RESEARCH SUMMARY
Date Compiled: September 2018

Key Takeaways from Included Research

- The Global Burden of Disease project found that, for 2016, alcohol use was the leading risk factor for death, disease, and disability for adults aged 15–49 years. The total burden of mortality was 2.8 million deaths. Importantly, the study determined that the risk of all-cause mortality, and of cancers specifically, rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero.

- One of the benefits is three-tier systems of alcohol control is the limiting of absentee ownership, which can contribute to an unstable and harmful alcohol market.

- An Australian study found that existing regulations do not appear to be sufficient to adequately restrict health-related claims made by alcohol marketers and producers, as alcohol products continue to be advertised in association with health. Research shows that this can have significant implications for the way consumers view these products. Restrictions on health-related claims should form part of broader reforms to alcohol marketing that should include strong, independent, legislated controls.

- The implementation of "best buy" alcohol policies in Russia (notably, the gradual increase in the minimum price for distilled spirits) appears to have led to substantial decreases in alcohol-related death, disease, and disability in that nation.

- An analysis of drinkers and drinking patterns in England found that those drinking above guideline levels were estimated to account for 68% of total alcohol sales revenue in 2013/14, with the heaviest drinking 4% of the population account for 30% of all consumption and 23% of all industry revenue. In England, the alcohol industry appears to be highly financially dependent upon heavy drinking and might face significant financial losses were consumers to drink within guideline levels.

- A meta-analysis of observational studies indicated that there was a significant association between alcohol consumption and gastroesophageal reflux disease (GERD), a prevalent disease with rising incidence. GERD may not only lead to the pain and discomfort of heartburn, but can lead to breathing problems including esophageal cancer, esophagitis, esophageal stricture, and breathing problems (asthma, nighttime choking, pneumonia).

ALCOHOL USE AND BURDEN FOR 195 COUNTRIES AND TERRITORIES, 1990–2016: A SYSTEMATIC ANALYSIS FOR THE GLOBAL BURDEN OF DISEASE STUDY 2016

August 2018

Summary

Background: Alcohol use is a leading risk factor for death and disability, but its overall association with health remains complex given the possible protective effects of moderate alcohol consumption on some conditions. With our comprehensive approach to health accounting within the Global Burden of Diseases, Injuries, and Risk Factors Study 2016, we generated improved estimates of alcohol use and alcohol-attributable deaths and disability-adjusted life-years (DALYs) for 195 locations from 1990 to 2016, for both sexes and for 5-year age groups between the ages of 15 years and 95 years and older.

Methods: Using 694 data sources of individual and population-level alcohol consumption, along with 592 prospective and retrospective studies on the risk of alcohol use, we produced estimates of the prevalence of current drinking, abstention, the distribution of alcohol consumption among current drinkers in standard drinks daily (defined as 10 g of pure ethyl alcohol), and alcohol-attributable deaths and DALYs. We made several methodological improvements compared with previous estimates: first, we adjusted alcohol sales estimates to take into account tourist and unrecorded consumption; second, we did a new meta-analysis of relative risks for 23 health outcomes associated with alcohol use; and third, we developed a new method to quantify the level of alcohol consumption that minimises the overall risk to individual health.

Findings: Globally, alcohol use was the seventh leading risk factor for both deaths and DALYs in 2016, accounting for 2·2% (95% uncertainty interval [UI] 1·5–3·0) of age-standardised female deaths and 6·8% (5·8–8·0) of age-standardised male deaths. Among the population aged 15–49 years, alcohol use was the leading risk factor globally in 2016, with 3·8% (95% UI 3·2–4·3) of female deaths and 12·2% (10·8–13·6) of male deaths attributable to alcohol use. For the population aged 15–49 years, female attributable DALYs were 2·3% (95% UI 2·0–2·6) and male attributable DALYs were 8·9% (7·8–9·9). The three leading causes of attributable deaths in this age group were tuberculosis (1·4% [95% UI 1·0–1·7] of total deaths), road injuries (1·2% [0·7–1·9]), and self-harm (1·1% [0·6–1·5]). For populations aged 50 years and older, cancers accounted for a large proportion of total alcohol-attributable deaths in 2016, constituting 27·1% (95% UI 21·2–33·3) of total alcohol-attributable female deaths and 18·9% (15·3–22·6) of male deaths. The level of alcohol consumption that minimised harm across health outcomes was zero (95% UI 0·0–0·8) standard drinks per week.

