

Chapter 12

Economic Policy Is Health Policy: Findings from the Study of Income, Socioeconomic Status, and Health

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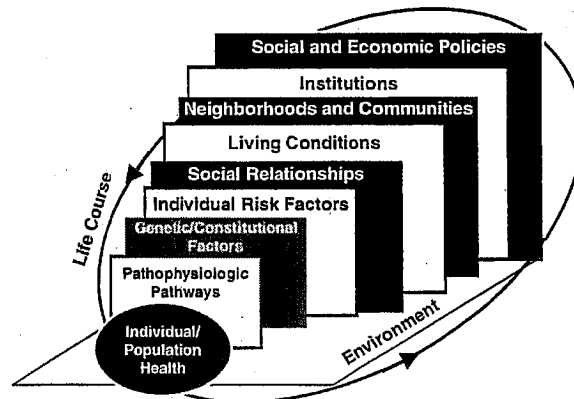
INTRODUCTION

Socioeconomic inequalities in health are large, pervasive, and compelling, falling along a gradient, as documented throughout this volume and elsewhere (Kaplan et al., 1987; Haan, Kaplan, and Syme, 1989; Syme and Berkman, 1976; Marmot, Kogevinas, and Elston, 1987; MacIntyre, 1997). Generally, regardless of the organ system or disease, how socioeconomic position is measured, or when and where the study is conducted, an inverse relationship exists between socioeconomic position and health—the higher the socioeconomic level, the better the health. For the much smaller number of diseases for which this is not true (for example, breast cancer), survival is generally worse among those who are poor. Although socioeconomic position is not the only metric along which health can be arrayed, it is an important one that relates in many fundamental ways to the overall health, well-being, and productivity of individuals, communities, and nations. Indeed, it may be the case that variations in socioeconomic position account for a greater proportion of health and disease experienced by populations than any other cause.

The search for the causes of socioeconomic inequalities in health is unlikely to lead down a single path. It has been assumed by many public policy leaders and experts that solving the problem of socioeconomic inequalities in health is simply a matter of providing more and better health care. Although guaranteeing the provision of high quality health care to all is the mark of most developed societies (the United States being a notable exception) and is a laudable goal, substantial inequalities in health are observed even in countries offering excellent health care to all (Haan, Kaplan, and Syme, 1989; Marmot, Kogevinas, and Elston, 1987). Reducing inequalities in health undoubtedly requires a multilevel framework that ranges from social and economic policies to individual behaviors (Kaplan, 1999) (see Figure 12-1).

FIGURE 12-1

Multilevel Framework for Reducing Inequalities in Health



Source: Kaplan (1999).

SCIENTIFIC GUIDEPOSTS AND THEIR POLICY IMPLICATIONS

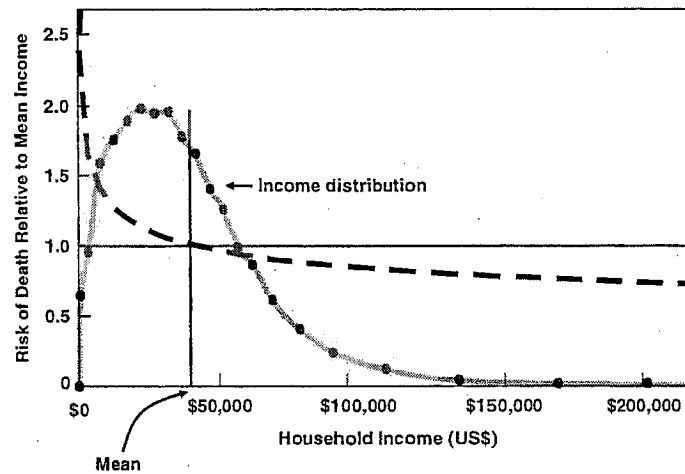
Exporting the scientific literature on health inequalities into the policy arena requires making choices of focus and intervention. In considering the exponentially expanding scientific literature on this topic (Kaplan and Lynch, 1997), several observations are relevant.

Effects of Low Socioeconomic Position on Health— Concentrated on Those at Lower Income Levels

Figure 12-2 shows the relationship between pretax household income and risk of death over 10 years, relative to the mean household income level, for a nationally representative sample of more than 700,000 adults age 25 or older from the Current Population Survey (Wolfson et al., 1999). The figure also illustrates the relative concentration of households at each income level. In these analyses, the poorest were four to five times more likely to die during the next 10 years than were the richest. However, Figure 12-2 demonstrates clearly that the health impact of differences in amount of household income is greatest among those who are below the mean level of household income, with steeply declining gains in health for those with incomes above the mean, or perhaps beyond the bottom 40 percent.

