Alcohol in Moderation

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International Digest on alcohol and health and the responsible consumption of alcohol

Contents

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Kyrgyzstan

The President of Kyrgyzstan signed amendments to existing legislation that prohibits the media from publishing information "harmful to the health or development of children". The amendments, in prohibit the dissemination of information, in the media and on the internet, that could cause in children a desire to use narcotic drugs, psychotropic or intoxicating substances, medicines containing narcotic substances, tobacco products, nicotine-containing products, alcoholic or alcohol-containing products.

UK

Temporary licensing rules that made it easier for pubs in England and Wales to sell takeaway drinks during the Covid-era will finish on 30 September, the UK government has said.

In 2020, landlords were given permission to serve customers in the street through hatches when they were forced to close their premises by Covid laws. The move, aimed at keeping the trade running, was extended twice during the pandemic.

Bulgaria

Drink and drugged driving punishments have increased in Bulgaria with the country also introducing vehicle confiscation for these offences.

Recent amendments to the Penal Code stipulate that a driver who causes death on the road while drugged or drunk or does not have a driving license or flees the scene of the crash could face a minimum of 5 years in prison.

Germany

Shortly before "International Beer Day" in August, The Federal Statistical Office in Germany reported that 474 million liters of non-alcoholic beer were brewed in 2022, up from just under 242 million liters in 2012.

Although 7.6 billion liters of beer containing alcohol were brewed in 2022, sales of conventional, alcoholic beer are falling and are 12% lower than ten years ago. The per capita consumption of beer is around 91.6 liters per year, compared to 20.7 liters per capita per year for wine, 3.2 liters for sparkling wine and 5.2 liters for spirits.

Data compiled by the German Central Office for Addiction Issues, based in Hamm, North Rhine-Westphalia shows that the per capita consumption for those over the age of 15 in Germany, is 10 liters of pure alcohol per year down from 13.4 liters in 1990.

Finland

The Finance ministry in Finland is proposing amendments to alcohol duty. The planned changes mean that tax on wine and other fermented drinks with an alcohol content of more than 5.5% abv would increase by an average of 8.3%. The tax on spirits and long drinks would increase by an average of 8.8% and tax on beer would be reduced by approximately 4.9%. The tax on drinks containing less than 3.5% alcohol by volume (including alcohol free beverages) would remain unchanged.

Global prevalence, incidence, and outcomes of alcohol related liver diseases: a systematic review and meta analysis

Authors

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Citation

BMC Public Health, 23:859 (2023) doi.org/10.1186/s12889-023-15749-x

Author's Abstract

Background Alcohol-related liver disease (ARLD) is one of the major chronic liver diseases worldwide. This review aimed to describe the global prevalence, incidence, and outcomes of ARLD.

Methods Medline, Embase, The Cochrane Library, and China National Knowledge Infrastructure (CNKI) were searched from inception to May 31, 2022. The language was restricted to English or Chinese. According to the criteria, articles describing the basic characteristics of the population were selected. Two reviewers extracted the data independently.

Results A total of 372 studies were identified: 353 were used for prevalence analysis, 7 were used for incidence analysis, and 114 were used to for outcome analysis. The prevalence of ARLD worldwide was 4.8%. The prevalence in males was 2.9%, which was higher than female (0.5%). Among the ethnic groups, the percentage was highest in Caucasians (68.9%). Alcoholic liver cirrhosis comprised the highest proportion in the disease spectrum of ARLD at 32.9%. The prevalence of ascites in ARLD population was highest (25.1%). The ARLD population who drinking for > 20 years accounted for 54.8%, and the average daily alcohol intake was 146.6 g/d. About 59.5% of ARLD patients were current or former smokers, and 18.7% were complicated with hepatitis virus infection. The incidence was 0.208/1000 person-years. The overall mortality was 23.9%, and the liver-related mortality was 21.6%.

Conclusion The global prevalence of ARLD was 4.8% and was affected by sex, region, drinking years, and other factors. Therefore, removing the factors causing a high disease prevalence is an urgent requisite.

International Scientific Forum on Alcohol Research Forum (ISFAR) comments

Background including previous results

The liver is the most important organ metabolizing and, therefore, detoxifying alcohol. Alcohol-related liver disease (ARLD) refers to liver damage caused by long-term excessive alcohol consumption. Alcohol causes hepatocellular damage through alcohol breakdown-associated mechanisms and malnutrition (Gao & Bataller, 2011). ARLD has a range of associated symptoms and consists of three main stages, which often overlap. These stages are alcoholic fatty liver disease (a built up of fat in the liver); alcoholic hepatitis (inflammation of the liver characterized by rapid onset of jaundice, malaise, tender hepatomegaly, and subtle features of systemic inflammatory response); and alcoholic liver cirrhosis (severe scarring of the liver) (GBD, 2017, WHO, 2018, Rehm et al., 2017, Louvet & Mathurin, 2015).

After drinking alcohol, alcohol is absorbed in the gastrointestinal tract and transported to the liver both by a first-pass before entering the central blood circulation and by the following passes of blood circulating through the liver. The liver absorbs the alcohol and breaks it down into acetaldehyde and acetate using some very active and efficient enzymes. On average, the liver can break down 6-14 g of alcohol per hour (Stockley & Saunders, 2010). So, when one drinks in moderation, viz 10-20 g/day for women and 20-30 g/day for men over a period of several hours, the liver can detoxify such a dose during that period of time. ARLD, however, occurs when much larger quantities of alcohol are being consumed daily over longer periods of time. Regular heavy drinkers and alcohol dependent drinkers die from alcoholic liver cirrhosis at a much higher rate than the general population, as the risk for alcoholic liver cirrhosis is related to overall cumulative lifetime alcohol consumption (Lelbach 1995). Cumulative life-time alcohol consumption is the average level of drinking in grams of pure alcohol (ethanol) per day (Roerecke et al., 2019) during at least a decade of sustained heavy drinking (Szabo, 2007).

Alcohol consumption and liver disease have an exponentially increasing dose-response relationship (Roerecke et al., 2019), where both the frequency of drinking as well as the quantity of alcohol consumed influence the risk of liver disease (Kamper-Jorgensen et al., 2004, Askgaard et al., 2015). A definitive threshold below which alcohol consumption will not cause ARLD has not been established. Research suggests, however, that levels of around 20-30 g/day for men and 10-15 g/day for women are unlikely to cause liver disease in most individuals (Szabo, 2007).

ARLD is one of the major lethal outcomes of alcohol consumption, and global burden of disease from ARLD is mainly due to (premature)

years of life lost rather than due to disability resulting from alcohol consumption (Rehm & Shield, 2019). ARLD deaths were estimated at some 607,000 in 2016[1], which is about 20% of all deaths attributed to alcohol (WHO, 2018). While the age-standardized mortality rates of alcohol-induced cirrhosis and other chronic liver diseases have declined from 5.7 deaths per 100,000 people in 1990 to 4.5 deaths in 2019, alcohol consumption per capita has risen from 5.5 L in 2005 and is projected to increase further to 7.6 L in 2030 (Zhang, 2022). Accordingly, there could be a concomitant increase in the incidence of ARLD in 2030 (Bang et al., 2015, Huang et al., 2023).

Various other factors than drinking large quantities of alcohol over extended periods of time modify the risk for ARLD. Specific genes have been identified that modify the severity of ARLD. These genes include PNPLA3, TM6SF2 and MBOAT7, which have also been implicated in lipid dysregulation (Scott & Anstee, 2018). Some lifestyle factors contributing to chronic liver disease include smoking and hepatitis viral infections, which have been analysed by the authors of this paper. The authors report that 60% of the ARLD patients were smokers and about 19% had a concurrent hepatitis virus infection.

The latter is interesting in the light of the recent COVID-19 pandemic. Recent research shows that after a spike in alcohol-related hepatitis admissions during the first summer of the COVID-19 pandemic, rates declined significantly in 2021 and returned to pre-pandemic levels (Gonzalez et al., 2023). Other risk factors for ARLD, which were not analysed by the authors, are metabolic syndrome (Pose et al., 2021), type 2 diabetes mellitus, cardiovascular disease and obesity (Theodoreson et al., 2023), as well as older age and gut microbial dysbiosis (Huang et al., 2023). Interestingly, COVID-19-associated dysbiosis has also been linked to increased intestinal permeability, which may negatively impact ARLD prognosis (Hussain et al., 2021).

With respect to the latter, a recent meta-analysis estimated the global prevalence of non-alcoholic fatty liver disease in the overweight population at about 70%, the prevalence of non-alcoholic fatty liver at about 40%, and the prevalence of non-alcoholic steatohepatitis at about 30%. Similar prevalence estimates were reported in the obese population (Quek et al., 2023). So, prevalence of the non-alcohol related liver diseases is quite high and it would have been interesting to study the effect of this risk factor as well.

Design and main outcomes

This systematic review and meta-analysis identified papers through various literature databases for English and Chinese papers on ARLD in general populations. A total of 372 studies were identified that fulfilled the inclusion criteria based on the diagnosis of ARLD with blood testing, ultrasound, imaging techniques and liver biopsies and the reporting of prevalence, incidence and outcomes of ARLD. In total, 14 countries were included. This study was extensive and resulted in a paper having 417 literature references.

Europe, the region with the highest alcohol consumption also had the highest prevalence of ARFLD, namely 5.4%, which did not differ much from the prevalence in Asia and North-America, namely 4.5% and 4.7%, respectively. However, heterogeneity between studies and between countries was large. For instance, Italy was reported to have the highest prevalence in Europe at a current per capita alcohol consumption of 7.5 L pure alcohol, whereas Portugal reported an ARLD prevalence of 1% at a per capita alcohol consumption of 12.3 L pure alcohol[2]. These data seem contradictory and are not discussed other than in general terms that other contributing factors may play a role in the aetiology of ARLD.

Prevalence of ARLD was analysed by region, sex, study period, by race and nationality, by duration and average dose of alcohol intake and other contributing factors such as smoking and hepatitis viral infections; however, other contributing factors such as older age, obesity, type 2 diabetes mellitus and gut microbial dysbiosis were not analysed. In addition, incidence and mortality and cause of ARLD death were analysed as well.

Comments on outcomes and methodology

Data reported on gender differences in ARLD prevalence seem contradictory to overall prevalence. Male prevalence was estimated at 2.9%, which was higher than that of women, namely 0.5%. Still the overall prevalence of ARLD in the general population was estimated at a much higher 4.8%. One possible explanation may be that the papers used for the gender assessments and the overall assessment were different: overall prevalence was based on 99 studies and prevalence per gender was based on 58 studies, possibly in lower prevalence countries.

Unfortunately, the relationship between ARLD prevalence or incidence and alcohol consumption data in a specific country were not investigated. One would expect a positive association between

per capita alcohol consumption, but such an association has not always been observed. For example, Swedes and Italians drink lower quantities of pure alcohol per capita (7.5 and 7.7 L/year) but have an extremely high prevalence of ARLD (14.0 and 16.1%), while the French and Portuguese drink at higher levels (11.4 and 10.4 L/year respectively), whereas the prevalence of ARLD in these two countries is only 1%. These data suggest that apart from drinking levels other risk factors play an important role in ARLD. The authors suggest that beverage type may be relevant in that respect, which is not consistent with the different prevalence in wine drinking countries such as France and Italy. This is also inconsistent with a previous observation that compared to beer and liquor, wine might be associated with a lower risk of alcoholic cirrhosis (Askgaard et al., 2015).

Noteworthy, the analysis of the causes of death in ARLD showed that mortality related to liver diseases was some 20%, about twice that of non-liver diseases. Overall mortality rate was some 24%.

Very interesting are the characteristics observed in terms of the duration of alcohol intake and the daily dose of pure alcohol consumption. Analysis of 19 studies indicated that the longer the drinking in years the higher the number of ARLD patients with the majority of the patients with a drinking history of over 20 years. Recent alcohol consumption rather than earlier in life has also been associated with risk of alcoholic cirrhosis (Askgaard et al., 2015). Moreover, analysis of 20 studies suggested that average daily alcohol consumption was up to 147 g of alcohol per day. This is an extreme amount of alcohol, which translates into a daily consumption of 14-15 Australian and European standard glasses, 10 US standard glasses and 18 UK standard glasses.

The authors correctly remarked that these high consumption levels are much higher than the excessive drinking defined by health authorities like the NIAAA. They note that there seems to be a discrepancy between the guidelines for alcohol consumption and disease prevalence in the case of ARLD. In other words, prevalence of ARLD is most likely not relevant as a risk for those that follow the guidelines. Guidelines need a safety margin on the drinking levels advised in the assumption that people will drink more than advised. However, in the case of ARLD, such a safety margin would appear to be extensive. In other words, based on these results, the risk for ARLD at moderate drinking levels may be negligible.

In general, health institutions currently do not look at incidence or prevalence of diseases associated with alcohol, but construct estimated risks for diseases. Moreover, a no-risk level seems to be acceptable, which may be hard to accept for the general population because people do usually not drink for their health but for their pleasure and relaxation. At least drinking guidelines may be too strict in terms of ARLD risk since it mainly occurs in people drinking huge quantities of alcohol for extensive periods of time. Although this paper seems to suggest that the threshold for developing ARLD may be much higher than most current drinking guidelines, the paper does not indicate where such a threshold may be.

Specific Comments from Forum Members

Forum member Keil considers that "this review paper contains inconsistencies and contradictions. The clear message is that alcohol consumption around 10-15 grams/day in women and 20-30 grams/ day in men is highly unlikely to cause ARLD."

Forum Member Skovenborg states that "in the conclusion section the authors suggest that "by increasing alcoholic taxes and controlling the quantity and timing of alcohol sales, the harm caused by alcohol can be reduced to some extent." If you look at the map of global prevalence of ARLD (Fig. 2) you will notice that the prevalence of ARLD in Portugal, a country that does not have excise taxes on wine and no restriction on timing of alcohol sales, is merely 1%, while the prevalence of ARLD in Sweden, a country with some of the highest excise taxes on alcoholic beverages in the world and a state monopoly with control of the timing and quantity of alcohol sales, is much higher: 14.0%.

These figures might have provoked some thoughts about the reason for the "Portuguese Paradox" and the possible effects of drinking pattern and drinking culture suggestion a kind of "cultural immunity". A study of the contextual and psychological factors of wine and beer consumption in Portugal and in the Netherlands found that "cultural differences define Portuguese as outdoors, everyday drinkers, within a meal context, and Dutch as at home, weekend drinkers."

The importance of drinking pattern was confirmed by the results from the prospective UK Million Women Study (Simpson et al., 2019).

The incidence of cirrhosis increased with amount of alcohol consumed (≥15 drinks [mean 220 g of alcohol] vs one to two drinks [mean 30 g of alcohol] per week; RR 3·43, 95% CI 2·87–4·10; p<0·0001). About half of the participants (203 564 of 401 806) reported usually drinking with meals and, after adjusting for amount consumed, incidence of cirrhosis was lower for usually drinking with meals than not (RR 0·69, 0·62–0·77; p<0·0001; wine-only drinkers RR 0·69, 0·56–0·85; all other drinkers RR 0·72, 0·63–0·82)."

Concluding comments from Forum Members

This extensive systematic review and meta analysis summarises the usually small-scale studies on ARLD to describe the ARLD population and its prevalence (Niu et al., 2023). Accordingly, it provides insight in the worldwide prevalence of ARLD and the role of factors affecting the disease.

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Comments on this critique by the International Scientific Forum on Alcohol Research were provided by the following members:

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Sex and tumor-site differences in the association of alcohol intake with the risk of early-onset colorectal cancer

The authors of a paper published in the Journal of Clinical Oncology argue that given the increasing incidence of early-onset colorectal cancer (CRC; diagnosed before age 50 years) worldwide, it is important to identify modifiable risk factors. Their study investigated whether alcohol consumption in the young population correlated with an increased early-onset colorectal cancer risk that differed by tumor location and sex.

