

Alcohol policies contribute to suicide prevention, review shows

September 13 2016

Restrictive alcohol policies, such as those limiting liquor store density or imposing taxes on alcohol, have been shown to have a "protective effect" in reducing suicides, according to a newly published review led by Boston University School of Public Health researchers.

The review, published online in the journal *Alcoholism: Clinical and Experimental Research*, examined associations between [alcohol](#) policies and suicides, as well as alcohol levels among suicide decedents, in 17 studies conducted between 1999 and 2014. While past research in the U.S. and other countries has established a link between alcohol consumption and [suicide rates](#), research into the relationship between alcohol policies and suicide has been limited.

The review found that overall, higher alcohol taxation was associated with lower rates of suicide. Similarly, studies gauging the effects of policies limiting liquor outlet density found an association between lower availability of alcohol and lower suicide rates, as well as lower odds of alcohol involvement (BAC levels) in suicide deaths. Other policies, such as "zero tolerance" laws for underage drinkers who drive while intoxicated, also were associated with a decline in suicides among young adults.

"Consistent with the conclusion that alcohol policies are among the most important population-level interventions that influence drinking levels and alcohol-related harms, our review found that such policies are important determinants in reducing suicide deaths," said Ziming Xuan,

the study's lead author and BU School of Public Health (BUSPH) assistant professor of community health sciences. "These findings highlight the importance of population-based alcohol policies in [suicide prevention](#)."

Among the research cited by the authors was a 2014 study that used data from 14 U.S. states, from 2003 to 2011, to find that greater liquor store densities were associated with higher proportions of alcohol-related suicides among men. Another study, from 2003, used youth suicide data from 1976 to 1999 and found that increases in the excise tax on beer were associated with reduced numbers of male suicides (though not affecting female suicides).

Studies in other countries produced results similar to those in the U.S. A 2013 study of the impact of alcohol restrictions implemented in Russia in 2006 found a 9-percent reduction in male suicides. A Canada-based study in 2011 found that a rapid rise in private liquor outlet density in British Columbia was associated with an increase in alcohol-related mortality, including suicide.

In the review, Xuan and co-authors advocated a public health approach to suicide prevention, rather than targeting interventions only to those people at highest risk of suicide.

"By making alcohol less available, it is possible to reduce the average risk of suicide, especially those where alcohol is involved," they wrote. "Departing from approaches that narrowly target members deemed at 'high risk' and that commonly address suicidal behaviors almost exclusively as problems of individuals, this population-based approach is likely to maximize public health benefit and to show long-lasting influence on reducing suicide."

The research team acknowledged several limitations of the studies they

reviewed, including the heterogeneity of the policy interventions assessed and a lack of research into the role of binge drinking, as opposed to regular heavy consumption. The authors also noted that because suicide is a "multi-faceted [public health](#) problem that is determined by multiple risk factors... it is important to recognize that other socio-contextual determinants (e.g., economic recession, divorce rate, firearm legislation) may independently or interactively affect suicide, in addition to alcohol policies."

Suicide was the tenth leading cause of death in the U.S. in 2013, resulting in more than 41,000 deaths, or about 113 each day. Age-adjusted suicide rates have increased steadily from 1999 (10.5 per 100,000 population) to 2014 (13.0 per 100,000).

Research has established that intoxication and chronic, heavy drinking often are associated with suicide. The effects of heavy alcohol use on [suicide](#) risk have been attributed to the reciprocal relationship between depression and alcohol use disorders. In addition, alcohol use may result in "interpersonal disruption" that leads to stress-related suicidal behavior, the authors noted.

Provided by Boston University Medical Center

Citation: Alcohol policies contribute to suicide prevention, review shows (2016, September 13) retrieved 1 May 2024 from

<https://medicalxpress.com/news/2016-09-alcohol-policies-contribute-suicide.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--