



RESEARCH SUMMARY

Date Compiled: November 2021

Key takeaways from included research:

- Researchers looked at cannabis and alcohol involvement in motor vehicle crash fatalities in the United States and found the percentage of fatalities involving cannabis or cannabis and alcohol had more than doubled from 2000 and 2018.
- While awareness of the alcohol and cancer link may still be low, those who were aware of the link were more likely to be supportive of adding warning labels and drinking guidelines to containers as well as banning outdoor alcohol advertising. Greater awareness was associated with stronger policy support.
- Throughout the COVID-19 pandemic many reports have stated that alcohol consumption increased due to increased sales. This study examined national changes in waiting lists for liver transplantation for alcoholic liver disease and the association with alcohol sales during the pandemic. Researchers concluded that waiting lists registrations and deceased donor liver transplants for alcoholic hepatitis increased significantly. Though this does not show causality, the disproportionate increase may indicate a relationship between increased alcohol sales and increased alcohol misuse.
- As a result of an Australian study examining online liquor licenses, recommendations were submitted to the Liquor & Gaming oversight agency asking for key reforms regarding the gaps in safeguards. These gaps included inconsistent application of the Liquor Act; the inability for regulators to complete compliance auditing; and the absence of consistent mandatory signage.
- Youth are impacted by their home environment and what they viewed as normal. After examining the effect of parental drinking on perceived social norms, researchers found that many parents, particularly fathers, consume in front of their children, often in excess. Health promotion strategies need to be targeted toward adults and parents to reduce the likelihood a child may perceive this behavior as normal in the future.

TRENDS IN CANNABIS INVOLVEMENT AND RISK OF ALCOHOL INVOLVEMENT IN MOTOR VEHICLE CRASH FATALITIES IN THE UNITED STATES, 2000–2018

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Objectives. To assess cannabis and alcohol involvement among motor vehicle crash (MVC) fatalities in the United States.

Methods. In this repeated cross-sectional analysis, we used data from the Fatality Analysis Reporting System from 2000 to 2018. Fatalities were cannabis-involved if an involved driver tested positive for a cannabinoid and alcohol-involved based on the highest blood alcohol concentration (BAC) of an involved driver. Multinomial mixed-effects logistic regression models assessed cannabis as a risk factor for alcohol by BAC level.

Results. While trends in fatalities involving alcohol have remained stable, the percentage of fatalities involving cannabis and cannabis and alcohol increased from 9.0% in 2000 to 21.5% in 2018, and 4.8% in 2000 to 10.3% in 2018, respectively. In adjusted analyses, fatalities involving cannabis had 1.56 (95% confidence interval [CI] = 1.48, 1.65), 1.62 (95% CI = 1.52, 1.72), and 1.46 (95% CI = 1.42, 1.50) times the odds of involving BACs of 0.01% to 0.049%, 0.05% to 0.079%, and 0.08% or higher, respectively.

Conclusions. The percentage of fatalities involving cannabis and coinvolving cannabis and alcohol doubled from 2000 to 2018, and cannabis was associated with alcohol coinvolvement. Further research is warranted to understand cannabis- and alcohol-involved MVC fatalities.

Source: Lira, M. C., Heeren, T. C., Buczek, M., Blanchette, J. G., Smart, R., Pacula, R. L., & Naimi, T. S. (2021). Trends in Cannabis Involvement and Risk of Alcohol Involvement in Motor Vehicle Crash Fatalities in the United States, 2000–2018. *American Journal of Public Health*, (0), e1-e10.
<https://doi.org/10.2105/AJPH.2021.306466>

AWARENESS OF ALCOHOL AS A CARCINOGEN AND SUPPORT FOR ALCOHOL CONTROL POLICIES

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Introduction

Alcohol use increases cancer risk, yet awareness of this association is low. Alcohol control policies have the potential to reduce alcohol-caused cancer morbidity and mortality. Research outside the U.S. has found awareness of the alcohol–cancer link to be associated with support for alcohol control policies. The purpose of this study is to estimate the prevalence of support for 3 communication-focused alcohol policies and examine how awareness of the alcohol–cancer link and drinking status are associated with policy support among U.S. residents.

Methods

Investigators analyzed data from the 2020 Health Information National Trends Survey 5 Cycle 4. Analyses were performed in 2021. The proportion of Americans who supported banning outdoor alcohol advertising and adding warning labels and drinking guidelines to alcohol containers was estimated. Weighted multivariable logistic regression was used to examine how awareness of the alcohol–cancer link and drinking status were associated with policy support.

Results

Most Americans supported adding warning labels (65.1%) and drinking guidelines (63.9%), whereas only 34.4% supported banning outdoor alcohol advertising. Americans reporting that alcohol had no effect/decreased cancer risk had lower odds of support for advertising ban (OR=0.56), warning labels

(OR=0.43), and guidelines (OR=0.46) than Americans aware of the alcohol–cancer link. Moreover, heavier drinkers had lower odds of support for advertising ban (OR=0.41), warning labels (OR=0.59), and guidelines (OR=0.60) than nondrinkers.

