projectextramile
PREVENTING ALCOHOL-RELATED HARM

RESEARCH SUMMARY
Date Compiled: April 2020

Key takeaways from included research:

- Individuals with a history of suicide attempts showed higher levels of alcohol craving throughout treatment compared to those without a history of suicidality. These results support current guidelines on assessing suicidal ideation in patients with substance use disorders.
- The number of lower blood alcohol concentration fatalities is substantial. Of 612,030 motor vehicle crash fatalities, 223,471 (37%) died in alcohol-involved crashes, of which 33,965 (15% of alcohol-involved fatalities or 6% of all fatalities) had a blood alcohol concentration <0.08%.
- Study findings provide insight into areas for which early intervention (EI) enhancements could be developed in order to tailor supports for the complex needs of this diverse population of children with or at risk for Fetal Alcohol Spectrum Disorders (FASD).
- Study findings indicate a greater association of current alcohol use with liver disease than lifetime alcohol use, which varied by Hepatitis C-viral (HCV) status.
- There is no evidence of a causal association between medical or recreational cannabis legalization and changes in either alcohol or cigarette sales per capita.

HISTORY OF SUICIDALITY AND ALCOHOL CRAVING TRAJECTORIES DURING INPATIENT TREATMENT FOR ALCOHOL USE DISORDER

April 2020

Abstract

Background: Alcohol use is associated with an increased risk of completed suicide, but it is unclear whether past suicidality affects the course of alcohol use disorder (AUD). We examined whether a history of suicidal ideation or attempts is associated with treatment response in individuals with AUD.

Methods: 146 participants underwent inpatient detoxification and residential treatment for AUD. Reductions in craving during treatment were used as an index of treatment response. Participants were assessed for history of suicidality using the Columbia-Suicide Severity Rating Scale and divided into three groups: no history of suicidal ideation or attempts (N = 76), history of suicidal ideation without attempts (N = 50), and history of suicide attempts (N = 20). Alcohol craving was measured weekly during treatment using the Penn Alcohol Craving Scale and compared across groups.

Results: Individuals with a history of suicide attempts showed higher levels of craving throughout treatment compared to those without a history of suicidality. Associations between past suicide attempts and craving remained significant after adjusting for age, sex, alcohol use disorder severity, comorbid psychopathology, and benzodiazepine treatment. Participants in all groups had significant reductions in alcohol craving by the end of treatment.

Conclusions: Our findings suggest that a history of suicide attempts is associated with higher levels of craving throughout inpatient treatment for AUD. These results support current guidelines on assessing suicidal ideation in patients with substance use disorders.

Source: Janakiraman, R., Gowin, J.L., Sloan, M.E., Schwandt, M.L, Diazgranados, N., Ramchandani, V.A., & Kwako, L.E. (2020). History of suicidality and alcohol craving trajectories during inpatient treatment for alcohol use disorder. *Drug and Alcohol Dependence*, Volume 209. https://www.sciencedirect.com/science/article/abs/pii/S0376871620300831

ALCOHOL POLICIES AND MOTOR VEHICLE CRASH DEATHS INVOLVING BLOOD ALCOHOL CONCENTRATIONS BELOW 0.08%

March 2020

Abstract

Introduction: Motor vehicle crashes are a leading cause of injury death in the U.S. Restrictive alcohol policies protect against crashes involving alcohol above the legal blood alcohol concentration of 0.08%. Characteristics of motor vehicle crash fatalities involving blood alcohol concentrations below the limit and their relationships to alcohol control policies have not been well characterized.

Methods: Motor vehicle crash fatality data and crash and decedent characteristics from 2000 to 2015 came from the Fatality Analysis Reporting System and were analyzed in 2018–2019. Alcohol Policy Scale scores characterized alcohol policy environments by state-year. Generalized estimating equation alternating logistic regression models assessed these scores and the odds that a fatality involved alcohol below the legal threshold.