Interpretation: Alcohol use is a leading risk factor for global disease burden and causes substantial health loss. We found that the risk of all-cause mortality, and of cancers specifically, rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero. These results suggest that alcohol control policies might need to be revised worldwide, refocusing on efforts to lower overall population-level consumption.

Source:

GBD 2016 Alcohol Collaborators (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: A systematic analysis for the Global Burden of Disease Study 2016. *The Lancet.* Online first.

Full free text: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31310-2/fulltext

Accompanying commentary:

Burton, R., & Sheron, N. (2018). No level of alcohol consumption improves health. *The Lancet.*

Video segment with study's lead author:

https://newsroom.uw.edu/resource/segment-alcohol-and-global-burden-disease

Related Media Coverage:

NPR: No Amount Of Alcohol Is Good For Your Health, Global Study Says

ScienceDaily: No safe level of alcohol, new study concludes

THE PROBLEM OF THE ABSENTEE OWNER
July 2018

When Prohibition ended, many states took steps to ensure that those who sold alcohol in their community were part of the community. Some states had residency requirements for retailers and wholesalers. Others restricted the number of licenses that could be held by a single owner, corporation or chain operation, since these were often absentee owned. Other states took the approach of requiring an out-of-state entity to designate a local manager as an additional licensee.

And, today's three-tiered regulatory system is designed to prevent or curtail local market domination of alcohol sales by a few large companies. Some of these state regulations have been challenged in the courts without an understanding of why they were instituted in the first place. Or, it is assumed that these regulations are merely there to favor local businesses. However, in most cases these provisions predate the local industry.

The concern over absentee owners or oversight far removed from the local market has had a long history in land reform debates. Even the federal code requires federal judges to live within their districts. (See 28 U.S.Code Section 44 (c).) …

Source: Healthy Alcohol Marketplace

Free full text: http://healthyalcoholmarket.com/wordpress/

PROLIFERATION OF 'HEALTHY' ALCOHOL PRODUCTS IN AUSTRALIA: IMPLICATIONS FOR POLICY
August 2018

Abstract

Objectives: The Australian alcohol industry has observed that increased health consciousness among consumers is a threat to industry revenue, but also an opportunity for innovation and growth within the sector.

Methods: This paper examines how the alcohol industry has responded to a perceived increase in health consciousness among consumers, considers policy implications and provides recommendations to address supposedly healthier alcohol products. We collected examples of new product developments and monitored alcohol industry publications for information on key trends and comments from alcohol company executives to inform the paper.

Results: We found that existing regulations do not appear to be sufficient to adequately restrict health-related claims made by alcohol marketers and producers, as alcohol products continue to be

advertised in association with health. Research shows that this can have significant implications for the way consumers view these products.

Lessons learnt: Restrictions on health-related claims should form part of broader reforms to alcohol marketing that should include strong, independent, legislated controls.

Source:

Keric, D. & Stafford, J. (2018). Proliferation of 'healthy' alcohol products in Australia: Implications for policy. *Public Health Research & Practice.* Online early publication.

Free full text: http://www.phrp.com.au/issues/online-early/proliferation-of-healthy-alcohol-products-in-australia-implications-for-policy/

Related Press Release:

Techly: Study warns Aussie consumers to beware of alcohol marketed as 'healthy'

RISK FACTOR POLICIES, MORBIDITY, AND MORTALITY IN RUSSIA
August 2018

Abstract

According to the Global Burden of Disease (GBD) 2016 Study by the GBD 2016 Russian Collaborators,1 published in The Lancet. As the prevalence of the most important risk factor according to this study—high blood pressure—increased over the past decades, these achievements seem to be primarily due to substance control policies, specifically WHO's so-called best buys, which resulted in marked declines in tobacco and—more importantly for Russia—alcohol use. …

The reductions in alcohol use described above are likely to have resulted from policy measures (including all best buys) instituted over the past decade, such as the gradual raising of the minimum price on spirits since 2010. Although the noted comparisons are for 2010 and 2016 (to align with the tobacco statistics), changes in alcohol legislation and declines in alcohol use and attributable mortality started before 2010.

Source:

Rehm, J., & Ferreira-Borges, C. (2018). Risk factor policies, morbidity, and mortality in Russia. *The Lancet.*

Free full text: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32043-9/fulltext

HOW DEPENDENT IS THE ALCOHOL INDUSTRY ON HEAVY DRINKING IN ENGLAND?
August 2018

Abstract

Aims: To understand the extent of the alcohol industry's financial dependence on drinking above government low-risk guidelines in England.