Conclusions

Awareness of the alcohol–cancer link was associated with policy support. Increasing public awareness of the alcohol–cancer link may increase support for alcohol control policies.

Source: Seidenberg, A. B., Wiseman, K. P., Eck, R. H., Blake, K. D., Platter, H. N., & Klein, W. M. (2021). Awareness of Alcohol as a Carcinogen and Support for Alcohol Control Policies. *American Journal of Preventive Medicine*. <https://doi.org/10.1016/j.amepre.2021.07.005>

ASSOCIATION OF COVID-19 WITH NEW WAITING LIST REGISTRATIONS AND LIVER TRANSPLANTATION FOR ALCOHOLIC HEPATITIS IN THE UNITED STATES October 2021

Introduction

Alcohol consumption has substantially increased during the COVID-19 pandemic; however, the impact on the already increasing burden of alcohol-associated liver disease (ALD) is unknown. We examined national changes in waiting list registration and liver transplantation for ALD and the association with alcohol sales during the COVID-19 pandemic. We hypothesized that waiting list registrations and deceased donor liver transplants (DDLTs) for alcoholic hepatitis (AH), which can develop after a short period of alcohol misuse, would disproportionately rise.

Methods

This cross-sectional study was deemed exempt from review and informed consent by the University of Michigan institutional review board because the study involves deidentified, publicly available secondary data sets that cannot be tracked back to an individual. This study follows the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guideline for reporting cross-sectional studies.

Data were obtained from the United Network for Organ Sharing Standard Transplant Analysis and Research file for new waiting list registrations and primary DDLT for US adults (age ≥ 18 years) between January 1, 2016, and January 31, 2021, and categorized by primary listing diagnosis as AH, alcohol-related cirrhosis (AC), or non-ALD (any other diagnosis). For each diagnosis, we characterized short-term changes during COVID-19 (March 2020 to January 2021) by comparing proportions of waiting list registrations and DDLTs to the same time frame pre–COVID-19 (March 2019 to January 2020) using χ^2 tests. To evaluate changes during COVID-19 compared with long-term trends, we compared observed monthly volumes of waiting list registrations and DDLTs from March 2020 to January 2021 with forecasted values based on pre–COVID-19 trends estimated from nonseasonal autoregressive integrated moving average models with first order differencing fit to monthly waiting list registrations and DDLTs for 4 years pre–COVID-19 (January 2016 to February 2020).

National monthly retail alcohol sales from January 2016 to January 2021 for purchases from beer, wine, and liquor stores in US dollars were obtained from the US Census Bureau Monthly Retail Trade Report. The associations of alcohol sales, waiting list registrations, and DDLT were evaluated using Spearman rank-order correlation with a significance level of .05. Analyses were performed using Stata/SE version 16.0 (StataCorp). Data were analyzed from March to April 2021.

Results

A total of 51 488 new waiting list registrations and 32 320 DDLTs from January 1, 2016, to January 31, 2021, were assessed. The median (IQR) age was 58.0 (50-64) years among pre-COVID-19 waiting list registrants and liver transplant recipients. The median (IQR) age was 58.0 (49-64) years for new waiting list registrants during COVID-19 and 58.0 (48-64) years for transplant recipients during COVID-19. Among new waiting list registrants, 15 247 (36.1%) were women and 26 930 (63.9%) were men during the pre-COVID-19 period, and 3477 (37.3%) were women and 5834 (62.7%) were men during COVID-19 ($P = .03$). From March 2020 to January 2021, during COVID-19, there was a significant increase in the proportions of waiting list registrations (227 of 9311 registrations [2.4%] vs 138 of 9638 registrations [1.4%]; $P < .001$) and DDLTs (185 of 6162 DDLTs [3.0%] vs 103 of 6263 DDLTs [1.6%]; $P < .001$) for AH compared with the same period pre-COVID-19 (ie, March 2019 to January 2020). Compared with long-term pre-COVID-19 trends, there was an overall reduction in waiting list registration and DDLT at the start of COVID-19, from March to May 2020 (Figure 1A and B). From June 2020 to January 2021, observed volumes of waiting list registrations and DDLTs for AH increased sharply, exceeding forecasted values by a mean of 59.5% in waiting list registrations and 62.0% in DDLTs and surpassing the 95% CI for 4 of 8 months. There was a temporal association and positive correlation between increasing waiting list registrations (Spearman $\rho = 0.79$; $P < .001$) and DDLT (Spearman $\rho = 0.76$; $P < .001$) for AH and increasing retail alcohol sales (Figure 1C). Observed waiting list registrations and DDLTs for AC and non-ALD remained within or below forecasted values (Figure 2).

Discussion

This cross-sectional study found that waiting list registrations and DDLTs for AH increased significantly during COVID-19, exceeding the volumes forecasted by pre-COVID-19 trends by more than 50%, whereas trends for AC and non-ALD remained unchanged. While we cannot confirm causality, this disproportionate increase in association with increasing alcohol sales may indicate a relationship with known increases in alcohol misuse during COVID-19. Since less than 6% of patients with severe AH are listed for transplantation, increasing waiting list volume during COVID-19 represents a small fraction of the increase in AH, a preventable disease with 6-month mortality up to 70%.