The association between average daily alcohol consumption and the risk of early-onset colorectal cancer was investigated among 5,666,576 individuals aged 20-49 years using data from the Korean National Health Insurance Service (2009-2019). Alcohol consumption levels of nondrinker, light (reference), moderate, and heavy drinker were defined as 0, <10, 10 to <30, and ≥30 g/d for men and 0, <10, 10 to <20, and ≥20 g/d for women, respectively.

8,314 incident early-onset colorectal cancer cases were identified during the follow-up period. Moderate and heavy drinkers showed an increased risk of early-onset colorectal cancer compared with light drinkers (aHR, 1.09 [95% CI, 1.02 to 1.16] and aHR, 1.20 [95% CI, 1.11 to 1.29], respectively). Subgroup analysis by tumor location showed positive dose-response significance for early-onset distal colon and rectal cancers, but not for proximal colon cancer. The dose-response association between drinking frequency and risk of early-onset colorectal cancer was significant, with a 7%, 14%, and 27% increased risk for 1-2, 3-4, and ≥5 d/wk compared with nondrinkers, respectively.

Excessive alcohol consumption increases the risk of colorectal cancer onset before age 50 years. The authors of the paper argue that effective interventions are required to discourage alcohol consumption among young people and to tailor colorectal cancer screening approaches for high-risk individuals.

Source: Jin EH, Han K, Shin CM, Lee DH, Kang SJ, Lim JH, Choi YJ. Sex and tumor-site differences in the association of alcohol intake with the risk of early-onset colorectal cancer. J Clin Oncol. 2023 Aug 1;41(22):3816-3825. doi.org/10.1200/JCO.22.01895

Alcohol intake including wine drinking is associated with decreased platelet reactivity in a large population sample

Authors

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Citation

International Journal of Epidemiology, 00:1–12; 2023 doi.org/10.1093/ije/dyad099

Author's Abstract

Background Alcohol consumption is linked to decreased platelet function. Whether this link is dependent on sex or type of beverage remains unclear.

Methods Cross-sectional data were obtained from the Framingham Heart Study (N=3427). Alcohol consumption was assessed by using standardized medical history and Harvard semi-quantitative food frequency questionnaires. Five bioassays measured 120 platelet reactivity traits across agonists in whole-blood and platelet-rich plasma samples. Linear mixed-effects models adjusted for age, sex and aspirin use, hypertension, body mass index, cholesterol, high-density lipoprotein, triglycerides, smoking and diabetes evaluated associations between platelet reactivity and alcohol consumption. Beta effects, the regression coefficients that estimate the amount of change in each unit of the predictor variable whereas all other predictor variables remain fixed, for heavy alcohol consumption were compared with effects of aspirin use.

Results Alcohol consumption was associated with decreased platelet reactivity, with more associations among wine and liquor compared with beer. Many platelet–alcohol associations in the full sample (86%, P<0.01) had larger effect sizes in females. Lower light transmission aggregometry adenosine diphosphate (1.82 mM) maximum aggregation (P=2.6E-3, 95% CI=–0.07, –0.02, β=–0.042) and area under the curve (P=7.7E-3, 95% CI=–0.07, –0.01, β=–0.039) were associated with white wine consumption; however, red wine had no associations with platelet reactivity. The effect of aspirin use was on average 11.3 (64.0) times greater than that of heavy drinking in our full sample.

Conclusions We confirm associations between alcohol consumption and decreased platelet reactivity. Effects appeared larger for liquor and wine intake and in our female cohort. Red wine consumption is not associated with lower platelet function, contrasting with prior population studies. Although we report an inhibitory relationship between alcohol intake and platelet function, these effects appear much smaller than that of aspirin use.

International Scientific Forum on Alcohol Research Forum (ISFAR) comments

Background including previous results

The relationship between alcohol consumption and cardiovascular diseases (CVD) is intricate and multifactorial. Epidemiological data show that light-to-moderate alcohol consumption is associated with cardioprotective benefits for apparently healthy individuals (Ronksley et al., 2011; Maclure, 1993) and individuals who are at risk of atherothrombotic-related diseases such as myocardial infarction (MI), peripheral artery disease (Djoussé et al., 2000) and cardiac death (Mukamal et al., 2001). However, it is essential for the robustness of a lifestyle factor-disease relationship to substantiate such an association with mechanistic understanding. Fortunately, this is the case for the epidemiological associations between moderate alcohol consumption and cardiovascular diseases; many short-term human interventions show that numerous biomarkers for CVD are affected by moderate alcohol consumption in a way that is consistent with cardiovascular protection. This publication in the International Journal of Epidemiology (Pashek et al., 2023) extends that proof and, therefore, contributes to the strength of the J-shaped association. The authors hypothesize that the J- or U-shaped associations may be explained, at least in part by haemostatic mechanisms, namely platelet aggregate formation, and other measurements of platelet reactivity.

The role of alcohol consumption on haemostasis contributing to cardiovascular protection has been investigated for approximately four decades since the seminal publication of Renaud and de Lorgeril (1992). The actual relationship between the consumption of alcoholic beverages and coagulation/fibrinolysis was first observed by Stampfer et al. in 1988. A somewhat older review nicely summarizes this relationship (Lee and Lip, 2003) by stating that the lower levels of plasma fibrinogen with moderate alcohol intake may well contribute to the apparent protection alcohol confers against ischaemic coronary and cerebral events. Conversely, the phenomenon of platelet hyperaggregability with binge drinking may attenuate this benefit.

The process of haemostasis and thrombus formation depends on the fine balance between the coagulation and fibrinolysis. The latter process

has been studied in intervention studies showing that both activation of tissue type plasminogen activator and plasminogen activator inhibitor are stimulated by moderate alcohol consumption resulting in a higher fibrinolysis potential the morning after moderate alcohol consumption (Hendriks et al., 1994). Moreover, coagulation may be less stimulated because fibrinogen levels are reduced by moderate alcohol consumption (Sierksma et al., 2001; Sierksma, van der Gaag, et al., 2002; Stote et al., 2016).

Ethanol, the component common to all alcoholic beverages, has specifically been shown to decrease coagulation and increase fibrinolysis. It affects the following haemostatic variables: fibrinogen; factor VII and factor VIII; platelet aggregatability; tissue type plasminogen activator (t-PA); urokinase type plasminogen activator (u-PA); and plasminogen activator inhibitor-1 (PAI-1).

These beneficial effects on haemostasis occur together with many other physiological changes consistent with cardiovascular protection. HDL cholesterol increases (Di Castelnuovo et al., 2022) accompanied by an increased HDL functionality, viz. increased reverse cholesterol transport (Rohatgi et al., 2014; Sierksma et al., 2004) and increased antioxidative capacity (van der Gaag et al., 1999; Wilkens et al., 2022), are both important mediators of cardiovascular protection. In addition, moderate alcohol consumption has been shown to improve glucose homeostasis (Schrieks et al., 2015) and decrease haemoglobin A1c in human intervention studies (Huang et al., 2017). Also, various inflammatory markers have been shown to be decreased (Sierksma, Van Der Gaag, et al., 2002).

Many of the experimental outcomes have been confirmed in epidemiological studies. Some epidemiological studies have examined the contribution of various biomarkers to the risk reduction of moderate alcohol consumers. It has been suggested that increased levels of high-density lipoprotein cholesterol, lower levels of haemoglobin A1c, and reduced fibrinogen levels attenuated 75% of risk among women and fully attenuated the cardiovascular protective association among men (Mukamal et al., 2005).

The effects of alcoholic beverages on coagulation and fibrinolysis are, however, difficult to determine conclusively and cannot be generalised as there appear to be significant confounders to the interpretation of the research data. These confounders include differences in coagulation and fibrinolytic responses to the acute versus short-term and longer-term consumption (Veenstra et al., 1990; Johansen et al., 1999), and gender differences in fibrinolytic responses. For example, the fibrinolytic response of post-menopausal women, who consume alcohol in moderation is similar to that of middle-aged men who consume alcohol in moderation. The converse was seen, however, in a comparison of men and women with a mean age of 36.7 years and, presumably, primarily pre-menopausal women. Moderate alcohol consumption decreased the rate of fibrin formation, decreased clot strength, and decreased rate of fibrin cross-linking in the men but not in the women (Spoerke et al., 2010).

Diet is also a confounder where wine consumers on a diet high in saturated fat may experience more significant effects on coagulation and fibrinolysis than wine consumers on a different diet (Renaud et al., 1992; Mezzano et al., 2001).

Further, in relation to the wine-specific phenolic compounds, there is in vitro evidence that wine-derived phenolic compounds may have an independent and additive effect on the reduction of platelet aggregation (Corvazier et al., 1984; Mower et al., 1984; Gryglewski et al., 1987; Seigneur et al., 1990; Pace-Asciak et al., 1995; Polette et al., 1996; Ruf, 2004), but the different flavonoid classes may exhibit different effects, particularly on arachidonic acid metabolism (Landolfi et al., 1984; Corvazier and Maclouf 1985). Specifically, wine-derived phenolic compounds have been observed to down-regulate cellular adhesion processes, which are responsible for the recruitment and activation of platelets and their aggregation at the site of vascular damage, hence reducing platelet aggregation (daLuz, 1999).

Pellegrini et al. (1996), however, could not demonstrate any difference on platelet aggregation and haemostatic variables in vivo between the consumption of red wine and an ethanol solution (equivalent to 30 g alcohol), and also demonstrated that the red wine stripped of phenolic compounds had no effect on platelet aggregation. Hence it was initially concluded that the ethanol component of red wine and not the wine-derived phenolic compounds reduced platelet aggregation. In addition, Pace-Asciak et al. (1996) argued, in contrast to Seigneur et al. (1990), that red and white wine were equally effective in vivo in reducing the plasma concentration of thromboxane B2 and platelet aggregation, and concluded that the predominant in vivo effect on these coagulations factors was due to the ethanol component common to both beverages. Research undertaken in animals (Demrow et al., 1994;

Maalej et al., 1997, 81) did, however, demonstrate a difference on platelet aggregation between an infusion of red wine and an ethanol solution, such that, the red wine inhibited platelet aggregation at a significantly lower blood alcohol concentration than did the ethanol solution.

Platelet aggregability has also been observed to be dependent on the amount and pattern of ethanol consumption, such that 'binge' and/or excessive consumption was observed to be associated with platelet rebound effects or hyperaggregability, which are implicated in sudden deaths after episodes of excessive consumption and in alcoholics (Renaud and Ruf 1996). Also, as suggested by Pashek et al. (2023), the type of alcoholic beverage consumed may also affect platelet aggregability. For example, the consumption of red wine, irrespective of the amount consumed, has not been observed to be associated with platelet rebound effects although the consumption of spirits is (Ruf et al., 1995). This suppression of hyper-aggregatability has been attributed to the inhibition of ethanol-induced lipid peroxidation by wine-derived phenolic compounds (Polette et al., 1996), as ethanol, especially in excessive amounts, is a pro- rather than an anti-oxidant (Puddey and Croft, 1997), such that the initiation of platelet aggregation may be induced by a high concentration of lipid peroxides (Renaud and Ruf, 1996).

Design and main outcomes

To study platelet aggregate formation and other measurements of platelet reactivity, data were obtained from some 3400 participants from the Framingham Heart Study in a cross-sectional analysis. Collected data included medical history and a semi-quantitative food frequency questionnaire quantitatively assessing weekly and monthly beverage specific alcohol consumption. Five bioassays were performed providing several platelet function tests with various platelet agonists resulting in numerous reactivity traits.

Drinking more than 8 drinks (± 112 g alcohol) per week for females and more than 15 drinks (± 210 g alcohol) per week for males is associated with decreased platelet reactivity in both females and males across a wide range of platelet traits. Habitual wine and liquor consumption showed the most associations with the largest effects on decreased platelet reactivity, particularly in females. Whereas red wine consumption was not associated with platelet reactivity, white wine consumption was associated with only 2 platelet reactivity traits. Aspirin use resulted in a much larger effect size (viz a stronger platelet inhibition) than heavy alcohol consumption.

Comments on methodology

This study, although cross-sectional in set-up, shows a detailed analysis of platelet reactivity traits across several agonists resulting in 120 distinct platelet traits. When analysing such high numbers of traits, significant outcomes my be found by chance specifically when groups are split up in smaller groups like beer, wine and liquor consumers.

The authors conclude that wine and liquor consumers showed stronger associations with reduced platelet aggregation as compared to beer consumers. Wine even had greater associations with platelet functions compared to liquor beverages attributed to the high phenolic compound and antioxidant content of wine. This suggestion, however, is not consistent with the outcome of the analysis comparing red wine and white wine consumers: red wine was not associated with any of the platelet reactivity traits, whereas white wine consumption was with a small number of these traits. This is surprising since red wine in general contains more phenolic compounds than white wine.

In their discussion the authors elaborate on the possible mechanisms that may be involved in the polyphenol/antioxidant pathways relevant for platelet aggregation inhibition. Polyphenols may act on platelet aggregation in an indirect way through nitric oxide production by endothelial-mediated vasodilatation or other mechanisms or even by specific grape composition of the wine and other factors. Unfortunately, the authors do not discuss the relevance of their ex vivo assays as biomarkers for in vivo haemostasis nor the results obtained on the effects of moderate alcohol consumption on haemostatic factors in vivo. Evaluation of platelet function uses specific methods for specific factors or effects, which may be limited in providing relevant physiological information (Israels, 2015; Wagner et al., 2022). There is also increasing awareness of the occurrence of rather broad interindividual variability in the haemostatic system (Kluft & Burggraaf, 2011).

The authors compared the associations between platelet reactivity traits and alcohol consumption with those between platelet reactivity traits and aspirin use. They showed that the inhibitions of platelet aggregation with aspirin use were much stronger than those with alcohol consumption

leading to the key message that alcohol consumption is unlikely to be of great utility in thrombosis prevention. This comparison was only made for heavy alcohol consumption, however, mainly because the largest inhibitions of platelet aggregation occurred in heavy alcohol consumers. Heavy alcohol consumption is, therefore, not of great utility for thrombosis prevention nor is it for any other health related issue anyway.

The authors consider several additional limitations of the study results. Self-reported alcohol consumption, as in most epidemiological studies has drawbacks. Self-report is susceptible to inaccuracies due to recall, temporal and self-desirability biases. Often self-report leads into underreporting. Also, drinking pattern was not assessed which may have affected the outcome. The authors consider the results to highlight the effects of habitual alcohol consumption, since most acute effects of alcohol consumption were presumed to have subsided the next morning. This assumption may not be correct keeping in mind that moderate alcohol consumption does stimulate fibrinolysis activity in healthy volunteers the next morning (Hendriks et al., 1994).

Specific Comments from Forum Members

Forum member Skovenborg consider that "The ability of blood to flow freely in vessels relies on complex homeostasis that exists between blood cells (including platelets), plasma proteins, coagulation factors, inflammatory factors and cytokines, and the endothelial lining within the lumen of arteries and veins. When there is an imbalance with this physiologic process, there can be an increased risk of developing a thrombosis versus a coagulopathy (increased risk of bleeding). Pashek et al. (2023) looked at the association of alcohol consumption with 120 platelet reactivity traits and to perform a proper assessment of this very complicated study would require specialisation in platelet reactivity. It is possible, however, to call attention to some caveats and contradictions in the paper by Pashek et al. (2023) as follows:

- Assessment of alcohol consumption: the self-reported alcohol consumption is susceptible to recall, temporal and underreporting bias as acknowledged by the authors. The measurement of weekly and monthly alcohol consumption precludes an assessment of drinking pattern;
- Subgroup analyses: the authors make extensive use of subgroup analyses by breaking down study samples into subsets of participants based on a shared characteristic. Some of the subgroups are rather small; for example, just 72 of the 3427 study participants drank only red wine and the finding of no association with red wine consumption and platelet reactivity may be a result of bias or coincidence. Demrow & Folts (1994) found red wine superior to white wine in experiments with acute platelet thrombus formation (APTF) followed by embolization producing cyclic flow reductions (CFR) in stenosed and damaged canine coronary arteries;
- Inhibition dose-response relationship: The study results suggested an inhibitory dose-response relationship between alcohol consumption and platelets, for example, they observed six, four and nine decreased platelet reactivity traits associated with the >2 to <8, >8 to <15 and >15 drinks per week alcohol consumption categories, respectively; and

In the "Discussion" section the authors concluded: "Our results support previous findings that established an inhibitory relationship between moderate to heavy alcohol consumption and platelet activation and aggregation." In the "Key messages" section, however, the authors only mention the association of decreased platelet reactivity and heavy drinking."

