Alcohol Policy Research: Putting together a global evidence base

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Alcohol policy research is a risk factor for an array of health and social problems internationally, from acute health and social harms (e.g. injury, assault, family breakdown) to chronic illnesses (e.g. liver cirrhosis)(1). A substantial body of evidence highlights effective policy options to reduce harm from alcohol. However, many important areas of uncertainty remain. These include the importance of policy implementation and enforcement, the cross-jurisdictional generalisability of research findings and the reliability of many commonly-used outcome measures. Thus, in September 2014, researchers from over a dozen countries met in Melbourne to present their alcohol policy research at a thematic meeting of the Kettil Bruun Society for Social and Epidemiological Research on Alcohol (KBS) (http://www.kettilbruun.org). This special section includes five papers from that meeting. Other papers from the meeting appear in three companion special issues: papers converging on the theme of price and/or taxation policy are published in Alcohol and Alcoholism, Vol. 50(6), 2015, papers based on qualitative data appear in Contemporary Drug Problems, Vol. 42(2), 2015 and a further collection of papers will be published in the International Journal of Alcohol and Drug Research, the KBS journal.

The papers in this special section provide a snapshot of research in the field, including research on the importance of policy implementation, the differential effects of policies in different settings and the potential interplay of policies with social relationships. The papers span a variety of methodological traditions - population survey analyses, systematic reviews, intervention evaluations and ecological studies.

A prominent concern of alcohol policy research is examining the effectiveness of policy to reduce alcohol consumption and associated harms. In this tradition, researchers may examine the impact of alcohol policy changes or compare outcomes across jurisdictions with different policies. Most often a single alcohol policy is examined. For example, a tax on a particular beverage or Sunday closing, (e.g. 2, 3). However, alcohol policies do not occur in isolation. Jurisdictions may have very different alcohol policy environments – the combinations of existing alcohol policies – meaning that the impact of a particular policy (e.g. increasing taxes) may vary markedly. In this section Erikson and colleagues (4) examine the association between different clusters of alcohol policies and alcohol consumption in the USA, focusing on particular configurations of alcohol policies at a state-level.
research incorporates measures of alcohol policy strength for each of 18 policies in each of 50 states as established in a previous piece of research (5). In addition to different relative strength, the study also takes into account levels of policy enforcement (low, moderate or high). Using Latent Class Analysis, the authors find the 18 alcohol policies cluster into a four class typology: ‘weak except serving policies’, ‘average’, ‘strong for underage use’, and ‘strong policies overall’. Adjusted multivariate regression analyses suggest a relationship between the strong underage use policy class and lower consumption. Somewhat surprisingly, the level of enforcement did not affect the association between policy class and consumption. An important contribution of this paper is to consider groups of alcohol policies rather than assess them in isolation.

One policy approach Erikson and colleagues examined related to the physical availability of alcohol in a community, often measured via alcohol outlet density. Research examining the link between the density of alcohol outlets and alcohol-related harm is expanding rapidly. While systematic reviews of this research have generally found that alcohol outlet density is associated with alcohol problems (6, 7), the precise nature of the link and the mechanism of the effects remain unclear (8). In a collaboration between two research groups, Gmel, Holmes and Studer (9) systematically review research on the association of outlet density and violence published since 2009. Not only do the authors update the two previous systematic literature reviews in this area, they critically assess the applicability of the research evidence to informing licensing policy. The authors discuss the 65 studies included in their review in order of increasing study design strength – completely ecological studies, partial ecological studies (those that included individual-level data) and natural experiments. They suggest the current evidence base is too diverse and hampered by design flaws to provide policy suggestions across jurisdictions. The authors make a number of recommendations for improving measurement and analysis in future research. In particular, they call for an end to simple cross-sectional analyses that operationalise alcohol availability using crude outlet density measures.

This piece has subsequently been the focus of a fascinating commentary and response (10, 11) with Morrison and colleagues pointing out research examining these questions make important contributions and high quality studies tend to produce consistent outcomes. Given the ongoing challenges of translating outlet density evidence into meaningful policy outcomes (12), these debates are critical.

