDC), and the National Institutes of Health. The position of Surgeon General is largely symbolic. The department has issued Healthy People reports, beginning through the Office of the Surgeon General in 1979 and followed by Healthy People 1990, 2000, and 2010. But only the first report offered comparisons of US mortality rates with other nations. Healthy People 2000 set out to reduce health disparities among Americans, while Healthy People 2010 aimed to eliminate them. These reports offered national targets related to mortality rates, health disparities, behaviour changes, and disease prevalence, but only a tiny fraction of targets have ever been met.

Health disparities came to prominence in 1985 with the publication of the HHS Heckler report on black and minority health. Since then the disparities focus has remained along this racial and ethnic perspective. The Office of Minority Health is housed in the US HHS and has a National Partnership for Action to End Health Disparities.

Healthy People 2020 is web-based, with four broad goals relating to longer lives; health equity (meaning improving the health of all groups); creating healthy social and physical environments; and improving quality of life, healthy development, and healthy behaviours across all life stages. There is one very small section on international comparisons for life expectancy.

In Healthy People 2020 the determinants of health, which can influence an individual’s or population’s health, are described as “Powerful, complex relationships exist between health and biology, genetics, and individual behaviour, and between health and health services, socio-economic status, the physical environment, discrimination, racism, literacy levels, and legislative policies.” Healthy People 2020 defines a health disparity as

a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.

The Institute of Medicine’s 2003 report, *The Future of the Public’s Health in the 21st Century*, contained a chapter on population health and mentioned the country’s poor health status,

but most of the document did not carry these ideas forward to consider actions (Institute of Medicine, 2003). Another IOM report considered the racial disparities in medical treatment (Smedley, Stith et al., 2003).

Efforts at reducing health inequities from the US state level vary tremendously at the level of state departments of health and with public health departments that operate at the county and city level. They are tasked with carrying out the goals of Healthy People 2020 while budgets are being slashed. The next section looks further at US policy documents relating to health inequalities.

US Policy Documents and Statements on Health Inequalities

There are few federal policy documents that have described the relatively poor health status of people in the US, and none that have caught the public's attention. Part of the difficulty in promoting public interest about these issues is related to the predominance of commercial enterprises and other non-governmental organizations in service provision. Some, such as health care insurance and pharmaceutical companies, have managed to profit handsomely over the last few decades. This is likely to continue in the future from national health care policies such as the PPACA.

The US Congress issued a report in 1993 pointing out the poor health status of people in the US compared to other nations (United States Congress, Office of Technology Assessment, 1993). The Centers for Disease Control and Prevention produces annual reports titled *Health United States*, which have tables listing infant mortality rates and life expectancy at birth and age 65 for the US and selected countries, with trends and rankings from 1960 onwards. Public attention has not been drawn to this material, however.

One recent governmental report has acknowledged the health inequalities within the US. In a January 14, 2011 supplement to the CDC's *Morbidity and Mortality Weekly Report*, an entire issue was devoted to a report on US health disparities and inequalities (Frieden, 2011). It included language stating a commitment to socio-economic justice, noting that health disparities are differences in health outcomes between groups that reflect social inequalities (see quotation below). A section on education and income in the US reflected issues rarely raised by its federal agencies. There were other sections on housing and air quality, as well as documentation of mortality stratified by race.

Health disparities are differences in health outcomes and their determinants between segments of the population, as defined by social, demographic, environmental, and geographic attributes. Health inequalities, which is sometimes used interchangeably with the term health disparities, is more often used in the scientific and economic literature to refer to summary measures of population health associated with individual- or group-specific attributes (e.g., income, education, or race/ethnicity). Health inequities are a subset of health inequalities that are modifiable, associated with social disadvantage, and considered ethically unfair. (Truman, Smith et al., 2011, 3)

A key finding from the CDC study is that inverse educational and poverty gradients in mortality in the US have not shown any improvement between 2005 and 2009 (Beckles &

Truman, 2011). Other studies have shown that educational gradients, where the less well educated have worse health outcomes, are not explained by behavioural risk factors among the less educated (Cutler, Lange et al., 2010).

A variety of action plans have been issued by public agencies to “reduce racial and ethnic health disparities,” with the actions outlined having a strong focus on individual risk factors and medical care. There has been fragmentation over action at the national, state, and local levels to deal with health inequities. Efforts are almost always focused on modifying individual health-related behaviours, since health promotion as a concept in the US tends to focus on four modifiable behavioural issues (physical activity, poor nutrition, tobacco use, and excessive alcohol consumption) that are considered to be responsible for much of the early death due to chronic diseases (CDC, 2011).

Research on Health Inequalities in the US

Research on health inequalities is done mostly through academic departments with some efforts in that area conducted by the CDC. The studies contain very little material implicating the political forces in the country in the production of health and ill health. What follows is a compilation of the most recent material on health inequities within the US, beginning with the declining relative health status of the US compared to other nations.

Health Inequalities Comparing the US to Other Nations

Although in the early 1950s the US could claim to have some of the best health outcomes in the world, by 2010 at least 30 other countries have better health outcomes (Bezruchka, 2012). For life expectancy the gap is so large that eradicating either heart disease or cancer as a cause of death would not enable the nation to rank at the top. An estimate of the body count that has resulted from the US not being the healthiest country for each year of the last century is 66 million (Muszynska & Rau, 2009). That is, if the US had the same health status as the country with the highest life expectancy in each year of the last century, there would be 66 million more people alive in 2000. That this toll represents 60 Holocausts defies comprehension—an example of structural violence that kills far more people than the behavioural variety (Gilligan, 1999).

A recent study examining the health status of counties in the US found that considering life expectancy for both men and women, the nation ranked 37th in 2007, meaning that 36 nations had longer life expectancy (Kulkarni, Levin-Rector et al., 2011). There are essentially no mortality measures of health where it ranks much better. This study calculated a time series of average life expectancy of the 10 lowest mortality countries each year from 1950 to 2010. This was termed the international “life expectancy frontier.” The researchers asked how many calendar years behind the frontier a nation might be. For men, the US is 13 years behind and for women, 16. This is comparable to saying that the top 10 nations have an innovative, highly useful product that is in great demand and makes life much better, but it won’t be available in the US for roughly another 15 years. If this were an iPad, we wouldn’t tolerate it, but because it is the more abstract concept of our health, it seems to be accepted. A part of that apparent acceptance, however, lies in a lack of awareness among most Americans of how unhealthy people are in the US compared to other nations.

Being so far behind this health frontier may be the most egregious health inequity: people in the richest and most powerful country in world history that pays half of the world's health care bill die much younger than in many other countries. But because of the profound individual health production focus in the US, health inequalities or inequities are not concepts understood by most Americans. They tend to believe that health outcomes are under individual control, and discount the concept that societal unfairness may be behind many poor health outcomes.

Child health, as well as adult mortality, is also relatively poor in the US. The child mortality rate *ranking* for the US in 1970 was better than in 2010 (Rajaratnam, Marcus et al., 2010b). Although the rate improved over time, it did not drop as fast as in many other nations. But child mortality is not responsible for the relatively low average life expectancy; the probability of an American youth age 15 living to age 60 is lower in the US than in over 40 other nations. A 15-year-old boy in Peru has a better chance of reaching age 60 than a boy in the US. Similar results hold for a girl in Sri Lanka compared to an American girl. US health status is that of a middle-income country or worse. While the ranking among nations since 1970 has improved for boys by 2010, it has not for girls (Rajaratnam, Marcus et al., 2010b). The gap in health between the US and western Europe is the result of slow health improvements in the near-elderly (e.g., age 50 and beyond) Americans compared to western Europeans (Michaud, Goldman et al., 2011).

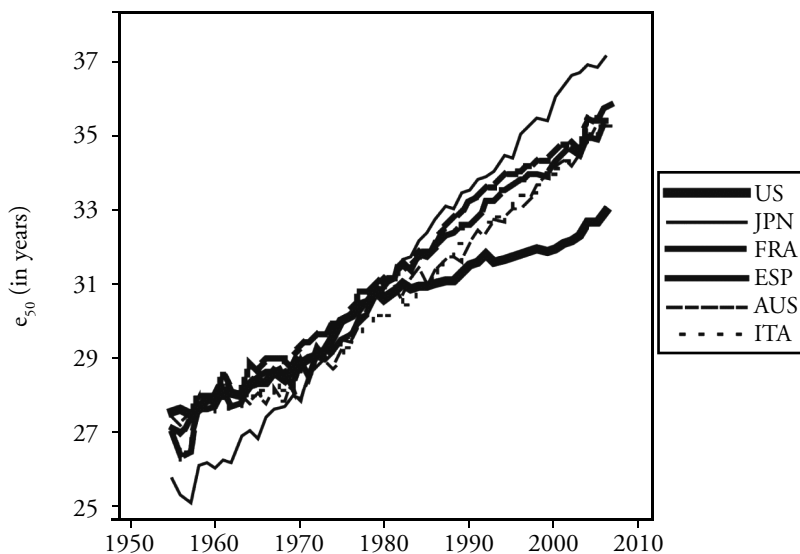
Women in the US in particular have been victims of health inequities. This is demonstrated below for US counties, but is also apparent for the nation as a whole, especially at older ages. Remaining years of life at age 50 (e_{50}) demonstrate that women begin falling further behind in comparison to other nations around 1980 (Glei, Meslé et al., 2010; see Figure 2.1). Another analysis from 1980 to 2006 comparing the US to other rich nations shows the same striking decline in the ranking of life expectancy at age 50 for women, although the decline was less for men (Wilmoth, Boe et al., 2010).