Forum Member van Velden states that he "while agrees with the results, the field is still open for opinions on alcohol consumption and the influence of alcohol and lifestyle interactions. A holistic approach is required, and moderate wine drinkers, for example, usually have a healthy lifestyle incorporating physical, mental and spiritual aspects as well."

A personal note from Forum Member Ellison reads as follows: "Visiting France more than three decades ago, I marvelled at the meticulous work done by Serge Renaud for evaluating platelet function in his studies in Lyon. They included his constructing a large laboratory in a trailer so that it could be towed into the field to measure platelet function immediately after blood was drawn. I understood very little back then, and not much more now, as to the specific mechanisms by which platelet aggregation and vascular function relate to cardiovascular disease; at the time and even today it is a poorly understood and appreciated risk factor for myocardial infarction. It is good to see that research continues on how the consumption of alcohol and wine affect platelet and vascular function. And even we aging epidemiologists now realize that it is not just blood cholesterol that affects the risk of heart attack, as we

were taught so many years ago."

Concluding comments from Forum Members

While Pashek et al. (2023) confirm previously observed associations between alcohol consumption and decreased platelet reactivity, our knowledge regarding the health effects of alcohol consumption might best be grouped into two complementary approaches. Observational studies, for example, have now reached epic proportions in sample size and duration, and feeding studies have assessed the immediate and short-term effects of alcohol on behaviour, biochemical pathways, and similar social or physiological endpoints. Clearly, neither of these approaches represents gold-standard evidence in biomedical research, that is, only a long-term randomized trial of clinical endpoints would meet that standard. Long-term randomized trials of clinical endpoints have, however, particular limitations that necessitate caution in their interpretation. Existing clinical trial and epidemiological evidence as well as confirmatory studies such as Pashek et al. (2023) provide useful insight into the endpoints that a clinical trial of moderate alcohol consumption might be best poised to tackle (Mukamal et al. 2016).

The limited in vivo data available have definitely demonstrated a differential effect of the alcoholic beverages on haemostatic cardioprotective mechanisms, where spirits and wine promote haemostasis more efficaciously and effectively. More data are required, however, to establish the degree of differentiation between wine and the other alcoholic beverages in conferring cardioprotection, cancer-protection and protection against other degenerative diseases.

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Familial risk of gout and interaction with obesity and alcohol consumption: A population-based cohort study in Korea

Population-based studies of the familial aggregation of gout are scarce, and gene/environment interactions are not well studied. A study evaluated the familial aggregation of gout and as assessed interactions between family history and obesity or alcohol consumption on the development of gout.

Using the Korean National Health Insurance database, which includes information regarding familial relationships and risk factor data, researchers identified 5,524,403 individuals from 2002 to 2018. Familial risk was calculated using hazard ratios (HRs) with 95% confidence intervals (95% CIs) to compare the risk in individuals with and those without affected first-degree relatives. Interactions between family history and obesity/alcohol consumption were assessed on an additive scale using the relative excess risk due to interaction (RERI).

Individuals with a gout-affected first-degree relative had a 2.42-fold (95% CI 2.39, 2.46) increased risk of disease compared to those with unaffected first-degree relatives. Having both a family history of gout and being either overweight or having moderate alcohol consumption was associated with a markedly increased risk of disease, with HRs of 4.39 (95% CI 4.29, 4.49) and 2.28 (95% CI 2.22, 2.35), respectively, which exceeded the sum of their individual risks but was only statistically significant in overweight individuals (RERI 0.96 [95% CI 0.85, 1.06]). Obese individuals (RERI 1.88 [95% CI 1.61, 2.16]) and heavy drinkers (RERI 0.36 [95% CI 0.20, 0.52]) had a more prominent interaction compared to overweight individuals and moderate drinkers, suggesting a dose-response interaction pattern.

The findings indicate the possibility of an interaction between gout-associated genetic factors and obesity/alcohol consumption.

Source: Kim KH, Choi IA, Kim HJ, Swan H, Kazmi SZ, Hong G, Kim YS, Choi S, Kang T, Cha J, Eom J, Kim KU, Hann HJ, Ahn HS. Familial Risk of Gout and Interaction With Obesity and Alcohol Consumption: A Population-Based Cohort Study in Korea. Arthritis Care Res (Hoboken). 2023 Sep;75(9):1955-1966. doi.org/10.1002/acr.25095.

Impact of alcohol dehydrogenase 7 polymorphism and alcohol consumption on risk of head and neck squamous cell carcinoma

Head and neck squamous cell carcinoma is closely associated with alcohol consumption and individual genetic susceptibility, such as single nucleotide polymorphism (SNP) of alcohol dehydrogenase (ADH). A study investigated the association of ADH7 SNPs with the risk of head and neck squamous cell carcinoma.

Researchers analyzed ADH7 rs1573496C>G, rs3737482T>C, rs1154460G>A, and rs284787T>C SNPs in 250 patients with head and neck squamous cell carcinoma and 322 controls in the Korean populations. Genotyping was conducted using the TaqMan assay. Linkage disequilibrium and haplotypes were analyzed.

The odds ratios (OR) and 95% confidence intervals (CI) of the CT and CC genotypes of ADH7 rs3737482T>C were 0.48 (0.29–0.78) and 0.69 (0.49–0.96), indicating a significantly decreased risk. In SNP of rs1154460G>A, the OR and 95% CI of the AA genotype was 1.63 (1.11–2.40), showing a significant increase in the risk. Furthermore, SNPs of ADH7 rs3737482T>C and ADH7 rs1154460G>A exhibit synergistic interactions with alcohol composition on the risk of head and neck squamous cell carcinoma. None of the haplotypes were associated with the risk of head and neck squamous cell carcinoma.

In conclusion, ADH7 rs3737482T>C and rs1154460G>A SNPs are associated with the risk of development of head and neck squamous cell carcinoma in Koreans. They could serve as molecular biological markers to screen high-risk groups for head and neck squamous cell carcinoma.

Source: Lee DW, Ji YB, Song CM, Kim JK, Lee SH, Tae K. Impact of Alcohol Dehydrogenase 7 Polymorphism and Alcohol Consumption on Risk of Head and Neck Squamous Cell Carcinoma: A Korean Case-Control Study. J Clin Med. 2023 Jul 13;12(14):4653. doi.org/10.3390/jcm12144653.

Association between alcohol consumption and risk of stroke among adults in China

The incidence of stroke in China is increasing, along with a clear trend in the prevalence of risk factors. Alcohol consumption is also a risk factor for stroke. Many cohort studies have explored the relationship between alcohol consumption and stroke risk, but findings have been inconsistent.

23,308 adults aged 30–79 in Chongqing, China were recruited to the study between October 2018 and February 2019. Follow-up was conducted through a monitoring system and questionnaires until September 2022. Information on alcohol consumption and other covariates was collected using a standardised questionnaire. Participants were asked to report their weekly frequency of drinking over the past year and weekly intake of various alcoholic beverages in general. The frequency of drinking was divided into three categories: 1–2 d/week, 3–5 d/week, and 6–7 d/week. The average daily alcohol consumption was calculated based on the amount of alcohol contained in different alcoholic beverages. Classifications were: nondrinker (0 g/day), light (0 to 12 g/day), moderate (13 to 36 g/day), and high (>36 g/day). The association between alcohol consumption and stroke risk was estimated.

With an average follow-up of 3.8 years, there were 310 new stroke events. The incidence of total stroke was 368.69 per 100,000 person-years. Overall, after adjusting for covariates, moderate alcohol consumption (average daily alcohol consumption 13–36 g/d) was associated with a lower risk of total stroke (HR: 0.48; 95% CI: 0.25–0.92) compared with nondrinkers. The adjusted HR and 95% CI for total stroke and ischemic stroke for those who drank alcohol 6–7 days per week were 0.60(0.37, 0.96) and 0.53(0.30, 0.94), respectively. The risk of total stroke (HR: 0.39; 95% CI: 0.17–0.89) was reduced in a pattern of drinking 6–7 days per week but with a mean alcohol consumption of less than 36 g/d. There was no significant association between alcohol consumption and hemorrhagic stroke.

This study suggests moderate alcohol consumption is associated with a lower risk of total stroke. And healthy drinking patterns should be of more significant concern.

Source: Liu X, Ding X, Zhang F, Chen L, Luo Q, Xiao M, Liu X, Wu Y, Tang W, Qiu J, Tang X. Association between alcohol consumption and risk of stroke among adults: results from a prospective cohort study in Chongqing, China. BMC Public Health. 2023 Aug 22;23(1):1593. doi.org/10.1186/s12889-023-16361-9.

Association of the amount of alcohol consumption with change in skeletal muscle and fat mass among Korean adults

The association between changes in alcohol consumption and body composition remains unclear. Researchers investigated the association between changes in drinking habits and muscle mass and fat mass in adults.

From the Health Examinees in Korea, the study population (N = 62 094) was categorised according to alcohol consumption (g of ethanol/day) and the changes in drinking habits between the baseline and follow-up periods were determined. Predicted muscle mass index (pMM), lean mass index, and fat mass index (pFM) were also calculated using age, sex, weight, height, and waist circumference. The β coefficient and adjusted means were then calculated using multiple linear regression analysis after adjusting for covariates, including follow-up duration, calorie intake and protein intake.

Compared to the almost-unchanged drinking group (reference), there was no statistical difference or tendency of change in the pMMs of the most-decreased and the most-increased alcohol-consuming groups. The pFM decreased in those with less alcohol consumption and increased with increased alcohol consumption, compared to the no-change group.

Thus, changes in alcohol consumption were not significantly associated with changes in muscle mass. Increased alcohol consumption was associated with increased fat mass. Reducing the amount of alcohol consumption may improve body composition in terms of fat mass.

Source: Song J, Choi S, Park SJ, Kim SM, Cho Y, Lee G, Kim JS, Park SM. Association of the amount of alcohol consumption with change in skeletal muscle and fat mass among Korean adults. Alcohol. 2023 Sep;111:9-16. doi.org/10.1016/j.alcohol.2023.04.003.

Alcohol-associated bowel disease - review

Excessive alcohol drinking can cause pathological changes including carcinogenesis in the digestive tract from mouth to large intestine, but the underlying mechanisms are not fully understood.

The authors of a review published in EGastroenterology discuss the effects of alcohol on small and large intestinal functions, such as leaky gut, dysbiosis and alterations of intestinal epithelium and gut immune dysfunctions, commonly referred to as alcohol-associated bowel disease (ABD).

To date, detailed mechanistic insights into ABD are lacking. Accumulating evidence suggests a pathogenic role of ethanol metabolism in dysfunctions of the intestinal tract. Ethanol metabolism generates acetaldehyde and acetate, which could potentially promote functional disruptions of microbial and host components of the intestinal barrier along the gastrointestinal tract. The potential involvement of acetaldehyde and acetate in the pathogenesis of the underlying ABD, including cancer, is discussed.

The authors also highlight some gaps in knowledge existing in the field of ABD and discuss future directions in exploring the role of acetaldehyde and acetate generated during chronic alcohol intake in various pathologies affecting different sites of the intestinal tract.

Source: Maccioni L, Fu Y, Horsmans Y, Leclercq I, Starkel P, Kunos G, Gao B. Alcohol-associated bowel disease: new insights into pathogenesis. eGastroenterology 2023;1:e100013. doi.org/10.1136/egastro-2023-100013

Lifestyle, Diet, Wine And Health Congress, 18th - 20th of October, 2023

Thirty leading scientists from Europe, North America, South Africa and Australia will present the latest research on diet, healthy lifestyle and moderate consumption of wine.

Organised by the Wine Information Council (WIC) and Fundación para la Investigación del Vino y la Nutrición (FIVIN) this congress is the most important international scientific event about lifestyle, diet, wine and health aspects of the last five years.

The international Congress will be held in the Palacio de Congresos El Greco of the historic City of Toledo, Spain.

The scientific programme will include presentations on the Global Burden of Disease Study, Cardiovascular Health, Health Implications of Lifestyle Choices, Importance of Context when consuming wine moderately, the Keys to Longevity and how to translate Science to Society.

lifestylewine2023.com

Adherence to the 2015-2020 Dietary Guidelines for Americans compared with the Mediterranean diet in relation to risk of prediabetes

Prediabetes presents a high-risk state for the development of various diseases and is reversible by adhering to a healthy lifestyle. Researchers conducted an analysis to explore the associations of the Healthy Eating Index-2015 (HEI-2015) and the Alternate Mediterranean Diet Index (aMed index) with the risk of prediabetes.

The data were derived from the National Health and Nutrition Examination Survey, including 20,844 participants. Multivariable-adjusted odds ratios (OR) of prediabetes and 95% confidence intervals (CI) by tertile of diet quality scores were estimated.

Compared to those in the lowest tertile, the multivariable-adjusted OR of prediabetes for the highest tertile was 0.82 (95% CI: 0.72, 0.94) for HEI-2015 and 0.87 (95% CI: 0.76, 0.98) for the aMed index. After mutual adjustment, the association for HEI-2015 but not for the aMed index remained significant. Among the component food groups and nutrients, higher intakes of red and processed meat, sodium, and total saturated fatty acids were associated with a higher risk of prediabetes, while moderate alcohol consumption was associated with a lower risk.

In conclusion, adherence to the 2015-2020 Dietary Guidelines for Americans, as compared with the Mediterranean diet, appeared to be more strongly associated with a lower risk of prediabetes among adults in the United States.

Source: Wu P, Zhang L, Zhao Y, Xu M, Tang Q, Chen GC, Qin L. Adherence to the 2015-2020 Dietary Guidelines for Americans Compared with the Mediterranean Diet in Relation to Risk of Prediabetes: Results from NHANES 2007-2016. Nutrients. 2023 Aug 11;15(16):3546. doi.org/10.3390/nu15163546.

Binge drinking and oral health-related quality of life in older adults: Socioeconomic position matters

A study investigated whether the association between binge drinking and oral health-related quality of life differs by socioeconomic position in Brazilian older adults.

The authors say that adverse health effects of alcohol consumption disproportionately affect socioeconomically disadvantaged and older individuals. Moreover, measures of binge drinking may capture different domains of the association between alcohol misuse and health that might be independent of the traditional markers of volume or frequency of consumption. Evidence of the association between alcohol use and oral health outcomes has failed to consider binge drinking and possible effect modification by socioeconomic position.

A secondary cross-sectional analysis was conducted using the baseline data from The Brazilian Longitudinal Study of Ageing (2015-2016). Further analysis tested whether the association between past-month binge drinking and higher scores of the Oral Impacts on Daily Performance (OIDP) questionnaire differed in magnitude by level of household wealth and educational attainment.

The analytical sample comprised 8,857 individuals. Participants who were from low-wealth households or with lower education and reported past-month binge drinking had 27% (95% CI: 1.16 to 1.39) and 28% (95% CI: 1.18 to 1.40) higher OIDP scores, respectively, than those not binge drinkers from higher socioeconomic position, and super-additive associations were detected for household wealth and educational attainment.

The study concludes that binge drinkers from low socioeconomic position have poorer oral health-related quality of life. Public oral health initiatives aiming to combat binge drinking are likely to disproportionately benefit vulnerable groups, the researchers say.

Source: Oliveira LM, Pelissari TR, Demarco FF, Zanatta FB. Binge drinking and oral health-related quality of life in older adults: Socioeconomic position matters. Gerodontology. 2023 Aug 27. doi.org/10.1111/ger.12711.

