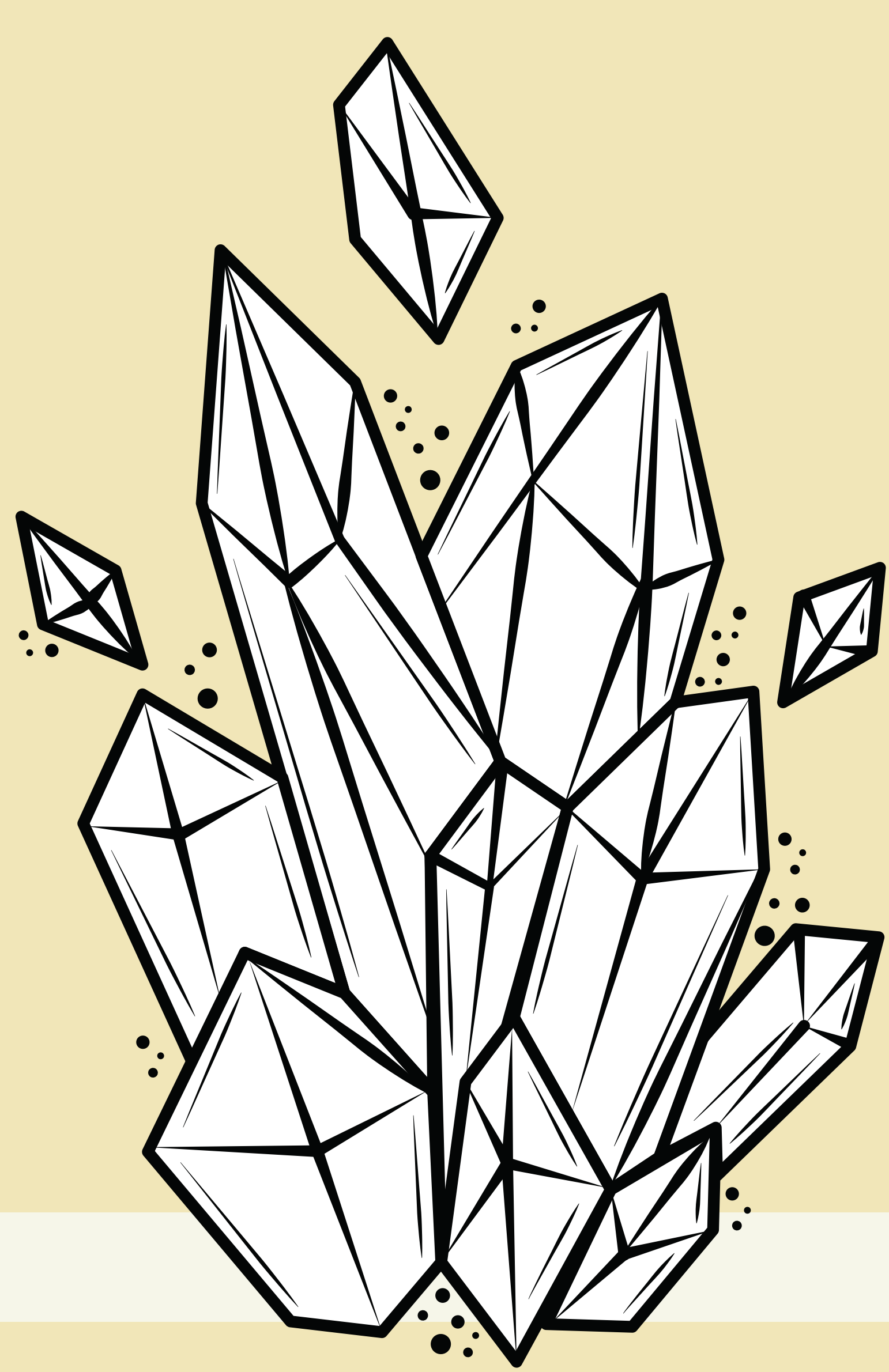# IMPRISONMENT AMONG PEOPLE WHO USE METHAMPHETAMINE

PRELIMINARY RESULTS FROM A PROSPECTIVE COHORT STUDY

Authors

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BACKGROUND

Imprisonment is associated with numerous and often enduring adverse outcomes [1-3]. Methamphetamine is the most commonly used illicit drug among people entering Australian prisons [2]. However, the incidence of, and factors contributing to, imprisonment among Australians who use methamphetamine are poorly understood.