To consider these health inequalities among countries at older ages, standard deviation trends for life expectancy at age 50 can be found for much of the last 100 years using the best available data sources. Again, the inequalities within the US counties surpass those within Canada, France, Germany, and Japan (Wilmoth, Boe et al., 2010). Table 2.1 lists health neighbours for the US, namely countries just above and just below the US, in various mortality measures of health (Hogan, Foreman et al., 2010; Rajaratnam, Marcus et al., 2010a,b). The health status of people within the US is that of a middle-income country and far below what might be appropriate for the richest and most powerful country in world history.

Some studies compare health in the US with neighbouring Canada or Cuba. Cuba's health is on par with the US, while Canada's is much better (Cooper, Kennelly et al., 2006; Siddiqi & Hertzman, 2007; Willson, 2009; Feeny, Kaplan et al., 2010). The effect of race on health depends on whether the US or Canada is considered, with Canada having attenuated inequities (Siddiqi & Nguyen, 2010). White Americans have poorer health than all Canadians, with political differences being important reasons (Kunitz & Pesis-Katz, 2005). These included Canada's universal welfare programs in contrast to those in the US, which were much less redistributive.

The relatively poor health status of the US depends not only on what that nation does that impacts its health, but on what other nations do (Bezruchka, 2001). National governments

Figure 2.1
Life Expectancy Trends for Women at Age 50 (e_{50}) for Selected Countries from 1955 to 2008



Source: D.A. Gleib, F. Meslé et al., Diverging trends in life expectancy at age 50: A look at causes of death, In E.M. Crimmins, S.H. Preston & B. Cohen (Eds.), *International Differences In Mortality at Older Ages: Dimensions and Sources* (Washington: National Academies Press, 2010, 22).

tend not to set benchmarks for health in comparison to other nations. Australia is the only country to do so recently in an effort to surpass Japan as the healthiest nation (National Preventative Health Taskforce, 2010).

Many other studies demonstrate similar findings: No matter what health outcome measure is used for a country, the United States' ranking continues to fall further behind (Bezruchka, 2012). There is little or no awareness among the US inhabitants of this situation. For example, a third of medical students in one study thought the US was the world's healthiest nation (Agrawal, Huebner et al., 2005). The author's personal experiences in speaking at conferences of public health workers or health care reporters attest to this profound ignorance of US health status in comparison to other nations.

Health Inequalities within the US

A variety of methods have been used to characterize health inequalities within the US. One novel method partitioned the country into "eight Americas" based on geographical and racial

Table 2.1
The United States' Health Neighbours

	Life Expectancy at Birth	Years Left at Age 50	Maternal Mortality Ratio	45q15 Male (chances of living to 60 at age 15)	45q15 Female (chances of living to 60 at age 15)	Under-Five Mortality
Just ahead (healthier)	Denmark	Malta	Lithuania	Peru	Maldives	Slovakia
US (ties)	US	US	US Macedonia	US Algeria	US Armenia	US Macedonia
Just behind (less healthy)	Qatar	Korea	Latvia	Barbados	Poland	Lithuania
Compared to the best	4.9 years	3.3 years	4.3x	2x	2x	2.7x

characterizations with major differences in mortality trends from 1982 to 2001 (Murray, Kulkarni et al., 2006). One of the “Americas” comprised Native populations living in the West on or near reservations who had some of the worst mortality outcomes in the country. Some subpopulations of American Indians had life expectancies 33 years behind some of the highest in that study.

Research over the last few years has documented absolute health declines in a large percentage of US counties. Analysis from 1983 to 1999 showed substantial declines in contrast to the comparison period of 1961 to 1983 (Ezzati, Friedman et al., 2008).

Analysis of county mortality until 2007 documents an even graver picture (Kulkarni, Levin-Rector et al., 2011). “US racial/ethnic and geographic health disparities are vast” and “have been growing since 1983” (p. 1). These geographic health inequities are worth considering further as they illustrate the use of new measures that enhance comparability across nations. This study used the novel “years behind the international life expectancy frontier” approach, mentioned earlier, for the country as a whole. These calendar years (not life expectancy years) were calculated using a time series to indicate how many years ahead or behind the frontier a geographical unit was. For the county analysis, the 3,147 US counties were grouped into 2,357 clusters to reflect redistricting and small populations (and hence small numbers of deaths in some original counties). The calendar years behind the frontier were calculated for life expectancy in US county groups in 2000 and then for 2007 to observe trends. In what follows, county groups will be called counties.

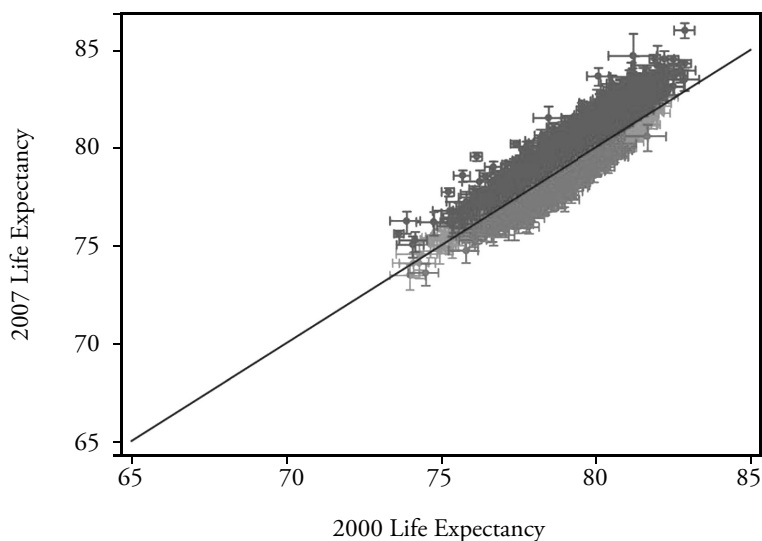
In 2000, county life expectancy ranged from nine years ahead of the frontier to over 50 years behind for men and one year ahead to 45 years behind for women. In 2007, county life expectancy ranged from 15 years ahead to over 50 years behind for men and 16 years

ahead to over 50 years behind for women. In other words, some counties could attain the health of the frontier in 50 years if present trends continued. The comparisons showed that men in 661 counties and women in 1,373 counties fell more than five years behind the international life expectancy frontier between 2000 and 2007. In 67 counties for men, and in 222 counties for women, they fell more than 10 years behind between 2000 and 2007. Only in 357 counties for men and in 168 counties for women were they fewer years behind in 2007 than in 2000. In all the others, health relative to the top 10 nations declined over this period.

Indeed, between 2000 and 2007 more than 85 percent of US counties fell further behind the international life expectancy frontier. In absolute terms, life expectancy has declined in close to a third of US counties for women (see Figure 2.2). The remarkable shift to worse absolute health status for significant parts of the US is unprecedented in modern times, except for some countries of the former Soviet Union after its breakup and in high AIDS-prevalent nations in southern Africa.

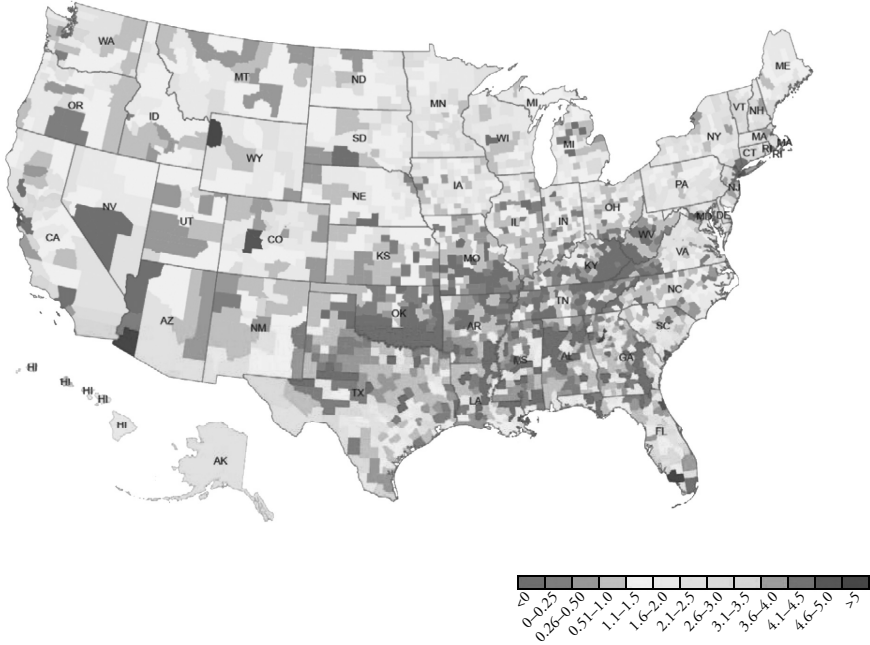
Geographically across the US, the county life expectancy trends from 1987 to 2007 reveal striking inequalities for women and less prominent but still sobering ones for men. Declines in health in such a substantial portion of the nation are certainly worrisome (Institute for Health Metrics and Evaluation, 2011). Figures 2.3 and 2.4 display life expectancy changes by county in absolute years for both men and women from 1987 to 2007.

Figure 2.2
US Women County Life Expectancy in 2007 Compared to 2000



Source: S. Kulkarni, A. Levin-Rector et al., Falling behind: Life expectancy in US counties from 2000 to 2007 in an international context, *Population Health Metrics* 9(16) (2011): 8.

