OP-17
Acute use of alcohol and suicides in Australia

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Objective: This study aimed to investigate differences in demographics, violent method of death, and seasonality between alcohol-related (ALC+) and non-alcohol-related (ALC-) suicides in Australia from 2010-2014 inclusive.

Methods: Data for all deaths classified as intentional self-harm (ICD-10) from 2010-2014 were extracted from the National Coronial Information System (NCIS). Cases classified as 1) over 15 years of age at the time of death; 2) closed by the coroner; 3) all Australian jurisdictions; 4) all methods of suicide and; 5) having reported alcohol analysis in a toxicology report were included in the study. A blood alcohol level (BAC) ≥0.05 g/dL was classified as an ALC+ and BAC<0.05 g/dL as an ALC- suicide. Bivariate analysis and logistic regression were performed to determine odds ratios comparing ALC+ suicides with ALC- suicides regarding the following risk factors: age, sex, marital status, employment status, seasonality, and method of death.

Results: 10,832 intentional-self harm cases (75.7% male) were coded, of which n=9,547 were included. 27.1% of all suicides were alcohol-related. Increased risk of ALC+ suicide was observed in males (odds ratio [OR] 1.2, 95% confidence interval [CI] 1.08,1.36) in the middle age. In females, the proportion of ALC+ suicides peaks at a younger age. No significant differences were found between ALC+ and ALC- groups regarding marital and employment statuses. Acute use of alcohol was associated with more violent means of suicide (OR 1.24, 95% CI 1.10,1.39). Seasonal variation was more apparent in ALC+ suicides than ALC- suicides, with higher adjusted odds occurring in December-February.

Conclusion: The findings show that acute consumption of alcohol prior to suicide is significantly associated with suicide risk factors. ALC+ suicides are more likely to occur in males, in the middle age, and with violent means - reflecting evidence found in the literature (1-4). Additionally, there is a greater risk of ALC+ suicides in the summer calendar months.

References:

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