Results: Of 612,030 motor vehicle crash fatalities, 223,471 (37%) died in alcohol-involved crashes, of which 33,965 (15% of alcohol-involved fatalities or 6% of all fatalities) had a blood alcohol concentration <0.08%. A 10 percentage point increase in Alcohol Policy Scale score, approximating

the interquartile range among states, was associated with reduced odds of fatalities involving alcohol <0.08% vs 0.00% (AOR=0.91, 95% CI=0.89, 0.93). These findings held across multiple subgroup analyses by decedent and crash characteristics. Similar results were found for odds of alcohol involvement <0.05% vs 0.00% (AOR=0.90, 95% CI=0.88, 0.93), and ≥0.05% but <0.08% vs <0.05% (AOR=0.93, 95% CI=0.89, 0.96).

Conclusions: The number of lower blood alcohol concentration fatalities is substantial. States with more restrictive alcohol policies tend to have reduced odds of lower blood alcohol concentration motor vehicle crashes than states with weaker policies.

Source: Lira, M.C., Vishnudas, S., Heeren, T.C., Miller, M., & Naimi, T.S. (2020). Alcohol policies and motor vehicle crash deaths involving blood alcohol concentrations below 0.08%. *American Journal of Preventive Medicine*. Available Online 16 March 2020.
https://www.sciencedirect.com/science/article/abs/pii/S0749379720300404

THE BEST POSSIBLE START: A QUALITATIVE STUDY ON THE EXPERIENCES OF PARENTS OF YOUNG CHILDREN WITH OR AT RISK FOR FETAL ALCOHOL SPECTRUM DISORDERS

February 2020

Abstract

Background: The developmental outcomes and life course trajectories of young children with or at-risk for fetal alcohol spectrum disorders (FASD) can be optimized when individual and family needs are identified early and met with family-centered early intervention (EI) services. However, little is known about access to and quality of EI services with this high-needs population.

Method: Twenty-five biological or adoptive parents of children with or at high risk for FASD, living in the greater area of Seattle, Washington participated in this qualitative study. Three focus groups were conducted using a semi-structured interview guide. Participants described their experience with EI, as well as other supports and challenges faced in their child's first three years of life. Interviews were audio recorded, transcribed verbatim and coded using phenomenological methods. Themes that were consistent across participant groups emerged from the data, as well as themes that showed differences among participant experiences.

Results: Common EI supports and needs between biological and adoptive parent groups were identified. In addition, perspectives and needs unique to each parent group were revealed. Themes were identified and organized into three categories: (1) child needs; (2) parent needs and priorities; and (3) EI capacity. When parents talked about their child's cognitive, physical, communication or adaptive development, they all discussed how EI was meeting those needs. In contrast, when parents expressed concern for their child's social-emotional development, a description of how EI was supporting these needs was missing from the conversation. Parents appreciated when EI providers were truthful, provided anticipatory guidance, and connected them with supports for their own social-emotional well-being. Yet there were unmet needs for respite care, and parents expressed that support for basic needs related to child or family survival was not consistently recognized as a top priority for families. This high-risk group of young children and their parents also encountered a multitude of transitions in their child's early years and later. Parents wanted more support navigating these transitions as they entered or moved through different systems of care.

Conclusions: Parents appreciated and endorsed the importance of EI with its provision of individualized, family-centered supports and resources. Examination of the gaps and unmet needs that are common and distinct underscore the importance of an FASD-informed approach to EI. Study

findings provide insight into areas for which EI enhancements could be developed in order to tailor supports for the complex needs of this diverse population of children and parents.

Source: Pruner, M., Jirikowic, T., Yorkston, K.M., Carmichael Olson, H. (2020). The best possible start: A qualitative study on the experiences of parents of young children with or at risk for fetal alcohol spectrum disorders. *Research in Developmental Disabilities*, Volume 97. https://www.sciencedirect.com/science/article/abs/pii/S0891422219302252

ASSOCIATIONS OF LIVER DISEASE WITH ALCOHOL USE AMONG PEOPLE LIVING WITH HIV AND THE ROLE OF HEPATITIS C: THE NEW ORLEANS ALCOHOL USE IN HIV STUDY

January 2020

Abstract

Aim: This cross-sectional analysis of the New Orleans Alcohol Use in HIV (NOAH) study assesses whether current and lifetime alcohol use in people living with HIV (PLWH) are associated with greater liver disease and how hepatitis C-viral (HCV) co-infection (HIV/HCV+) modifies the association.

