



RESEARCH SUMMARY
Date Compiled: June 2020

Key takeaways from included research:

- The experience of the Russian Federation in reducing the burden of disease caused by alcohol is a strong argument that effective alcohol policies are essential for improving the prospects for long and healthy lives.
- A novel conceptual framework proposes that counts of alcohol outlets measure availability, proximity to the nearest outlet measures accessibility, and spatial access measures measure access, which comprises both availability and accessibility. Researchers should consider using proximity and spatial access measures when possible to quantify the alcohol environment.
- Alcohol outlet and advertising density, particularly off-sale outlet density within one-quarter mile of the home, increased the risk of hospital admission for alcohol withdrawal syndrome.
- Alcohol advertisements visible outside off-premise outlets were associated with increased violent crime over and above the association between the outlets themselves and violent crime.
- Although alcohol use can increase suicide risk, emergency department patients with acute use appear to receive less thorough suicide risk assessments.

ALCOHOL POLICY HAS SAVED LIVES IN THE RUSSIAN FEDERATION

June 2020

Abstract

Alcohol use has been determined to be one of the main risk factors of, and contributors to, premature mortality in Russia, but no formal analysis of the impact of alcohol control policies has been undertaken so far. The present contribution is a commentary on a policy impact study undertaken by the World Health Organization on the effects of alcohol control measures on mortality and life expectancy in the Russian Federation. As part of the case study, all alcohol control policies in Russia from 1990 to 2018 were examined, and periods with differing policy intensity were distinguished based on the known effectiveness of different measures. Trends in all-cause mortality during these periods, and the shifts in trends between periods, were analysed using interrupted-time series methodology. As predicted, the intensity of alcohol control policies strongly impacted all-cause mortality. The experience of the Russian Federation in reducing the burden of disease caused by alcohol is a strong argument that effective alcohol policies are essential for improving the prospects for long and healthy lives.

Source: Neufeld, M., Ferreira-Borges, C., Gil, A., Manthey, J., & Rehm, J. (2020). Alcohol policy has saved lives in the Russian Federation. *International Journal of Drug Policy*, Volume 80.

LOOKING BACK AND MOVING FORWARD: THE EVOLUTION AND POTENTIAL OPPORTUNITIES FOR THE FUTURE OF ALCOHOL OUTLET DENSITY MEASUREMENT

May 2020

Abstract

Background: The literature consistently finds that areas with greater density of alcohol outlets (places that sell alcohol) tend to have higher levels of public health harms. However, conflicting findings arise when researchers drill down to identify the type(s) of alcohol outlets with the strongest associations with harms and the mechanisms that explain these associations. These disagreements could be a result of the outdated methods commonly used to quantify the alcohol environment: counts of the number of outlets in an area.

Methods: This manuscript reviews the events and ideas that shaped the literature on the physical alcohol environment. It then defines the three main methods used to measure alcohol outlet density and conduct an exploratory factor analysis to explore the constructs underlying each method.

Results: We present a novel conceptual framework that summarizes the three most common measurement methods, their respective underlying constructs, and the setting(s) in which each may be most appropriate. The framework proposes that counts of alcohol outlets measure availability, proximity to the nearest outlet measures accessibility, and spatial access measures measure access, which comprises both availability and accessibility.

Discussion: Researchers should consider using proximity and spatial access measures when possible, because this may present opportunities to advance theory and the design and implementation of regulations. Researchers can also draw on innovations used in other areas of the built environment to suggest opportunities to use novel methods to overcome common hurdles (e.g., separating subtypes of outlets, ecologic designs) and a new challenge on the horizon: home delivery.

Source: Trangenstein, P.J., Sadler, R.C., Morrison, C.N., & Jernigan, D.H. (2020). Looking back and moving forward: The evolution and potential opportunities for the future of alcohol outlet density measurement. *Addiction Research & Theory*, DOI: 10.1080/16066359.2020.1751128.

POSITIVE ASSOCIATION BETWEEN NEIGHBORHOOD RETAIL ALCOHOL OUTLET ACCESS AND HOSPITAL ADMISSIONS FOR ALCOHOL WITHDRAWAL SYNDROME IN NEW ORLEANS

May 2020

Abstract

Objectives: We used treatment for alcohol withdrawal syndrome as an objective surrogate marker to investigate the relationship between alcohol-related health outcomes and home neighborhood alcohol outlet density and alcohol advertising density.

