



# Self-Reported Drug Use: How Prevalent is Under-Reporting?

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# Introduction

- Most current Australian information relies on self-reported data
- People may conceal or exaggerate drug use
- Little work done in Australia on the extent of under-reporting



# This Paper

- This paper will examine the extent of under-reported of drug use in a sample of police detainees interviewed as part of the DUMA project
- It will compare the results of self-reported drug use to the results of urinalysis testing to gain a measure of the extent of under-reporting



# The DUMA Project

- Drug Use Monitoring in Australia
- Running since 1999
- Data collections are conducted quarterly
- Two main parts – an interviewer administered questionnaire and a urine sample
- Both are strictly voluntary and confidential



# DUMA Sites

- East Perth Watchhouse (1999-2003)
- Brisbane Watchhouse (2002-2003)
- Southport Watchhouse (1999-2003)
- NSW sites (1999-2003)
  - Bankstown Police Station
  - Parramatta Police Station
- SA sites (2002-2003)
  - Adelaide City Watchhouse
  - Elizabeth Police Station Cells



# DUMA Participants

- All adult men and women
- Juveniles are included in the NSW sites
- Held in custody for less than 48 hours
- Not violent, unwell or intoxicated
- Deemed by police officer as safe to approach



# Participation rates

- Participation rates high for social science survey
- 9074 detainees interviewed from 10,597 (86%)
- 6846 gave a urine sample (75%)



# Inclusions in the analysis

- Must have given a usable urine sample
- Adults only
- 6475 of questionnaires and urine results analysed



# Drug Testing Methodology

- Tests – cannabis, cocaine, methadone, opiates, amphetamines & benzodiazepines
- Two types of tests – screens and confirmatories
- Confirmatories detect specific drugs for opiates, amphetamines & benzodiazepines
- Focus on heroin, methylamphetamine & cocaine



# Drug Use Among the DUMA Sample

- Drug use among this population is much higher than the general population
- Self-reported use in the past 12 months, general population\* vs. DUMA sample:
  - Opiates 0.5 percent vs. 19 percent
  - Amphetamines 3.4 percent vs. 25 percent
  - Cocaine 1.3 percent vs. 2.4 percent

Source: Australian Institute of Health and Welfare, 2002b, 'National Drug Strategy Household Survey: Detailed Findings', *Drug Statistics Series No. 11*, Australian Institute of Health and Welfare.



# Heroin Concordance

	Urinalysis	
	Positive (%)	Negative (%)
Self-reported use past 2-3 days	68	2
Self-reported use past 30 days	80	8
(Total n)	(1199)	(5266)

Source: Australian Institute of Criminology, DUMA collection 1999-2002 [computer file]



# Methylamphetamine Concordance

	Urinalysis	
	Positive (%)	Negative (%)
Self-reported use past 2-3 days	57	3
Self-reported use past 30 days	80	19
(Total n)	(1592)	(4870)

Source: Australian Institute of Criminology, DUMA collection 1999-2002 [computer file]



# Cocaine Concordance

	Urinalysis	
	Positive (%)	Negative (%)
Self-reported use past 2-3 days	63	1
Self-reported use past 30 days	76	5
(Total n)	(158)	(6314)

Source: Australian Institute of Criminology, DUMA collection 1999-2002 [computer file]



# Type A Errors

Occurs when:

- positive urinalysis but use is denied
- a false positive test – occurs in 1-2 percent of cases
- through under-reporting of drug use – most likely



# Type B Errors

Occurs when:

- a negative urinalysis but use is reported
- a miscalculation of time since the drug was last taken
- drug consumed was not what respondent thought



# Do they know what they are taking -- the case of MDMA

- Methylenedioymethlyamphetamine - known on the street as “ecstasy”
- Self-reported use in past 2-3 days and urinalysis results
- Of detainees self-reporting ecstasy use in the past 2-3 days:
  - 20 percent tested positive to MDMA
  - 64 percent test positive to methamphetamine



# Examining Under-reporting

- Of greatest interest is the level of type A error – under-reporting
- Following section examines only people who tested positive to heroin, methamphetamines or cocaine (n=2510)
- Compares those who reported use in the past 30 days with those who didn't
- 95 percent under-reported none or all of their drug taking, five percent under-reported some



# Socio-demographic Profile

	Percent of Detainees	
	Accurately Reporting	Under reporting
Male	79	80
Single	61	58
10 or less years of education	65	64
Over 30 yrs old	33	43
Money from full time work, 30 days	11	23
Lived in own house, 30 days	34	47

Source: Australian Institute of Criminology, DUMA collection 1999-2002 [computer file]



# Offending Behaviour

	Percent of Detainees	
	Accurately Reporting	Under reporting
Detained for violent offence	15	18
Detained for property offence	50	39
Detained for drug offence	15	12
Arrested prior 12 months	72	52
In prison prior 12 months	33	24

Source: Australian Institute of Criminology, DUMA collection 1999-2002 [computer file]



# Drug Related Activities

	Percent of Detainees	
	Accurately Reporting	Under reporting
On drugs at time of arrest	68	44
Looking for drugs at time of arrest	20	7
Purchased drugs, 30 days	86	51
Dependent on illicit drugs, 12 months	66	24
Ever been in drug/ alcohol treatment	60	47
Ever made money from drugs	59	38

Source: Australian Institute of Criminology, DUMA collection 1999-2002 [computer file]



# Discussion – the Under-Reporter

- Lives in his or her own home
- Employed full-time
- Over the age of 30
- No drug dependence in the past 12 months
- Not engaged in the drug-market in the past 30 days



# Discussion – Accurate Reporter

- Detained for a property offence
- Prior contact with the criminal justice system over the previous 12 months
- On drugs at time of arrest
- Engaged in the drug market, past 30 days
- Self-reported drug dependence, past 12 months
- Been in drug or alcohol treatment during their lifetime



# Discussion – Points to remember

- Focused on under-reporting drug-use
- Important to consider the whole sample
- Among all adults that produced a usable sample the total concordance between results and self-reported use in the past 30 days:
  - 94 percent for cocaine;
  - 90 percent for heroin; and
  - 81 percent for amphetamines.



# Conclusion

- Those with 'more to lose' may under-report their drug taking
- Has implications for self-report surveys done in the general population





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