Figure 2.3
US County Female Life Expectancy Changes in Years from 1987 to 2007

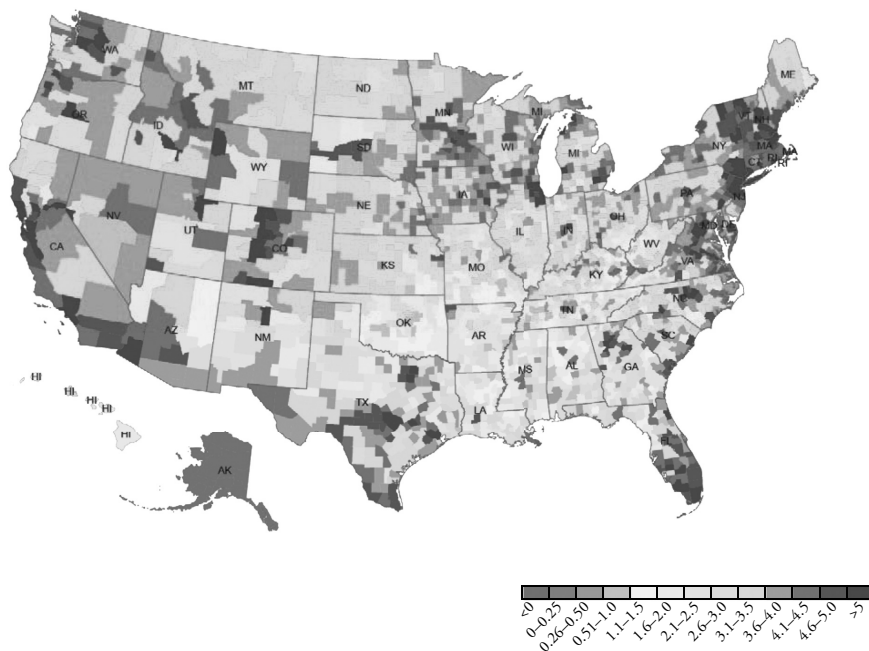


Source: Institute for Health Metrics and Evaluation (2011), Life expectancy in most US counties falls behind world's healthiest nations, retrieved from: <http://www.healthmetricsandevaluation.org/news-events/news-release/life-expectancy-most-us-counties-falls-behind-worlds-healthiest-nations>, figure 1.

When analysis was done for African Americans at the county level where there were sufficient numbers for reliable estimates, the expected worse health for African Americans was found. For black men, 65 percent of counties studied found life expectancies over 50 years behind, and for women this was found in 22 percent of counties. Considerable research has demonstrated racial or ethnic and other health inequalities for a variety of indicators that appear to be resistant to change (Bezruchka, 2010b). A vast number of Americans, distinctly identified by their socio-demographic characteristics and place of residence, have life expectancies that are similar to some low-income developing countries (Murray, Kulkarni et al., 2006). The patterns were similar for white and black, pointing out that the US health inequality situation is not simply due to racial inequities. It is too early to tell whether or not health for the nation as a whole will decline as predicted in the last decade (Olshansky, Passaro et al., 2005).

Analysis of mortality in geographical subunits in nations, comparable to US counties, allows some comparison of health inequities among them. This was done for the US, Canada, the United Kingdom, and Japan, making comparisons to the “frontier” countries. For Japanese

Figure 2.4
US County Male Life Expectancy Changes in Years from 1987 to 2007

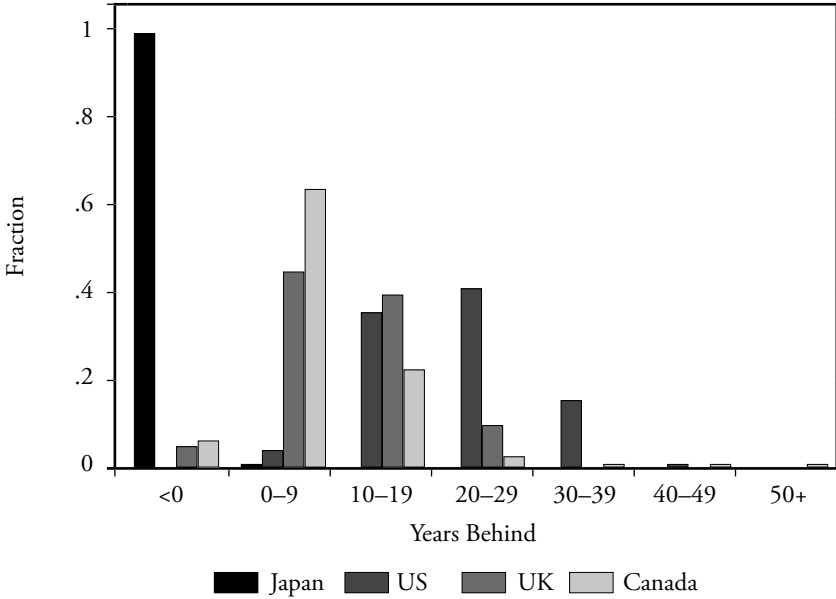


Source: Institute for Health Metrics and Evaluation (2011), Life expectancy in most US counties falls behind world's healthiest nations, retrieved from: <http://www.healthmetricsandevaluation.org/news-events/news-release/life-expectancy-most-us-counties-falls-behind-worlds-healthiest-nations>, figure 2.

women, 99 percent of the administrative levels had life expectancies above the international frontier countries, and for Japanese men, over 50 percent exceeded this marker (see Figures 2.5 and 2.6). The US has an insignificant number of counties with this distinction. The United Kingdom and Canada did better too. This comparison illustrates yet again that even the best health in the US is far below the average of other nations. The worst health outcomes in the US stand almost alone in this comparison, except for the Inuit in Canada's North, who appear to do even worse.

Racial and ethnic minority health inequities have long been reported in the US (Pappas, Queen et al., 1993). They begin early in life with preterm births and low birth weight. Not unexpectedly, preterm birth rates in the US are the highest for all rich nations (MacDorman & Mathews, 2009). For black non-Latinos, preterm births are almost one in five (Martin, 2011). Birth weights of African-born black women in the US are closer to those of whites than of US-born black women (David & Collins, 1997).

Figure 2.5
Fraction of Four Nations' Local Areas Female Life Expectancy in Calendar Years Behind or Ahead of the International Frontier



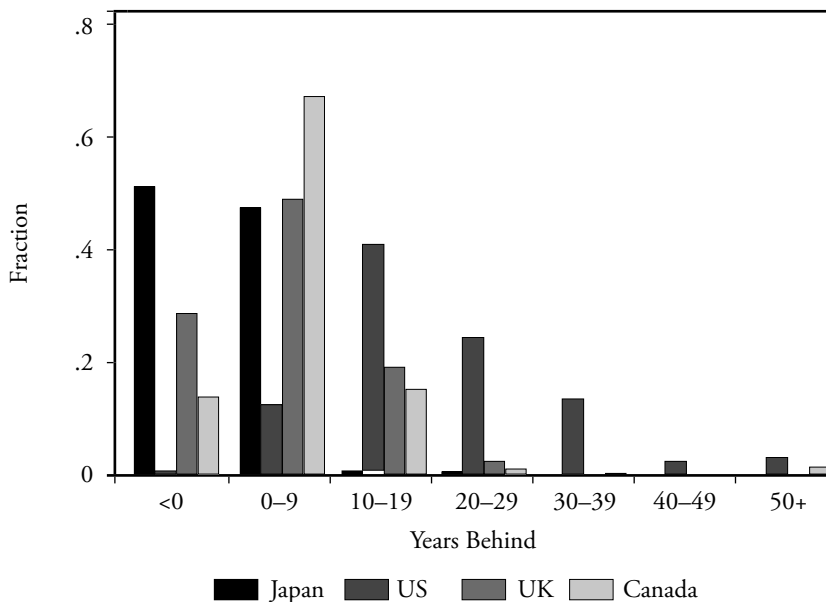
Source: S. Kulkarni, A. Levin-Rector et al., Falling behind: Life expectancy in US counties from 2000 to 2007 in an international context, *Population Health Metrics* 9(16) (2011): 5.

While there is no standard way of comparing health inequities across nations, some graphical depictions are illustrative. Use of the Gini coefficient for mortality shows large declines over the last few centuries, with the US lagging behind in recent decades (Peltzman, 2009). The standard deviation trends for age of death for people older than 10 years (S_{10}) across OECD countries show declines for most nations, but not the US, which remains higher than any other, as shown in Figure 2.7.

A dispersion measure of diversity in age at death equal to a weighted average of inter-individual differences in age at death (e^\dagger) has been proposed as a standard way of measuring health inequalities across nations (Shkolnikov, Andreev et al., 2011). This measure covers all ages, not just those older than 10 years. Plots of life expectancy versus e^\dagger for rich nations show profoundly higher health inequalities for the US, as well as lower life expectancy for both sexes (see Figure 2.8). The ability to gauge both life expectancy and health inequality trends among nations presents striking findings for the US in relation to Japan, England and Wales, and Sweden.

A variety of studies have demonstrated US health disadvantage, considering chronic diseases and biomarkers in adults to be greater than those in Britain and Europe in comparison

Figure 2.6
Fraction of Four Nations' Local Areas Male Life Expectancy in Calendar Years Behind or Ahead of the International Frontier



Source: S. Kulkarni, A. Levin-Rector et al. Falling behind: Life expectancy in US counties from 2000 to 2007 in an international context, *Population Health Metrics* 9(16) (2011): 5.

