STASH, Vol. 11(4) – Two wrongs won't make it right: The effect of heavy alcohol use on suicide risk among illicit drug users

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Suicide is a leading cause of death among illicit drug users (Bohnert et al., 2010). Likewise, heavy alcohol use has been shown to increase suicide risk in the general population (Kessler et al., 1999). However, little research has explored the combined effect of illicit drug use and alcohol on suicide risk. In recognition of **Alcohol Awareness Month**, this week's STASH reviews a study that examined how heavy alcohol use affects suicide risk among illicit drug users (Kennedy et al., 2015).

Methods

- Researchers completed secondary data analysis of two prospective cohort studies of illicit drug users in Vancouver, Canada. A prospective cohort study follows a group of similar individuals (cohorts) over time to study how they differ with respect to future outcomes study, and why. In this case, the outcome was suicide attempt.
- Data included information from 1,757 research participants who completed questionnaires regarding demographics, drug use patterns, and mental health problems (including suicidal behavior). The research participants were studied for 8 years.
- The researchers classified participants as "heavy alcohol users" or "not heavy alcohol users"[1] and computed the suicide attempt hazard ratios between these two groups. They controlled for potential factors that might increase the risk for attempted suicide, such as age, gender, and sexual orientation.

Results

- Heavy alcohol use roughly doubled the hazard ratio for attempting suicide among illicit drug users (unadjusted hazard ratio = 2.13).

- Four years following baseline assessment, the cumulative incidence of first reports of attempted suicide was 14.6% among illicit drug users who also were heavy alcohol users. It was substantially lower–7.5%– among those illicit drug users who did not also report heavy alcohol use. See Figure 1 below.

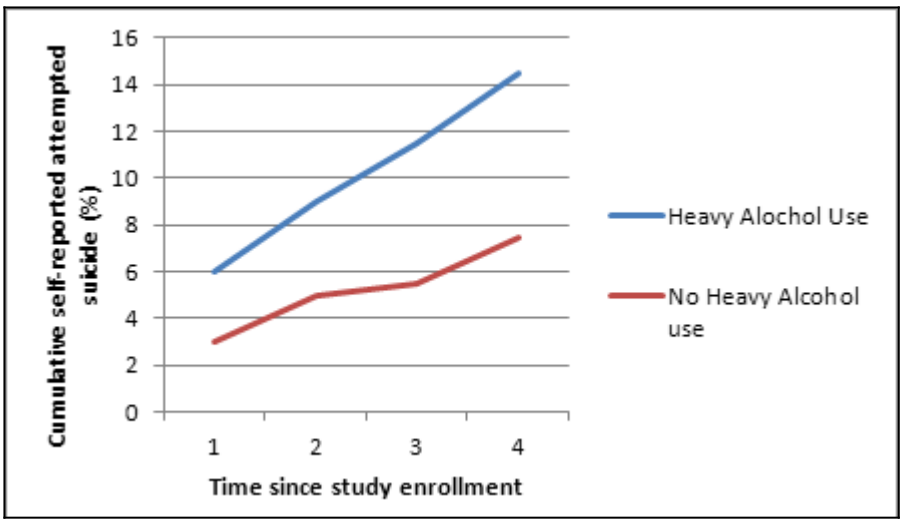


Figure. Approximated incidence of first self-reported suicide attempts (cumulative %). Adapted from Kennedy et al. (2015). Click image to enlarge.

Limitations

- The cohorts are community-recruited, non-randomized samples of individuals. Therefore the findings may not be generalizable to other drug-using populations in other settings, such as psychiatric emergency rooms or court-ordered drug rehabilitation and addiction treatment sites.
- This study relied upon self-reported information, which means that participants might have underreported certain behaviors, including suicide attempts, due to social desirability biases.
- The study design precludes the identification of causal relationships, which leaves open the possibility that other factors not assessed in the questionnaires could be influencing the relationship between heavy drinking and suicidal behavior.

Conclusion

Although researchers have observed links between suicidal behavior and drug and alcohol use considered separately, this study is the first of its kind to report upon their combined effect on long-term suicide risk. Further, this study

illustrates the importance of considering the complexity of addictive behavior in determining risk for suicidal behavior. Implementation of screening protocols for heavy alcohol consumption among illicit drug users, followed by suicide prevention and intervention efforts, could be an effective way of reducing suicidal behavior among this population.

– Emily Shoov

What do you think? Please use the comment link below to provide feedback on this article.

References

Bohnert, A.S.B., Roeder, K., & Ilgen, M.A. (2010) Unintentional overdose and suicide among substance users: a review of overlap and risk factors. *Drug and Alcohol Dependence, 110*, 183-192.

Kennedy, M.C., Marshall, B.D.L., Hayashi, K., Nguyen, P., Wood, E., & Kerr, T. (2015) Heavy alcohol use and suicidal behavior among people who use illicit drugs: A cohort study. *Drug and Alcohol Dependence* http://dx.doi.org/10.1016/j.drugalcdep.2015.03.006.

Kessler, E.C., Borges, G., & Walters, E.E. (1999) Prevalence of and risk factors for lifetime suicide attempts in the national comorbidity survey. *Archive of General Psychiatry* 56, 617-626.

[1] “Heavy alcohol use” is defined as an average of >3 alcoholic drinks on at least 1 day/week or >7 drinks in total/week for women, or >4 alcoholic drinks on at least 1 day/week or >14 drinks in total/week for men.