Alcohol, Health Inequalities and the Harm Paradox: why some groups face greater problems despite consuming less

**Summary Points**

- Health inequalities are systematic differences in health between different social groups within a society.
- Lower socioeconomic status (SES) is associated with higher mortality for alcohol related causes, despite lower socioeconomic groups often reporting lower levels of alcohol consumption. This is described as the alcohol harm paradox.
- Possible explanations include alcohol’s interaction with other unhealthy behaviours, and potential inaccuracies in recording consumption.
- Minimum Unit Pricing for alcohol would have a significant impact on alcohol related health inequalities: research suggests around 80% of the lives saved would come from routine or manual worker households.
- Incorporating public health into the licensing system would offer Local Authorities, who have responsibility for public health, far greater scope to tackle alcohol related health and health inequality issues.

**What are ‘health inequalities’?**

In the UK, the term ‘health inequality’ is usually used to refer to systematic differences in health which exist between socio-economic classes or geographical areas, although there are other inequalities, for example by gender and ethnicity. Health inequalities can be defined in a purely descriptive way, but the moral and ethical dimensions of the term are often emphasized. A commonly cited example of health inequalities within the UK is that men living in the Calton area of Glasgow live, on average, 28 years less than men living in Lenzie, just a few kilometres away.\(^1\)

The impact of health inequalities has clear public policy implications, and it is estimated that they cost the UK £31-33 billion per year in terms of illness, lost taxes and productivity, in addition to £20-32 billion per year in social security payments that are due to poor health.\(^2\)

**Alcohol and health inequalities**

There is a good body of research identifying a key link between alcohol and health inequalities, however there are many issues in need of greater clarification. Central to this is the fact that alcohol related health inequalities are more complicated than for other drugs, such as tobacco, and are somewhat paradoxical: Indeed, lower socioeconomic status (SES) is associated with higher mortality for alcohol-attributable causes – despite lower socioeconomic
groups often reporting lower average levels of alcohol consumption.iii One study found lower SES groups to have a 1.5 – 2 fold higher alcohol related mortality,iv whereas another found the most deprived quintile of local authorities in England to have alcohol specific mortality rates 5.5 times the rate of the least deprived.v

As the orange lines on Figure 1 below shows, the proportion of increasing risk and higher risk drinkers declines as levels of deprivation increase, yet alcohol related mortality moves in the opposite direction and grows with deprivation. This creates something of a paradox; why should some groups experience worse alcohol related harms, despite apparently consuming less alcohol?

Figure 1: The social gradient of alcohol harm and levels of increasing and higher risk drinkersvi

Possible explanations for the ‘alcohol harm paradox’

Materialist explanations: One of the most well-supported explanations for overall health inequalities relate to the material (social, economic and environmental) circumstances in which people live and work.vii These factors also seem likely to contribute to explaining alcohol related inequalities, with researchers suggest that ‘those of fewer resources are less protected from the experience of a problem or the impact of a stressful life event.viii

Inaccurate consumption reporting: It has been suggested that the consumption of alcohol is under-reported in more deprived groups (relative to less deprived groups), possibly because key groups are missed, such as people experiencing homelessness and those working in the military.ix In addition, there may be a methodological issue with how alcohol consumption data is recorded.

Alcohol & other unhealthy behaviours: Some research has looked at alcohol consumption as part of a complex system of interactions with other ‘poly-behaviours’. For example, it is known that low SES groups consume more foods high in salt, sugar and fat, as well as more processed food.x Research into
obesity and alcohol consumption has found a ‘supra-additive interaction’ between the two, particularly in relation to liver disease.\textsuperscript{xii} It is also known that a combination of smoking and drinking accelerates the risk of cancer, with tobacco and alcohol related cancers in the UK 2-3 times more common in areas of the most deprivation than the least.\textsuperscript{xii}

**Consumption Patterns:** While differences in consumption patterns between different SES groups have been found, these do not seem to explain alcohol related health inequalities. Research using data from 25 countries\textsuperscript{xiii} found that ‘lower educated men and women were more likely to report negative consequences than higher educated men and women even after controlling for drinking patterns’. Research from Finland\textsuperscript{xiv} and Australia\textsuperscript{xv} supports this view.

