THE MISUNDERSTOOD RELATIONSHIP BETWEEN DECLINING MORTALITY AND INCREASING RACIAL AND SOCIAL DISPARITIES IN MORTALITY RATES[1]

JAMES P. SCANLAN

During recent decades countries in the developed world have experienced overall declines in morbidity and mortality. The declines usually have been accompanied by increases in racial and socioeconomic differences in rates of morbidity and mortality. The increases have been interpreted to indicate relative declines in the health status of less advantaged groups.

However, the meaning of increasing differences in mortality and morbidity rates in times of overall improvements in health must be appraised in the light of the fact that overall declines in morbidity and mortality increasingly limit preventable morbidity and mortality to the most vulnerable elements of the overall population. The expected result of patterns whereby adverse outcomes are increasingly restricted to the most vulnerable segments of the population is that racial and socioeconomic disparities in experiencing the outcome increase, while such disparities in avoiding the outcome decline.

These tendencies are apparent in data on income and test performance. Reductions in poverty that allows people just below a poverty line to leave poverty will tend to increase demographic disparities in poverty rates and reduce disparities in rates of avoiding poverty. Similarly, the lowering of a test cutoff point—or improvements in test performance—that allow persons with scores just below a particular cutoff point now to pass the test will tend to increase demographic disparities in failure rates while reducing pass rate disparities.

The same patterns can be expected to apply to differences in morbidity and mortality. That is, for example, overall declines in mortality will tend to cause demographic differences in mortality rates to increase while causing disparities in survival rates to declines. That tendency must be taken into account in attempting to determine whether changes in demographic disparities in experiencing or avoiding an adverse outcome in fact reflect meaningful changes in the relative well-being of particular groups.

The pattern whereby overall declines in the prevalence of an outcome tend to increase disparities in experiencing the outcome and reduce disparities in avoiding the outcome may also be characterized in the following terms: the less prevalent an outcome, the greater the disparity in experiencing the outcome and the smaller the disparity in avoiding it. This tendency may be sufficient to outweigh other factors that would tend to cause subgroup differences to be smaller in one population that another. For example, in the United States better educated whites and blacks are more alike with respect to factors affecting health than are blacks and whites in the population at large. However, because infant mortality is so much rarer among the well-educated than among the population at large, the racial disparity in infant mortality rates is larger among the better-educated than among the nation at large; on the other hand, survival rate differences will be extremely small among the better educated. The described tendency must be taken into account, not only in interpreting data on group differences among subgroups within a

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national population, but in interpreting data on demographic differences from nation to nation. That is, a nation with very low mortality rates and relatively modest socioeconomic differences in factors associated with health may nevertheless show greater socioeconomic differences in mortality rates than nations with higher overall mortality rates and greater socioeconomic differences in factors associated with health.