FIGURE 12-2

Relative Risk of Death by Income and Income Distribution



Source: Wolfson et al. (1999).

Thus, although there is a graded, dose-response relationship, with health improving with increases in income, between household income and risk of death in this nationally representative sample, the highly curvilinear nature of the relationship means that increasing the economic resources of lower income households will have the greatest health impact. From a policy perspective, therefore, any measure that increases wages and reduces taxes for the poor could have a substantial effect on health. Increased education and training for lower income households, to the extent that they are associated with increased financial resources, would also in this scenario increase the health of the poor and hence decrease inequalities in health. Additional policies that could improve health include subsidizing housing, child care, or health care access, providing other noncash benefits, or generally decoupling the availability of resources from income.

It should be apparent that there are little data with which to test these assertions. Beginning with the War on Poverty in the 1960s, or perhaps before that, there has been a consistent pattern of lost opportunities to gauge the impact of economic and social programs on health, with much of the assessment being done post hoc. Nevertheless, the evidence is encouraging. For example, Arno (1999) found improvements in the health of the elderly after the introduction of Social Security. To provide a firm foundation for examining fundamental causes of inequalities in

health, it is imperative that health outcomes be added to the evaluation portfolio of social and economic policy interventions.

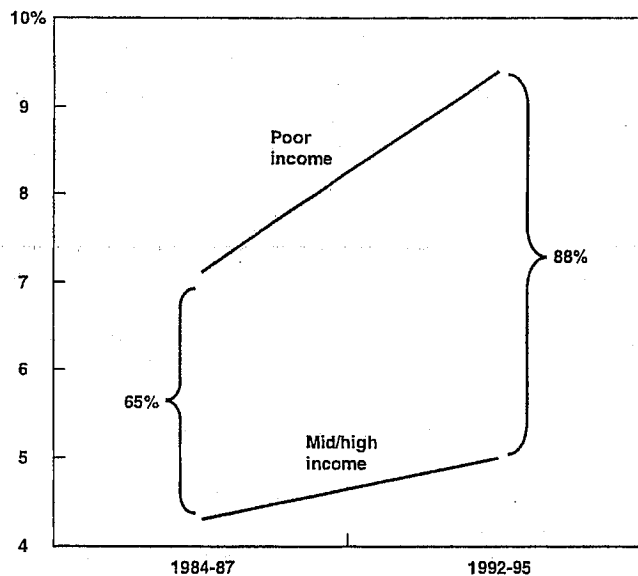
Inequalities in Health—Not Fixed

Some would argue that health inequalities are a fixed feature of society related to merit. The evidence, however, suggests considerable variation in these inequalities between time periods and between places (Mackenbach et al., 1999). Figure 12-3 shows trends from the mid-1980s to the mid-1990s in the prevalence of activity limitations in U.S. children under age 18 (National Center for Health Statistics, 1998). During 1984-87, the prevalence of such limitations was 65 percent higher in children from poor families than in children from middle income or higher income families. By 1995, the rates were 88 percent higher in poor children, an increase of more than one-third in less than a decade.

Furthermore, these secular changes in inequalities in health become even more striking when race and ethnicity are considered. In their analyses of 1984-93 trends in deaths from coronary heart disease in

FIGURE 12-3

**Percent of Children Under Age 18 with Activity Limitations,
1984-87 and 1992-95**



Source: National Center for Health Statistics (1998), Table 11.

North Carolina, Barnett, Armstrong, and Casper (1999) found that socioeconomic inequalities in mortality from this disease widened for both Black and White men. Also, while declines in mortality were experienced by White men of all social classes, with the greatest benefit among those in the highest social class, only the highest social class of Black men showed any decline at all. These patterns of increasing inequalities in health—a widening gap between the rich and the poor and between Black and White—have been found in numerous studies and are cause for great concern (Feldman et al., 1989; Schalick et al., 2000; Pappas et al., 1993; Williams, 1999).

Nevertheless, changes in the extent of inequalities in health during some historical periods can also be a reason for optimism. The cynical view that the poor and their poor health will always be part of society should be tempered by the realization that the differences are not fixed, but are malleable. From a research perspective, more work should focus on understanding these trends. From a policy viewpoint, again there have been many lost opportunities to examine variations in social and economic policy that could be related to these changes in health inequalities.

