

Socioeconomic status and susceptibility to alcohol-related harm



Alcohol is a major contributor to the global burden of disease,¹ adding to inequities in health² and life expectancy and affecting disproportionately drinkers of lower socioeconomic status. Analyses of population data for alcohol use and harm in different socioeconomic groups have noted consistently that the same patterns of alcohol consumption cause more harm in drinkers of lower than higher socioeconomic status.³

Reasons for the relation between drinking patterns, health, and socioeconomic status are debated. The major candidate explanations are: that drinkers of lower socioeconomic status engage in riskier drinking patterns than do those of higher socioeconomic status; that the relation is confounded by variations between drinkers of different socioeconomic status with respect to the prevalence of other risk factors (eg, obesity and smoking); and that heavy drinkers who have greater alcohol-related harm undergo downward social mobility. These explanations are difficult to distinguish in studies that only use aggregate population data. We need individual-level data on socioeconomic status, drinking patterns, health outcomes, and other risk factors in samples followed up over time to better understand this paradox.

In *The Lancet Public Health*, Vittal Katikireddi and colleagues⁴ assess explanations of the alcohol harm paradox in a study that linked self-reported alcohol use in a series of large Scottish population surveys undertaken between 1995 and 2012 with health records of treated morbidity and mortality related to alcohol.⁵ They gathered detailed data for alcohol use, socioeconomic status, and major risk factors for premature death and morbidity from very large, reasonably representative samples of Scottish adults. They linked their survey data with health-care records for alcohol-related deaths, hospital admissions, and treatment to derive two composite measures of alcohol-related mortality and alcohol-related morbidity. They tested the robustness of relations between socioeconomic status and alcohol use and alcohol-related harm by using multiple measures of social disadvantage, and they controlled for confounding by cigarette smoking and body-mass index (BMI).

Katikireddi and colleagues noted a pronounced interaction between socioeconomic status and the relation between alcohol use (measured by units consumed weekly and binge drinking) and their alcohol-related harm index. Compared with light drinkers living in advantaged areas, the relative risk of harm from high levels of alcohol use was much greater for drinkers living in socially deprived areas (hazard ratio 10.22, 95% CI 7.73–13.53) than those living in areas of social advantage (6.12, 4.45–8.41). The same pattern was seen when socioeconomic status was measured by education, occupational level, income, or an area-based measure of social deprivation. The interaction was attenuated—but not wholly explained—by confounding by cigarette smoking and BMI.

Katikireddi and colleagues also assessed the role of downward social mobility. They excluded probable problem drinkers from their initial samples (ie, people who had been admitted for an alcohol-attributable condition before baseline samples were taken) then assessed the extent of downward social mobility over time in the sample, using area-based measures of social disadvantage derived from postcodes of residence. Very little evidence was noted of downward social mobility in the whole sample or among drinkers.

The study by Katikireddi and colleagues shares a common limitation of epidemiological studies of the effects of alcohol on health outcomes—namely, that self-reported alcohol use was gathered on one occasion. It is difficult and expensive to repeatedly assess alcohol use over time in large representative samples of the population. Thus, we cannot exclude the possibility that drinkers of lower socioeconomic status were less likely to reduce their drinking over time than were individuals of higher socioeconomic status (eg, if health education is less likely to reach or change drinking behaviour in people of lower socioeconomic status).

Katikireddi and colleagues also used composite measures of alcohol-related harms—eg, deaths or treatment received for alcohol-related harm. Specific causes of alcohol-related death and treatment for some types of alcohol-related morbidity are not common

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enough, even in a fairly large sample, to provide statistically powerful tests of the associations.

Notwithstanding these limitations, this study shows that downward social mobility and confounding by cigarette smoking and obesity are implausible explanations of the alcohol harm paradox. Katikireddi and colleagues' findings also agree with those from other similar studies⁶ in identifying alcohol use as a major contributor to social differentials in life expectancy and disease in developed societies.

These findings have one clear policy implication: that drinkers of lower socioeconomic status have even more to gain than do those of higher socioeconomic status from the most effective public health alcohol policies⁷—namely, increasing alcohol taxation, setting a minimum unit alcohol price, and reducing alcohol availability. This inference should undermine any opposition to raising alcohol taxes because of the notion that this policy would have socially inequitable effects on drinkers of lower socioeconomic status.

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I declare no competing interests.

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