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# Commentary on Peña et al.: The broader public health relevance of understanding and addressing the alcohol harm paradox

## CHARLOTTE PROBST<sup>1,2</sup>, CAROLIN KILIAN<sup>3</sup>

<sup>1</sup>Heidelberg Institute of Global Health (HIGH), Medical Faculty and University Hospital, Heidelberg University, Heidelberg, Germany

<sup>2</sup>Institute for Mental Health Policy Research, Centre for Addiction and Mental Health (CAMH), Toronto, ON, Canada

<sup>3</sup>Institute of Clinical Psychology and Psychotherapy, Technische Universität Dresden, Dresden, Germany

#### **Abstract**

Socio-economic inequalities in alcohol-attributable mortality make an important contribution to socio-economic health inequalities overall. A comprehensive approach to reducing socio-economic inequalities in alcohol-related health requires combining the implementation of evidence-based, cost-effective alcohol control policies with broader policy measures that act upon the structural, economic and social root causes of socioeconomic inequalities.

## Keywords

Alcohol harm paradox; alcohol-attributable harm; health policy; public health; social determinants of health; socio-economic inequality

The 'alcohol harm paradox' is the public health phenomenon that individuals with low socio-economic status (SES) experience greater alcohol-attributable harm despite equal or lower levels of alcohol consumption [1]. The study by Peña *et al.* [2] is the most recent and potentially most comprehensive effort yet to investigate the role of joint effects between SES and various behavioral risk factors, most importantly alcohol use, as a potential explanation of the alcohol harm paradox.

The interaction effects between a low SES and alcohol use that were demonstrated by the authors are not merely useful to explain the alcohol harm paradox; they are probable contributors to severe public health crises of our times, such as the stagnation and decline of

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mariecharlotte.probst@gmail.com. Author contributions

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life expectancy at birth in the general population of the United States. Seminal research by Case & Deaton [3] has demonstrated that the increases in mortality that are underlying these recent trends are largely driven by an increase in so-called 'deaths of despair'; that is, deaths from causes that are closely linked to alcohol and drug use (alcohol and drug poisoning, alcoholic liver cirrhosis and suicide). Individuals with low SES are most affected by these increases in mortality. Similarly, inequalities in alcohol-attributable mortality are rising in Europe and constitute an important driver of socio-economic inequality in mortality in many parts of Europe [4]. This underlines the public health importance of understanding and acting upon socio-economic inequalities in alcohol-attributable health above and beyond understanding the alcohol harm paradox. The rise in socio-economic inequalities that can be expected as a consequence of the current COVID-19 pandemic adds urgency to understanding the alcohol harm paradox and the ways in which the high alcohol-attributable burden among those with low SES can be addressed [5].

What options exist to tackle inequalities in alcohol-attributable harm from a public health perspective? Unfortunately, the most cost-effective alcohol control policies, such as taxation, regulation of availability and implementation of screening and brief intervention (SBI) [6], are not well equipped *per se* to target low SES populations if we do not pay close attention in their implementation [7]. For example, increasing the coverage with SBI may, in fact, exacerbate socio-economic inequalities in health outcomes due to lower health-care access for individuals with low SES [8]. It is therefore important to combine such initiatives with efforts to increase and facilitate health-care access for low SES populations and to ensure that SBI is offered across a wide range of health-care services, including occupational health-care and community health centers.

Minimum unit pricing is the policy with the strongest evidence so far on addressing socioeconomic inequality in alcohol consumption and alcohol-attributable harm [9,10]. By setting a floor price on the cheapest alcohol, which is more likely to be purchased by heavy drinkers and drinkers with low SES, minimum unit pricing has been shown to be a promising tool in lowering inequalities in alcohol-attributable harm. Currently, however, only ten countries [11] in the WHO European Region have implemented some form of minimum unit pricing [12].

Even if effective alcohol policies are being implemented, their impact upon health inequality in alcohol-attributable harm is limited, given that the prevalence and average level of drinking are often already lower among those with low SES. Thus, alcohol policies must be accompanied by upstream policy measures that address the root causes of the socioeconomic inequalities themselves.

Such upstream policies include initiatives for social welfare, universal health-care coverage, quality and equality in education and reducing stigma and social exclusion [13]. Importantly, a 'health in all policies' approach should be applied in all policy planning, assessing potential health consequences for the most disadvantaged groups explicitly, rather than focusing upon productivity alone [14].

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In conclusion, relying exclusively upon fast-acting downstream interventions that are directed at emerging health consequences will fail to address the underlying causes that give rise to the alcohol-related inequalities in the first place [13]. A comprehensive approach to reducing inequalities in alcohol-related health has to act on several levels, addressing the social determinants of health, relevant behavioral risk factors and health consequences down the line [13].

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