Dose-response relationship between drinker's alcohol consumption and harm caused to others

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Introduction: Research on the dose-response relationship between a drinker's alcohol consumption and harms caused to others is scarce. This study aims to explore this dose-response relationship and whether such relationship differs by gender, age, and socioeconomic subgroup of the person harmed.

Method: A national Alcohol Harm to Others survey was conducted among 2,574 respondents (18+ years) in Australia in 2021. Among these respondents, 554 reported being harmed by the drinking of the identified most harmful drinkers in the last 12 months. The harm experienced by the respondents included verbal and physical abuse, emotional hurt, and harm rated on a scale of 1 to 10. The "dose" or level of drinking was estimated using the respondent's estimates of the harmful drinker's weekly alcohol consumption volume and frequency of heavy episodic drinking (HED).

Results: Our preliminary results show a positive dose-response relationship between the drinker's alcohol consumption (both in terms of volume and frequency of HED) and the level of harms experienced by the respondents. This dose-response relationship was found to be stronger for women who reported being harmed than men. No significant differences were found among different age and socioeconomic subgroups.

Discussions and Conclusions: The greater the alcohol consumption and the higher frequency of HED by the drinker, the more harm is inflicted on the people around them, especially on women.

Implications for Practice or Policy: This dose-response relationship will be used to model how alcohol control policies could reduce alcohol consumption and subsequently minimize alcohol's harm to others.