As noted by Room and colleagues in another paper in this section, most drinking is social: ‘it occurs in the presence of others and potentially affects others’ (13). Two papers in this section examine interpersonal aspects of drinking using population surveys. Room et al. (13) focus on the interpersonal influences on individual drinking, exploring the direction and frequency of peer...
influences on heavy social drinkers. The authors argue that one consideration for changing drinking
among heavy drinkers is understanding, what, if any, influences to drink more or less are being
exerted on such drinkers. Using survey data from Victoria, sampling drinkers who frequently drink in
the company of others, Room et al. find that those who are risky and social drinkers are much more
likely than other drinkers to report pressures to drink more from friends and workmates, and even
from family members, although they more often report pressures from family members to drink less
than to drink more. The study underscores the importance of understanding the collective nature of
drinking for informing any government messages on changing drinking behaviour.

The second paper examining the interpersonal nature of drinking examines negative effects. Over
the last decade in particular, research on this topic under the rubric of ‘alcohol’s harm to others’ has
increased (e.g. 14, 15, 16). Greenfield and colleagues (17) examine whether experiencing such harms
is associated with experiencing depression. Using the 2010 US National Alcohol Survey, they
examined how experiencing four harms from others drinking (family harms, financial troubles,
vandalizing property and assaults) was associated with a measure of depression. Considered
separately, each type of harm is associated with depression. However, when considered together,
assaults were no longer significantly related to depression. This research broadens the existing harm
to others literature, by suggesting the harms experienced have significant impacts on mental health.
The authors frame their study by noting the importance of the second hand effects of tobacco
smoke to tobacco policy debates, but acknowledge just how to bring evidence of alcohol’s second-
hand effects into the policy-making process remains a challenge.

Finally, this special section includes one experimental study. Wiggers and colleagues (18) used a non-
randomised stepped wedge trial to evaluate the effectiveness of implementing an organisational
change intervention (the Alcohol Linking Program), involving a major change in the method used in
New South Wales (NSW) to record alcohol characteristics of police-attended incidents. The program
involved recording four new pieces of information at each incident which was attended: 1) whether
each person involved in an incident had consumed alcohol prior to the event, 2) approximate level of
intoxication, 3) last setting of alcohol consumption and 4) name/address of licensed premises (where
applicable). The research team used a range of strategies to support police units adopt this new
reporting requirement. The program had been previously trialled in a single police region in NSW
where, after 12 months, the four items were recorded in 87%-100% of incidents (19). The research
team have previously established evidence of efficacy from applying the newly recorded information
to enhance police enforcement of licensing laws (19). Based on these findings, the NSW Police
decided to adopt the program into routine policing practice state-wide. In the present paper,
Wiggers and colleagues (18) evaluate this state-wide rollout. Compliance with reporting the new items at two follow-up points was the key measure of implementation effectiveness. Three parts of the state were allocated to sequentially initiate the 18-month intervention at three separate time points beginning in 2002, such that complete state coverage was obtained after approximately four years in 2006. In this scenario, the stepped wedge design is a pragmatic and “naturalistic” initiative; the program implementation is proceeding much as it would have done had the evaluation not been in place, while allowing an evaluation of its effectiveness. At follow-up, information was recorded for 85%-100% of people involved in incidents. The percentage of assaults classified across the state as alcohol-related increased significantly from 25% to 44%. This study demonstrates the importance of data recording systems and processes when researchers are attempting to understand the role of alcohol in social problems, and the potential benefits of long-standing collaborative relationships with state agencies.

Alcohol policy research is often thought of, quite narrowly, as measuring the impact of policy change on an aggregate outcome. What the papers in this special section highlight, when considered together, is that it is necessary to look beyond this simple approach and consider alcohol policies’ relative and combined impact (4), the social settings in which drinking often takes place and which policy seeks to affect (13, 17), research design and policy relevance of traditions of research (10), and integration and implementation of policies across systems and organisational settings (18).

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References