Methods: Alcohol use was measured by Lifetime Drinking History (LDH), a 30-day Timeline Followback calendar, the Alcohol Use Disorder Identification Test, and phosphatidylethanol. Liver disease was estimated by alanine aminotransferase (ALT), aspartate aminotransferase (AST), AST platelet ratio-index (APRI), fibrosis-4 index (FIB-4) and nonalcoholic fatty liver disease-fibrosis score. Associations between alcohol consumption and liver disease were estimated with multivariable logistic regression. Models were adjusted for age, sex, body-mass index, hepatitis B and HIV viral load.

Results: Participants (N = 353) were majority male (69%) and black (84%) with a mean age of 48.3 ± 10 years. LDH was significantly associated with advanced liver fibrosis (FIB-4 aOR = 22.22 [1.22–403.72]) only among HIV/HCV+ participants with an LDH of 100–600 kg. HIV/HCV+ participants had a higher prevalence of intermediate and advanced liver disease markers than HIV/HCV− ($P < 0.0001$). Advanced markers of liver disease were most strongly associated with hazardous drinking (≥40(women)/60(men) grams/day) (APRI aOR = 15.87 (3.22–78.12); FIB-4 aOR = 6.76 (1.81–7.16)) and PEth ≥400 ng/ml (APRI aOR = 17.52 (2.55–120.54); FIB-4 aOR = 17.75 (3.30–95.630).

Conclusion: Results indicate a greater association of current alcohol use with liver disease than lifetime alcohol use, which varied by HCV status. These findings stress the importance of reducing alcohol use in PLWH to decrease risk of liver disease and fibrosis.

Source: Ferguson, T.F., Rosen, E., Carr, R., Brashear, M., Simon, L., Theall, K.P., Ronis, M.J., Welsh, D.A., & Molina, P.E. (2020). Associations of liver disease with alcohol use among people living with HIV and the role of Hepatitis C: The New Orleans Alcohol Use in HIV Study. *Alcohol and Alcoholism*, Volume 55, Issue 1, 28–36. https://academic.oup.com/alcalc/article-abstract/55/1/28/5669883

CHANGES IN ALCOHOL AND CIGARETTE CONSUMPTION IN RESPONSE TO MEDICAL AND RECREATIONAL CANNABIS LEGALIZATION: EVIDENCE FROM U.S. STATE TAX RECEIPT DATA

January 2020

Abstract

Background: Whether medical or recreational cannabis legalization impacts alcohol or cigarette consumption is a key question as cannabis policy evolves, given the adverse health effects of these substances. Relatively little research has examined this question. The objective of this study was to examine whether medical or recreational cannabis legalization was associated with any change in state-level per capita alcohol or cigarette consumption.

Methods: Dependent variables included per capita consumption of alcohol and cigarettes from all 50 U.S. states, estimated from state tax receipts and maintained by the Centers for Disease Control and National Institute for Alcohol Abuse and Alcoholism, respectively. Independent variables included indicators for medical and recreational legalization policies. Three different types of indicators were separately used to model medical cannabis policies. Indicators for the primary model were based on the presence of active medical cannabis dispensaries. Secondary models used indicators based on either the presence of a more liberal medical cannabis policy ("non-medicalized") or the presence of any medical cannabis policy. Difference-in-difference regression models were applied to estimate associations for each type of policy.

Results: Primary models found no statistically significant associations between medical or recreational cannabis legalization policies and either alcohol or cigarette sales per capita. In a secondary model, both medical and recreational policies were associated with significantly decreased per capita cigarette sales compared to states with no medical cannabis policy. However, post hoc analyses demonstrated that these reductions were apparent at least two years prior to policy adoption, indicating that they likely result from other time-varying characteristics of legalization states, rather than cannabis policy.

Conclusion: We found no evidence of a causal association between medical or recreational cannabis legalization and changes in either alcohol or cigarette sales per capita.

Source: Veligati, S., Howdeshell, S., Beeler-Stinn, S., Lingam, D., Allen, P.C., Chen, L., & Grucza, R.A. (2020). Changes in alcohol and cigarette consumption in response to medical and recreational cannabis legalization: Evidence from U.S. state tax receipt data. *International Journal of Drug Policy*, Volume 75.
https://www.sciencedirect.com/science/article/pii/S0955395919302853