

## Social Status and Mortality

Few societies, even modern Scandinavian welfare states, avoid the uncomfortable fact of social inequalities in health. In the United Kingdom, ever since accurate mortality data first became available early in the 19th century, life expectancy has been shown to be more favorable for persons in higher-status occupations. Their relative advantages are also enjoyed by their households. Currently, boys born to families with a parent in a professional or managerial occupation can expect to live 5 years longer than a counterpart born to a parent working in a partly skilled or unskilled occupation (1). Similar inequalities in life expectancy prevail in the United States (2, 3). Until recently, the most plausible explanation for such inequalities has been that lower-status jobs were associated with lower income, which in turn resulted in damage to the health of an individual and his or her family through poorer diet and housing, lack of access to appropriate health care, and higher levels of social stress. Recently, however, accumulating evidence suggests that such explanations may not be sufficient and that social status itself, regardless of associated material and economic advantages, may confer health benefits.

Redelmeier and Singh (4) now provide further intriguing evidence by showing that actors and actresses who win Academy Awards live an average of 3.9 years longer than comparable performers who were nominated for an award but did not win. At first sight, this study will strike readers as one of those typically whimsical and serendipitous findings peculiar to epidemiology. However, the authors have considered as many potential methodologic pitfalls as possible in studying their sample of 1649 performers, on whom data were derived from relatively limited sources available on the Internet. Differences in survival remained after adjustment for age, sex, and ethnicity, and winning more than one award conferred an additional survival advantage.

This study prompts one to speculate about mechanisms, since little further detail was available within the study to identify potential causal pathways from winning Academy Awards to mortality. Material advantages of income, such as housing and diet, are clearly implausible sources of further advantage at this relatively affluent end of the social spectrum. A study performed in the United Kingdom that was more deliberately set up to

examine social status and related effects on health prospectively followed a sample of British civil servants (5). Although the sample was relatively homogenous in many respects, such as ethnicity, office-based employment, levels of wealth, and employment in the greater London area, stepwise improvements in all-cause mortality were observed with higher positions in the job hierarchy; mortality was three times worse among participants in the lowest employment grades than among those in the highest grades. These differences between employment grades remained after adjustment for baseline risk factors, such as smoking, blood pressure, and cholesterol level. Explanations such as deprivation and low income are implausible in this study of civil servants. Instead, explorations of more psychosocial intervening mechanisms between social status and health showed that lower-grade occupations were associated with lack of a sense of control over work, greater work pressures, and lower social support and integration outside of work, all factors associated with poor health in other studies (6). Differences in mortality in England and Wales as a whole can be related to measures of occupation that focus on employment conditions (7).

Many models focus in more detail on the workplace to explain how persons of different social status experience different levels of health. One body of evidence finds that jobs with high demands on an individual but low control over job tasks impose high levels of stress, with adverse health effects (8). A related but distinct body of work focuses on effort–reward imbalance. Occupations that are demanding in terms of tasks but low in rewards, whether esteem, remuneration, or career progression, are associated with poorer health, especially in terms of cardiovascular disease (9).

A different line of enquiry into psychosocial determinants of social inequalities in health has pursued what has come to be known as a “social capital” explanation. Some evidence has emerged that the overall extent of income inequality in a community, rather than individually experienced low income, may be harmful to health (10). It is argued that greater inequality in income in a society as a whole reduces individuals’ sense of integration, cohesion, and trust, which in turn undermines health.

Clearly, none of these current approaches to understanding psychosocial rather than income-related factors in relation to social status and health appear completely relevant to Redelmeier and Singh's study of major differences in mortality between more or less successful actors. On the one hand, work-focused models are more relevant to experiences more typical of blue-collar and routine nonmanual occupations and seem unlikely to point to mechanisms conferring specific health benefits after winning an Academy Award. On the other hand, societal levels of cohesion are likely to be perceived and experienced as similar by the different categories of actor studied by Redelmeier and Singh. Instead, we should look at more personal psychological mechanisms that might link social status and success with health. The most obvious candidates are self-esteem and related cognitions, such as sense of control and mastery, optimism, and pessimism. Self-esteem has been related to health through two distinct routes. First, low self-esteem is part of a causal sequence that may lead to severe depression and related psychiatric disorders (11). The social processes implicated in that sequence have been extensively examined (12). A second and distinct connection to health is that persons with low self-esteem lack the confidence and determination to adopt or maintain appropriate health behaviors with regard to smoking, substance abuse, diet, and exercise (13).

This overview of the evidence linking individuals' social status with their health prompts three related thoughts. First, most of the social scientific and epidemiologic literature on social status implicitly or explicitly considers status as an advantage conferred on the individual by group membership; prestige and other psychological benefits are gained by joining a class, caste, or social category held in esteem by society. How well does that assumption fit the much more individualistic experience of being recognized as a "star" by winning an Academy Award? Second, the literature almost always works with mechanisms of deficit or disadvantage: the problems associated with low status, control over work and income, and so on. The study of Academy Award winners is unusual in that it focuses on positive gains to already advantaged people. "Social success" is a putative mechanism that warrants further investigation. An important step in delineating the different possible causal pathways implicated in now-familiar

observations of association between measures of income and social status and subsequent health outcomes is to question more deeply the meaning of routine measures of social status (14, 15).

Finally, a helpful concept from economics: A "positional good" derives its attraction by its scarcity rather than its intrinsic value (16). Titles, holidays in exotic settings, and housing in good locations are examples of things that lose value by wider availability. Pursuing possible inferences from the current study, if everyone were famous for 15 minutes, would they derive the survival advantage seen in Academy Award winners? Meanwhile, in terms of public health policy, we are likely to continue to focus on the more mundane but tractable hazards of social status, such as poverty.

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