Alcohol and Parkinson's disease: A systematic review and meta-analysis

A substantial body of research has examined the relationship between alcohol consumption and risk of Parkinson's disease (PD). Researchers aimed to provide an updated systematic review and meta-analysis of observational studies examining the relationship between alcohol consumption and risk of Parkinson's disease.

Eligible studies comparing Parkinson's disease risk in ever vs. never alcohol drinkers were sourced from 6 databases. Outcomes were pooled using standard meta-analysis techniques. Separate female and male estimates were generated from studies reporting sex-specific data. Additionally, cohort studies stratifying participants by quantity of alcohol intake were integrated in a dose-response analysis.

52 studies were included, totalling 63,707 Parkinson's disease patients and 9,817,924 controls. The meta-analysis supported a statistically significant overrepresentation of never drinkers among Parkinson's disease subjects; odds ratio (OR) for ever drinking alcohol 0.84 (95% confidence interval (CI) 0.76 - 0.92). A subgroup analysis revealed similar effect estimates in females and males. A further synthesis of seven cohort studies suggested a negative, dose-dependent association between alcohol and risk of Parkinson's disease.

The authors state that in the absence of a known neuroprotective pathway, there may be reason to doubt a true biological effect. The role of survivor bias, selection and recall bias, misclassification, and residual confounding requires consideration. Alternatively, observations might be attributable to reverse causation if those predestined for Parkinson's disease alter their alcohol habits during the preclinical phase. Major limitations of the study include high between-study heterogeneity (I2 = 93.2%) and lack of adjustment for key confounders, namely smoking status.

Source: Mitchell E, Chohan H, Bestwick JP, Noyce AJ. Alcohol and Parkinson's disease: A systematic review and meta-analysis. J Parkinsons Dis. 2022;12(8):2369-2381. doi.org/10.3233/JPD-223522.

Korean Red Ginseng extract attenuates alcohol-induced addictive responses and cognitive impairments by alleviating neuroinflammation

Due to its addictive characteristics, many people struggle with the side effects of alcohol. Korean Red Ginseng (KRG) is a traditional herbal medicine that is widely used to treat various health problems. However, the effects and mechanisms of Korean Red Ginseng in alcohol-induced responses remain unclear. A study investigated the effects of Korean Red Ginseng in alcohol-induced responses.

The researchers investigated two aspects: alcohol-induced addictive responses and spatial working memory impairments. To determine the effects of Korean Red Ginseng in alcohol-induced addictive responses, conditioned place preference tests were performed and withdrawal symptoms were observed. To assess the effects of Korean Red Ginseng in alcohol-induced spatial working memory impairment, Y-maze, Barnes maze, and novel object recognition tests were performed using mice after repeated alcohol and Korean Red Ginseng exposure. To investigate the potential mechanism of Korean Red Ginseng activity, gas chromatography-mass spectrometry and western blot analysis were performed.

Korean Red Ginseng -treated mice showed dose-dependent restoration of impaired spatial working memory following repeated alcohol exposure. Furthermore, withdrawal symptoms to alcohol were reduced in mice treated with Korean Red Ginseng and alcohol. The PKA-CREB signaling pathway was activated after alcohol administration, which was reduced by Korean Red Ginseng. However, the levels of inflammatory cytokines were increased by alcohol and decreased by Korean Red Ginseng.

Taken together, Korean Red Ginseng may alleviate alcohol-induced spatial working memory impairments and addictive responses through anti-neuroinflammatory activity rather than through the PKA-CREB signaling pathway, the researchers conclude.

Source: Kim HJ, Lee MY, Kim GR, Lee HJ, Sayson LV, Ortiz DMD, Cheong JH, Kim M. Korean Red Ginseng extract attenuates alcohol-induced addictive responses and cognitive impairments by alleviating neuroinflammation. J Ginseng Res. 2023 Jul;47(4):583-592. doi.org/10.1016/j.jgr.2023.02.003

Global trends of prostate cancer by age, and their associations with gross domestic product (GDP), human development index (HDI), smoking, and alcohol drinking

An international team of researchers examined the global disease burden and trends of prostate cancer incidence and mortality by age, and their associations with gross domestic product (GDP), human development index (HDI), smoking, and alcohol drinking.

The Global Cancer Observatory (GLOBOCAN) database was used for the incidence and mortality of prostate cancer in 2020; the World Bank for GDP per capita; the United Nations for HDI; the WHO Global Health Observatory for prevalence of smoking and alcohol drinking; the Cancer Incidence in 5 Continents (CI5); and the WHO mortality database, for trend analysis. The researchers presented the prostate cancer incidence and mortality using age-standardised rates and examined their associations with GDP, HDI, smoking, and alcohol drinking. The study estimated the 10-year trend of prostate cancer incidence and mortality.

A wide variation in the burden of prostate cancer with the highest mortality found in low-income countries while the highest incidence was observed in high-income countries. Moderate to high positive correlations were observed for GDP, HDI, and alcohol drinking with prostate cancer incidence, whilst a low negative correlation was observed for smoking. Globally, there was an increasing incidence but decreasing mortality of prostate cancer, and such trends were particularly prominent in Europe. Notably, the incidence increase was also found in the younger population aged <50 years.

There was a global variation in the burden of prostate cancer associated with GDP, HDI, smoking, and alcohol drinking the study concludes

Source: Huang J, Chan EO, Liu X, Lok V, Ngai CH, Zhang L, Xu W, Zheng ZJ, Chiu PK, Vasdev N, Enikeev D, Shariat SF, Ng CF, Teoh JY, Wong MCS. Global trends of prostate cancer by age, and their associations with gross domestic product (GDP), human development index (HDI), smoking, and alcohol drinking. Clin Genitourin Cancer. 2023 Aug;21(4):e261-e270.e50. doi.org/10.1016/j.clgc.2023.02.003.

Alcohol intake and blood pressure levels: a dose-response meta-analysis of nonexperimental cohort studies

Alcohol consumption may increase blood pressure but the details of the relationship are incomplete, particularly for the association at low levels of alcohol consumption, and no meta-analyses are available for nonexperimental cohort studies.

Researchers performed a systematic search of longitudinal studies in healthy adults that reported on the association between alcohol intake and blood pressure.

Seven studies, with 19 548 participants and a median follow-up of 5.3 years (range 4–12 years), were included in the analysis. A substantially linear positive association between baseline alcohol intake and changes over time in SBP and DBP was observed, with no suggestion of an exposure-effect threshold. Overall, average SBP was 1.25 and 4.90 mm Hg higher for 12 or 48 grams of daily alcohol consumption, compared with no consumption. The corresponding differences for DBP were 1.14 and 3.10 mm Hg. Subgroup analyses by sex showed an almost linear association between baseline alcohol intake and SBP changes in both men and women, and for DBP in men while in women an inverted U-shaped association was identified. Alcohol consumption was positively associated with blood pressure changes in both Asians and North Americans, apart from DBP in the latter group.

The results suggest the association between alcohol consumption and SBP is direct and linear with no evidence of a threshold for the association, while for DBP the association is modified by sex and geographic location.

Source: Di Federico S, Filippini T, Whelton PK, Cecchini M, Iamandii I, Boriani G, Vinceti M. Alcohol intake and blood pressure levels: A dose-response meta-analysis of nonexperimental cohort studies. Hypertension. 2023 Jul 31. doi.org/10.1161/HYPERTENSIONAHA.123.21224.

Drinking on an empty stomach: How consuming food with alcohol affects short-term outcomes

Governments' issue official guidelines on reducing the short-term risks associated with alcohol as do alcohol industry-funded organizations. Both sources frequently recommend consuming food with alcohol, however, it is unclear what evidence these recommendations are based on. The aim of a scoping review was to map and summarise evidence on the short-term effects of consuming food and alcohol.

A scoping review searched CINAHL, Cochrane Library, Embase, Medline, PsychINFO and NICE Evidence Search (published inception to June 2021). Studies in English, investigating co-consumption of food and alcohol and reporting short-term health outcomes or acute effects, were included.

Of the 15,246 studies identified, 10 met the inclusion criteria. There was little evidence on the effects of food co-consumption on most short-term alcohol-related outcomes. Included studies were low in quality and inconsistent in their reported outcomes.

Despite a weak and inconsistent evidence base, food co-consumption is often recommended by both official guidance and alcohol industry-funded sources. Food co-consumption as a harm reduction measure, while plausible, requires a stronger evidence base and more nuanced messaging due to the risk of encouraging heavier, sustained drinking, the report authors state.

Source: Ramsbottom A, Petticrew M, Huber A, van Schalkwyk MCI. Drinking on an empty stomach: a scoping review of the evidence on how consuming food with alcohol affects short-term outcomes. J Public Health (Oxf). 2023 Aug 28;45(3):612-620. doi.org/10.1093/pubmed/fdac117.

Joint association of alcohol consumption and adiposity with alcohol- and obesity-related cancer in a population sample of 399,575 UK adults

Obesity and alcohol consumption are both important modifiable risk factors for cancer. Researchers examined the joint association of adiposity and alcohol consumption with alcohol- and obesity-related cancer incidence.

The prospective cohort study included cancer-free UK Biobank participants aged 40-69 years. Alcohol consumption was categorised based on current UK guidelines into four groups. Three markers of adiposity were defined: body fat percentage (BF %), waist circumference and BMI and categorised each into three groups. A joint alcohol consumption and adiposity marker variable with twelve mutually exclusive categories was derived.

Among 399,575 participants, 17,617 developed alcohol-related cancer and 20,214 developed obesity-related cancer over an average follow-up of 11·8 (SD 0·9) years. The study found relatively weak evidence of independent associations of alcohol consumption with cancer outcomes. However, the joint association analyses showed that across all adiposity markers, above guideline drinkers who were in the top two adiposity groups had elevated cancer incidence risk (e.g., HR for alcohol-related cancer was 1·53 (95 % CI (1·24, 1·90)) for within guideline drinkers and 1·61 (95 % CI (1·30, 2·00)) for above guideline drinkers among participants who were in the top tertile BF %. Regardless of alcohol consumption status, the risk of obesity-related cancer increased with higher adiposity in a dose-response manner within alcohol consumption categories.

The researchers say that the study provides guidance for public health priorities aimed at lowering population cancer risk via two key modifiable risk factors.

Source: Inan-Eroglu E, Huang BH, Sarich P, Nassar N, Stamatakis E. Joint association of alcohol consumption and adiposity with alcohol- and obesity-related cancer in a population sample of 399,575 UK adults. Br J Nutr. 2023 Aug 14;130(3):503-512. doi.org/10.1017/S0007114522003464

Study shows promise of gene therapy for alcohol use disorder

Researchers at Oregon Health & Science University and institutions across the US have found that a form of gene therapy currently used to treat Parkinson's disease may dramatically reduce alcohol use among chronic heavy drinkers.

Their study in nonhuman primates showed that implanting a specific type of molecule that induces cell growth effectively resets the brain's dopamine reward pathway in animals predisposed to heavy drinking. The gene therapy procedure involves brain surgery, and may only be useful in the most severe cases of alcohol use disorder. The study is published in the journal Nature Medicine.

The implanted virus is not harmful and carries a gene that codes for the protein known as glial-derived neurotrophic factor, or GDNF. It was injected in a specific area of the brain of a group of rhesus macaque monkeys that voluntarily and heavily drink ethanol diluted in water. After four macaques underwent the procedure, researchers found their consumption dropped by more than 90% compared with a control group.

GDNF is known as a growth factor which enhances the function of neurons in the brain that synthesize dopamine, a feel-good chemical released in the brain. In the case of alcohol use disorder, chronic drinking decreases the release of dopamine. Researchers enhanced dopamine by delivering GDNF to an area of the brain where dopamine is located.

Source: Ford, M.M., George, B.E., Van Laar, V.S. et al. GDNF gene therapy for alcohol use disorder in male non-human primates. Nat Med. 2023. 29:2030–2040. doi.org/10.1038/s41591-023-02463-9

Alcohol consumption and risk of total hip replacement due to hip osteoarthritis in women

Alcohol has been associated with both adverse and beneficial health effects generally, however, the relationship between alcohol consumption and hip osteoarthritis has been minimally studied. Researchers examined the relationship between alcohol consumption and hip osteoarthritis in women. The results are published in the journal Arthritis and Rheumatology.

Among women in the Nurses' Health Study cohort in the US, alcohol consumption was assessed every 4 years, starting in 1980. Intake was computed as cumulative averages and simple updates with latency periods of 0-4 through 20-24 years. 83,383 women without diagnosed osteoarthritis in 1988 to June 2012 were followed. 1,796 cases of total hip replacement due to hip osteoarthritis defined were identified by self-report of osteoarthritis with hip replacement.

Alcohol consumption was positively associated with hip osteoarthritis risk. Compared with nondrinkers, multivariable hazard ratios (HRs) and 95% confidence intervals (95% CIs) were HR 1.04 (95% CI 0.90, 1.19) for drinkers of >0 to <5 grams/day, HR 1.12 (95% CI 0.94, 1.33) for 5 to <10 grams/day, HR 1.31 (95% CI 1.10, 1.56) for 10 to <20 grams/day, and HR 1.34 (95% CI 1.09, 1.64) for ≥20 grams/day. This association held in latency analyses of up to 16-20 years, and for alcohol consumption between 35-40 years of age. Independent of other alcoholic beverages, the multivariable HRs (per 10 grams of alcohol) were similar for individual types of alcohol intake (wine, liquor, and beer).

Higher alcohol consumption was associated with greater incidence of total hip replacement due to hip osteoarthritis in a dose-dependent manner in women, the study found.

Source: Marchand NE, Hu Y, Song M, Rosner BA, Karlson EW, Ratzlaff C, Lu B, Liang MH, Willett WC. Alcohol consumption and risk of total hip replacement due to hip osteoarthritis in women. Arthritis Rheumatol. 2023 Sep;75(9):1522-1531. doi.org/10.1002/art.42543.

Alcohol consumption and risk of fractures

Alcohol consumption remains inconsistently correlated with fracture risk, but a dose–response meta-analysis for specific outcomes is lacking. A study sought to quantitatively integrate the data on the relationship between alcohol consumption and fracture risk.

Relevant articles were identified in PubMed, Web of Science, and Embase databases up to 20 February 2022. Combined RRs and 95% CIs were estimated. Forty-four articles covering 6,069,770 participants and 205,284 cases of fracture were included. The combined RRs and 95% CIs for highest compared with lowest alcohol consumption were 1.26 (1.17–1.37), 1.24 (1.13–1.35), and 1.20 (1.03–1.40) for total, osteoporotic, and hip fractures, respectively.

A linear positive relationship between alcohol consumption and total fracture risk was detected; the risk was correlated with a 6% increase (RR, 1.06; 95% CI: 1.02, 1.10) per 14 g/d increment of alcohol consumption. J-shaped relationships of alcohol consumption with risk of osteoporotic fractures; and hip fractures were found. Alcohol consumption of 0 to 22 g/d was linked to a reduced risk of osteoporotic fractures and hip fractures.

The findings show that any level of alcohol consumption is a risk factor for total fractures. Moreover, this dose–response meta-analysis shows that an alcohol consumption level of 0 to 22 g/d is related to a reduction in the risk of osteoporotic and hip fractures.

Source: Ke Y, Hu H, Zhang J, Yuan L, Li T, Feng Y, Wu Y, Fu X, Wang M, Gao Y, Huo W, Chen Y, Zhang W, Wang L, Li X, Pang J, Zheng Z, Hu F, Zhang M, Sun L, Zhao Y, Lu J, Hu D. Alcohol consumption and risk of fractures: A systematic review and dose-response meta-analysis of prospective cohort studies. Adv Nutr. 2023 Jul;14(4):599-611. doi.org/10.1016/j.advnut.2023.03.008.

Beer-gut microbiome alliance: a discussion of beer-mediated immunomodulation via the gut microbiome

As a long-established fermented beverage, beer is rich in many essential amino acids, vitamins, trace elements, and bioactive substances that are involved in the regulation of many human physiological functions. The polyphenols in the malt and hops of beer are also important active compounds that interact in both directions with the gut microbiome.