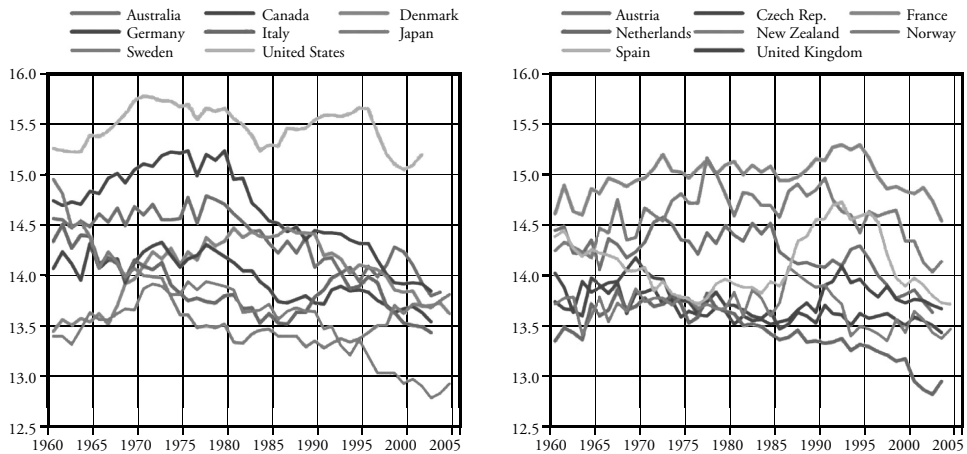
to other countries. This disadvantage begins at an early age before it could be impacted by personal behaviours (Banks, Marmot et al., 2006; Avendano, Glymour et al., 2009; Martinson, Teitler et al., 2011).

To summarize the health situation in the US metaphorically, consider a fast-flowing river that is full of human bodies catapulting downstream to their certain deaths. Along the bank is a monumental industry that propels lifelines out for the victims, who are then pulled ashore to be resuscitated. There are standards for this practice, guidelines to follow, and monitors who observe that quality is maintained, but no concern is voiced as to why all the people are coming downstream and require rescue. Over time the numbers increase substantially. After being rescued, many jump back into the torrent, which presents a continuing challenge for the industry situated further down the river.

Public Policy and Health Inequalities in the US

Health research is a large effort in the US, with the usual focus on health care services rather than the broader determinants of health. Most research looks at various inputs into medical

Figure 2.7
Standard Deviation in Age of Death, at Ages ≥ 10 Years for OECD Countries from 1960 to 2005



Source: OECD, *Society at a Glance: OECD Social Indicators* (Paris: Organisation for Economic Co-operation and Development, 2006): 99.

services and the surrogate outputs for health that are typically not health outcomes at a level that can impact health inequities.

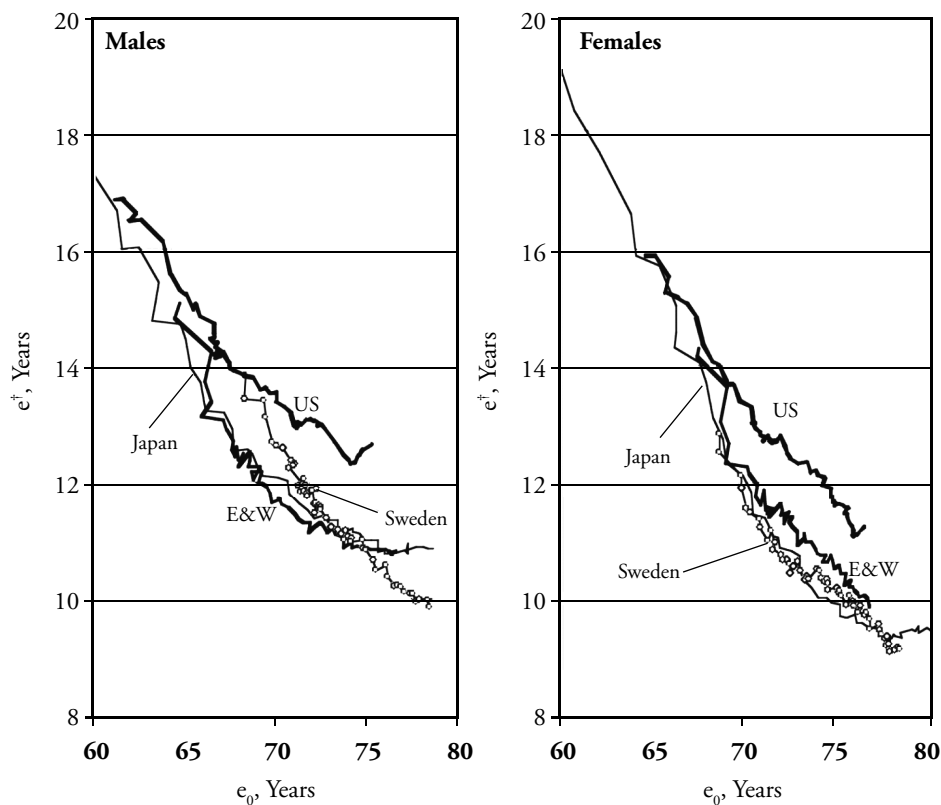
Health-Related Research from a Broader Policy Perspective

The concept embedded in the last paragraph of Geoffrey Rose's *Strategy of Preventive Medicine* is not considered in the US: "The primary determinants of disease are mainly economic and social, and therefore its remedies must also be economic and social. Medicine and politics cannot and should not be kept apart" (Rose, 1992, 129).

When one considers the economic and social aspects, one of the most pervasive findings in all current health research is the socio-economic gradient in health outcomes. This points to the observation that those lower down the socio-economic ladder tend to have worse outcomes (Adler, Boyce et al., 1994).

The last two decades have seen increasing exploration of and much insight into the gradient (Berkman & Kawachi, 2000). However, the approach that focuses on determinants of health of populations has made few inroads into public consciousness in the US, in contrast to Europe. The phrase "social determinants of health" is only now coming into the parlance of public health in the US. The concepts stress that societal or structural factors, especially related to socio-economic status, are more important in determining health outcomes than the provision of medical care and modifying personal health-related behaviours (Bezruchka, 2010a).

Figure 2.8
Trajectories of Life Expectancy at Birth (e_0) and Dispersion in Age of Death (e^\dagger) (Inter-individual Differences in Age of Death or Average Life Expectancy Losses Attributable to Death) for England and Wales, Japan, Sweden, and the United States



Source: V. Shkolnikov, E. Andreev et al., Losses of expected lifetime in the United States and other developed countries: Methods and empirical analyses, *Demography* 48(1) (2011): 211–239.

Developmental Origins of Health and Disease (DOHaD)

The DOHaD perspective demonstrates that a large proportion of adult health is programmed in the first 1,000 days of an individual's life, beginning with conception. Various stresses *in utero*, coupled with experience in the first few years of life after birth, forever affect health (Gluckman, Hanson et al., 2008; Gluckman, Beedle et al., 2009). Fetal nutrition, reflected by birth weight and gestational age, has an important impact on adult health (Paul, 2010). Maternal nutrition throughout a woman's lifespan before she becomes pregnant is critical for fetal, child, and adult health (Floud, Fogel et al., 2011). Socio-economic status and myriad environmental factors affect pregnancy outcomes.

Birth weight and rate of growth in childhood taken together predict chronic disease in adulthood (Barker, Osmond et al., 2005). Reactions that occur during pregnancy in response to adverse circumstances have the costly result of greater likelihood of later chronic, non-communicable diseases (Gluckman, Beedle et al., 2009). Across nations, differences in these early environments can profoundly influence a nation's health (Meza, Pourbohloul et al., 2010).

DOHaD posits that health is transmitted intergenerationally. US slavery, for example, and the stress experienced by slaves associated with deprivation, may explain the continuing low birth weight of contemporary African Americans (Jasienska, 2009), as positive changes in socio-economic status in the US have not influenced low birth-weight rates among African American women (Colen, Geronimus et al., 2006). Fetal programming thus allows low birth weight to persist for women who were themselves born with low birth weight (Collins, Rankin et al., 2011; Hertzman & Boyce, 2010; Essex, Boyce et al., 2011; Godfrey, Sheppard et al., 2011).

Parenting of the very young is critical for health (Schore, 2005), with outcomes related to early life attachment (Ciechanowski, Russo et al., 2010). Inter-parental conflict has been shown to predict later lung function problems (Suglia, Ryan et al., 2009). Adverse childhood experiences impact later life, but good parenting may buffer their effects (Suglia, Enlow et al., 2009).

Societies with policies that recognize the importance of early life will have better health outcomes than those that neglect it. For example, national paid antenatal and paid parental leave policies impact health outcomes and reduce health inequities (Guendelman, Hubbard et al., 2009; Vrijkotte, van Der Wal et al., 2009; Heymann, Raub et al., 2011; Ruhm, 2000). Nations that spend more of their GDP on early life, (e.g., Sweden spends more public money on the first year of life than any subsequent year) enjoy better general health (OECD, 2007). Other social supports besides paid leave yield health benefits to children and the adults they become (Ray, Gornick et al., 2010).

Medical Care

The focus on health care services research in the US implies that medical care must be the critical factor influencing health and impact health inequalities. The role of medical care in producing health may be overstated in the US because not everyone in the nation has access to health care. While the terms "health" and "health care" are often considered synonymous, in fact there is little research evidence to demonstrate a substantial impact of medical care on population health outcomes for a society (Jamrozik & Hobbs, 2002; House, Schoeni et al., 2008). Certainly health care as presently organized in the US seems poorly suited to producing good health (Pritchard & Wallace, 2011).

Health care in the US is under the very profitable control of insurance companies. Their profits alone in 2005 were over \$100 billion, and these profits are likely to increase substantially in the near future. At present, US health care costs represent about 18 percent of the GDP and almost half of the world's total. There appears to be no limit to the amount of medical care that Americans will pay for and consume, and costs are only slated to increase. Even with health care reform (PPACA), many millions of people will still lack access to medical services.