Our study is limited by its retrospective nature and changes in allocation policy and transplant center practices that may have independently affected waiting list registration and DDLT. Although allocation changes in February 2020 could have contributed to increasing DDLT for AH, the simultaneous increase in waiting list registration supports an underlying increase in AH. While increasing adoption of early DDLT for AH has increased waiting list registration and DDLT for AH in recent years, this would not explain the acute increase during COVID-19 disproportionate to pre-COVID-19 trends. This study provides evidence for an alarming increase in AH associated with increasing alcohol misuse during COVID-19 and highlights the need for public health interventions around excessive alcohol consumption.

Source: Anderson, M. S., Valbuena, V. S., Brown, C. S., Waits, S. A., Sonnenday, C. J., Englesbe, M., & Mellinger, J. L. (2021). Association of COVID-19 With New Waiting List Registrations and Liver Transplantation for Alcoholic Hepatitis in the United States. *JAMA Network Open*, 4(10), e2131132-e2131132. <https://doi:10.1001/jamanetworkopen.2021.31132>

ONLINE LIQUOR GETS AUDITED: A REVIEW OF REGULATORY CONTROLS AND SUPPLY PRACTICES OF ONLINE LIQUOR RETAILERS IN NSW, AUSTRALIA

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Abstract

Objectives: In New South Wales (NSW), Australia, the number of ‘online liquor licences’ – packaged liquor licences with conditions restricting the sale of alcohol to online, phone or fax orders – increased from 101 in 2010 to 500 by May 2018. International and national evidence is emerging that this growth in online liquor licences has been accompanied by increased risk of supply to young and intoxicated people. This study aimed to determine the extent to which online liquor retailers in NSW have adopted safeguards to prevent people younger than 18 years purchasing alcohol online; and the supply of alcohol to intoxicated people. It also aimed to assess the regulatory framework in NSW for these licences.

Methods: We undertook an audit between May and November 2018 of regulatory controls for 213 online liquor retailers in NSW with publicly available websites at the time of auditing. A comparative analysis of the NSW Liquor Act 2007 and the NSW Liquor Regulation 2018 was conducted.

Results: Three gaps in the existing legal safeguards for online liquor retailers were identified: inconsistent application of the NSW Liquor Act 2007; the inability of the regulator to complete compliance auditing; and an absence of consistent mandatory signage. The study also identified inconsistencies between the regulation of physical and online liquor retailers.

Conclusions: Study findings led to the formulation of recommendations for regulatory change, which were presented to the government oversight agency, Liquor & Gaming NSW, in April 2019 and followed up by written submissions from the research group on behalf of Northern Sydney Local Health District Health Promotion. Several key reforms were subsequently incorporated into the NSW Liquor Amendment (24-hour Economy) Bill 2020. Findings have informed an advocacy approach which has led to improved regulatory reform within NSW.

Source: Noyesa, J., Palermoa, M., Willmana, A., Harknessa, J., Bienenstocka, R., & Klarenaara, P. (2021). Online liquor gets audited: a review of regulatory controls and supply practices of online liquor retailers in NSW, Australia. <https://doi.org/10.17061/php31342115>

LEVELS OF PARENTAL DRINKING IN THE PRESENCE OF CHILDREN: AN EXPLORATION OF ATTITUDINAL CORRELATES **November 2021**

Abstract

Aims

This study aimed to examine perceived social norms, the effect of parental drinking on these norms, alcohol use in front of children, and how norms and consumption vary based on child age and gender of the parent.

Methods

A cross-sectional online panel survey was undertaken with n = 1000 Australian adults (including 670 parents) aged 18–59 years. The survey assessed: alcohol consumption in front of children; normative attitudes towards drinking in the presence of children; and perceived social norms.

Results

Overall, 33.9% of parents reported drinking a glass of alcohol each day or a couple of times a week, 18.2% reported getting slightly drunk and 7.8% indicated getting visibly drunk each day or a couple of times a week with their children present. In total, 37.5% reported drinking in front of their children at least weekly. Fathers were more likely to drink in front of children than mothers. Most parents deemed drinking small amounts of alcohol in front of children as acceptable but did not accept drunkenness. Respondents were less concerned about a father drinking one or two drinks in front of their children

than a mother. Social expectations were not related to child age, but norms related to others' perceived behaviour were.

Conclusions

Many parents, particularly fathers consume alcohol in front of their children. There is a need to target health promotion strategies to adults and parents consuming in excess of health guidelines, and to the many parents who are consuming alcohol at higher levels in front of their children.

Source: Jacqueline A Bowden, Paul Delfabbro, Robin Room, Caroline L Miller, Carlene Wilson, Levels of Parental Drinking in the Presence of Children: An Exploration of Attitudinal Correlates, Alcohol and Alcoholism, 2021;, agab071, <https://doi.org/10.1093/alcalc/agab071>