

Comparing socioeconomic gradients in alcohol-related harm between the four UK countries

Susannah Sadler, Colin Angus, Lucy Gell, Duncan Gillespie, John Holmes, Alan Brennan, Petra Meier
School of Health and Related Research, University of Sheffield, UK

WHY DID WE DO IT?

- In all four UK countries people in lower socioeconomic groups experience worse health outcomes, though the scale of inequalities has been shown to vary between countries¹
- Almost 5% of deaths and hospital admissions (in England) are alcohol-attributable² with socioeconomic gradients also identified for alcohol-related harm³
- Therefore, policies targeting alcohol-related harm may help tackle overall health inequalities
- Reducing alcohol-related harm is complicated by contextual factors such as drinking patterns (For example, people may suffer more harm despite lower consumption if they tend to binge-drink), dietary and smoking behaviour, education, marginalisation and access to healthcare
- These contextual factors influence risk of harm overall but may also influence the risks for individual conditions (for example, binge drinking is more likely to be associated with accidents and injuries)
- Understanding alcohol-related health inequalities at the condition level may clarify which contextual factors are important, and the extent to which various policies could be effective in the different countries of the UK

CONCLUSIONS

- The scale of alcohol-related health inequalities varies between conditions with greatest inequality seen in mental disorders, gastrointestinal conditions (like liver disease), assault, poisoning and self-harm
- Between countries, patterns of inequality are similar although some countries (e.g. Scotland) may have more scope to address overall health inequalities through alcohol policy
- There may be more scope to impact inequalities through reducing binge drinking (but the overall level of alcohol-attributable admissions for acute conditions is lower)

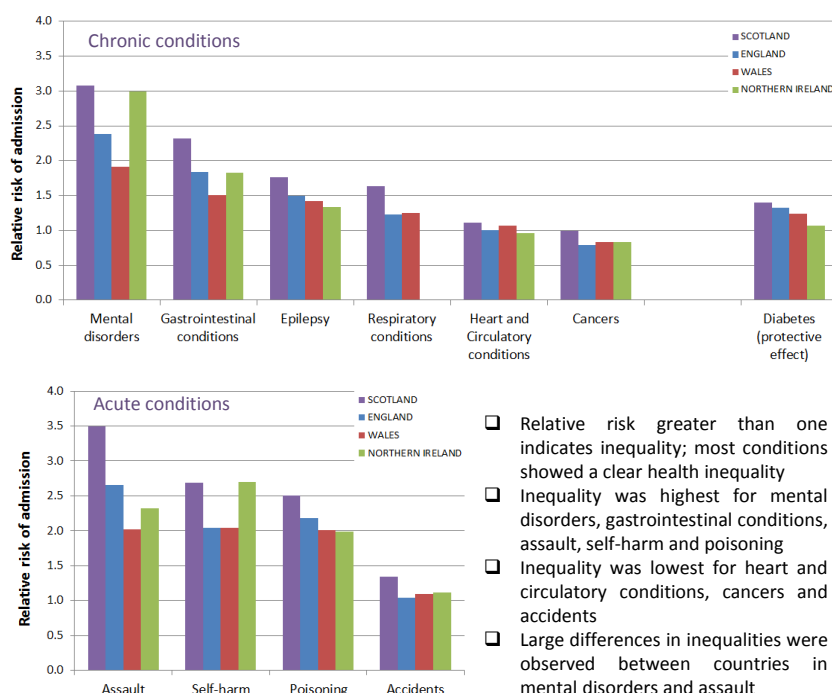
- Relative risks of hospital admission were calculated for patients from the **15% most deprived areas compared with the 85% least deprived**.
- Analysis used rates per 100,000 population from raw person-specific admission numbers (not alcohol-attributable admissions)
- Condition types to be included were prioritised based on the most alcohol-attributable admissions in the UK
- Note some variations in raw data between countries, for example exact matches were not possible for all conditions for Northern Ireland and each country uses a different measure of deprivation.

ANNUAL PERSON-SPECIFIC HOSPITAL ADMISSIONS AND ALCOHOL-ATTRIBUTABLE ADMISSIONS BY CONDITION TYPE

	ALCOHOL-ATTRIBUTABLE PERSON-SPECIFIC ADMISSIONS*	TOTAL UK PERSON-SPECIFIC ADMISSIONS
HEART AND CIRCULATORY CONDITIONS**	333,357	2,202,247
ALCOHOL-ASSOCIATED MENTAL DISORDERS	153,837	153,837
GASTROINTESTINAL CONDITIONS	40,626	58,693
EPILEPSY	31,739	119,024
CANCERS	29,623	149,428
RESPIRATORY CONDITIONS	14,212	163,710
DIABETES (PROTECTIVE EFFECT)	-19,370	184,359
ACCIDENTS	69,344	537,801
POISONING	34,712	45,284
SELF-HARM	5,331	48,462
ASSAULT	4,555	31,719

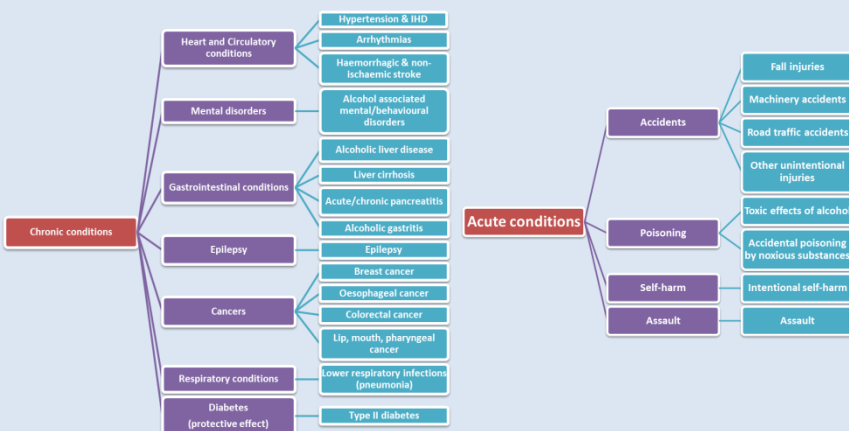
*based on English alcohol attributable fractions **contains a mixture of some protective and some harmful effects of alcohol, but harmful effects dominate

RELATIVE RISK OF HOSPITAL ADMISSION FOR PEOPLE LIVING IN THE 15% MOST DEPRIVED AREAS, COMPARED WITH THE REST OF THE POPULATION



- Relative risk greater than one indicates inequality; most conditions showed a clear health inequality
- Inequality was highest for mental disorders, gastrointestinal conditions, assault, self-harm and poisoning
- Inequality was lowest for heart and circulatory conditions, cancers and accidents
- Large differences in inequalities were observed between countries in mental disorders and assault

ALCOHOL-RELATED CONDITIONS INCLUDED



REFERENCES

- Self-rated health and mortality in the UK: results from the first comparative analysis of the England and Wales, Scotland, and Northern Ireland Longitudinal Studies, Popul Trends. 2010 Spring;(139):11-36
- Updating England-Specific Alcohol-Attributable Fractions Mark A. Bellis & Lisa Jones, Centre for Public Health, Liverpool John Moores University. www.cph.org.uk
- Alcohol, Health Inequalities and the Harm Paradox: Why some groups face greater problems despite consuming less alcohol, Dr Katherine Smith & Jon Foster, Institute of Alcohol Studies. www.ias.org.uk