Increasing Inequality

Increasing inequality is considered a driver of health inequities just as it is for explaining differences in many outcomes for various other societal factors, such as teen pregnancies and youth

violence (Wilkinson & Pickett, 2010). Many studies now attest to societal inequality being causally linked to worse health outcomes. Context, culture, threshold, and lag effects matter, but the concept that economic inequality is not healthy has gained considerable acceptance in Europe. There is little, if anything, about greater equality in society that is detrimental, but the concept, until recently, has been virtually unthinkable in the US.

One study found a third of all deaths in the US could be linked to the high income inequality present there when compared to the best outcomes to be found in Europe (Kondo, Sembajwe et al., 2009). To put this finding into perspective, it is equivalent to one September 11, 2001 tragedy (3,000 deaths) occurring every 30 hours continuously throughout every year. This depicts structural violence, in contrast to the 9/11 behavioural variety in which there was a discrete event, clearly a perpetrator, and greater visibility. With structural violence, deaths are continuous from the usual conditions that cause death, and there is no smoking gun (Gilligan, 1999).

Policies Driving Health Inequalities

A range of social policies are known to address many of the social and economic conditions known to affect health inequalities. In most cases, however, the US has not taken advantage of these opportunities to support the health and well-being of the population.

Labour Policy

Labour policy in the US has seen workers' wages remain flat, adjusted for inflation, since the 1970s while the incomes at the top have risen immensely. At the same time, productivity in the country has soared, but workers have not benefited commensurately (Cypher, 2011). Since 1973, labour unions have been decimated, with rates of unionization for the entire country going from 26.7 percent to 13.6 percent in 2009 and even more pronounced declines in the private sector, so there is now more than a 5:1 ratio of unionization between public and private (Economic Policy Institute, 2011; Bureau of Labor Statistics, 2011). A comparison of labour conditions, national competitiveness, and unemployment rates around the world finds the US at a great disadvantage in comparison to other rich nations (Heymann, 2009).

Family Policy

Family benefits in the US are among the lowest of all rich nations, with few cash or service transfers and only limited tax assistance (Raphael, 2007; OECD, 2008). The US stands alone among rich nations without paid antenatal or parental leave policies (Heymann, 2009; OECD, 2009a). UNICEF has compiled various reports ranking child well-being parameters in rich nations, and the US consistently stands among the worst-off nations in material, education, or health outcomes (UNICEF Innocenti Research Centre, 2010). There are remarkably few welfare programs targeted at families, especially in comparison to other rich nations (Raphael, 2010).

A work and family life transition with profound economic effects has occurred in the US. In 1970, a median two-parent, two-child family with one parent working outside the home had more disposable income after meeting necessary expenses than a similar family in 2000 in which both parents work outside the home (Warren & Tyagi, 2003).

A second demographic transition has taken place in the US. The first transition saw mortality and fertility declines and resulted in small families. In the 1970s patterns of delays in fertility and marriage, increases in single parenthood, and maternal employment outside the home arose. Higher-educated mothers delayed fertility, but those with less education did not. For less-educated mothers, employment opportunities are fewer, incomes are lower, single motherhood is the norm, and fathers are often absent. These results increase economic inequality for families and especially between richer and poorer children. The fathers of children of married mothers with low education spend less time with their children in contrast to the fathers of children of more educated mothers. Without government welfare support, child poverty increases dramatically and is transmitted intergenerationally. The US now has the most child poverty among rich nations for both single-parent and two-parent families (McLanahan, 2004).

The variety in current family structure has consequences for children's well-being, such as the developmental origins of adult disease, birth outcomes, and health (including mental health) in later life. The US has arguably the most mental illness of all nations, and much of this begins in childhood. The US also has the most psycho-pharmaceutical treatment, with increasing numbers of children on these drugs.

Women's Rights

The status of women holding political and executive business power in the US lags behind that in many nations (Hausmann, Tyson et al., 2010; United Nations, 2010). In those US states where women's status is measured by indices of political participation, economic autonomy, employment and earnings, and reproductive rights, their health is better than those living in states where they have lower status (Kawachi, Kennedy et al., 1999). Children fare worse where women have lower political, economic, and social status (Koenen, Lincoln et al., 2006). Women are now the majority in the workforce in the US, and their proportion is expected to increase rapidly in large part because they will work for lower wages, which cuts costs and increases profits for employers in a capitalist society. The remarkable lag in health outcomes for women shown earlier may well be due to the increasing demands on women in US society. Not only do they have to demonstrate excellence in mothering and homemaking, they now have to be successful in the workplace, be soccer moms, jocks, supermodels, and porn stars. By contrast, not as much, aside from earning a living, is expected from men.

Racism and Discrimination

With the election of an African-American president in the US, many feel that racism has been largely overcome, but evidence in health inequalities does not support that idea. The ethnic mix and heterogeneity of the US is often explained as the reason for its poor health status. However, many European countries and Canada have a much high percentage of a foreign-born population than the US, and the health of US immigrants tends to be better than the health of those born there. In the US, attempts are made to increase diversity in institutional settings; cultural competency trainings have become common, for example. But this perspective masks serious structural inequalities that are not only persistent for African Americans but increasing (Michaels, 2006). The African-American wealth inequities far surpass those related to income, are increasing, and

perpetuate greater inequality (Shapiro, 2004). The US meritocracy and the American Dream ideology haven't decreased health inequities among African Americans (Kwate & Meyer, 2010).

Social Assistance and Unemployment Policy

By most measures, the US is among the least generous of all rich nations in social assistance and public spending, especially for working-age people (OECD, 2011). This includes the lowest social assistance or welfare for the marginalized segments of the US, with attendant high poverty rates and the least unemployment benefits (OECD, 2009b). As with other measures, the low rates of social support are highly correlated with the relatively poor health status in the US.

Examining Political and Economic Forces behind These Public Policy Approaches

It is difficult to get a man to understand something when his salary depends upon his not understanding it.

—Upton Sinclair, 1935

The huge increase in inequality in the US to levels on par with those before the Great Depression have resulted from a variety of political policies based in neo-liberal ideology that invokes decreasing public support for the less well off, letting market mechanisms work without regulation in the belief that the rich will invest their much-increased wealth for the benefit of all through the trickle-down approach. The political power in the country is now vested in corporations that control the democratic process for their own benefit, in contrast to the situation in the 1960s, when organized labour made more contributions than business to political campaigns (Clawson, Neustadt et al., 1998). The recent US Supreme Court's *Citizens United* decision is likely to further erode the democratic process in the country by allowing corporations to spend unlimited amounts on political advertising for election campaigns (Wiist, 2011).

The political forces that control the nation to enrich a few at the cost of everybody else are a modern example of cultural hegemony, a concept illustrated in the prison notebooks of Gramsci (Gramsci, 1973). These forces have produced a situation in which most people in the US have worse health than they might otherwise, given the comparisons with the health frontier mentioned earlier. They die from the usual illnesses and injuries. There is no outcry about the structural violence. It is as if there is an invisible, odourless, highly toxic lethal gas that envelops the oblivious nation, for business as usual is the norm. The key concept is business, as President Coolidge stated. There is a paradoxical focus on producing health in the nation beyond traditional medical care, as well as myriad other methods ranging from elixirs, supplements, spas, a huge self-help health industry, alternative treatments, health-enhancing exercises that defy description, to health-apps and who knows what the future may bring. This effort seems almost entirely a waste if it did not produce something besides huge profits.

Health Disparities Industry

Given the capitalist orientation of the US political system, it would be very surprising if a health disparities industry did not exist. A key feature of the profit-making approach is to define a

problem and then set up an industry to capitalize on it. The US health disparities industry has a focus that has transformed from eliminating health disparities to reducing health disparities, which would result in a long-term need and almost unlimited “work” to address them (Shaw-Ridley & Ridley, 2010). The workforce of this industry includes health educators, health care providers, researchers, educators, administrators, consultants, policy-makers, mass media professionals, as well as consumers of prevention and health care services and the various students in pre-health and professional programs.

Profit centres of this industry include conferences, myriad continuing education offerings about health literacy, social marketing, health communication, and translation research, as well as setting up various research fellowships, teaching courses, offering degree and certificate programs, together with a flourishing publishing industry devoted to health disparities.

The Catch-22 of increasing health inequities, despite an industry tackling it, means that the well-intentioned stakeholders do not look at the root causes of health inequalities, but instead work on small issues that do not address the core concepts of population health. Upton Sinclair’s quote above is key here: By not critically examining the paradigm through which work efforts proceed, there is continued employment for those involved. Shaw-Ridley and Ridley (2010) question the ethics of this industry and question a number of their practices. These include games of changing names, such as using community-based participatory research, as well as “illusionary collaborations and partnerships,” including centres of excellence. Others they describe are “dysfunctional quality assurance and performance standards,” an “anaemic response by agencies to fundamental causes,” and “fragmentation of knowledge advancement.” Some have more directly questioned the politics of health inequalities research in the US (Navarro, 2004). Exploratory discussions produce a variety of approaches (Krieger, Alegría et al., 2010).

Political Culture

There are major differences in the political cultures of the US compared to neighbouring Canada and western Europe that are rooted in history (Alesina & Glaeser, 2004). One reason offered for the widespread toleration of greater inequality in the US includes the lack of proportional representation, which makes it difficult for reform parties that might push for redistribution to take hold. The US has never been defeated militarily on its own territory, in contrast to Europe, where social democracies took hold after World War II (Navarro & Schmitt, 2005). The kind of class analysis of European Marxism was less likely to be applied in the US with its waves of immigration and melting-pot culture. European nations have relatively recent constitutions, in contrast to the United States Constitution, which was drafted by a minority of wealthy white men in 1787 and, among other effects, served to protect their wealth against expropriation. The US Supreme Court defends the rights of the wealthy. US racism concentrates poverty and prejudices against redistribution. Success in the US is considered a sign of goodness, reinforcing the moral failings of the poor (Alesina & Glaeser, 2004).

