MEASURING HEALTH INEQUALITIES

Over the last two decades, increasing resources have been devoted to the study of racial and socioeconomic inequalities in mortality. Generally, these inequalities have been interpreted in terms of the ratio of the mortality rate of the disadvantaged group to that of the advantaged group. With rare exception, the conclusions of such research have been that, despite declining mortality, inequalities in mortality have been increasing.

Such conclusions are suspect due to the failure to appreciate the statistical tendency whereby, when two groups differ in their susceptibility to an outcome, the rarer and outcome, the greater the inequality in experiencing the outcome and the smaller the inequality in avoiding the outcome. This tendency flows from the fact that the rarer an outcome, the more it is concentrated in the segment of the overall population that is most susceptible to the outcome, and disadvantaged groups comprise a higher proportion of each increasingly more susceptible segment of the overall population. Such pattern can be observed in virtually any data set that allows one to examine the situation at various points in a continuum where two groups have different distributions of factors related to experiencing some outcome (e.g., income data, risk profiles, test score distributions). Thus, increasing inequalities in mortality are a near inevitable consequence of declining mortality.

The tendency has implications beyond the appraisal of the size of mortality inequalities over time. It also affects efforts to appraise the sizes of inequalities in different geographic regions. Thus, efforts to rank European countries by the size of mortality inequalities are also suspect, since the lower the mortality in a particular
country the greater will tend to be the difference in mortality rates between advantaged and disadvantaged groups.

Other measures of health inequalities (e.g., absolute difference, odds ratios, longevity differences) are also problematic.