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## Highlights

- It is increasingly hard to justify not considering potential health impacts of policy change given the range and size of potential health outcomes that flow from all policy, including policies that are seemingly unrelated to health.
- Non-health related policies may have positive consequences for health that are equally or more important than the outcomes they were originally designed to produce. Thus, health effects can be central factors in decisions concerning changes in policy seemingly unrelated to health.
- Health research and policy in the United States should shift towards models recently adopted in Canada, Sweden and the broader European Union that consider and evaluate the health impact of all policy, not just health policy.
- Social and economic policy can present alternatives to increased health care spending for maintaining and improving health. By considering the health impacts of public and private policies not directly related to health care as mechanisms for promoting health and preventing or alleviating disease, the cost-effectiveness of non-health policies can also be greatly enhanced.

## The Health Effects of Social and Economic Policy: The Promise and Challenge for Research and Policy

James S. House, Robert F. Schoeni, George A. Kaplan, and Harold Pollack. Based on a chapter in Robert F. Schoeni, James S. House, George A. Kaplan, and Harold Pollack (editors), 2008. *Making Americans Healthier: Social and Economic Policy as Health Policy*. New York: Russell Sage.

The United States spends more on health insurance and medical care as a percent of GDP than any other nation. Yet despite the marked growth in spending over the past fifty years, the U.S. has fallen from being amongst the top in life expectancy and infant mortality to ranking at or near the bottom among developed nations. Of the thirty nations in the OECD, only Mexico, Turkey, and three former Soviet bloc countries consistently rank below the U.S. on such indicators.

Most political and policy analysis related to health in the United States focuses on medical-care and insurance. Little attention is paid to levels of population health beyond the worry that spending constraints may adversely affect it. The concentration of policy discussion on medical services however, ignores historical facts about the causes of major changes in the overall health of populations. It also neglects very real opportunities outside the domain of medical care to improve health. The idea that a country could achieve better population health without explicitly increasing health care spending may seem paradoxical, but only if we assume that

health care is the major determinant of health. As dramatic and consequential as medical care is for individual cases, much evidence suggests that such care is not, and probably never has been, the major determinant of overall levels of population health. Rather, economic, social, psychological, behavioral and environmental factors are more likely the major determinants of population health.

### Historical Perspective

A brief historical review is helpful in understanding why and how social and economic policies may be just as important as health policies in maintaining and improving population health.

Between the mid-eighteenth and mid-nineteenth centuries, and accelerating in the first half of the twentieth century, human life expectancy in Europe and North America grew at unprecedented rates. Although this roughly coincided with the development of modern biomedical science and its translation to health care practice, most of the improvement for many diseases actually occurred prior to, and independently of, the discovery

of the causative bacterial or viral agents, and the application of this knowledge in the form of vaccines or pharmacological treatment (McKinlay and McKinlay 1977; Preston 1977). In fact current estimates suggest that only about five years of the almost thirty-year increase in U.S. life expectancy over the twentieth century were due to preventive or therapeutic medicine (Bunker, Frazier, Mosteller, 1994). The exact nonmedical factors responsible for the great historical rise in life expectancy are impossible to identify retrospectively, but general socioeconomic development—most notably improvements in nutrition, sanitation, housing and clothing, and general conditions of life, certainly played a central role. The scientific success of the

germ theory of disease, combined with the general decline of dread diseases between the mid-nineteenth and mid-twentieth centuries, led nonetheless to the hegemony of the biomedical perspective on health in the U.S. and many other developed nations. Understanding microbiological basis of life and disease seemed to provide a golden pathway to improved population health.

The rise of modern “epidemics”—particularly heart disease and cancer—began to cloud this picture in the mid-twentieth century. As a result, several strands of research which recognized the role of socioeconomic and psychosocial determinants of health were revived. In particular, a strand of research by Hans Selye (1956) and others showed that perturbations in the relation between organisms and their psychosocial, as well as their physical, chemical, and biological environments led to physiological symptoms in the form of, for example, heightened heart rate or blood pressure. These symptoms in turn could lead to physical disease and even death. The rise of chronic diseases ultimately produced a change in the epidemiologic conception of, and search for, their causes—a shift from identifying a single causative agent to identifying multiple contingent causal forces, or risk factors. Though biological risk factors (i.e. blood pressure, cholesterol) were the central focus of attention initially, increasingly behaviors (such as tobacco use or a sedentary life-style), have also been identified as high risk factors for various chronic diseases. Perhaps the most striking and important development in social epidemiology over the last quarter century has been the discovery (or rediscovery) of large, persistent and even increasing disparities in health by socioeconomic status and race-ethnicity (Marmot, Kogevinas, and Elston 1987; Pappas et al. 1993; Wilkinson 1996; Kaplan and Lynch 1997; House and Williams 2000).

Not surprisingly, socioeconomic position shapes people’s experience of, and exposure to, almost all risk factors for poor health (Marmot, Bobak and Smith 1995; Lynch et al. 1996; House and Williams 2000).