Compared to other nations, the US has the lowest proportion of the population who believe in the concept of the state taking care of the very poor in society; however, there are significant differences between the two major political parties (Pew Global, 2007).

Neo-liberal Restructuring and Welfare State Retrenchment

The neo-liberal effects on social welfare have been more pervasive in the US than in any other rich nation. A major result of many decades of restructuring, together with the decline of government welfare support for families, has been the rise of non-governmental organizations (NGOs), non-profit organizations that essentially depend on charitable giving or government grants for their existence. The dismantling of federal, state, and local government support has led to a greater role for these loosely organized external agencies.

The food bank situation in the US illustrates this process. Jobs used to be plentiful, and attaining sufficient food was not a problem for most people. In the 1970s there were relatively few destitute or homeless families in the US, and a few hundred missions throughout the nation helped feed them. In 1981 President Reagan cut the funding for low-cost housing and mental health services, which led to a dramatic increase in the numbers of homeless and destitute in the country, so the homeless became a daily observable fact of life. Statistics gathered by the federal government have found that perhaps one in 200 people has used a shelter in recent years (Wikipedia Homeless in the US). Now myriad NGOs provide various services for the homeless that include shelters and food banks. These institutions depend on individual generosity, including volunteer time, and their numbers have increased immensely so that by 2005, there were over 40,000 agencies providing food for various groups in the US. They have organized into networks so that, for example, members of Feeding America provide food for over 25 million Americans, or as many as one in 12.

Influence of Business and Corporate Sectors

The corporate sector in the US has enhanced its profitability in many ways that adversely impact economic inequalities in the nation. Corporations in the 1950s paid on average nearly a third of the federal tax bill, but now the figure is close to 6 percent. This has been brought about through a variety of mechanisms brokered by an extensive corporate lobbying industry in the nation's capital. In 1975 there were 3,400 registered lobbyists in Washington, DC, whereas by 2005 there were almost 10 times as many (Reich, 2007). This has allowed many legal ways of enhancing profits by moving production to poor countries, garnering government subsidies, decreasing tax burdens through a variety of mechanisms, and giving very high compensation to corporate executives by tying bonus pay to stock options.

The corporate sector has had a very strategic, immensely influential role in producing the health inequities in the US by increasing inequality. Because the public's view of health is grounded in individual responsibility rather than in a structural perspective, there is no appreciation of the links. This is remarkably similar to individuals' acceptance of their economic situations in the US that is divorced from any perception of political or corporate responsibility.

Recommendations for Future Activities

A key barrier to improving the health status of people in the US is that the understanding of what produces health in society is limited to personal health-related behaviours and to medical care (Lillie-Blanton, Brodie et al., 2000; Robert, Booske et al., 2008; Robert & Booske, 2011). This approach is taken by society at large, including most people involved in public health activities, those working in medical care, teachers, and the media. Creating a better

public understanding of social and economic determinants of health will be a critical but very challenging political step in addressing the relative health declines in the US (Gollust & Lantz, 2009; Gollust, Lantz et al., 2009).

If the goal is to improve US health to the level of, say, the frontier nations, the methods to do so do not require further research, but rather a commitment to act upon general guidelines. This is akin to John Snow removing the pump handle that was spreading disease during the cholera epidemic in the UK (Bezruchka, 2010a). The overarching aim would be to decrease economic inequality throughout the nation and to use the proceeds from that effort to foster a healthy early life environment for families. An important first step would be putting in place generous supports for antenatal and parental paid leave and community support for families and children, including those *in utero* and young infants. It would be important to identify other means of fostering caring and sharing relationships at all levels of society and monitoring progress toward those goals. The country could adopt a guaranteed annual income level for all families, particularly those with children, as was proposed by President Nixon in 1969 (Burke & Burke, 1974; Quadagno, 1990).

The impact of universal health care on decreasing health inequalities remains an open question. There is no reason why the US should remain the only rich nation without appropriate quality health care available for all.

The health disparities industry requires “*a genuine movement* to eliminate the fundamental causes of health disparities—beyond interventions and new programs that offer anaemic responses to a complex problem. The solutions at best may necessitate ‘cultural confrontation’ strategies—confronting political, social, economic, and education underpinnings of health disparities” (Shaw-Ridley & Ridley, 2010, 464).

The changes required to decrease health inequities in the US will occur only with broader awareness of what produces health in a nation. The education process for the nation needs to be multi-pronged and targeted at all levels, from preschool to post-graduate school. After the Russian launch of *Sputnik* in the late 1950s, the US realized its gap in science and math training and set a goal to increase its academic capability and to land a human on the Moon by the end of the following decade. The effort was successful in only 12 years, but the health challenge will take generations.

Mass media will be an important tool in the effort to bring about social transformation. The US media are controlled by a small number of corporate entities whose interests in enhancing profits do not cater to a population health agenda. Fostering critical thinking in education about the role of the media in US society could eventually lead to mechanisms to stem this power and direct it toward benefitting the well-being of citizens. With the advent of new media, including the Internet, there are many possibilities for broader education that could be spared the corporate domination of the print and broadcast modes. Legislation that fosters “net neutrality” would benefit the development of independent media that could engage the public in broader discussion of health (Nunziato, 2009).

The events of the economic crisis beginning in late 2007 and beyond were seen as an opportunity to rethink how the US economy functions and to build grassroots social and political movements. Instead, if anything, the grass has lost its roots and is withering. Whether the Occupy movement will revive the grass is unclear.

Conclusion

People in the US die much younger than those in many other countries. To date, most health-related efforts in the US have focused on increasing access to medical care and in changing personal health-related behaviours. This approach has not been successful in either improving the health of Americans in comparison to other nations, or in decreasing the health inequalities within the country. At the heart of the reason why lies the political economic choices that structure the nature of caring and sharing relationships that produce health. To take on the neo-liberal enterprise that produces ill health in the US will require greater efforts than the Manhattan Project, undertaken when the US built the first nuclear weapon. At least as much is at stake now as when that effort was begun.

Critical Thinking Questions

1. Why is there so little awareness of the poor health status of the US in relation to other rich nations?
2. Is the health status of a nation compared to others a reasonable assessment of that country?
3. Why is there such a focus on the relatively less important factors affecting health inequalities that are related to personal behaviours and choices than on those related to societal political structures?
4. In the midst of the current global economic crisis, is there a political revolution going on that will change societal relationships all around the world and lead to a post-carbon economy with different priorities for people and the planet?

Recommended Readings

Understanding how the world works is necessary to make it better. Delving into such a big topic requires a guide. One of the best is Noam Chomsky, who has written an immense number of books and is the world's most cited living person. You could choose from a volume containing four works or an edited version of his ideas, or just about any other of his writings.

Chomsky, N., Barsamian, D., et al. (2011). *How the world works*. Berkeley: Soft Skull Press.

Chomsky, N., Mitchell, P.R., et al. (2002). *Understanding power: The indispensable Chomsky*. New York: New Press.

The advantage of this volume is that the footnotes are available in a separate pdf online at <http://www.understandingpower.com/AllChaps.pdf>.

Gluckman, P.D., Beedle, A., et al. (2009). *Principles of evolutionary medicine*. Oxford/New York: Oxford University Press.

A scientific revolution is taking place on understanding the origins of chronic diseases of aging, which are increasingly understood to be programmed in early life. These are difficult concepts for many to grasp and, like anything worthwhile, requires considerable work. This book frames the concepts in a broad perspective.

Each of these shows how the United States of America has a peculiar political system. These ideas are usually not discussed in American schools.

Kingdon, J.W. (1999). *America the unusual*. New York: Worth Publishers.

Lipset, S.M. (1996). *American exceptionalism: A double-edged sword*. New York: W.W. Norton.

Russell, J.W. (2011). *Double standard: Social policy in Europe and the United States*. Lanham: Rowman & Littlefield.

Wilkinson, R., & Pickett, K.E. (2010). *The spirit level: Why equality is better for everyone*. London: Penguin.

The key source for understanding the structural factors affecting health of populations, this book has been a bestseller in Europe and has been translated into more than a dozen languages. It may be starting to have an impact on thinking in the US.

Recommended Websites

Equality Trust: <http://www.equalitytrust.org.uk/>

The Equality Trust explores the effects of structural inequalities in society. It complements the Spirit Level recommended in the previous section and gives access to those who disagree with these ideas, together with responses.

Gapminder: <http://www.gapminder.org/>

This website allows one to explore various data around the world relating to different indicators and see animations and trends over the last 100 years or more. It is a treasure trove.

Institute for Health Metrics and Evaluation: <http://www.healthmetricsandevaluation.org/>

This website gives detailed health data customizable to the countries and indicators you wish to study and observe trends. You can see a variety of graphical and map displays. US county details are especially useful in understanding health inequalities there.

Population Health Forum: <http://depts.washington.edu/eqhlth/>

This University of Washington website has material to help others present the concepts underlying the health of societies. There are many useful links, as well as broadcast talks by the author.

References

Adler, N.E., Boyce, T., et al. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist*, 49(1), 15–24.

Agrawal, J.R., Huebner, J., et al. (2005). Medical students' knowledge of the US health care system and their preferences for curricular change: A national survey. *Academic Medicine*, 80(5), 484–488.

