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Editorial

Is Economic Policy Health Policy?

During the recent US presidential debates, as well as in the debates in the previous presidential campaign, the large and growing gap between the rich and the poor was frequently mentioned. Political candidates of various persuasions have proposed different solutions to the problems posed by the magnitude of this gap; generally, they have focused on different mixes of strategies related to blaming those who were not doing well, increasing individual incentives to work, restoring "safety nets for the poor," and changing taxation and transfer programs. It is the frequent mention of the problem, however, that is noteworthy. This economic divide has not gone unnoticed by public health researchers, who have produced a substantial literature documenting and discussing the links between increasing economic inequality and poorer health.¹⁻⁷ The report by Lochner et al.8 in this issue of the Journal nicely adds to this growing literature by documenting an increased risk of death among individuals in some groups living in high-inequality vs low-inequality states.

Along with the growth in the literature on this topic, there has been a corresponding growth in the controversy surrounding the empiric results and their interpretation,^{6,9–11} and it seems appropriate to take stock of some of the more significant conceptual and methodological issues in this area of investigation.

Aggregate vs Compositional Effects

As stated previously by a number of researchers¹² and revisited by Gravelle,¹⁰ the relationship between income inequality measured at the aggregate (e.g., state) level and mortality levels at the aggregate level might simply reflect a compositional effect—greater numbers of poor people in high-inequality areas and the strong nonlinear association between individual income and mortality would result in higher mortality in high-inequality areas. The analyses of Wolfson et al.¹³ indicated that, at best, this compositional–individual explanation accounted for very little of the association between state-level income inequality and mortality in the United States, and other studies that have used both individual and aggregate data (summarized by Wagstaff and van Doorslaer⁹) have, with only a few exceptions, found some evidence for independent effects of income inequality, although the population subgroups most affected vary between studies.

While the introduction of multilevel data sets and modes, allowing for the specification of both individual- and community-level effects, represents an analytic advance, it ignores a major conceptual issue. Technically, it is possible to separate individual- and communitylevel effects, but are the determinants really separate? For example, social and economic policies that differentially distribute and reward high-tech and low-skilled labor will differentially attract populations that vary by level of individual income and wealth. We would observe that one area had more wealthy people than the other and could attribute any aggregate differences in health between the areas to their compositional differences, but in reality it may be more difficult to separate individual and area characteristics. If such an argument is extended to the forces that determine the distribution of economic opportunities with and between areas, it is easy to see how clarifying the separate roles of individual economic status and income inequality becomes difficult. For example, local- or state-level policies that encourage or discourage labor union participation, that support affordable and useful public transportation, that adequately support public education, or that provide health and social services that are publicly financed, could all have an impact on the economic well-being of those who live in an area. Note that the same difficulty applies when we consider other factors, seen in some analyses as confounders, such as race/ethnicity, rural/urban status, and others.

Who Is Affected by Income Inequality?

Multilevel models do allow us to examine the question of which subpopulations show an effect of income inequality on health. Many hypotheses are possible. For example, one could argue that we should only expect those who are most marginalized and vulnerable to suffer. Alternatively, one could argue that the cost of deep economic divides is spread across the population through increased levels of crime and decreased commitment to the "commons." Although it is still too early to come to a definitive conclusion, the general pattern of results is not consistent with the latter scenario. Thus, Lochner et al.⁸ found significant results primarily for near-poor Whites, Daly et al.¹⁴ found a mortality effect of state-level income inequality only among the middle-income, nonelderly population, and Kennedy et al.¹⁵ found that state-level income inequality was primarily associated with low self-rated health among low- and middle-income groups. No consistent picture has emerged regarding the differential impact of income inequality among those who might be at double jeopardy because of their low-income status, race/ethnicity, residence, or other characteristics, although some evidence indirectly suggests large effects.¹⁶

How Could Income Inequality Affect Health?

As Lochner et al.⁸ point out, 2 major mechanisms have been proposed to account for the observed relationship between the extent of income inequality and poor health. The first, which we have called the "neo-material" explanation, views income inequality as a result of both historical and contemporary social, political, and economic policies and emphasizes the many differences between places that vary regarding extent of income equality.^{2,4,6} The policies that result in high levels of income inequality also are associated with systematic underinvestment across wide ranges of human, physical, social, and health infrastructure. As we have elsewhere observed,

These processes influence the private resources available to individuals and shape the nature of public infrastructure, education, health services, transportation, environmental controls, availability of food, quality of housing, and occupational health regulations that form the "neo-material" matrix of contemporary life. In the US, higher income inequality is significantly associated with many aspects of infrastructure, unemployment, health insurance, social welfare, work disability, educational and medical expenditure, and even library books per capita.^{6(p1202)}

The second mechanism, which we have called the "psychosocial interpretation," emphasizes the role of perceptions of place in the social hierarchy leading to a sense of frustration and relative deprivation, social conflict, and loss of social capital and social cohesion.^{1,7,17} While we would argue that the second explanation must be largely based on the patterns of exposures and experiences that are associated with the types of underinvestment described above, it is also possible that frustration on a population-wide scale, loss of social cohesion, and destruction of social capital may erode some of the societal mechanisms that keep income inequality under control and provide buffers against it.

The biggest dilemma is that our means for measuring investments in infrastructure, differential patterns of exposure and resources, and social disintegration are extremely crude. We have argued previously that what is needed is an "epidemiology of everyday life"¹⁸ that would describe, with nuance and depth, the links between neomaterial conditions and the forces that generate them, psychosocial states, the social milieu, and health outcomes. However, such an enterprise demands perspectives from many disciplines-urban sociology, economics, anthropology, political science, psychology, history, and city planning, to name just a few. Without such detailed knowledge and broadened perspectives, we are not likely to be able to understand much more about the links between income inequality and health.

Must Income Inequality Cause Poorer Health?

Although we know little about the answer to the question of whether income inequality must cause poorer health, some evidence suggests that the answer is no. Ross et al.,¹⁹ in a comparative study of income inequality and mortality in metropolitan areas in the United States and Canada, found that the lower levels and restricted range of income inequality in Canadian metropolitan areas eliminated the association between income inequality and mortality. What's more, the relationship for Canadian areas did not lie on the same curve as is found in the United States, suggesting that it was not only the lower levels of inequality that were important but that there were other mechanisms that buffered the impact of income inequality on health. We are not sure of what these other mechanisms are, but some likely candidates are differences in economic and racial/ethnic residential segregation and a tax

and transfer system that supports more extensive education, public health, and social services programs in Canada. In a similar vein, large increases in income inequality in Sweden in the 1980s were not accompanied by an increase in child poverty rates, unlike in the United States and the United Kingdom,⁴ reflecting a commitment in Swedish society to social programs that protect children from economic downturns. It may well be that the impact of income inequality on health is not automatic but varies as a function of the institutional and societal arrangements that buffer the impact of income inequality on health.

Conclusion

The study of the relationship between income inequality and the health of nations and areas has rekindled interest in the role of social and economic policy as important determinants of the patterns of both individual and population health. While numerous empirical and conceptual challenges remain, additional studies, debate about interpretation of the evidence, and discussion of the links with health policy represent a sign of vitality in public health and a movement toward increased involvement by public health researchers with the links between economic and social policy and health.

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