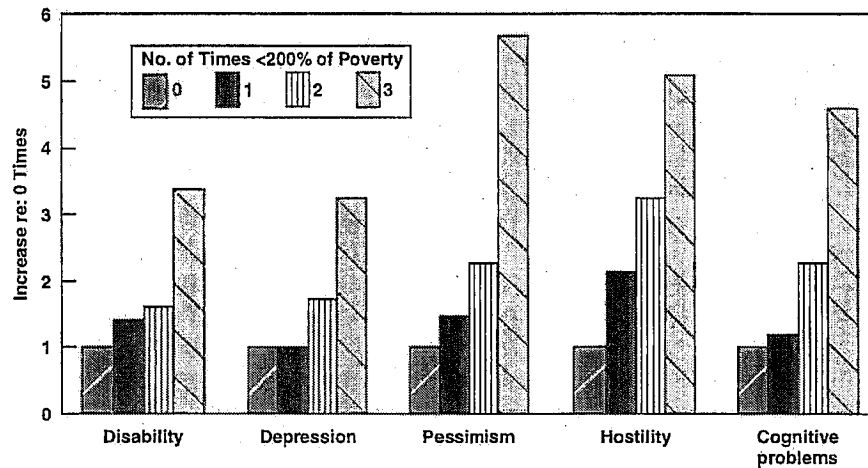
Pernicious Effects of Sustained Economic Disadvantage

During a period of economic growth it is easy to forget that, for many people, economic disadvantage occurs over much of the life course. We now know that economic disadvantage leaves an early footprint on human development (Kuh and Ben-Shlomo, 1997; Keating and Hertzman, 2000) and that the health impacts of cumulative exposure to disadvantage can be substantial. For example, Figure 12-4 presents the impact of 29 years (1965-94) of cumulative exposure to economic disadvantage on the health of adults (Lynch, Kaplan, and Shema, 1997). The data are from a longitudinal study that followed the health of a population sample of 7,000 adults in Alameda County, California, since 1965 (Kaplan, 1992). Based on responses from the study participants in 1965, 1974, and 1983, it was possible to determine if their incomes were less than 200 percent of the poverty level and to count the number of times, out of a possible three, that they were below 200 percent of poverty. The figure illustrates the relationship between this cumulative exposure to economic disadvantage and the rates, relative to the group never below 200 percent of poverty, of physical disability, depression, pessimism, hostility, and cognitive problems. An unpublished analysis (Lynch, 2000) shows that cumulative exposure to poverty and starting out poor in life are also associated with decreased life expectancy.

These results indicate that early, sustained economic disadvantage can rob individuals and their communities of good health. The effects spiral downward through families, affecting children and the unborn.

FIGURE 12-4

29-Year (1965-94) Cumulative Impact of Economic Disadvantage
on Five Health Outcomes, 45+ Years of Age



Source: Lynch, Kaplan, and Shema (1997).

This intra- and intergenerational transmission of disadvantage creates a matrix in which the health inequalities of the future are produced. From a primary prevention viewpoint, the most effective policies would combine strategies that reduce income volatility among the poor and near poor, decrease periods of sustained financial hardship, and buffer the effects of sustained disadvantage on individuals, their families, and their communities.

Communities Matter

Scientific interest in the community and neighborhood foundations of health and development has increased enormously (Kaplan, 1996; MacIntyre, MacIver, and Sooman, 1993; Diez-Roux, 1998; Brooks-Gunn, Duncan, and Aber, 1997). Recent studies have shown that social and economic properties of communities are independent predictors of the health of individuals who live there. For example, Haan, Kaplan, and Camacho (1987) demonstrated that residing in a federally designated poverty area was associated with an almost 50 percent increased risk of death over the next nine years. This occurred even when there was adjustment for a wide range of individual socioeconomic, demographic, behavioral, social, and psychological factors. The results of that study have been replicated in a national sample (Waitzman and Smith, 1998a),

and new studies are showing similar contextual effects on a variety of health outcomes (Davey-Smith et al., 1998; Anderson et al., 1997; Diez-Roux et al., 1997; O'Campo et al., 1997; Sampson, Raudenbush, and Earls, 1997).

This increasing interest in the role of the community is also found in the human development literature, particularly in studies of the effects of neighborhoods and schools on development and learning. A recent two-volume publication presents strong support that neighborhood factors impact child and adolescent achievement, behavior, and mental health (Brooks-Gunn, Duncan, and Aber, 1997). At the same time, the researchers suggest that because of measurement problems, these effects may be underestimated.