A review published in the Frontiers of Nutrition summarises the mechanisms by which polyphenols, fibre, and other beneficial components of beer are fermentatively broken down by the intestinal microbiome to initiate the mucosal immune barrier and thus participate in immune regulation. Beer degradation products have anti-inflammatory, anticoagulant, antioxidant, and glucolipid metabolism-modulating potential.

The researchers have categorised and summarised reported data on changes in disease indicators and in vivo gut microbiota abundance following alcoholic and non-alcoholic beer consumption. The positive effects of bioactive substances in beer in cancer prevention, reduction of cardiovascular events, and modulation of metabolic syndrome make it one of the candidates for microecological modulators.

Source: Zhang Silu, Jin Shuo, Zhang Cui, Hu Shumin, Li Huajun, Beer-gut microbiome alliance: a discussion of beer-mediated immunomodulation via the gut microbiome. Frontiers in Nutrition, Vol 10, 2023 doi.org/10.3389/fnut.2023.1186927

Medical research listed by publication date

- Drinking on an empty stomach: a scoping review of the evidence on how consuming food with alcohol affects short-term outcomes. 24/10/2022
- Alcohol and Parkinson's disease: A systematic review and meta-analysis. 16/12/2022
- Familial risk of gout and interaction with obesity and alcohol consumption: a population-based cohort study in korea. 20/01/2023
- Global prevalence, incidence, and outcomes of alcohol related liver diseases: a systematic review and meta-analysis. 11/5/2023
- Alcohol consumption and risk of total hip replacement due to hip osteoarthritis in women. 25/04/2023
- Association of the amount of alcohol consumption with change in skeletal muscle and fat mass among Korean adults. Available online 11/04/2023, Version of Record 8/06/2023
- Korean Red Ginseng extract attenuates alcohol-induced addictive responses and cognitive impairments by alleviating neuroinflammation. Available online 22/02/2023, Version of Record 15/06/2023.
- Alcohol consumption and risk of fractures: A systematic review and dose-response meta-analysis of prospective cohort studies Available online 24/03/2023, Version of Record 27/06/2023
- Alcohol intake including wine drinking is associated with decreased platelet reactivity in a large population sample. 11/07/2023
- Impact of alcohol dehydrogenase 7 polymorphism and alcohol consumption on risk of head and neck squamous cell carcinoma: a korean case-control study. 13/07/2023
- Global trends of prostate cancer by age, and their associations with gross domestic product (GDP), human development index (HDI), smoking, and alcohol drinking. Available online 15/03/2023, Version of Record 21/07/2023.
- Beer-gut microbiome alliance: a discussion of beer-mediated immunomodulation via the gut microbiome. 25/07/2023
- Alcohol intake and blood pressure levels: A dose-response meta-analysis of nonexperimental cohort studies. 31/07/2023
- Sex and tumor-site differences in the association of alcohol intake with the risk of early-onset colorectal cancer. 01/08/2023
- Adherence to the 2015-2020 Dietary Guidelines for Americans Compared with the Mediterranean Diet in relation to risk of prediabetes: results from NHANES 2007-2016. 11/08/2023
- GDNF gene therapy for alcohol use disorder in male non-human primates 14/08/2023
- Association between alcohol consumption and risk of stroke among adults: results from a prospective cohort study in Chongqing, China. 22/08/2023
- Joint association of alcohol consumption and adiposity with alcohol- and obesity-related cancer in a population sample of 399,575 UK adults. 27/08/2023
- Binge drinking and oral health-related quality of life in older adults: Socioeconomic position matters 27/08/2023

Analysing gender in research and policy on alcohol-related violence among young people

The report 'Analysing gender in research and policy on alcohol-related violence among young people' presents a summary of findings and recommendations from an international comparative research project. It explores the treatment of gender in research and policy on alcohol-related violence among young people in Australia, Canada and Sweden.

The report is designed to encourage researchers and policymakers to consider new approaches to examining and addressing the relationship between alcohol and violence among young people in the night-time economy (NTE). It draws attention to the urgent need for future research and policy to address the key role of gender – particularly the complex relationship between specific masculinities, alcohol and violence – in the production of harm.

The report suggests that more direct engagement with gender, and particularly masculinities, should be central to future research and to recommendations informing contemporary alcohol policy debate. The report proposes ways in which such an engagement might be supported.

Source: Moore, David; Keane, Helen; Ekendahl, Mats; Graham, Kathryn; Duncan, Duane; Farrugia, Adrian; et al. (2023). Analysing gender in research and policy on alcohol-related violence among young people: A summary of findings and recommendations from an international comparative study. La Trobe. Report. doi.org/10.26181/23621004.v1

Risky drinking and other drug use in US adults with chronic conditions

Co-use of multiple drugs may prolong or increase heavy drinking, even for individuals with health conditions adversely affected by it. Patterns of alcohol and drug use may vary across racial/ethnic groups, with differential implications for health. A study examined racial/ethnic differences in the associations between risky drinking and other drug use in adults with diabetes, hypertension, heart disease or cancer.

The study was based on a nationally representative sample of adults drawn from the 2015 to 2019 National Survey on Drug and Health. The outcome was risky drinking (consuming more than 7/14 drinks weekly). Other drugs considered were tobacco, marijuana, illicit drugs, and non-medical prescription drugs. Covariates included age, sex, education, income, marital/cohabitation status, health insurance coverage and self-rated health status.

Each drug category was positively associated with risky drinking across all four conditions. Racial/ethnic minority adults were less likely than White adults to engage in risky drinking, with this pattern most consistent for those with hypertension. Other drug use in minority adults (i.e., tobacco and illicit drug use in Black and Hispanic adults, and marijuana and prescription drug use in Asian adults) was associated with disproportionately greater odds of risky drinking compared with White adults. This pattern was more prominent for those with a heart condition, and not found for those with cancer.

Future interventions might address co-use of alcohol and other drugs in adults with chronic conditions, the authors comment, with special attention to racial/ethnic minority adults.

Source: Won Kim Cook and others, Risky drinking and other drug use in adults with chronic conditions in the United States: differential associations by race/ethnicity, Alcohol and Alcoholism, 2023;, agad024, doi.org/10.1093/alcalc/agad024

Trends in alcohol-related deaths by sex in the US, 1999-2020

Alcohol consumption rates have been increasing among women in the US, which may affect mortality rates and sex gaps. Therefore, conducting a comprehensive assessment of sex differences in alcohol-related deaths is essential to inform targeted interventions and policies aimed at reducing the burden of alcohol-related harm among the population.

A study examined sex differences in the burden and trends of alcohol-related mortality in the US from 1999 to 2020. The cross-sectional time series study used Centers for Disease Control and Prevention Wide-Ranging Online Data for Epidemiologic Research data on alcohol-related deaths from 1999 to 2020. Alcohol-related deaths were identified from the underlying cause of death files using International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, codes, including alcohol-related poisoning, liver disease, gastritis, cardiomyopathy, myopathy, polyneuropathy, and pseudo-Cushing syndrome, among others.

Age-adjusted mortality rates (AAMRs) were analyzed by sex and substratified by race and ethnicity, age, and census region. A total of 605,948 alcohol-attributed deaths were identified in the US from 1999 through 2020 (AAMR, 8.3 per 100,000 persons; 95% CI, 8.3-8.3 per 100,000 persons). The mortality burden was higher among male individuals than female individuals, with male individuals being 2.88 (95% CI, 2.86-2.89) times more likely to die compared with female individuals. However, temporal trends showed an increase in alcohol-related deaths for both male and female individuals in recent years, with higher rates of increase among female individuals relative to male individuals. The AAMR increased by 12.5% (95% CI, 6.4%-19.1%) per year among male individuals from 2018 to 2020 but increased by 14.7% (95% CI, 9.1%-20.5%) per year among female individuals during the same period. Trend differences were observed across subtypes of age, race and ethnicity, cause, and region.

Although alcohol-related deaths have historically been more prevalent among men than women, recent temporal trends suggest a narrowing of this gap, with increasing rates of alcohol-related deaths among female individuals compared with male individuals. The authors argue that the development of targeted interventions and evidence-based treatments for alcohol use among female individuals becomes imperative in effectively addressing the increasing rates of alcohol-related deaths.

Source: Karaye IM, Maleki N, Hassan N, Yunusa I. Trends in Alcohol-related deaths by sex in the US, 1999-2020. JAMA Netw Open. 2023. Jul 3;6(7):e2326346. doi.org/10.1001/jamanetworkopen.2023.26346.

Sharp rise in alcohol-related liver disease in Iceland over four decades

A study published in the Scandinavian Journal of Gastroenterology finds that over the last 40 years, there has been an eightfold increase in the number of Icelanders suffering from alcohol-related liver disease (ARLD), coinciding with a 74% increase in per capita alcohol consumption. Incidence of ARLD increased from 0.77 cases per 100,000 inhabitants annually 1984–2000 to 6.1 per 100,000 in 2016–2020. Per capita alcohol consumption increased from 4.3 Litres to 7.5 L in in the same time periods.

The authors of the study state that limited data exist on the association between per capita alcohol consumption and incidence of alcohol related liver disease (ARLD). They aimed to analyse this relationship and assess prevalence of ARLD in Iceland and among patients treated for alcohol use disorder (AUD) and its impact on outcomes. Out of the 314 diagnosed with ARLD during the study's span, 76% were male, with a median age of 56 years. The research found that patients previously diagnosed with alcohol use disorder (AUD) faced worse outcomes. Interestingly, those who underwent treatment for AUD after an ARLD diagnosis had a better prognosis than those who received treatment before.

Valgerður Rúnarsdóttir, a senior doctor at the Vog Hospital and a key figure behind the study, described the findings as striking. "This should serve as an alarm bell for lawmakers and regulators. One serious liver ailment imposes a massive cost on the state, not to mention the severe repercussions for the individual," she said.

Source: E. S. Björnsson, A. Johannsson, S. S. Sigurdarson, J. P. Hreinsson & V. Runarsdottir (2023) Development of severe alcohol related liver disease over four decades in Iceland: impact of increased access and use of alcohol, Scandinavian Journal of Gastroenterology, doi.org/10.1080/00365521.2023.2245939

nordicalcohol.org/post/sharp-rise-in-alcohol-related-liver-disease-in-iceland-over-four-decades

The estimated health impact of alcohol interventions in New Zealand

Researchers from the University of Otago, Wellington, New Zealand estimated the health impacts of key modelled alcohol interventions among Māori (indigenous peoples) and non-Māori in New Zealand (NZ).

For the study, the researchers modelled two scenarios: (1) business-as-usual (BAU); and (2) an intervention package scenario that included a 50% alcohol tax increase, outlet density reduction from 63 to five outlets per 100,000 people, outlet hours reduction from 112 to 50 per week and a complete ban on all forms of alcohol marketing.

The model's population replicated the 2018 NZ population by ethnicity (Māori/non-Māori), age and sex. Alcohol consumption was estimated using nationally representative survey data combined with sales data and corrected for tourist and unrecorded consumption. Disease incidence, prevalence and mortality were calculated using Ministry of Health data. Dose-response relationships between alcohol and illness were used from the 2016 Global Burden of Disease study and disability rates for each illness were calculated. Changes in consumption were based on the following effect sizes: total intervention package [-30.3%); tax (-7.60%); outlet density (-8.64%); outlet hours (-9.24%); and marketing (-8.98%). The researchers measured health gain using health-adjusted life years (HALYs) and life expectancy.

Compared with the BAU scenario, the total alcohol intervention package resulted in 726,000 HALYs gained during the life-time of the modelled population. Māori experienced greater HALY gains compared with non-Māori (0.21 and 0.16, respectively). When modelled individually, each alcohol intervention within the intervention package produced similar health gains (~200,000 HALYs per intervention) owing to the similar effect sizes.

Modelled interventions for increased alcohol tax, reduced availability of alcohol and a ban on alcohol marketing among Māori and non-Māori in New Zealand (NZ), suggest substantial population-wide health gains and reduced health inequities between Māori and non-Māori.

Source: Chambers T, Mizdrak A, Herbert S, Davies A, Jones A. The estimated health impact of alcohol interventions in New Zealand: A modelling study. Addiction. 2023 Aug 30. doi.org/10.1111/add.16331

Is the association between alcohol use and sickness absence modified by socioeconomic position?

The distribution of sickness absence tends to be socially patterned. However, less is known about the underlying mechanisms and pathways of the social gradient found in sickness absence. A study investigated: (i) if the risk function between average volume of alcohol consumption and sickness absence is modified by socio-economic position; and (ii) whether such an effect modification can be attributed to differences in drinking patterns and other risk factors including other lifestyle behaviours, health status, and working conditions.

The study was based on data from the Stockholm public health cohort 2006, with an analytical sample of 13,855 respondents aged 18-64 years. Self-reported information on occupational class (a measure of SEP), alcohol consumption, other lifestyle behaviour, health and working conditions was collected from the survey. The outcome of long-term (> 14 days) sickness absence between 2006 and 2008 was obtained from national registers.

In the initial analyses, heavy drinking manual workers had a 5-fold increased risk of long-term sickness absence compared to non-manual employees who were moderate drinkers, and approximately 60% of the excess risk among heavy drinking manual workers was attributable to an interaction between alcohol use and socio-economic position. Adjusting for working conditions was associated with the largest attenuation of the risk estimate, compared to other lifestyle behaviours and health. In the fully adjusted model, the IRR was further attenuated for the manual workers and the joint effect of socio-economic position and heavy drinking remained in the final model with an attributable proportion of 49%.

Individuals in Sweden with lower levels of SEP appear to be more vulnerable to alcohol consumption in relation to sickness absence, where differences in working conditions explained a large part but not all of the differential vulnerability, the research concludes.

Source: Landberg J, Thern E. Is the association between alcohol use and sickness absence modified by socioeconomic position? findings from the Stockholm public health cohort. BMC Public Health. 2023 Aug 4;23(1):1490. doi.org/10.1186/s12889-023-16341-z

Do changes in parent-student phone call and text message communication during the transition to college predict first-year drinking and consequences?

Researchers examined whether changes in parent-student phone call and text messaging communication during the transition into college are associated with alcohol use and related consequences, and also, whether pre-matriculation drinking patterns predicted these changes in parent-student communication.

246 first-year students participated in a longitudinal survey study as a part of a larger study. Prior to matriculation (T0), participants reported their drinking and whether they experienced alcohol consequences in the past 30 days. Approximately one month into their first semester (T1), participants reported if the frequency of their calling and texting their parents had decreased, remained the same, or increased since the start of college. Drinking and consequences were then reassessed four months later (T2). Analytic models evaluated (a) whether a decrease in calling and texting parents, as reported by students (compared to an increase or no change), predicted drinking outcomes, and (b) whether pre-college drinking (compared to non-drinking) predicted changes in communication.

Changes in phone calls and texting with mothers and fathers during the first month of college predicted alcohol use and consequences into the second semester. Additionally, heavy drinking predicted lower odds of texting frequency with mothers staying the same or increasing.

This study underscores that consistent call or text communication with students upon their transition into college could serve as a protective factor against alcohol risk. By closely monitoring such communication, parents may be better equipped to identify potential signs of risky drinking behaviour in their first-year students.

Source: Trager BM, Morgan RM, Boyle SC, LaBrie JW. Do changes in parent-student phone call and text message communication during the transition to college predict first-year drinking and consequences? A prospective study. J Stud Alcohol Drugs. 2023 Aug 30. lifescience.net/publications/445524/do-changes-in-parent-student-phone-call-and-text-m/

Effect of a smartphone intervention as a secondary prevention for use among university students with unhealthy alcohol use

A randomised controlled trial conducted in four higher education institutions in Switzerland estimated the effects of providing access to a brief, smartphone based alcohol intervention.

