Dose-Response Relationships between self-reported Frequency of Methamphetamine Use and Criminal Activities in a Cohort of Metropolitan and Regional/Rural People Using Methamphetamine in Victoria, Australia.

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Introduction and Aims:
Methamphetamine use is associated with significant harms, including involvement in criminal activities. However, limited research has explored associations between specific methamphetamine consumption patterns and criminogenic outcomes. The aim of this study was to investigate possible dose-response relationships between self-reported frequency of methamphetamine use and criminal activities.

Design and Methods: The sample (N=727; M_age=34.0, SD=9.4; Male=61%) was recruited from metropolitan and regional/rural Victoria for the prospective ‘VMAX’ cohort study. Eligible participants self-reported at least monthly methamphetamine use in the six months before recruitment. We generated a categorical methamphetamine use frequency independent variable with three levels: ‘low’ (1-2 days/week in the last month), ‘medium’ (3-4 days), and ‘high’ (5-7 days). ‘Criminal activities’ included driving within three hours of using any illicit substance, being physically violent, dealing drugs, and committing property crime/s. Multivariate logistic regression models controlled for age, gender, education, employment status, Aboriginal and Torres Strait Islander identity, recruitment site (metropolitan vs. regional/rural), heroin use, and high-risk alcohol use.

Results:
Our findings indicated self-reporting a higher rate of methamphetamine use trended towards an increased likelihood of reporting involvement in certain criminal activities: driving (medium aOR = 1.60, 95%CI 0.94-2.72; high aOR = 6.68, 95%CI 3.24-13.76); being violent (medium aOR = 1.10, 95%CI 0.69-1.77; high aOR = 1.76, 95%CI 1.11-2.79); dealing drugs (medium aOR = 1.48, 95%CI 1.00-2.18; high aOR = 3.07, 95%CI 2.05-4.59); property crime/s (medium aOR = 1.26, 95%CI 0.79-2.02; high aOR = 2.40, 95%CI 1.52-3.77).

Discussions and Conclusions:
We found dose-response relationships between self-reported methamphetamine use frequency and: selling drugs, being violent, committing property crime/s, and drug-driving.

Implications for Practice:
As increased methamphetamine use was related to increased engagement in criminal activities it is possible harm reduction measures focusing on relatively minor (e.g., 1-2 days/week) decreases in use may prevent these harms, but further research is required.

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