Design: Scenario modelling using descriptive analyses of pooled data from the 2013 and 2014 waves of two nationally representative surveys: the Health Survey for England (HSE) and the Living Costs and Food Survey (LCF). We estimated the proportion of alcohol sales revenue accounted for by drinkers above guideline levels, and how this varies between different beverage and retailer types. We then estimated the impact on sales revenue if the entire population reduced their drinking to within guideline levels, as well as the average price increases necessary to compensate for such a loss of revenue.

Setting: England.

Participants: A total of 16 872 individual (HSE) and 9975 household (LCF) survey respondents.

Measurements: Transaction-level estimates of volume of alcohol purchased and price paid by beverage type and trade sector.

Findings: Those drinking above guideline levels are estimated to account for 68% of total alcohol sales revenue in 2013/14: 81% of off-trade revenue and 60% of on-trade revenue. This represents 77% of beer, 70% of cider, 66% of wine and 50% of spirits sales value. The heaviest drinking 4% of the population account for 30% of all consumption and 23% of all industry revenue. If all consumers reduced their drinking to within guideline levels, alcohol sales revenue could decline by 38% (£13 billion). To mitigate this loss, average prices paid would have to rise substantially—for example, by £2.64 for a pint of on-trade beer or £12.25 for a 70 cl bottle of off-trade spirits.

Conclusions: In England, the alcohol industry appears to be highly financially dependent upon heavy drinking, and might face significant financial losses were consumers to drink within guideline levels.

Source:

Bhattacharya, A., Angus, C., Pryce, R., Holmes, J., Brennan, A., & Meier, P. S. (2018). How dependent is the alcohol industry on heavy drinking in England? *Addiction.*

The Independent: Alcohol sales would fall nearly 40% if everyone in England drank within guidelines, research finds

ALCOHOL CONSUMPTION AND THE RISK OF GASTROESOPHAGEAL REFLUX DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS

Abstract

Aims: Epidemiologic evidence on alcohol consumption increasing the risk of gastroesophageal reflux disease (GERD) is contradictory. This study aimed to investigate the correlation between alcohol consumption and GERD by a meta-analysis of observational studies.

Short summary: Gastroesophageal reflux disease (GERD) is a prevalent disease, and the incidence is rising. We conducted a meta-analysis of observational studies, indicating that there was a significant association between alcohol consumption and the risk of GERD. This finding provides important implications for the prevention and control of GERD.

Methods: Two investigators retrieved relevant studies on PubMed, Cochrane and EMBASE, respectively. The summary odds ratios (ORs) and 95% confidence intervals (CIs) were calculated by random effects model to assess the association. Heterogeneity was quantified using the Q statistic and I2. Subgroup analysis, publication bias and sensitivity analysis were also conducted.

Results: Twenty-six cross-sectional studies and three case-control studies were included in the meta-analysis. The pooled random effects OR was 1.48 (95%CI, 1.31–1.67; I2 = 88.8%), in comparison between drinkers and non-/occasional drinkers. For reflux esophagitis and non-erosive reflux disease, two subtypes of GERD, the ORs were 1.78 (95%CI, 1.56–2.03; I2 = 87.5%) and 1.15 (95%CI, 1.04–1.28; I2 = 0.3%), respectively. In addition, the pooled OR for drinkers who drank <3–5 times or days per week was 1.29 (95%CI, 1.14–1.46; I2 = 35.5%), while for those who drank more frequently, the OR was 2.12 (95%CI, 1.63–2.75; I2 = 55.1%). Dose–response analysis showed a linear association between alcohol consumption and GERD (Pfornonlinearity=0.235) . The pooled OR for a 12.5 g/day increment of alcohol was 1.16 (95%CI, 1.07–1.27; P = 0.001).

Conclusions: This meta-analysis provides evidence for a potential association between alcohol drinking and the risk of GERD. The increase in alcohol consumption and frequency showed a stronger association with GERD.

Source:

Pan, J., Cen, L., Chen, W., Yu, C., Li, Y., & Shen, Z. (2018). Alcohol consumption and the risk of Gastroesophageal Reflux Disease: A systematic review and meta-analysis. *Alcohol and Alcoholism.*