

American Public Health Association 134th Annual Meeting & Exposition – Abstract #133070

Understanding variations in group differences that are the results of the variation in the overall prevalence of an outcome

James P. Scanlan, JD, James P. Scanlan, Attorney at Law, 1529 Wisconsin Ave., NW, Suite 300, Washington, DC 20007, 202-338-9224, jps@jpscanlan.com

When two groups differ in their susceptibility to an outcome, the rarer the outcome the greater the disparity in experiencing the outcome and the smaller the disparity in avoiding the outcome. This is a consequence of the fact that the rarer an outcome, the more it is restricted to the most susceptible segments of the overall population, and more susceptible demographic groups comprises increasingly higher proportions of each more susceptible segment of the overall population.

This tendency complicates the interpretation of changes in health disparities. For, as outcomes grow less prevalent, the disparity in experiencing them increases and the disparity in avoiding them declines; the opposite occurs when an outcome grows more prevalent. Similarly, in geographic areas and among subgroups where an outcome is relatively rare, disparities in experiencing it will tend to be larger and disparities in avoiding it will tend to be smaller than in areas and among subgroups where the outcome is more prevalent.

This tendency also complicates efforts to identify and appraise race- or gender-related differential effects of beneficial interventions or exacerbating factors. For beneficial interventions will be expected to cause greater proportionate reductions in adverse outcomes among the less susceptible group but greater proportionate increase in rates of avoiding the outcome among the more susceptible group. Exacerbating risk factors, however, will tend to increase rates of adverse outcomes more among the less susceptible group but reduce rates of avoiding the outcome more among the more susceptible group.

Learning Objectives: At the conclusion of this session, the participant (learner) will be able to

- Identify patterns of variation in group differences that flow from variation in the prevalence of an outcome.
- Recognize spurious changes in the size of health disparities.
- Recognize spurious race and gender effects of therapies or risk factors.

Keywords: Health Disparities, Measuring Social Inequality

Related Web page: www.jpscanlan.com/images/Race_and_Mortality.pdf

Presenting author's disclosure statement:

Any relevant financial relationships? No