The study included 1770 students (≥18 years) who screened positive for unhealthy alcohol use (i.e., a score on the alcohol use disorders identification test-consumption (AUDIT-C) of ≥4 for men and ≥3 for women). 884 were assigned to the intervention group and 886 to the control group. Mean age was 22.4 years and 54.1% were women; 66.0% were undergraduate students and 30.1% were studying for a master's degree, 2.4% were studying for a doctorate, and 1.4% were students of other higher education programmes. The baseline mean number of standard drinks per week was 8.59; the baseline number of heavy drinking days was 3.53.

The primary outcome measure was the number of standard drinks per week at 6 months and the secondary outcome was number of heavy drinking days (past 30 days). Additional outcomes were maximum number of drinks consumed on one occasion, alcohol related consequences, and academic performance. Follow-up assessments occurred at months three, six, and 12.

Of 884 students randomly assigned to the intervention group, 738 (83.5%) downloaded the smartphone application. The intervention had a significant overall effect on the number of standard drinks per week (incidence rate ratio 0.90 (95% confidence interval 0.85 to 0.96)), heavy drinking days (0.89 (0.83 to 0.96)), and the maximum number of drinks consumed on one occasion (0.96 (0.93 to 1.00), P=0.029), indicating significantly lower drinking outcomes in the intervention group than in the control group during the follow-up period. The intervention did not affect alcohol related consequences or academic performance.

The study findings suggest that providing access to the smartphone application throughout the 12 month follow-up was effective at limiting the average drinking volume of university students who had self-reported unhealthy alcohol use at baseline.

Source: Bertholet N, Schmutz E, Studer J, Adam A, Gmel G, Cunningham J A et al. Effect of a smartphone intervention as a secondary prevention for use among university students with unhealthy alcohol use: randomised controlled trial BMJ 2023; 382 :e073713 doi.org/10.1136/bmj-2022-073713.

Who benefits from alcohol screening and brief intervention? A mini-review on socioeconomic inequalities from the US

Addressing hazardous alcohol use and alcohol use disorders through alcohol screening and brief intervention is a promising public health strategy to improve health equity.

In a narrative mini-review published in the journal Addictive Behaviors, the authors discuss the extent to which socioeconomic differences exist in the alcohol screening and brief intervention cascade, highlighting the example of the US.

For the study, PubMed was searched to identify and summarise relevant literature addressing socioeconomic inequalities in: (a) accessing and affording healthcare; (b) receiving alcohol screenings; and/or (c) receiving brief interventions, focusing predominantly on literature from the Unites States.

The researchers found evidence for income-related inequalities in access to healthcare in the United States, partly due to inadequate health insurance coverage for individuals with low socioeconomic status. Alcohol screening coverage appeared to be generally very low, as was the probability of receiving a brief intervention when indicated. However, research suggests that the latter is more likely to be provided to individuals with low socioeconomic status than those with high socioeconomic status. Individuals with low socioeconomic status also tend to benefit more from brief interventions, showing greater reductions in their alcohol use.

The researchers comment that once access to and affordability of healthcare is ensured and high coverage of alcohol screening is achieved for all, alcohol screening and brief interventions have the potential to enhance health equity by reducing alcohol consumption and alcohol-related health harms.

Source: Kilian C, Lemp JM, Probst C. Who benefits from alcohol screening and brief intervention? A mini-review on socioeconomic inequalities with a focus on evidence from the United States. Addict Behav. 2023 Oct;145:107765. doi.org/10.1016/j.addbeh.2023.107765.

Beer goggles or liquid courage? Alcohol, attractiveness perceptions, and partner selection among men

New research indicates that consuming alcohol makes someone more likely to approach a person they already find attractive but does not make others appear more attractive.

Previous studies have suggested that intoxication makes others seem better looking, but this phenomenon has not been studied systematically. Earlier research typically had participants simply rate other's attractiveness while sober and while intoxicated based on photos, but this new study added a more realistic element: the possibility of meeting the people being rated.

Perception of physical attractiveness (PPA) is a fundamental aspect of human relationships and may help explain alcohol's rewarding and harmful effects. Yet PPA is rarely studied in relation to alcohol, and existing approaches often rely on simple attractiveness ratings. The study added an element of realism to the attractiveness assessment by asking participants to select four images of people they were led to believe might be paired with them in a subsequent study.

18 pairs of platonic, same-sex male friends attended two laboratory sessions wherein they consumed alcohol in the first session and a no-alcohol control beverage in the second session. After consuming the beverages, participants were asked to rate the attractiveness of people they viewed in photos and videos. They also selected four individuals to potentially interact with in a future study.

Alcohol did not affect traditional attractiveness ratings but did significantly enhance the likelihood that participants would choose to interact with the most attractive targets.

Alcohol may not be altering perception but rather enhancing confidence in interactions, giving the men liquid courage to want to meet those they found the most attractive. When drinking, they were 1.71 times more likely to select one of their top-four attractive candidates to potentially meet in a future study compared with when they were sober.

Future alcohol–PPA studies should include more realistic contexts and provide assessment of actual approach behaviours toward attractive targets, in order to further clarify the role of PPA in alcohol's hazardous and socially rewarding effects, the authors comment.

Source: Bowdring, M. A., & Sayette, M. A. (2023). Beer goggles or liquid courage? Alcohol, attractiveness perceptions, and partner selection among men. Journal of Studies on Alcohol and Drugs, 84, 598–604. doi.org/10.15288/jsad.22-00355

Examining alcohol-related blackouts and drinking motives over time among college women

Excessive alcohol consumption and its consequences among college women continue despite prevention efforts. One common consequence, alcohol-related blackouts (ARBs), are periods of alcohol activated anterograde amnesia. A project aimed to extend the ARB and drinking motive literature by examining their relationship over time.

A sample of 424 women (88.9% White) completed online surveys assessing their ARBs and drinking motives weekly for 10 weeks. A series of hierarchical generalized linear models were estimated to examine the between-person and within-person effects of each drinking motive on repeated measures of experiencing a blackout across the time points.

Women who report higher levels of drinking motives compared to others were more likely to report having blackout experience. College women who reported higher levels of conformity motives did not have increased odds of experiencing a blackout. In weeks when they reported elevated levels of drinking motives, they were also more likely to experience an ARB.

In general, college women who reported higher levels of social, coping or enhancement motives experienced more blackouts than students that reported lower levels of these motives. Women who were underage were more likely to experience a blackout compared to women that were 21 or above. In a given week, 52.6% to 70.7% of the students consumed alcohol, and among women who drank in a given week, the prevalence of blackouts ranged from 8.5% to 14.6%. The results suggest that changes in motivational levels might provide a possible intervention point for ARBs risk.

Source: Ward RM, Geyer R, Cleveland M, Perlman E, Messman T. Examining Alcohol-Related Blackouts and Drinking Motives over Time among College Women. J Stud Alcohol Drugs. 2023 Aug 30. doi.org/10.15288/jsad.22-00285.

The effectiveness of alcohol label information for increasing knowledge and awareness

Consumers have difficulty understanding alcoholic units and low risk drinking guidelines (LRDG). Labelling may improve comprehension. A rapid evidence review examined the effectiveness of on-bottle labelling for (i) improving comprehension of health risks; (ii) improving comprehension of unit and/or standard drink information and/or LRDG; and (iii) reducing self-reported intentions to drink/actual drinking.

Electronic database searches were carried out (January 2008-November 2018 inclusive). Papers were included if they were: published in English; from an Organization for Economic Co-operation and Development country; and had an experimental/quasi-experimental design. Papers were assessed for quality using the Effective Public Health Practice Project Quality Assessment tool. Ten papers were included. Most studies were moderate quality (n = 7).

Five themes emerged: comprehension of health risks; self-reported drinking intentions; comprehension of unit/standard drink information and/or LRDG; outcome expectancies; and label attention. Labelling can improve awareness, particularly of health harms, but is unlikely to change behaviour. Improved comprehension was greatest for labels with unit information and LRDG.

The study authors conclude that alcohol labelling can be effective in improving people's comprehension of the health risks involved in drinking alcohol enabling them to make informed consumption decisions, and perhaps thereby provide a route to changing behaviour. Thus, effective alcohol labelling is an intervention that can be added to the broader suite of policy options. That being said, this literature reviewed suggests that the specific format of the label matters, so careful consideration must be given to the design and placement of labels.

Source: Edmunds CER, Gold N, Burton R, Smolar M, Walmsley M, Henn C, Egan M, Tran A, Harper H, Dale MK, Brown H, Londakova K, Sheron N, Greaves F. The effectiveness of alcohol label information for increasing knowledge and awareness: a rapid evidence review. BMC Public Health. 2023 Jul 31;23(1):1458. doi.org/10.1186/s12889-023-16327-x

Alcohol-related sexual harassment in the workplace: A between and within industry analysis

Sexual harassment as a political/legal issue was revitalised by the #MeToo movement in 2017. Researchers from the Norwegian Institute of Public Health estimated the prevalence and development of alcohol-related sexual harassment (ASH) across industries over the years 2015 to 2021, including potential changes from 2017, and assessed differences in the risk of ASH according to industry- and individual-level characteristics.

The research was based on annual surveys (2015–2021) among employees in 21 Norwegian industries and included 6,353 individuals aged 20–69 years. Associations between ASH and industry- and individual-level demographics, work autonomy, work-related drinking and intoxication were estimated.

ASH prevalence was 6% between 2015 and 2021 and varied between 4% and 13% across industries. Men showed a gradual increase in ASH from 2015 to 2021. The was no significant trend among women or a change after #MeToo. Industries with older employees, more women and frequent intoxication at work-related occasions had more ASH, while those with more highly educated employees had less. At the individual level, frequent work-related drinking occasions, tendency to get intoxicated at these occasions, being a woman and younger age were associated with more ASH. No individual- or industry-level association was found between work autonomy and ASH.

The study found that annually, 6% of Norwegian employees experience alcohol-related sexual harassment in work-related settings. The risk of ASH is higher among employees who are young, female, frequently drink and drink to intoxication at work-related events, and that work in industries with older employees, more women, less formal education and frequent intoxication.

Source: Lund, I, Moan, IS, Halkjelsvik, T. Alcohol-related sexual harassment in the workplace: A between and within industry analysis. Drug Alcohol Rev. 2023. doi.org/10.1111/dar.13736

Driving under the influence of cannabis and alcohol in young drivers

Driving under the influence (DUI) of psychoactive substances is an important public health and criminal justice issue. Although recent research provides up-to-date information regarding DUI among adults, there is a pressing need for research that focuses specifically on younger/ underage drivers.

A study used data from 2020 and 2021 National Survey on Drug Use and Health to provide up-to-date evidence as to the prevalence and key criminal justice, substance use, and behavioural health correlates of DUI of cannabis and alcohol among young drivers in the United States. 2,863 young drivers aged 16-20 were included in the study.

The prevalence of DUI-cannabis for the full sample, including those not endorsing past-year use was 6.3%. Among youth endorsing past-year cannabis use, 24.5% reported DUI of cannabis. In the full sample and among cannabis users, DUI-cannabis risk was elevated among older and male youth. The prevalence of DUI-alcohol was 2.6% among all youth and 6.1% among youth reporting past-year alcohol consumption.

The study authors state that their estimates indicate that more than one million young drivers each year are placing their lives and those of others at risk by operating motor vehicles after consuming cannabis and/or alcohol. Findings underscore the importance of prevention efforts targeting underaged cannabis and alcohol-impaired driving.

Source: Salas-Wright CP, Hai AH, Vaughn MG, Hodges JC, Goings TC. Driving under the influence of cannabis and alcohol: Evidence from a national sample of young drivers. Addict Behav. 2023 Jul 28;147:107816. doi.org/10.1016/j.addbeh.2023.107816.

Problematic alcohol use and food and alcohol disturbance in mothers

In recent years, women have significantly closed the alcohol use gender gap and they are drinking more heavily now than in previous decades. Furthermore, "wine-mom" culture (which promotes the use of alcohol to cope with the stressors of parenthood) has become increasingly prevalent in society and may be a factor in mothers' alcohol use.

Researchers from Department of Psychology, West Chester University in Pennsylvania examined the link between wine-mom-consistent drinking (reporting drinking in the ways promoted by wine-mom culture) and alcohol outcomes, including problematic alcohol use and food and alcohol disturbance (FAD). FAD, sometimes referred to as "drunkorexia," is a behaviour pattern marked by calorie restriction and/or compensation in relation to alcohol use. The researchers were interested in whether wine-mom-consistent drinking related to the above alcohol outcomes and also whether wine-mom-consistent drinking interacted with risk factors (stress, body dissatisfaction) to further increase an individual's likelihood of engagement in the above alcohol use behaviours. In other words, if someone drinks "like a wine-mom" and has elevated levels of stress or body dissatisfaction, are they also more likely to use alcohol in problematic ways?

In the study, the researchers collected data from 466 mothers who were from the UK and the US as part of a project titled 'Alcohol use, health behaviors, parenting, and motherhood'. Through an online survey, participants reported their stress levels (within the previous month), their body dissatisfaction, their alcohol use (including problematic alcohol use and FAD), and whether the drinking behaviours promoted by wine-mom culture corresponded with their own alcohol use.

The results indicated that wine-mom-consistent drinking was linked to problematic alcohol use and all four FAD dimensions (alcohol effects, bulimia, dietary restraint and exercise, restriction). 40 women who reported wine-mom-consistent drinking in the study (compared to the mothers who did not report wine-mom-consistent drinking), the relationship between stress and FAD-alcohol effects and FAD-restriction was only present among mothers who reported wine-mom-consistent drinking. Therefore, drinking like a "wine-mom" may not be benign. Furthermore, wine-mom-consistent drinking coupled with elevated stress could be especially concerning in relation to some FAD behaviours.

Source: Hill EM, Mazurek ME. Problematic alcohol use and food and alcohol disturbance in mothers: Examining the role of stress, body dissatisfaction, and wine-mom culture engagement. Alcohol. 2023 Aug 7:S0741-8329(23)00253-7. doi.org/10.1016/j.alcohol.2023.08.001.

Association of pregnancy-specific alcohol policies with infant morbidities and maltreatment

Research has found associations of pregnancy-specific alcohol policies with increased low birth weight and preterm birth, but associations with other infant outcomes are unknown. A study examined the associations of pregnancy-specific alcohol policies with infant morbidities and maltreatment.

A retrospective cohort study used outcome data from Merative MarketScan, a national database of private insurance claims. The study cohort included individuals aged 25 to 50 years who gave birth to a singleton between 2006 and 2019 in the US, had been enrolled 1 year before and 1 year after delivery, and could be matched with an infant.

Nine state-level pregnancy-specific alcohol policies were obtained from the National Institute on Alcohol Abuse and Alcoholism's Alcohol Policy Information System.

The primary outcomes were 1 or more infant injuries associated with maltreatment and infant morbidities associated with maternal alcohol consumption within the first year. Logistic regression, adjusting for individual-level and state-level controls, and fixed effects for state, year, state-specific time trends, and SEs clustered by state were used.

A total of 1,432,979 birthing person–infant pairs were included); 30,157 infants (2.1%) had injuries associated with maltreatment; and 44,461 (3.1%) infants had morbidities associated with alcohol use during pregnancy. The policies of Reporting Requirements for Assessment/ Treatment (adjusted odds ratio [aOR], 1.28; 95% CI, 1.08-1.52) and Mandatory Warning Signs (aOR, 1.18; 95% CI, 1.10-1.27) were associated with increased odds of infant injuries but not morbidities. Priority Treatment for Pregnant Women Only was associated with decreased odds of infant injuries (aOR, 0.83; 95% CI, 0.76-0.90) but not infant morbidities. Civil Commitment was associated with increased odds of infant injuries (aOR, 1.26; 95% CI, 1.08-1.48) but decreased odds of infant morbidities (aOR, 0.57; 95% CI, 0.53-0.62). Priority Treatment for Pregnant Women and Women With Children was associated with increased odds of both infant injuries (aOR, 1.12; 95% CI, 1.00-1.25) and infant morbidities (aOR, 1.08; 95% CI, 1.03-1.13). Reporting Requirements for Child Protective Services, Reporting Requirements for Data, Child Abuse/Neglect, and Limits on Criminal Prosecution were not associated with infant injuries or morbidities.