**Alcohol policy and health inequalities across the UK**

Central targets for reducing health inequalities in England have been scrapped and responsibility for public health has been handed over to local authorities, giving central government far less ability to performance manage public health issues. Instead the Government has stated an unquantifiable commitment to ‘improve the health of the poorest fastest’.\textsuperscript{xvi} The Public Health Outcomes Framework does include a commitment to ‘reduce differences in life expectancy and healthy life expectancy between communities’\textsuperscript{xvii} but there are no specific targets or indicators attached to this commitment. Alcohol can be seen as a contributing factor for almost 50% of the indicators within the Public Health Outcomes Framework for England. As such addressing alcohol-related harm could be a key route to improving public health and reducing general health inequalities.

**Interventions to address alcohol related inequalities**

Research has found that that public health interventions which rely on individuals to change, such as public education campaigns, are likely to increase health inequalities, whilst more ‘upstream’ public health interventions (e.g. price increases and restrictions in the availability of alcohol) are most likely to help reduce health inequalities.\textsuperscript{xviii} Critics have argued that the Government is not taking action on alcohol, having stalled on the introduction of Minimum Unit Pricing (MUP). Investigations into a public health licencing objective are on going.

**Alcohol Affordability and Minimum Unit Pricing**

There is strong evidence that reducing the affordability of alcohol by raising prices leads to a reduction in alcohol consumption and associated harms.\textsuperscript{xix} One such policy is Minimum Unit Pricing (MUP), which sets a level below which retailers cannot sell alcohol, depending on the number of units per beverage. Similar policies have been effectively introduced in Canada\textsuperscript{xx} and the evidence base for MUP is supported by the World Health Organisation,\textsuperscript{xxi} the OECD\textsuperscript{xxii} and NICE.\textsuperscript{xxiii}
As well as purchasing more units overall, harmful drinkers tend to buy more cheap alcohol: one study found that patients with alcohol-related cirrhosis paid an average price of 33p per unit, compared with £1.10 per unit for low-risk drinkers. xxiv This means that harmful drinkers – regardless of their socioeconomic group – would be most affected by MUP. In addition, there would be a minimal impact on moderate drinkers, as Figure 2 shows.

While MUP effectively targets all harmful drinkers, modelling done by the University of Sheffield suggests that it would have greater impact on harmful drinkers from a low SES background. They estimate that a 45p minimum unit price would lead to 860 fewer deaths and 29,900 fewer hospital admissions due to alcohol per year, and that routine or manual worker households – who account for around 41% of the population – would account for around 80% of these reductions.

**Recommendation:** that the Government introduce Minimum Unit Pricing at a rate of at least 50p per unit as a step towards addressing alcohol related health inequality targets in the Public Health Outcomes Framework.

**A Public Health Licencing Objective**

Greater levels of alcohol outlet density have been linked with increased consumption and drink related problems, xxv as well as increased violence xxvi and significantly higher alcohol-related death rates in that area. xxvii A number of studies have found areas of greater deprivation to have greater concentrations of alcohol outlets, xxviii, xxix with the mismatch between supply and demand potentially resulting in disproportionately more alcohol-related harm in deprived neighbourhoods. xxx

Some of these issues can be addressed via the current licencing system, however without a public health objective longer-term health outcomes cannot be
tackled easily. In England and Wales cumulative impact policies (CIPs) can be introduced in areas where the combined effect of licensed premises suggests that the growth of similar premises needs to be controlled. While it introduces an assumption that no further licenses will be granted it does not necessarily allow for the current density of alcohol outlets to be reduced, even if it is already a problem.\textsuperscript{xxxi}

A number of groups, such as the Local Government Association,\textsuperscript{xxxii} have been calling for the addition of a public health licensing objective so that Local Authorities can better implement their public health responsibilities. It would allow Local Authorities much greater scope to take health inequalities into account, including factors such as density and the supply of alcohol in an area, and the prevalence of both on and off license premises.

At the time of writing the Home Office and Public Health England are investigating mechanisms though which a public health licensing objective could be effectively implemented.\textsuperscript{xxxiii} Questions remain around how such an objective could be implemented and findings from Scotland, which has had public health as a fifth licensing objective since 2005, point towards practical and cultural problems, despite some success.\textsuperscript{xxxiv} In the interim Public Health England have produced guidance to help public health teams in England & Wales effectively participate in licensing decisions.\textsuperscript{xxxv}

\textbf{Recommendation:} that the Government take concrete steps towards incorporating public health within the licensing system in order to give Local Authorities greater scope to implement their duties around public health.

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The full report and a podcast interview with Professor Sir Michael Marmot can be accessed from the \textbf{IAS Reports} section of our website.

Southward Council. A guide to cumulative impact and saturation policies. Accessed on 01/10/14


Home Office Guidance (2014) Local Alcohol Action Areas

Alcohol Research UK (August 2014) Using licensing to protect public health: from evidence to practice