Methods: Mixed effects logistic regression examined whether alcohol outlet density or alcohol advertisement density within either one-quarter mile or one-half mile of individuals' home address was associated with treatment for alcohol withdrawal.

Results: Adjusted models showed outlet and advertising density, particularly off-sale outlet density within one-quarter mile of the home, increased the risk of hospital admission for alcohol withdrawal syndrome (AOR = 1.15).

Conclusion/impact: These data inform public policy initiatives to reduce the harmful effects of alcohol by regulating the neighborhood alcohol environment.

Source: Johnson, J.L., Canterberry, M., Vu, U.L., & Carton, T.W. (2020). Positive association between neighborhood retail alcohol outlet access and hospital admissions for alcohol withdrawal syndrome in New Orleans. *Journal of Addictive Diseases*, DOI: 10.1080/10550887.2020.1762029.

ALCOHOL ADVERTISING AND VIOLENCE

March 2020

Abstract

Introduction: Numerous studies have found associations between alcohol outlet density and violence, but it is unknown whether alcohol advertisements visible outside outlets are also associated with violent crime. Baltimore City, MD enacted restrictions on retail alcohol establishment advertising practices as of June 5, 2017. This study examines the association between alcohol advertisements visible outside off-premise alcohol outlets and violent crime before this restriction.

Methods: Outlet observations ($n=683$) were conducted in summer 2015, and violent crime data ($n=24,085$) were from June 5, 2015, through June 4, 2017. The number of violent crimes per square mile within 1,000 feet of outlets was summed using kernel density estimation. In 2018–2019, authors used mixed models with a Simes–Benjamini–Hochberg correction for multiple testing.

Results: Roughly half (47%, $n=267$) of the outlets with complete data ($n=572$) had alcohol advertisements visible from the exterior. Outlets with alcohol advertisements had 15% more violent crimes per square mile within 1,000 feet ($e^{\beta}=1.15$, 95% CI=1.07, 1.25, $q<0.001$) after adjusting for neighborhood context. All associations between alcohol advertisements and specific types of violent crime were significant, with the association strongest for homicides ($e^{\beta}=1.28$, 95% CI=1.13,

1.46, $q < 0.001$). There was no association between cigarette advertisements and violent crime ($e^B = 1.08$, 95% CI = 0.92, 1.26, $q = 0.43$).

Conclusions: Alcohol advertisements visible outside off-premise outlets were associated with increased violent crime over and above the association between the outlets themselves and violent crime. Reducing alcohol advertising visible from the street may decrease risk of violent crime that is associated with alcohol outlets.

Source: Trangenstein, P.J., Greene, N., Eck, R.H., Milam, A.J., Furr-Holden, C.D., & Jernigan, D.H. (2020). Alcohol advertising and violence. *American Journal of Preventive Medicine*, Volume 58, Issue 3, Pages 343-351

EMERGENCY DEPARTMENT PATIENTS WITH SUICIDE RISK: DIFFERENCES IN CARE BY ACUTE ALCOHOL USE

March – April 2020

Abstract

Objective: To compare Emergency Department (ED) care of suicidal patients with and without documented acute alcohol use.

Methods: Retrospective chart review of randomly sampled patient visits ($n = 800$; January 2014 to December 2015) at an urban ED with universal screening for suicide risk. Eligible visits were by adults (18+ years) who screened positive for suicide risk at the ED visit (i.e., suicidal ideation in past two weeks or suicide attempt in past six months). Analyses compared those with and without documentation of acute alcohol use.

Results: Among these patients with suicide risk, 19% had documented acute alcohol use (versus 43% with no use and 38% without documentation); individuals with acute alcohol use were more often male and aged 35–59 years. Overall, 62% were evaluated by a mental health professional in the ED. Individuals with acute alcohol use were significantly less likely (vs those without use) to be evaluated by a mental health professional in the ED (odds ratio 0.49, 95%CI 0.28–0.87) after adjustment for age, recent suicide ideation, current suicide plan, self-harm as a chief complaint, contact with family, and ED disposition.

Conclusions: Although alcohol use can increase suicide risk, ED patients with acute use appear to receive less thorough suicide risk assessments.

Source: Urban, C., Arias, S.A., Segal, D.L., Camargo, C.A., Boudreaux, E.D., Miller, I., & Betz, M.E. Emergency Department patients with suicide risk: Differences in care by acute alcohol use. *General Hospital Psychiatry*, Volume 63, Pages 83-88.