In this cohort study, most pregnancy-specific alcohol policies were not associated with decreased odds of infant injuries or morbidities. Policy makers should not assume that pregnancy-specific alcohol policies improve infant health, the researchers state.

Source: Roberts SCM, Schulte A, Zaugg C, Leslie DL, Corr TE, Liu G. Association of pregnancy-specific alcohol policies with infant morbidities and maltreatment. JAMA Netw Open. 2023 Aug 1;6(8):e2327138. doi.org/10.1001/jamanetworkopen.2023.27138

Can governments do without public health regulation?

In the first of three papers exploring tobacco, alcohol, obesity and gambling policy, Aveek Bhattacharya, Research Director of the Social Market Foundation compares different types of policy approach, and concludes that more 'interventionist' and apparently politically challenging measures, such as strict regulations on availability and taxes, tend to be more effective. The paper argues that in general, more 'interventionist' policies (such as bans, taxes and regulations) tend to be more effective – although the story is nuanced. Individual-level interventions (e.g., incentive payments and treatment) are more amenable to experimentation, and so have stronger evidence behind them. However, the evidence that we have on measures that affect whole populations suggests they have bigger effects, and are cheaper (and so more cost-effective). The evidence – particularly from tobacco control – suggests that a range of policies, implemented together, should reinforce one another and make each policy more effective. Yet the most impactful measures may be those that appear most politically difficult because they involve raising prices or restricting availability.

smf.co.uk/wp-content/uploads/2023/07/Carrots-and-sticks-July-2023.pdf

The effects of combined binge drinking and cannabis consumption on academic performance and adjustment in Spanish students

A study investigated the effects of binge drinking and cannabis co-consumption on academic performance and adjustment in Spanish Third-Year University Students and explored the impact of academic adjustment on this relationship.

A total of 144 students (aged 19-20 years) enrolled in the third year of university completed the study. The students were recruited during in first academic year (T1) via a survey that included items regarding the use of alcohol (AUDIT-C), cannabis and other drugs and demographic variables. Participants meeting the study criteria were invited by e-mail to a clinical (face-to face) structured interview. The participants completed a calendar of alcohol consumption during the 6 months prior to the interview (Alcohol Timeline Follow back), and recorded cannabis consumption in 3 months prior to the interview. Participants were categorised into three consumption groups (i.e., control, binge drinking, and co-consumers) based on the number of binge drinking days and cannabis unit scores.

Binge drinking and cannabis co-consumption in first-year students was significantly associated with poor academic performance and adjustment after 2 years of undergraduate study. Relative to controls, co-consumers reported significantly lower academic and personal-emotional adjustment to university as well as poorer performance. Mediation analysis showed that academic adjustment explains the mechanism by which co-consumers perform less well, mediating the relationship between co-consumption and academic performance, with an indirect effect representing 64.61% of the total effect. Furthermore, the mediating effect of academic adjustment was maintained after controlling for academic adjustment and baseline grade point average (T1).

This prospective follow-up study highlights how combined binge drinking and cannabis consumption may affect university adjustment and academic success in Spanish university students. The authors argue that overall, the study results should encourage health professionals, educational psychologists and academic institutions to take ownership of the need for support and involvement in prevention, as well as for provision of guidelines for implementing appropriate intervention strategies.

Source: Páramo MF, Cadaveira F, Rodríguez MS. A 2-year follow-up of the effects of combined binge drinking and cannabis consumption on academic performance and adjustment in Spanish third-year university students. Front Psychol. 2023 Aug 3;14:1223597. doi.org/10.3389/fpsyg.2023.1223597

'It's a small little pub, but everybody knew everybody': pub culture, belonging and social change

In an article published in the journal, Sociology, the authors state that public houses have long served an important social role in the UK, yet in recent decades the conditions under which they operate have changed dramatically. While research has examined adaptations in the pub sector, there is little analysis of how this relates to social change as experienced in the lives of individuals and communities. Pubs are therefore a useful topic of sociological inquiry.

Using focus groups data, the article examines how people experience the changing form and function of pubs reveals insights into perceptions of social change. Findings show that participants were aware of how pub culture has changed over recent decades and that this was linked to perceptions of wider social and cultural changes in society. Talking about pub going was a means to express dynamic feelings of belonging and attachment, particularly where they arise at the intersection of personal life changes and wider social transformations.

Source: Thurnell-Read, T. 'It's a Small Little Pub, but Everybody Knew Everybody': Pub Culture, Belonging and Social Change. Sociology. 2023. doi.org/10.1177/00380385231185936

Social research listed by publication date

- Risky drinking and other drug use in adults with chronic conditions in the United States: differential associations by race/ethnicity, 01/06/2023
- Who benefits from alcohol screening and brief intervention? A mini-review on socioeconomic inequalities with a focus on evidence from the United States. Available online 9/06/2023, Version of Record 12/06/2023
- Analysing gender in research and policy on alcohol-related violence among young people: Findings and recommendations from an international comparative study. 07/07/2023
- Alcohol-related deaths by sex in the US, 1999-2020. 28/07/2023
- 'It's a Small Little Pub, but Everybody Knew Everybody': Pub Culture, Belonging and Social Change. 28/07/2023
- Driving under the influence of cannabis and alcohol: Evidence from a national sample of young drivers. 28/07/2023
- The effectiveness of alcohol label information for increasing knowledge and awareness: a rapid evidence review. 31/07/2023
- A 2-year follow-up of the effects of combined binge drinking and cannabis consumption on academic performance and adjustment in Spanish third-year university students. 03/08/2023
- Association of pregnancy-specific alcohol policies with infant morbidities and maltreatment 03/08/2023
- Is the association between alcohol use and sickness absence modified by socioeconomic position? findings from the Stockholm public health cohort. 04/08/2023
- Problematic alcohol use and food and alcohol disturbance in mothers: Examining the role of stress, body dissatisfaction, and wine-mom culture engagement. 07/08/2023
- Development of severe alcohol related liver disease over four decades in Iceland: impact of increased access and use of alcohol 08/08/2023
- Alcohol-related sexual harassment in the workplace: A between and within industry analysis. 14/08/2023
- Effect of a smartphone intervention as a secondary prevention for use among university students with unhealthy alcohol use: randomised controlled trial 16/08/2023
- Beer goggles or liquid courage? Alcohol, attractiveness perceptions, and partner selection among men. 29/08/2023
- The estimated health impact of alcohol interventions in New Zealand: A modelling study. 30/08/2023
- Do changes in parent-student phone call and text message communication during the transition to college predict first-year drinking and consequences? A prospective study. 30/08/2023
- Examining Alcohol-Related Blackouts and Drinking Motives over Time among College Women 30/08/2023

Portman Group updates guidance on marketing that appeals to children

The Portman Group and the Independent Complaints Panel commissioned the children's marketing agency, Kids Industries, to provide insights on marketing techniques that are used to appeal to children and teenagers outside of the alcohol industry. As a result, the Portman Group has refreshed its advice around Code rule 3.2(h): Particular appeal to under-18s.

In 2022, 85% of complaints about alcohol marketing and packaging that the Portman Group received related to Code rule 3.2(h), with 29% of all advice requests also related to this area, more than any other category. The updated guidance aims to help the alcohol industry market and package products in a way that does not have a particular appeal to under-18s.

The document is divided into four sections which explore the different stages of child development, trends in kids marketing, elements of packaging that may appeal to children in FMCG products and summarises the considerations that products should be mindful of when applying these learnings to alcohol products.

Matt Lambert, CEO of the Portman Group said: "These insights are incredibly important to enhance understanding and application of the Code to ensure that we regulate effectively and protect under-18s from alcohol marketing. We have taken these learnings and updated our guidance on the Code rule, along with more recent decisions, and hope this will help the industry continue to market responsibly."

portmangroup.org.uk/wp-content/uploads/2023/07/Kids-Industries-Report.pdf

Italy offers free taxi rides to stop drunk drivers

Matteo Salvini, Italy's Minister of Infrastructure and Transport has introduced trial measures to provide free taxis to drivers who, after undergoing alcohol tests on leaving night clubs, exceed the legal limit for driving. Salvini said that the pilot project aims to "prevent the increasingly frequent carnage" on the country's roads at weekends.According to data from 2019 from the Carabinieri and police published by the European Transport Safety Council (ETSC), around 8.7% of the 58,872 road collisions with injuries reported in Italy involved at least one driver under the influence of alcohol.

The experimental scheme will involve six venues around Italy, on Saturday nights from August to mid-September, with the results to be evaluated at the end. Salvini commented: "The idea, born after meetings at the ministry on road safety with influencers and content creators, provides for the payment of transport to those who, undergoing an alcohol test when exiting discoes, exceed the limit set for getting behind the wheel." The scheme has met with some resistance with critics saying that the scheme "rewards" excessive alcohol consumption. Others are unhappy with their taxes are to fund this transport.

8% rise in numbers receiving treatement for problem alcohol use in Ireland

The number of people treated for problem alcohol use in Ireland increased last year by 8% to 7,421 cases, according to the latest data from the Health Research Board (HRB).

The average age cases first began drinking was 16, while the average age of those in treatment was 47. Almost half of cases were unemployed and one in 13 cases was recorded as homeless. 51% of those in treatment lived with children aged 17 or younger.

HRB Senior Researcher Suzi Lyons said that almost 60% of cases consumed alcohol daily. Women seeking treatment for problem alcohol use are typically consuming 15 standard drinks every day and show a preference for spirits, followed by wine. For men, the figure is 20 standard drinks a day, but they prefer beer, followed by spirits. Problem use of more than one substance was reported by 25% of cases, with cocaine being the most common additional drug used alongside alcohol, followed by cannabis.

rte.ie/documents/news/2023/08/alcohol-treatment-demand-2022-bulletin.pdf

WSTA launches low and no alcohol guides

The Wine & Spirit Trade Association (WSTA) has developed what it says are the UK's first no and low alcohol guides. Three documents, compiled by the WSTA in collaboration with its producer and retailer members, aim to "clear up confusion over the marketing, labelling and production" of low and no alcohol wines and spirits.

The first two are WSTA Marketing Guide for Alcohol Alternatives, and WSTA Guidance on Labelling of Low and No 'Spirit' Alternatives. A third guide, WSTA Guidance on Labelling of Low and No 'Wine' Alternatives, will follow. The marketing guide focuses on beverages that contain a maximum of 0.5% abv and are marketed at adults. The second guide on labelling low and no spirit alternatives is the second edition of WSTA guidance originally published in 2021. It builds on the previous advice and sets out "pragmatic solutions to conflicting legislative requirements". The document also contains best practice pointers, as well as suggested legal descriptors to aid in the naming of products.

Miles Beale, chief executive of the WSTA said: "As the low and no sector continues to innovate and grow the WSTA is pleased to offer - for the first time in the UK - a comprehensive set of guides to help members navigate the often-confusing world of describing, labelling and marketing no and low alcohol drinks.

The WSTA said that it expects the Department of Health and Social Care (DHSC) to carry out a further consultation to seek views on changing the low alcohol descriptor guidance that was published in 2018. The consultation has two objectives: to increase substitution of standard-strength alcohol products with low/no products by those drinking above low-risk levels; and to facilitate a shift in the market from sales and promotion of alcoholic products towards low/no alternatives. The WSTA says that its members believe strongly that these aims cannot be achieved without amendments to the current descriptors, particularly the need to increase alcohol free from 0.05% to 0.5%. providing consistency between the UK and European markets in these products, as well as providing clarity to consumers.

The new guides are available to WSTA members.

wsta.co.uk/

Alcohol and drugs fatalities on French toll motorways

Alcohol and drugs are the leading cause of fatal crashes on French toll motorways, according to a recent report by the Association of French Motorway Companies (ASFA). 188 people died in 2022 on French toll motorways, compared to 131 in 2021, representing a 43% increase. 26.3% of fatal accidents are linked to one of three factors: alcohol, narcotics and medicines.

ASFA head Christophe Boutin said, "The role alcohol, drugs and medicines play in accidents is increasing significantly… some users are openly taking more risks. This results in more victims, these types of behaviour are unacceptable." All motorway deaths (not just toll motorways) had increased by 12%, from 263 people in 2019 to 294 in 2022. Overall, 3,267 people died on French roads in 2022, up 0.7% compared to 2019.

roadpol.eu/index.php/alcohol-and-drugs-leading-cause-of-death-on-french-motorways-1

Drink smart university class in Budapest

As a result of the "I drink smart!" initiative (by Dreher Breweries part of Asahi Europe & International), responsible alcohol consumption has become part of university classes. A pilot course of the program's UNI series started at Budapest Metropolitan University in the fall of 2022. Since then, over a hundred graduate and postgraduate students have studied and designed awareness campaigns on moderate alcohol consumption. Following the success of the pilot semester, the initiative was implemented at other universities.

Budapest Metropolitan University's consolidated postgraduate program for Public Relationsincluded the prgram in Spring 2023. Subsequently, it became one of the elective courses offered during the joint spring semester at Budapest Corvinus University and Moholy-Nagy University of Art and Design. Starting from autumn 2023, the initiative will reach more domestic higher education institutions so that more young adults can become more conscious about responsible alcohol consumption while expanding their professional knowledge.

The university program can be adapted to various academic fields (e.g., law, marketing, finance, medicine) and formats (e.g., workshops, block theme days, semester courses). In all implementation modes, students create project works that authentically convey the message: "Irresponsible alcohol consumption is not cool."

Based on the preliminary questionnaire results, 77.3% of the students stated that during the course, they gained a better understanding of the culture, background, and effects of alcohol consumption, enabling them to be more aware of what to pay attention for in order to avoid extremes. Additionally, 50% of the students specifically believed that there are several aspects of their drinking habits that they should change.

asahiinternational.com/stories/sustainability/i-drink-smart-program-hungary/

Framework for implementing the Global Alcohol Action Plan, 2022–2030 in the WHO African Region

In August, Member States in the WHO African Region adopted, without amendment, a proposed regional implementation framework for the Global Alcohol Action Plan (GAAP).

The goal of the Framework is to significantly reduce morbidity and mortality due to alcohol consumption in the African Region. Its objectives include increasing the implementation and enforcement of high-impact policy options and interventions to reduce the harmful use of alcohol in the African Region; strengthening multisectoral actions through effective governance, enhanced political commitment, leadership, dialogue, and coordination; enhancing the capacity of health and social care systems to prevent and treat disorders due to alcohol use as an integral part of universal health coverage (UHC); and raising awareness of the risks and harms associated with alcohol consumption and its impact on the health and well-being of individuals, families, communities and nations. During their deliberations, Member States paid particular attention to drinking among adolescents, industry interference, and marketing, particularly related to children.

apps.who.int/iris/bitstream/handle/10665/372385/AFR-RC73-8-eng.pdf

Drunk driving has increased by 10% in Sweden

In Sweden, the number of revoked driving licenses due to drunk driving or drug-impaired driving during the first half of 2023 has increased to 3,542, up from 3,200 in the same period last year. This is the highest number in 10 years.

Tony Gunnarsson, an expert in road safety at the National Federation M Sweden commented, "One in four fatal accidents in Swedish road traffic is alcohol or drug-related, which is a high percentage compared to comparable countries." Although more people have had their driving licenses revoked, it is thought to be a small proportion compared to the number of impaired drivers. According to the Transport Administration, at least 15,000 journeys are made daily in Sweden with drivers so impaired that they would be convicted of drunk driving if discovered.

"Unfortunately, the risk of detection is far too low. The number of withdrawn driving licenses is also linked to the number of controls, which have decreased significantly over time. In 2010, the police conducted 2.7 million sobriety checks, in 2019 1.2 million tests were made, and in 2022 only 677,000," says Tony Gunnarsson. "We need more police on our roads so that more impaired drivers can be taken out of traffic, and more are deterred from driving under the influence." 56 people died in alcohol or drug-related accidents in 2022, which is 9 more than in 2021. Of these, 32 people died in accidents solely related to alcohol, 16 in accidents solely related to drugs, and 8 in accidents related to both alcohol and drugs.

