

Communities can't go it alone to cut alcohol related violence: Australian world first study

EMBARGO: Not for release prior to 8:00am 12th March 2014

Community action alone won't significantly reduce binge drinking and related harms, such as violent assaults, without changes to legislation, a major new report from the National Drug and Alcohol Research Centre at UNSW suggests.

The five year study of 20 communities in New South Wales, with populations between 5,000 – 20,000, found that the 10 communities that implemented a range of 13 interventions were able to reduce average weekly alcohol consumption across their local government area and minor harms, such as verbal abuse, but there was no impact on binge drinking or major harms, such as assaults, traffic crashes and hospital inpatient admissions.

The thirteen interventions, which were developed in partnership with the communities themselves, were a mix of: prevention (such as school and work-based education and training and regular media messaging on harms); early intervention (such as screening and brief advice in general practice, pharmacies and hospital EDs); and targeting high risk individuals and high risk times and weekends.

The 10 communities that implemented the interventions were picked randomly, and the impact of the interventions was measured using community surveys and, for the first time ever in an alcohol community trial, using routinely collected data from police, hospitals and the RTA.

This is the largest RCT (randomised controlled trial) of interventions which communities themselves can implement, without specific government legislation, to try to reduce their own rates of alcohol harm, said study leader UNSW Professor Anthony Shakeshaft. "It suggests that leaving communities to work together to sort out their own alcohol problems is, quite simply, unlikely to work very well without tighter legislation on things like the availability, price and advertising of alcohol," said Professor Shakeshaft.

"Although international research suggests that legislation in these areas does work," he said. "There have not been any rigorous randomised trials, and none outside of the US, evaluating the impact of what happens when communities implement their own solutions."

Professor Shakeshaft said the results did not mean that community led solutions were without merit. "We did see changes to overall consumption of alcohol per head, which is an important finding for harms like alcohol-related cancers and disease, and we saw some lower level impacts such as less verbal abuse on the streets, which is an important public amenity issue. It

was also apparent that communities had different types of alcohol harms, which shows a role for communities targeting their own issues.”

“But it seems communities by themselves will struggle to control the big immediate impacts, such as assaults, if alcohol is widely advertised, relatively cheap and readily available,” he said.

Interestingly the study found big variations in the way communities reacted to the interventions. Even though each of the 10 experimental towns operated under the same State and Federal legislation, some dramatically changed their risky drinking and harms and others hardly changed at all.

“We don’t know why some communities adapt better than others in reducing alcohol related harms. It’s an important issue because the next steps for research would be to understand this process in order to more effectively help communities respond better to their own particular harms,” said Professor Shakeshaft.

The study *The effectiveness of community action in reducing risky alcohol consumption and harm: a cluster randomised controlled trial* is published today in the prestigious journal *PLOS Medicine*. The study was funded by a grant from the Foundation for Alcohol Research and Education (FARE)

- Ends -

The National Drug and Alcohol Research Centre at the University of New South Wales is supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvements Grants Fund.

Media contacts, National Drug and Alcohol Research Centre:

Marion Downey
Communications Manager, National Drug and Alcohol Research Centre
P: (02) 9385 0180 / 0401 713 850 / m.downey@unsw.edu.au

Erin O’Loughlin
Communications Officer, National Drug and Alcohol Research Centre
P: (02) 9385 0124 / 0402 870 996 / erin.oloughlin@unsw.edu.au

PLOS Medicine Editor's Summary

Background.

People have consumed alcoholic beverages throughout history, but alcohol use is now an increasing global public health problem. According to the World Health Organization's 2010 Global Burden of Disease Study, alcohol use is the fifth leading risk factor (after high blood pressure and smoking) for disease and is responsible for 3.9% of the global disease burden. Alcohol use helps cause heart disease, liver disease, depression, some cancers, and many other health conditions. And alcohol also affects the well-being and health of people around those who drink, through alcohol-related crimes and road traffic crashes. The impact of alcohol use on disease and injury depends on the amount of alcohol consumed and the pattern of drinking. Both long-term risky drinking (more than four drinks per day on average for men or more than two drinks per day for women; a "drink" is, roughly speaking, a can of beer or a small glass of wine) and short-term (binge) risky drinking (seven or more drinks on a single occasion for men, five or more drinks on a single occasion for women) are harmful.

Why Was This Study Done?

In 2010, the World Health Assembly endorsed a global strategy to reduce the harmful use of alcohol. This strategy emphasizes the importance of community action—a process in which a community defines its own needs and determines the actions that are required to meet these needs. However, although community action is highly acceptable to community members, few studies have looked at the effectiveness of community action in reducing risky alcohol consumption and alcohol-related harm. Here, the researchers undertake a cluster randomized controlled trial (the Alcohol Action in Rural Communities [AARC] project) to quantify the effectiveness of community action in reducing risky alcohol consumption and harms in rural communities in Australia. A cluster randomized trial compares outcomes in clusters of people (here, communities) who receive alternative interventions assigned through the play of chance.

What Did the Researchers Do and Find?

The researchers pair-matched 20 rural Australian communities according to the proportion of their population that was Aboriginal (rates of alcohol-related harm are higher among Aboriginal individuals than among non-Aboriginal individuals in Australia). They randomly assigned one member of each pair to the experimental group and implemented 13 interventions in these communities by negotiating with key individuals in each community to define and implement each intervention. Examples of interventions included general practitioner training in screening for alcohol use disorders and in implementing a brief intervention, and a school-based interactive session designed to reduce alcohol harm among young people. The researchers quantified the effectiveness of the interventions using routinely collected data on alcohol-related crime and road traffic crashes, and on hospital inpatient admissions for alcohol dependence or abuse (which were expected to increase in the experimental group if the intervention was effective because of more people seeking or being referred for treatment). They also examined drinking habits and experiences of alcohol-related harm, such as verbal abuse, among community members using pre- and post-intervention surveys. After implementation of the interventions, the rates of alcohol-related crime, road traffic crashes, and hospital admissions, and of risky alcohol consumption and problem drinking were not statistically significantly different in the experimental and control communities (a difference in outcomes that is not statistically significantly different can occur by chance). However, the reported average weekly

consumption of alcohol was 20% lower in the experimental communities after the intervention than in the control communities (equivalent to 1.9 fewer standard drinks per week per respondent) and there was less alcohol-related verbal abuse post-intervention in the experimental communities than in the control communities.

What Do These Findings Mean?

These findings provide little evidence that community action reduced risky alcohol consumption and alcohol-related harms in rural Australian communities. Although there was some evidence of significant reductions in self-reported weekly alcohol consumption and in experiences of alcohol-related verbal abuse, these findings must be interpreted cautiously because they are based on surveys with very low response rates. A larger or differently designed study might provide statistically significant evidence for the effectiveness of community action in reducing risky alcohol consumption. However, given their findings, the researchers suggest that legislative approaches that are beyond the control of individual communities, such as alcohol taxation and restrictions on alcohol availability, may be required to effectively reduce alcohol harms. In other words, community action alone may not be the most effective way to reduce alcohol-related harm.