Within the policy arena, relocation experiments such as the Gautreaux study (Rosenbaum and Popkin, 1991) and the more recent evaluations of the Move to Opportunity experiment (Ludwig, Duncan, and Hirschfield, 1998) provide further evidence that residential environments have important effects on health. However, minimal information on health has been collected, again a lost opportunity in terms of understanding the links between social and economic policy and health. Issues also have not been addressed that are related to the tradeoffs in health and social gains between moving people to new residential environments versus improving residential environments through community development strategies that improve formal and informal infrastructure, organizations, and institutions.

Health Effects of Income Inequality—Important But Not Inevitable

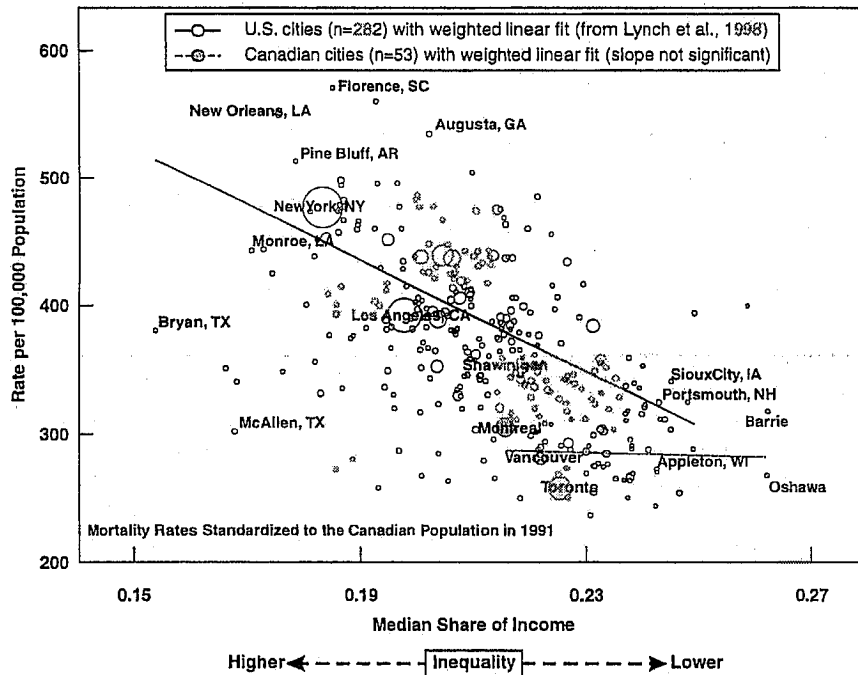
In an era of unprecedented prosperity in the United States, a rising tide has not lifted all boats, and Americans have experienced the highest levels of income inequality since the Great Depression (Wolff, 1995; Auerbach and Belous, 1998). Increasing income inequality worldwide has led to studies suggesting that, beyond the social upheavals associated with rising income inequalities, there are important health outcomes as well (Wilkinson, 1992). While the between-country evidence concerning this association is mixed (Judge, 1995; Lynch and Kaplan, 1997; Judge, Mulligan, and Benzeval, 1998; Ellison, 1998), income inequality and health have been linked within the United States (Kaplan et al., 1996; Kennedy, Kawachi, and Prothrow-Stith, 1996; Lynch et al., 1998; Daly et al., 1998; Waitzman and Smith, 1998b; Kennedy et al., 1998; Soobader and LeClere, 1999), Great Britain (Stainstreet, Scott-Samuel, and Bellis, 1999), and Brazil (Szwarcwald et al., 1999). For example, in examining U.S. states, Kaplan et al. (1996; Kennedy, Kawachi, and Prothrow-Stith, 1996) demonstrated that the share of total household income going to the least well-off half of the population in each state was strongly correlated with that state's mortality rates. This relationship was found to

be independent of the average income level in each state. In looking at the 283 U.S. Metropolitan Statistical Areas, Lynch et al. (1998) noted a similar relationship. In these analyses, the combined impact of high levels of income inequality and low per capita income was associated with a burden of mortality equal to the combined total mortality from lung cancer, HIV/AIDS, unintentional injuries, diabetes, suicide, and homicide.

Recent analyses comparing the United States and Canada point to improvements in health outcomes from reducing income inequality, as well as the extent to which the health effects of income inequality can be mitigated (Ross et al., 2000). Figure 12-5 shows mortality rates for U.S. and Canadian workers age 25-64 and the degree of income inequality for individual metropolitan areas. The U.S. data are identical to the Lynch et al.

FIGURE 12-5

Working Age (25-64) Mortality by Median Share, U.S. and Canadian Metropolitan Areas, 1990 and 1991



Source: Ross et al. (2000).