Current research on the psychosocial, biomedical, and environmental determinants of health has moved in two directions. The more common approach might be referred to as “downstream,” that is, seeking to understand the mechanisms through which psychosocial risk factors affect health. This approach tends to lead to a biomedical approach to mitigating the health impact of social or economic risk factors—for example, finding a pharmacological treatment for stress. An “upstream” approach, on the other hand, seeks to understand the broader aspects of social life that shape *exposure* to such psychosocial or environmental risk factors. Many public policies strongly impact health because they strongly impact the socioeconomic, psychosocial, and/or environmental determinants of health. Very few policy makers have considered health in either formulating or justifying public policies. The authors hope to change this state of affairs by encouraging a proactive identification—and perhaps also mitigation or enhancement—of the health impacts of social and economic policies.

## The Promise and the Challenges

A greater and more specific focus on the actual and potential health effects of social and economic policy could strengthen scientific understanding of the determinants of health as well as their amenability to change via public policy. It could also help extricate American health policy from unparalleled levels of spending growth with little to show for it. Social and economic policy may well be a more cost-effective way of improving population health.

**Figure 1.**  
U.S. Infant Mortality Ranking



Source: authors' compilation from OECD Health Statistics (2006)

**Figure 2.**  
Ratio of GDP Spent by U.S. to Rest of OECD average



Source: authors' compilation from OECD Health Statistics (2006)

Realizing this promise requires confronting a number of challenges. Determining causality is the first. The inherent difficulty in proving that a particular social or economic policy or program impacts health is complicated by competing approaches to determining causality. One view holds that the only way to establish a causal relationship is through randomized experimentation, or a close approximation. A different tradition derives its power from an accumulated body of evidence showing consistency of statistical association across a wide number of studies. Both approaches have value, and increased engagement and interchange between the two is crucial. A second challenge has to do with cost-effectiveness. Even if we determine causality, it is possible that achieving a desired health impact may be too costly relative to its putative effects. The health effects of social and economic policy must be evaluated not only absolutely, but also relative to not being implemented, and relative to other programs and policies specifically aimed at health. Next, even if a non-health policy or intervention is recognized as both causal and cost-effective with respect to health, an objection may be raised that it is simply politically, technically, or otherwise unfeasible.

The case of cigarette smoking provides a fascinating example of how policies not specifically aimed at health can impact it. Originally U.S. policy addressing cigarettes had little or nothing to do with health, but much to do with agriculture and commerce. As smoking increased, likely due at least in part to these policies, evidence suggesting that the concurrent increase in chronic disease might be related to smoking began to mount. Though it took decades, causality was eventually determined. But even as consensus grew, many doubted that it was technically, politically or ethically feasible to reduce the consumption of cigarettes. In the end,

efforts outside the traditional realm of health—from taxation to restrictions on where and when people could advertise, buy, and use tobacco products—proved more feasible and cost-effective than medical attempts to somehow block the adverse effects of tobacco smoke.

One reason economic and social policy is less frequently employed as a tool for improved health is that while there is a well-established paradigm and a supportive institutional structure for basic biomedical research and its translation to health policy and practice, nothing approaching this exists for social or economic determinants of health. This has deleterious consequences for both scientific understanding and potential improvements in health. Even when basic research provides strong evidence of the health impact of socio-economic factors, there is no infrastructure to systematically translate these findings into policy and practice. We need to foster the social and economic equivalent of clinical trials through the experimental introduction and evaluation of potential new policies and programs. Though some well known—and highly regarded—social experiments have been conducted (the Negative Income Tax and MDRC welfare-reform evaluations come to mind), they have typically been implemented with a focus on specific outcomes relative to the income maintenance and/or welfare-reform debate. Had they also explored health outcomes they would have been even more valuable.

## The Linkages Between Non-health Policy Areas and Health

A growing body of evidence suggests that social and economic policy and practice may be the major route to improving population health. In *Making Americans Healthier: Social and Economic Policy as*

*Health Policy*, eleven chapters are devoted to examining the linkages between population health and several ostensibly “non-health” policy arenas. Six key policy areas with potentially sizable effects on health are addressed: education policy, income-support policy, civil-rights policy, macroeconomic and employment policy, welfare policy, and housing and neighborhood policy. The authors of these chapters seek to assess where we are, and where we might most fruitfully go next in order to better understand whether, why and how certain policies and programs impact health.

In commissioning the chapters in this volume, the authors sought to provide a foundation for a more comprehensive American health policy. Just as we now routinely evaluate the environmental impact of programs and policies not explicitly environmental in nature (Irwin and Scali 2005), the United States must move toward models recently advocated and adopted in Canada, Sweden and the broader European Union that consistently consider evaluating the impact of *all* policy—not just health policy—on health outcomes (Raphael and Bryant 2006; Navarro 2007). In so doing, we might just help our nation escape the dubious distinction of having the highest healthcare expenditures in the world coupled with the worst public health outcomes of any major industrial democracy.

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National Poverty Center  
Gerald R. Ford School of Public Policy  
University of Michigan  
735 S. State Street  
Ann Arbor, MI 48109-3091  
734-615-5312  
npcinfo@umich.edu