The National Federation M Sweden wants to reduce drunk driving by adopting measures such as introducing more sobriety checks by police, implementing alcohol gates at all ferry terminals (such as those tested in ports at Stockholm and Gothenburg), allowing the police to conduct random drug tests in traffic without suspicion and closing the loophole for "after-drinking" so that people who have driven a car and been involved in a traffic accident are prohibited from consuming alcohol or other intoxicants within six hours after driving.

nordicalcohol.org/post/sweden-drunk-driving-has-increased-by-ten-percent

FOMO FOREVER campaign in Denmark

According to the Danish Cancer Society, over half of 18-24 year-olds in Denmark have missed out on events they wished to attend due to excessive alcohol consumption.

In a questionnaire survey conducted by Epinion for the Danish Cancer Society and TrygFonden, 630 young individuals aged 18-24 were asked about their experiences with alcohol. 54% identified with missing out on experiences because they had drunk excessively.

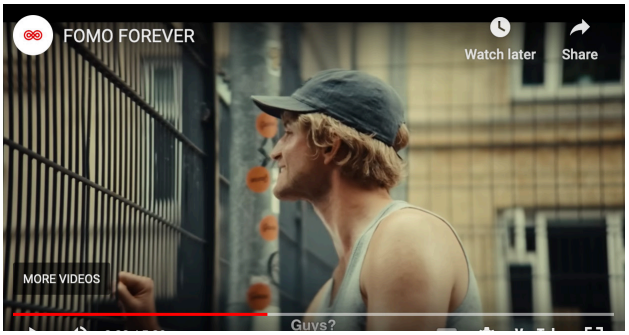
Søren Stokholm Thomsen, Project Manager at TrygFonden said, "We know that many young people drink alcohol for fun, so it's unfortunate when alcohol gets in the way of great experiences. We want to emphasise that one can get more out of an evening by reducing alcohol intake".

The research also highlights that when drinking gets out of hand, it also affects friendships. Over 7 in 10 young people have experienced a party being ruined because a friend was too drunk.

The day after, both moral and physical hangovers can also be troublesome, with about 4 out of 5 of those aged 18-24 stating that they regretted how much alcohol they'd consumed. Peter Dalum, Project Manager at the Danish Cancer Society for TrygFonden's alcohol initiative 'Fuld af liv' (Full of Life) commented, "Young Danes sadly hold a European record for drinking… After a period of declining alcohol use among youth, recent studies unfortunately show a rising trend. This calls for action from politicians, parents, and the youth themselves."

Data from Denmark's National Institute of Public Health shows that 4% of those aged 18-24 had an emergency room visit in the past year due to alcohol. This equates to about 30,000 annual ER visits. The Danish Cancer Society and TrygFonden launched a new campaign, FOMO FOREVER, aiming to make toung people reflect on their alcohol consumption and to encourage moderation. The campaign focusses on missed amazing experiences due to excessive drinking.

alcoholcampaign.org/2023/08/24/fomo-forever/



The Fourth WHO Forum on Alcohol, Drugs and Addictive Behaviours

The Fourth World Health Organization Forum on Alcohol, Drugs and Addictive Behaviours was held on June 27-30 2023 at the WHO Headquarters in Geneva.

The Forum began with presentations by the senior executive of WHO, including Dr Tedros Adhanom Ghebreyesus, Director-General. In the opening session there were presentations by three prominent individuals who had personal experience of addictions and an introduction to the alcohol policy framework of WHO, the Global Alcohol Action Plan 2022-2030. This prefaced sessions covering cross-border and digital marketing of alcoholic beverages; global targets for reducing alcohol's disease burden; reviews of alcohol use and cardiovascular diseases; alcohol and cancer; and alcohol's harm to others.

A session on commercial determinants of alcohol use ran on the third day. Parallel sessions examined specific issues related to (i) alcohol, (ii) psychoactive drugs, and (iii) addictive behaviours. These sessions included policies and approaches to reduce harm, monitoring of harm globally and regionally, approaches to the identification, diagnosis and brief interventions, and treatment of alcohol use disorders. The fourth day of the Forum was devoted to special initiatives including the SAFER initiative on alcohol, with reports from those involved in countries that are pioneering the initiative, including Uganda and Nepal.

media.licdn.com/dms/document/media/D4E1FAQE-UOpKJmEoCw/feedshare-document-pdf-analyzed/0/1692781036236?e=1694044800&v=beta&t=uF3ND5ejJWgQhNXhpdyJSPg-nedaee9XJ8necDx1FTk

Small increase in alcohol-specific death statistics in Scotland

The number of deaths from alcohol-specific causes rose in Scotland in 2022 by 2%, according to figures published by National Records of Scotland.

In total, 1,276 deaths were attributed to alcohol-specific causes in 2022; 31 more than in 2021, and the highest number since 2008. Male deaths continue to account for around two thirds of alcohol-specific deaths. Female deaths increased by 31 to 440, with the number of alcohol-specific male deaths unchanged at 836. Taking into account the changing size and age-structure of the population, the rate of death had changed from 22.3 per 100,000 to 22.9 per 100,000 over the last year. This is not considered statistically significant.

Daniel Burns, Head of Vital Events Statistics, said: "Looking at the long-term trend the number of deaths from alcohol-specific causes fell between 2006 and 2012 but has risen since and is now about the same as 2010 levels. In 2022, the average age at death for females from an alcohol-specific cause was 58.7 years and for males it was 60.0 years."

There are 4.3 times as many deaths from these causes in the most deprived communities as in the least deprived communities but this equality gap has been narrowing. This compares to a ratio of 1.8 times for all causes of death.

nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/alcohol-deaths

ROADPOL Alcohol & Drugs Marathon sees a sharp rise in the rate of DUI

The latest ROADPOL Alcohol & Drugs Marathon registered a double rise in the rate of driving under intoxication of substances (DUI). The marathon was conducted during the June ROADPOL Alcohol & Drugs operation and featured broad 24-hour checks along the roads of 13 member countries.

According to the reports, more than 262,000 drivers were checked throughout Europe during the day and night of the operation. Of these 12,284 drivers were under the influence of alcohol and 399 under the influence of drugs. The violation rate was thus 4.84%, double the one from the same operation a year ago (2.44%). 22 drivers were under the influence of alcohol and drugs. In 1,210 cases, the driver's license was seized, or a procedure was started to revoke the driver's license.

The enforcement marathon was carried out against the backdrop of the larger week-long Alcohol & Drug Operation run from 14 to 20 June. According to the reports of participating countries more than 495,000 drivers were checked throughout Europe during this operation. Of these 7,812 drivers were under the influence of alcohol and 1,920 under the influence of drugs. 173 drivers were under the influence of alcohol and drugs.

roadpol.eu/index.php/roapdol-snatches-over-4000-duis-in-24-hours-2

Smart Drinking Lab in Brazil supporting moderation

Brazilian brewer Ambev, opened the Smart Drinking Lab in 2021 helping to support the company's work to promote moderation. The Lab is led by a team of product development and research experts from Ambev's Center for Innovation and Technology (CIT) in Rio de Janeiro, who collaborate with neuroscientists, biotech startups and local government officials on new products and tech to help people make better choices when drinking. To encourage positive behaviours, such as eating before and while drinking, the lab partnered with popular beverage brand, Beats, on a clinically tested cereal bar that can potentially slow alcohol absorption, make people feel fuller and drink more slowly.

Flow Voice is a new app that uses artificial intelligence (AI) to evaluate more than 120 aspects of the human voice. The Smart Drinking Lab, together with Metatimbre AI (an Ambev-backed startup) is testing to see if Flow Voice can detect changes in a user's voice due to alcohol consumption. After uploading a recording of spoken phrases, users receive an analysis of their voices along with tips for moderation. Flow Voice is currently in early testing and is adding to its bank of 8,000+ voices to improve the app's accuracy and expand its capabilities. Other potential uses being explored include smartwatch integrations and working with local law enforcement to address drinking and driving.

The Smart Drinking Lab also provides tech expertise to help reduce harmful drinking in local communities. The team recently created a digital version of the evidence-based practice known as "Screening and Brief Interventions". This tool empowers healthcare professionals to assess individuals' alcohol consumption habits during outpatient or wellness appointments. It serves as a guide for steering conversations and motivating those at risk to make changes to their drinking habits.

Lastly, the lab has been involved in testing predictive technology which uses AI and data intelligence to help identify locations that are prone to traffic crashes, enabling local law enforcement to initiate proactive actions, where needed "We're proud to be doing our part in creating a future with more moderation and less harmful drinking," said Gabriel Gomes, Head of Disruptive Innovation at Ambev.

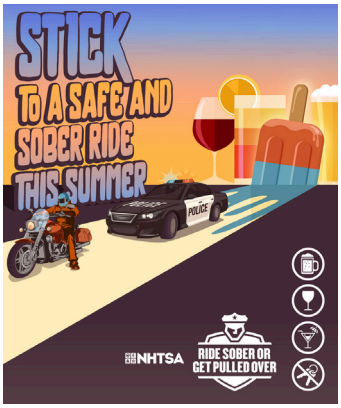
NHTSA Launches Labor Day 'Drive Sober or Get Pulled Over' Campaign

The US Department of Transportation's National Highway Traffic Safety Administration (NHTSA) kicked off its annual "Drive Sober or Get Pulled Over" Labor Day national enforcement mobilization campaign on 15th August.

The enforcement effort has been supported by a $13.8 million paid media campaign using a mix of television, radio, digital, social media and billboards to educate drivers about the dangers of impaired driving. As part of the high-visibility enforcement campaign, law enforcement officers have been working with their communities from August 18 through September 4 to stop impaired driving.

The initiative includes a number of public service messages: Drive Sober or Get Pulled Over; If You Feel Different, You Drive Different; Drive High, Get a DUI; and Ride Sober or Get Pulled Over.

NHTSA data shows that historically summer months tend to be more dangerous on the road. Latest statistics show that impaired driving is increasing, with fatalities in alcohol-impaired-driving crashes increasing by 14.2% from 2020 to 2021, as compared to a 10.1% increase in overall traffic fatalities from 2020 to 2021. In 2021, 13,384 people were killed in alcohol-impaired-driving crashes and 9,027 of those deaths involved a driver with a blood alcohol concentration of 0.15 or more, nearly twice the legal limit of impairment.



"Impaired drivers put everyone, including themselves, at risk," NHTSA Acting Administrator Ann Carlson said. "We're asking everyone to arrange for a sober ride home. It's a matter of life and death."

nhtsa.gov/press-releases/labor-day-drive-sober-or-get-pulled-over-campaign-2023

Regulating same-day alcohol supply in Australian Capital Territory

The Australian Capital Territory (ACT) government is seeking feedback on proposed amendments to legislation which regulates same-day alcohol supply. Reforms to the Liquor Act 2010 would set a maximum volume of liquor that could be delivered to the same customer within 24 hours and would restrict the hours for rapid delivery. Delivery staff and agents would have to undergo Responsible Service of Training specifically tailored to the rapid alcohol delivery market. It would also be an offence to deliver alcohol to evidently intoxicated people, minors, or to alcohol-free zones.

The government states that a specific legislative framework for same day deliveries would provide clarification for retailers and consumers between the application of legislation and industry codes of conduct, and introduce specific protections for customers, retailers and delivery drivers that do not currently exist under the Act. Attorney-General Shane Rattenbury said that any legislative changes "must support our harm minimisation approach to liquor policy in the ACT, including reducing the risk of consuming alcohol at an early age." Other Australian jurisdictions, including NSW and Victoria, have introduced specific legislation to regulate online sales that provide rapid alcohol delivery. The ACT Government released a discussion paper on regulation of this retail sector. A consultation will run for six weeks, closing on 14 September 2023.

hdp-au-prod-app-act-yoursay-files.s3.ap-southeast-2.amazonaws.com/4616/9015/7883/Discussion_Paper__Regulation_of_Same_Day_Liquor_Delivery_Providers_.pdf

The cost of harmful alcohol consumption and smoking in France

A report from the French Monitoring Centre for Drugs and Drug Addiction (OFDT) reveals that France loses more money due to lives lost and prevention spending on alcohol and tobacco use than it gains from taxes on those products.

Researchers analysed data from 2019 to determine the impact of alcohol and smoking on the country. They estimated that the "social cost" to the state amounted to €156 billion for tobacco smoking and €102 billion for alcohol. The cost to the state of illicit drug use amounted to €7.7 billion. The estimate takes into account the economic value of lives lost due to drug use, the loss of quality of life for patients with cancers caused by tobacco and alcohol use as well as state spending on prevention and care. The savings on pensions for those who lose their lives due to drugs, alcohol and tobacco use was deducted from the social cost estimate.

The French government received €4 billion and €13 billion respectively from the taxes on alcohol and tobacco. That is lower than the cost to the government of treatments for alcohol and tobacco abuse. "The idea that drugs like tobacco and alcohol would bring benefits to the state is, therefore, completely unfounded," said report author Pierre Kopp, a professor of economics at the University of Paris 1 Panthéon Sorbonne.

The report noted that the drop in the number of deaths caused by alcohol, tobacco and illicit drugs between 2010 and 2019 shows that public policies have made it possible to "significantly reduce tobacco consumption, improve care for illicit drug users and, more modestly, increase awareness of the dangers of alcohol".

ofdt.fr/BDD/publications/docs/eisxpk2d7.pdf

New Zealand law to crack down on fleeing drivers passes third reading

The New Zealand Government has delivered on its commitment to crack down on fleeing drivers through the passage of the Land Transport (Road Safety) Amendment Bill. Associate Transport Minister Damien O'Connor said. "Fleeing drivers often drive recklessly or at excessive speed. They could be fleeing from a checkpoint because they are over the alcohol limit or have been involved in a crime. These situations are high risk for everyone involved, and this legislation will help reduce their frequency."

The new law allows Police to seize and impound a vehicle for six months if it fails to stop or remain stopped – up from 28 days. It provides a new power allowing Police to seize and impound a vehicle for up to 28 days if the registered owner fails to provide information about a fleeing driver and impounding the vehicle is necessary to prevent a threat to road safety. The period of licence disqualification increases from 12 months to between 12 months and 24 months after a second conviction for a failing to stop offence. In addition, the law creates a new sentencing option allowing the Courts to order that a vehicle be forfeited on conviction for a failing to stop offence, with the offender getting no proceeds from the sale.

beehive.govt.nz/release/new-law-crack-down-fleeing-drivers-passes-third-reading

AIM – Alcohol in Moderation was founded in 1991 as an independent not for profit organisation whose role is to communicate "The Responsible Drinking Message" and to summarise and log relevant research, legislation, policy and campaigns regarding alcohol, health, social and policy issues.

AIM Mission Statement

- To work internationally to disseminate accurate social, scientific and medical research concerning responsible and moderate drinking
- To strive to ensure that alcohol is consumed responsibly and in moderation
- To encourage informed and balanced debate on alcohol, health and social issues
- To communicate and publicise relevant medical and scientific research in a clear and concise format, contributed to by AIM's Council of 20 Professors and Specialists
- To publish information via www.alcoholinmoderation.com on moderate drinking and health, social and policy issues – comprehensively indexed and fully searchable without charge
- To educate consumers on responsible drinking and related health issues via www.drinkingandyou.com and publications, based on national government guidelines enabling consumers to make informed choices regarding drinking
- To inform and educate those working in the beverage alcohol industry regarding the responsible production, marketing, sale and promotion of alcohol
- To distribute AIM Digest Online without charge to policy makers, legislators and researchers involved in alcohol issues
- To direct enquiries towards full, peer reviewed or referenced sources of information and statistics where possible
- To work with organisations, companies and associations to create programmes, materials or policies that communicate responsible alcohol consumption messages or work to reduce alcohol related harm.

AIM Social, Scientific and Medical Council