(1998) analyses mentioned above. Canadian taxation and transfer policies result in considerably lower levels of income inequality and less variation between metropolitan areas in the degree of income inequality than in the United States. This translates into much lower Canadian mortality rates. However, it is important to note that there is essentially no relationship between income inequality and mortality rates for the Canadian metropolitan areas; the line summarizing the relationship for Canada is basically flat.

These data suggest that strategies that lower income inequality could improve the health of populations as well as reduce inequalities in health. Such strategies include taxation and transfer payments, unemployment policy, minimum wage, and regulatory policies. The observation of a relationship between income inequality and mortality in Canada that is off the U.S. line and flat further indicates that social policies that loosen the links between income and housing, community infrastructure, education, and noncash benefits may mitigate the impact of income inequality on health.

CONCLUSION: THE ROLE OF ECONOMIC AND SOCIAL POLICIES

Should Policymakers Care About Income Inequality, Socioeconomic Status, and Health?

While the evidence presented throughout this volume may seem compelling to those in the public health field, it has not previously attracted the broad attention of social and economic policymakers. To some extent this may reflect a lack of interest in health or inequalities in health; a single-minded focus on increasing health care access and quality as a cure-all; or a belief that genomic discoveries down the road will provide answers on how to maintain high levels of health in the population. The first view ignores the tremendous economic burden associated with poor health in terms of the direct costs of health care and the indirect costs related to lost productivity. Although there is an important need for improved access and quality of care, the second view flies in the face of the fact that the United States spends more per capita on health care than any other country and ranks substantially behind many countries in numerous measures of health. The third view is simply a promissory note that comes due well into the future; however, it seems unlikely from what is known now that genomic discoveries will have much impact on the broad patterns of inequality in health that currently exist. In fact, given that information, dissemination, and new technologies often reach those in the higher income categories first, there may well be increasing inequalities in health associated with the new discoveries.

There are additional reasons that should attract policymakers to the significance of health inequalities. The challenges to modern societies involve adaptation, resiliency, and productivity; it is likely that, to the extent that a society cannot improve the health of all of its citizens, it puts all three at risk. Furthermore, health inequalities are divisive and have the potential to erode democratic institutions and processes. Finally, health inequalities draw attention to issues of justice and equity that may be the bedrock of healthy societies.

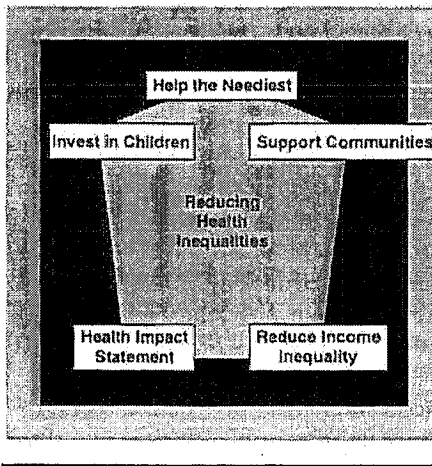
Strategic Areas for Action

As indicated, there is no single solution to the problem of inequalities in health. Nevertheless, the available evidence, some of which has been highlighted in this chapter, points to strategic areas for action (see Figure 12-6).

First, there can be no denying the importance of assisting, both financially and with noncash benefits, those who are most in need. Low household income levels throughout the bottom two income quintiles appear to have important effects on health. Thus, many working poor families will need assistance as well as families that are most destitute. These effects would be likely to cascade, influencing the health of children and the unborn. Second, because of the growing evidence that economic disadvantage throughout the life course influences health, with particularly potent impacts early in life, the policy of "compound disin-

FIGURE 12-6

Strategic Areas for Action



terest" must be reversed. Compound disinterest means that underinvestments in children result in patterns of health and developmental disadvantage that grow throughout life. Third, there is mounting evidence that the social and economic status of a community powerfully impacts the health of the residents. Thus, community development efforts, including reducing or moderating the effects of economic segregation, must be sustained. Fourth, the United States is increasingly experiencing the erosive results of the growing gap between the rich and the poor. The U.S. and Canadian comparison shows that much can be gained by reducing income and wealth inequalities and by mitigating the outcomes of income inequality on life chances.

Finally, although the scientific evidence is compelling, there is a dismal history of lost opportunities in measuring the health impact of social and economic policies. As a consequence, we know far less than we should. As was similarly pointed out in a recent report on reducing health inequalities in the United Kingdom (Acheson, 1998), it is time to include an assessment of health impacts and of the effects of health inequalities in our discussion and evaluation of social and economic policies. Not to do so is to miss extraordinary opportunities to move toward a healthy, productive, and just society.

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