AIMS

Among people who use methamphetamine:

1. Determine incidence of imprisonment

2. Determine factors associated with imprisonment

RESULTS

Among 541 people (who were observed for a combined 1761 person years [PY]), we found:

- 108 people contributed 151 imprisonments (range = 0 - 4)
- a crude imprisonment rate of 85 per 1000 PY (95% confidence interval: 72-99)

Factors associated with imprisonment are shown in Table 1.

METHODS

Data (2017–2022) were from VMAX, an ongoing cohort study of people who smoked methamphetamine at least monthly at study enrollment in Victoria, Australia.

Imprisonment was determined by self-report - at each interview participants were asked "*Have you been imprisoned since we last saw you?*"

Crude imprisonment rates were calculated; associations between time invariant and time varying characteristics were estimated using multiple-event discrete-time survival analysis. Time varying characteristics were lagged one interview.

CONCLUSION

We observed an imprisonment rate more than 40-fold greater than the general Australian population [5].

Imprisonment rates among people who use methamphetamine could be reduced by the use of

- non-custodial responses to drug-related offences
- initiatives which improve employment outcomes
- expanded access to interventions which the reduce frequency of methamphetamine use

TABLE 1

Associations with imprisonment in VMAX: discrete-time survival model showing unadjusted (HR) and adjusted hazard ratios (AHR) with 95% confidence interval (95%CI)

Associations with imprisonment in VMAX (N=541): discrete-time survival model showing unadjusted (HR) and adjusted hazard ratios (AHR) with 95 % confidence interval (95 %CI)

Covariate	HR (95%CI)	p-value	AHR (95%CI) [a,b]	p-value
Time invariant				
Age at baseline	0.98 (0.96-0.99)	0.01	0.94 (0.92-0.97)	<0.001
Gender: Female & Other	0.44 (0.30-0.64)	<0.001	0.58 (0.37-0.91)	0.017
Aboriginal and/or Torres Strait Islander	2.00 (1.35-2.98)	0.001	1.60 (0.99-2.60)	0.056
Completed Year 10 or higher	0.61 (0.44-0.85)	0.003	0.89 (0.60-1.33)	0.571
Imprisoned as a juvenile	2.48 (1.66-3.71)	<0.001	1.07 (0.64-1.78)	0.799
Time varying				
Homeless	2.03 (1.45-2.82)	<0.001	1.42 (0.98-2.05)	0.063
Frequency of methamphetamine use: Weekly or more [c]	1.87 (1.28-2.72)	0.001	1.68 (1.16-2.44)	0.006
Employed	0.46 (0.29-0.72)	0.001	0.61 (0.38-0.98)	0.043
Any IDU	1.70 (1.23-2.35)	0.001	1.26 (0.83-1.90)	0.276
History of adult imprisonment	4.72 (3.36-6.64)	<0.001	4.21 (2.85-6.23)	<0.001
Sought professional methamphetamine support	1.57 (1.12-2.20)	0.009	1.31 (0.91-1.88)	0.144

[a] Adjusted for observation period and all listed covariates; [b] includes offset for log of during of observation period; [c] versus none or less than weekly

References

[1] Fazel & Baillargeon, The health of prisoners. Lancet, 2011. 377(9769): p. 956-65. [2] Australian Institute of Health and Welfare, The health of Australia's prisoners 2018. 2019, AIHW: Canberra. [3] Borschmann et al., Increased risk of death following release from incarceration: an individual participant data meta-analysis of 1,314,568 adults in eight countries. International Journal of Population Data Science, 2022. 7(3). [4] Quinn et al., A prospective cohort of people who use methamphetamine in Melbourne and non-metropolitan Victoria, Australia: Baseline characteristics and correlates of methamphetamine dependence. Drug and Alcohol Review, 2021. 40(7): p. 1239-1248. [5] Australian Bureau of Statistics. Prisoners in Australia. 2023. Updated 24/02/2023; Available from: https://www.abs.gov.au/statistics/people/crime-and-justice/prisoners-australia/2022.

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