

Commentary on Lange *et al.*: Acute alcohol use before suicide—is it contributing to an increase in suicide rates in the United States?

Determining whether an increase in use of alcohol is contributing to rises in suicide rates in the United States needs further evidence. Nevertheless, it is clear that alcohol use and suicidal behaviour should not be viewed in isolation, and there is considerable opportunity for future research and enhanced policy and practice in reducing suicide and problematic alcohol consumption.

Alcohol consumption has been associated with suicidal behaviour on an aggregated and individual level. Numerous reviews have described the contributing pathways between both chronic and acute alcohol use and suicidality, such as greater impulsivity, cognitive constriction and tolerance of pain, and reduced psychological barriers against death resulting in greater risk of using highly lethal methods of suicide [1–4]. Recent theories of suicide suggest that alcohol consumption may play an important role in the transition from suicidal ideation to action; however, the issue of causality requires further investigation [5]. Furthermore, despite known gender differences in alcohol use and its consequences, the distinct pathways leading from (chronic and/or acute) alcohol use to suicidal behaviour have received less attention [3,6].

Both alcohol use (particularly heavy use) and suicide rates have shown increasing trends in the United States in recent decades [7,8]. Interestingly, the United States is one of the few countries around the world where suicide rates have been rising, and the Americas is the only World Health Organization Region with a rising trend of suicide rates since 2000 [9]. Lange and colleagues [10] argue that the rise in heavy alcohol use and suicide rates has been faster for women than for men, and they hypothesize that the accelerated increase in alcohol use has contributed to the simultaneous growth in suicide rates among women and narrowing of the gender gap in suicide in recent years. Authors utilized data from the National Violent Death Reporting System for 115 202 adults who died by suicide in the United States in 2003–18 and focused on the involvement of acute alcohol consumption at the time of suicide to

investigate temporal trends. Analyses demonstrated a significant increase in the proportion of alcohol-involved suicides for women (young adult, middle-aged, older) during the study period, but not for men. However, it is important to note that the proportion was similarly increasing for males, but the trend has since started to decline from 2014.

In their study, Lange and colleagues [10] note that the overall suicide rate in the United States has decreased since 2018. They attribute this as potentially related to the emergence of the global novel Coronavirus disease 2019 (COVID-19) pandemic. Indeed, in the early stages of the pandemic suicide rates from multiple high-income countries did not show evidence of an increase and/or declined [11]. However, during subsequent waves some states in the United States indicate a later increase [12]. This appears to be most notable in women and young people. Suicide prevention experts highlight the possible role of increased alcohol consumption as a prominent risk factor for suicide among others during the uncertain times of the pandemic [13]. Indeed, preliminary survey data indicate both an increase in alcohol consumption during the early months of the pandemic and during lockdown periods [14] as well as self-reported suicidal ideation [15]. Again, increase in alcohol consumption may be particularly heightened in women [16]. It is possible that risk factors heightened by the conditions of the pandemic converge in such a way for women that further increases in both alcohol consumption and suicidality are made more likely (e.g. employment in health-care or unstable fields, competing demands of working from home and home schooling, lockdown with abusive partners). However, this is currently unclear, and research continues to emerge. Nevertheless, based on the rapid increase in alcohol consumption at the time of suicide, as reported by Lange and colleagues [10] prior to the pandemic, is it clear that ongoing surveillance is warranted and prevention strategies sensitive to the role of gender, gender socialization and norms, and access to supports are enhanced.

Determining whether an increase in use of alcohol is contributing to rises in suicide rates in the United States needs further evidence. We also need to be mindful of suicidal behaviour as a multi-dimensional phenomenon with multiple risk factors, and establishing

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causal links with acute and chronic alcohol use requires further research. However, regardless of causality, recent systematic literature reviews and a meta-analysis have highlighted that alcohol-related interventions on the individual level and alcohol-related policies on an aggregate level have the potential to reduce suicide [17,18]. Therefore, enhanced gatekeeper training, interventions and screening practices could have the benefit of earlier identification of co-occurring symptomatology in both directions (including other substance use or mental health conditions). Furthermore, multi-sectoral collaboration across policy and within health-care facilities is also highly encouraged [19]. It is clear that these two prominent social and health issues should not be viewed in isolation, and there is considerable opportunity for future research and enhanced policy and practice in reducing suicide and problematic alcohol consumption both within women and the broader community.

KEYWORDS

Acute alcohol use, alcohol consumption, COVID-19, suicide, suicide prevention, the United States

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DECLARATION OF INTERESTS

None.

AUTHOR CONTRIBUTIONS

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