Is equity a scientific issue?

Inequality across socioeconomic and political groups influences health outcomes

Equity is a humanitarian issue that derives from principles of ethics, especially justice (fairness). Fairness requires the elimination of inequity—that is, systematic inequality across population subgroups. Can science be brought to bear on the subject of equity? The answer must be yes.

It is no secret that, in the world over and within countries, the rich are getting richer and the poor are getting poorer. Ethical issues alone suggest a cause for alarm on humanitarian grounds. Concern is heightened by the relatively recent evidence that increasing poverty is not the only worry. Although it is a big one, it is not a new one. The new issue concerns the evidence of increasing inequities in wealth wherein the ill effects derive not only from increases in poverty but also because the wealthy are becoming wealthier.

Recent literature is converging on the conclusion that the extent of disparities between the wealthiest segments of society and the least wealthy is directly related to the health of that society, even when health is measured by conventional mortality and morbidity statistics. Thus, the phenomenon is not a matter only of material deprivation among the poorer segments of society,¹⁻³ and it is not alleviated substantially by providing alms (either public or private) to lighten the burden on the poor.

There are many determinants of ill health, whether at an individual or a population level. Political, socioeconomic, and demographic factors play a crucial role in influencing health outcomes. These operate to increase or decrease risks to illness through genetics, biologic factors, and other pathophysiologic mechanisms. Time and trajectories over the life course also play a part. The influence on adult health of events in early life and continuing through childhood are now undeniable, although the mechanisms of the trajectories are still unclear. Does early damage always increase the risk of subsequent disease, and under what conditions might it not? Might the effects of early insults be occult, only to be manifested later? Are they mostly gradually accumulating, with each increment leading to progressively greater risks to health later on? Or are there vulnerable “incubation” periods during which people are particularly susceptible to incurring risks that will be manifested later on?

We are also beginning to suspect that the pathway of determinants does not act in the same way in all countries, all cultures, and in all population subgroups. For example, in the United States, mortality in black populations in urban areas seems much more heavily influenced by income inequality than is the case in white urban populations, in which the adverse effect of income inequalities

is partly mitigated, for example, by greater availability of primary care health services (unpublished data).

The findings regarding the likely importance of primary care in reducing the effect of income inequality, at least in some areas and populations in the United States,⁴ run counter to the widely held belief that health services do not have much effect on health. Only a few studies provide any hope for the potential benefits of health services taken together.^{5,6} However, newer conceptualizations of health services have brought the realization that they are composed of 2 distinct parts: primary care and specialty care, and at least in terms of population health, it is primary care and not specialty care that contributes the most.⁷

The subject of the causation of inequities in health is clearly complex, but it is amenable to scientific study. The many issues concerning the nature of the pathways in different population groups, in different cohorts, and in different historical time periods are only some of the many challenges. We need good scientific research on the nature of the pathways and their consistency and variability; on the best ways to specify the variables that represent the various types of characteristics in the theoretical models; on the relative influence and mechanisms of effect of various types of interventions to reduce the effects on ill health and, perhaps, even improve the health of populations; and on the special challenges posed by vulnerable population groups, such as children and adolescents, women and especially pregnant women, and racial and ethnic minorities. The development and application of statistical techniques that elucidate mechanisms rather than describe them are also a high priority, as are collaborative efforts across political jurisdictions and countries to improve the generalizability of research results and policy applications.

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