Alesina, A. & Glaeser, E.L. (2004). *Fighting poverty in the US and Europe: A world of difference*. Oxford: Oxford University Press.

Avendano, M., Glymour, M.M., et al. (2009). Health disadvantage in US adults aged 50 to 74 years: A comparison of the health of rich and poor Americans with that of Europeans. *American Journal of Public Health*, 99(3), 540–548.

Banks, J., Marmot, M., et al. (2006). Disease and disadvantage in the United States and in England. *JAMA*, 295(17), 2037–2045.

Barker, D.J.P., Osmond, C., et al. (2005). Trajectories of growth among children who have coronary events as adults. *New England Journal of Medicine*, 353(17), 1802–1809.

Beckles, G.L. & Truman, B.I. (2011). Education and income—United States, 2005 and 2009. *MMWR*, 60(1), 13–17.

- Berkman, L.F. & Kawachi, I. (Eds.). (2000). *Social epidemiology*. New York: Oxford University Press.
- Bezruchka, S. (2001). Societal hierarchy and the health Olympics. *Canadian Medical Association Journal*, 164(12), 1701–1703.
- Bezruchka, S. (2010a). Epidemiological approaches to population health. In T. Bryant, D. Raphael & M.H. Rioux (Eds.), *Staying alive: Critical perspectives on health, illness, and health care* (2nd ed., pp. 13–40). Toronto: Canadian Scholars' Press Inc.
- Bezruchka, S. (2010b). Health equity in the USA. *Social Alternatives*, 29(3), 50–56.
- Bezruchka, S.A. (2012). The hurrier I go the behinder I get: The deteriorating international ranking of US health status. *Annual Review of Public Health*, 33(1), 157–173.
- Bureau of Labor Statistics. (2011). Union members summary. Retrieved from: <http://www.bls.gov/news.release/union2.nr0.htm>.
- Burke, V.J., & Burke, V. (1974). *Nixon's good deed: Welfare reform*. New York: Columbia University Press.
- CDC. (2011). *Chronic disease prevention and health promotion*. Retrieved from: <http://www.cdc.gov/chronicdisease/overview/index.htm>.
- Ciechanowski, P., Russo, J., et al. (2010). Relationship styles and mortality in patients with diabetes. *Diabetes Care*, 33(3), 539–544.
- Clawson, D., Neustadt, A., et al. (1998). *Dollars and votes: How business campaign contributions subvert democracy*. Philadelphia: Temple University Press.
- Colen, C.G., Geronimus, A.T., et al. (2006). Maternal upward socioeconomic mobility and black-white disparities in infant birthweight. *American Journal of Public Health*, 96(11), 2032–2039.
- Collins, J.W., Jr., Rankin, K.M., et al. (2011). African American women's lifetime upward economic mobility and preterm birth: The effect of fetal programming. *American Journal of Public Health*, 101(4), 714–719.
- Cooper, R.S., Kennelly, J.F., et al. (2006). Health in Cuba. *International Journal of Epidemiology*, 35(4), 817–824.
- Cutler, D.M., Lange, F., et al. (2010). *Explaining the rise in educational gradients in mortality*. National Bureau of Economic Research Working Paper Series no. 15678. Cambridge MA: National Bureau of Economic Research.
- Cypher, J.M. (2011). Nearly \$2 trillion purloined from US workers in 2009. *Dollars & Sense*. Boston, Economic Affairs Bureau, Issue 295, 24–25.
- David, R.J. & Collins, J.W. (1997). Differing birth weight among infants of US-born blacks, African-born blacks, and US-born whites. *New England Journal of Medicine*, 337(17), 1209–1214.
- Duménil, G. & Lévy, D. (2004). *Capital resurgent: Roots of the neoliberal revolution*. Cambridge: Harvard University Press.
- Economic Policy Institute. (2011). *State of working America: Declining unionization*. Retrieved from: <http://www.stateofworkingamerica.org/charts/view/204>.
- Essex, M.J., Boyce, T.W., et al. (2011). Epigenetic vestiges of early developmental adversity: Childhood stress exposure and DNA methylation in adolescence. *Child Development*, doi: 10.1111/j.1467-8624.2011.01641.x.
- Ezzati, M., Friedman, A.B., et al. (2008). The reversal of fortunes: Trends in county mortality and cross-county mortality disparities in the United States. *PLoS Medicine*, 5(4), e66.
- Feeny, D., Kaplan, M.S., et al. (2010). Comparing population health in the United States and Canada. *Population Health Metrics*, 8, 8.
- Floud, R., Fogel, R.W., et al. (2011). *The changing body health, nutrition, and human development in the Western world since 1700*. New York: Cambridge University Press.
- Frieden, T.R. (2011). Foreword: CDC health disparities and inequalities report—United States, 2011. *MMWR*, 60(1), 1–2.
- Gilligan, J. (1999). Structural violence. In R. Gellesman (Ed.), *Violence in America: An encyclopedia* (pp. 229–233). New York: Scribner.

- Glei, D.A., Meslé, F., et al. (2010). Diverging trends in life expectancy at age 50: A look at causes of death. In E.M. Crimmins, S.H. Preston & B. Cohen (Eds.), *International differences in mortality at older ages: Dimensions and sources* (pp. 17–67).
- Gluckman, P.D., Beedle, A., et al. (2009). *Principles of evolutionary medicine*. Oxford/New York: Oxford University Press.
- Gluckman, P.D., Hanson, M.A., et al. (2008). Effect of *in utero* and early-life conditions on adult health and disease. *New England Journal of Medicine*, 359(1), 61–73.
- Godfrey, K.M., Sheppard, A., et al. (2011). Epigenetic gene promoter methylation at birth is associated with child's later adiposity. *Diabetes*, 60(5), 1528–1534.
- Gollust, S.E., & Lantz, P.M. (2009). Communicating population health: Print news media coverage of type 2 diabetes. *Social Science & Medicine*, 69(7), 1091–1098.
- Gollust, S.E., Lantz, P.M., et al. (2009). The polarizing effect of news media messages about the social determinants of health. *American Journal of Public Health*, 99(12), 2160–2167.
- Gramsci, A. (1973). *Letters from prison*. New York: Harper & Row.
- Guendelman, S., Hubbard, A., et al. (2009). Maternity leave in the ninth month of pregnancy and birth outcomes among working women. *Women's Health Issues*, 19(1), 30–37.
- Hausmann, R., Tyson, L.D., et al. (2010). *The global gender gap index 2010*. Geneva: World Economic Forum.
- Hertzman, C. & Boyce, T. (2010). How experience gets under the skin to create gradients in developmental health. *Annual Review of Public Health*, 31(1), 329–347.
- Heymann, J. (2009). *Raising the global floor: Dismantling the myth that we can't afford good working conditions for everyone*. Stanford: Stanford University Press.
- Heymann, J., Raub, A., et al. (2011). Creating and using new data sources to analyze the relationship between social policy and global health: The case of maternal leave. *Public Health Reports*, 126(Suppl. 3), 127–134.
- Hogan, M.C., Foreman, K.J., et al. (2010). Maternal mortality for 181 countries, 1980–2008: A systematic analysis of progress towards Millennium Development Goal 5. *The Lancet*, 375(9726), 1609–1623.
- House, J.S., Schoeni, R.F., et al. (2008). The health effects of social and economic policy: The promise and challenge for research and policy. In R.F. Schoeni, J.S. House, G.A. Kaplan & H. Pollack (Eds.), *Making Americans healthier: Social and economic policy as health policy* (pp. 3–26). New York: Russell Sage Foundation.
- Institute for Health Metrics and Evaluation. (2011). *Life expectancy in most US counties falls behind world's healthiest nations*. Retrieved from: <http://www.healthmetricsandevaluation.org/news-events/news-release/life-expectancy-most-us-counties-falls-behind-worlds-healthiest-nations>.
- Institute of Medicine. (2003). *The future of the public's health in the 21st century*. Washington: National Academy Press.
- Jamrozik, K., & Hobbs, M.S.T. (2002). Medical care and public health. In R. Detels, J. McEwen, R. Beaglehole & H. Tanaka (Eds.), *Oxford textbook of public health* (pp. 215–242). Oxford: Oxford University Press.
- Jasienska, G. (2009). Low birth weight of contemporary African Americans: An intergenerational effect of slavery? *American Journal of Human Biology*, 21(1), 16–24.
- Kawachi, I., Kennedy, B.P., et al. (1999). Women's status and the health of women and men: A view from the States. *Social Science & Medicine*, 48(1), 21–32.
- Kingdon, J.W. (1999). *America the unusual*. New York: Worth Publishers.
- Koenen, K.C., Lincoln, A., et al. (2006). Omen's status and child well-being: A state-level analysis. *Social Science & Medicine*, 63(12), 2999–3012.
- Kondo, N., Sembajwe, G., et al. (2009). Income inequality, mortality, and self-rated health: Meta-analysis of multilevel studies. *British Medical Journal*, 339(Nov.): b4471, 1–12.

- Krieger, N., Alegria, M., et al. (2010). Who, and what, causes health inequities? Reflections on emerging debates from an exploratory Latin American/North American workshop. *Journal of Epidemiology and Community Health*, 64(9), 747–749.
- Kulkarni, S., Levin-Rector, A., et al. (2011). Falling behind: Life expectancy in US counties from 2000 to 2007 in an international context. *Population Health Metrics*, 9(16), 1–12.
- Kunitz, S.J., McKee, M., et al. (2010). State political cultures and the mortality of African Americans and American Indians. *Health & Place*, 16(3), 558–566.
- Kunitz, S.J., & Pesis-Katz, I. (2005). Mortality of white Americans, African Americans, and Canadians: The causes and consequences for health of welfare state institutions and policies. *Milbank Quarterly*, 83(1), 5–39.
- Kwate, N.O.A., & Meyer, I.H. (2010). The myth of meritocracy and African American health. *American Journal of Public Health*, 100(10), 1831–1834.
- Lillie-Blanton, M., Brodie, M., et al. (2000). Race, ethnicity, and the health care system: Public perceptions and experiences. *Medical Care Research Review*, 57(Suppl. 1), 218–235.
- Lipset, S.M. (1996). *American exceptionalism: A double-edged sword*. New York: W.W. Norton.
- MacDorman, M.F., & Mathews, T. (2009). *Behind international rankings of infant mortality: How the United States compares with Europe*. Hyattsville: National Center for Health Statistics.
- Martin, J.A. (2011). Preterm births—United States, 2007. *MMWR*, 60(1), 78–79.
- Martinson, M.L., Teitler, J.O., et al. (2011). Health across the life span in the United States and England. *American Journal of Epidemiology*, 173(8), 858–865.
- McLanahan, S. (2004). Diverging destinies: How children are faring under the second demographic transition. *Demography*, 41(4), 604–627.
- Meza, R., Pourbohloul, B., et al. (2010). Birth cohort patterns suggest that infant survival predicts adult mortality rates. *Journal of Developmental Origins of Health and Disease*, 1(03), 174–183.
- Michaels, W.B. (2006). *Trouble with diversity: How we learned to love identity and ignore inequality*. New York: Metropolitan Henry Holt.
- Michaud, P.-C., Goldman, D., et al. (2011). Differences in health between Americans and western Europeans: Effects on longevity and public finance. *Social Science & Medicine*, 73(2), 254–263.
- Murray, C.J.L., Kulkarni, S.C., et al. (2006). Eight Americas: Investigating mortality disparities across races, counties, and race-counties in the United States. *PLoS Medicine*, 3(9), e260.
- Muszynska, M.M., & Rau, R. (2009). Falling short of highest life expectancy: How many Americans might have been alive in the twentieth century? *Population and Development Review*, 35(3), 585–603.
- National Preventative Health Taskforce. (2010). *Taking preventative action—a response to Australia: The healthiest country by 2020—The report of the National Preventative Health Taskforce*. Canberra: Commonwealth of Australia.
- Navarro, V. (2004). The politics of health inequalities research in the United States. *International Journal of Health Services*, 34(1), 87–99.
- Navarro, V., & Schmitt, J. (2005). Economic efficiency versus social equality? The US liberal model versus the European social model. *International Journal of Health Services*, 35(4), 613–630.
- Nunziato, D.C. (2009). *Virtual freedom: Net neutrality and free speech in the Internet age*. Stanford: Stanford Law Books.
- OECD. (2006). *Society at a glance: OECD social indicators*. Paris: Organisation for Economic Co-operation and Development.
- OECD. (2007). *Health at a glance: OECD indicators 2007*. Paris: Organisation for Economic Co-operation and Development.
- OECD. (2008). *Babies and bosses—balancing work and family life*. Paris: Organisation for Economic Co-operation and Development.
- OECD. (2009a). *Doing better for children*. Paris: Organisation for Economic Co-operation and Development.
- OECD. (2009b). *Society at a glance: OECD social indicators*. Paris: Organisation for Economic Co-operation and Development.

- OECD. (2011). *Society at a glance: OECD social indicators*. Paris: Organisation for Economic Co-operation and Development.
- Olshansky, S.J., Passaro, D.J., et al. (2005). A potential decline in life expectancy in the United States in the 21st century. *New England Journal of Medicine*, 352(11), 1138–1145.
- Pappas, G., Queen, S., et al. (1993). The increasing disparity in mortality between socioeconomic groups in the United States, 1960 and 1986. *New England Journal of Medicine*, 329(2), 103–109.
- Paul, A.M. (2010). *Origins: How the nine months before birth shape the rest of our lives*. New York: Free Press.
- Peltzman, S. (2009). Mortality inequality. *Journal of Economic Perspectives*, 23(4), 175–190.
- Pew Global. (2007). *World publics welcome global trade—but not immigration*. 47-nation Pew Global Attitudes Survey. Washington: The Pew Research Center.
- Pritchard, C., & Wallace, M.S. (2011). Comparing the USA, UK, and 17 Western countries' efficiency and effectiveness in reducing mortality. *JRSM Short Reports*, 2(7), 1–10.
- Pynchon, T. (1973). *Gravity's rainbow*. New York: Viking.
- Quadagno, J. (1990). Race, class, and gender in the US welfare state: Nixon's failed family assistance plan. *American Sociological Review*, 55(1), 11–28.
- Rajaratnam, J.K., Marcus, J.R., et al. (2010a). Neonatal, postneonatal, childhood, and under-5 mortality for 187 countries, 1970–2010: A systematic analysis of progress towards Millennium Development Goal 4. *The Lancet*, 375(9730), 1988–2008.
- Rajaratnam, J.K., Marcus, J.R., et al. (2010b). Worldwide mortality in men and women aged 15–59 years from 1970 to 2010: A systematic analysis. *The Lancet*, 375(9727), 1704–1720.
- Raphael, D. (2007). Public policies and the problematic USA population health profile. *Health Policy*, 84(1), 101–111.
- Raphael, D. (2010). The health of Canada's children. Part III: Public policy and the social determinants of health. *Paediatrics and Child Health*, 15(3), 143–149.
- Ray, R., Gornick, J.C., et al. (2010). Who cares? Assessing generosity and gender equality in parental leave policy designs in 21 countries. *Journal of European Social Policy*, 20(3), 196–216.
- Reich, R.B. (2007). *Supercapitalism: The transformation of business, democracy, and everyday life*. New York: Alfred A. Knopf.
- Robert, S.A., & Booske, B.C. (2011). US opinions on health determinants and social policy as health policy. *American Journal of Public Health*, 101(9), 1655–1663.
- Robert, S.A., Booske, B.C., et al. (2008). Public views on determinants of health, interventions to improve health, and priorities for government. *WMJ*, 107(3), 124–130.
- Ruhm, C.J. (2000). Parental leave and child health. *Journal of Health Economics*, 19(6), 931–960.
- Schore, A.N. (2005). Attachment, affect regulation, and the developing right brain: Linking developmental neuroscience to pediatrics. *Pediatrics in Review*, 26(6), 204–217.
- Shapiro, T.M. (2004). *The hidden cost of being African American: How wealth perpetuates inequality*. New York: Oxford University Press.
- Shaw-Ridley, M., & Ridley, C.R. (2010). The health disparities industry: Is it an ethical conundrum? *Health Promotion Practice*, 11(4), 454–464.
- Shkolnikov, V., Andreev, E., et al. (2011). Losses of expected lifetime in the United States and other developed countries: Methods and empirical analyses. *Demography*, 48(1), 211–239.
- Siddiqi, A., & Hertzman, C. (2007). Towards an epidemiological understanding of the effects of long-term institutional changes on population health: A case study of Canada versus the USA. *Social Science & Medicine*, 64(3), 589–603.
- Siddiqi, A., & Nguyen, Q.C. (2010). A cross-national comparative perspective on racial inequities in health: The USA versus Canada. *Journal of Epidemiology and Community Health*, 64(01), 29–35.
- Sinclair, U. (1935). *I, candidate for governor: And how I got licked*. New York: Farrar & Rinehart, Inc.
- Smedley, B.D., Stith, A.Y., et al. (2003). *Unequal treatment: Confronting racial and ethnic disparities in health care*. Washington: National Academy Press.
- Suglia, S.F., Enlow, M.B., et al. (2009). Maternal intimate partner violence and increased asthma incidence in children: Buffering effects of supportive caregiving. *Archives Pediatric Adolescent Medicine*, 163(3), 244–250.

- Truman, B.I., Smith, C.K., et al. (2011). Rationale for regular reporting on health disparities and inequalities—United States Supplements. *MMWR*, 60(1), 3–10.
- UNICEF Innocenti Research Centre. (2010). *The children left behind: A league table of inequality in child well-being in the world's rich countries*. Innocenti Report Card no. 9, December. Florence: UNICEF.
- United Nations. (2010). *The world's women 2010: Trends and statistics*. New York: United Nations.
- United States Congress, Office of Technology Assessment. (1993). *International health statistics: What the numbers mean for the United States*. Washington: Office of Technology Assessment, United States Congress.
- Vrijkotte, T.G.M., van Der Wal, M.F., et al. (2009). First-trimester working conditions and birthweight: A prospective cohort study. *American Journal of Public Health*, 99(8), 1409–1416.
- Warren, E., & Tyagi, A.W. (2003). *The two-income trap: Why middle-class mothers and fathers are going broke*. New York: Basic Books.
- Wiist, W. (2011). Citizens united, public health, and democracy: The Supreme Court ruling, its implications, and proposed action. *American Journal of Public Health*, AJP.H.2010.300043.
- Wilkinson, R., & Pickett, K.E. (2010). *The spirit level: Why equality is better for everyone*. London: Penguin.
- Willson, A.E. (2009). “Fundamental causes” of health disparities: A comparative analysis of Canada and the United States. *International Sociology*, 24(1), 93–113.
- Wilmoth, J., Boe, C., et al. (2010). Geographic differences in life expectancy at age 50 in the United States compared with other high-income countries. In E.M. Crimmins, S.H. Preston & B. Cohen (Eds.), *International differences in mortality at older ages: Dimensions and sources* (pp. 336–366). Washington: National Academies Press.