



Drug use and risk among people who inject drugs regularly: exploring age-related differences

Authors: Kerryn Butler and Lucy Burns,
National Drug and Alcohol Research Centre, University of New South Wales

Faculty of Medicine

National Drug and Alcohol Research Centre

KEY FINDINGS

- Significant differences between the three age groups; *young adults* (≤ 29), *adults* (30-49) and *older adults* (50+) were found in this sample.
- The *older adults* were more likely to be male and identify as heterosexual than the *young adults* and the *adults*.
- The *young adults* and the *adults* reported initiating injecting earlier than the *older adults*.
- Patterns of drug use were similar although the *older adults* were more likely to nominate heroin as drug of choice and less likely to nominate methamphetamine as their drug of choice.
- The *older adults* were less likely to report having a mental health problem in the previous six months compared to the *adults*.
- The *older adults* were more likely to report a prison history and least likely to report being arrested in the previous month.

BACKGROUND

As the median age of the general population in Australia increases so does the median age of people who inject drugs. Over the next several decades, population ageing is projected to have significant implications for Australia in many spheres, including health, labour force participation, housing and demand for skilled labour (Treasury 2010). This is mirrored in the population of people who inject drugs (PWID). Age-specific considerations into the care and treatment options provided needs urgent attention in Australia to adequately service this ageing population. A recent study in the US (Han, Gfroerer et al. 2009) estimates substance use disorder among older adults, 50 or older, to double due to the baby boom cohort ageing in the US and this could be mirrored in other western countries around the world. Compared to earlier cohorts, (Johnson and Gerstein 1998) found that baby boomers have much higher rates of illicit drug use. Aged care and geriatric medicine may be about to confront treatment challenges not seen on this scale before.

METHOD

Participants in the 2012 illicit drug reporting system (IDRS) survey are people who inject drugs regularly (PWID) residing in the capital city of each state and territory in Australia. All participants in the survey are recruited using the same eligibility criteria. The information gathered from the IDRS survey is not representative of PWID in the general population nor is the information representative of all PWID. For more details on the IDRS project and the 2012 National and Jurisdictional results refer to the NDARC website (<http://ndarc.med.unsw.edu.au> and click on 'Drug Trends'). This bulletin provides a closer look at PWID survey results, focusing on the age related differences.

The 2012 data was split into three groups reflecting the different needs of *young adults* (18-29 yrs), *adults* (30-49 yrs) and *older adults* (50+ yrs).

Statistical analyses were conducted using SPSS for Windows version 20.0. Categorical variables were analysed using logistic regression models. Controlling for gender, comparisons were made between the *older adults* (50+) and the other two group: *adults* (30 and 49 years) and the *younger adults* (29 years and younger).

Demographics

A total of 924 PWID were interviewed in 2012 for the IDRS study.

An analysis of demographic data revealed significant differences between the three groups (Table 1). The *older adults* were significantly more likely to be male than the *young adults* (76% vs. 55%; OR=2.6, 95%CI 1.55, 2.44) and the *adults* (76% vs. 66%; OR=1.6, 95%CI 1.56, 2.40).

The *older adults* were significantly more likely to identify as heterosexual compared to the *young adults* (95% vs. 85%; OR=3.6, 95%CI 1.5, 8.7) and the *adults* (95% vs. 89%; OR=2.5, 95%CI 1.12, 5.52).

The *older adults* had the highest level of unemployment of the three groups although this was not statistically significant. The *older adults* were more likely to have a prison history (ever) than the *young adults* (62% vs. 39%; OR=2.4, 95%CI 1.52, 3.91) but were least likely of all groups to have been recently arrested in the past 12 months (18% vs. 43% in *young adults*; OR=0.3, 95%CI 0.17, 0.51) (18% vs. 35% in *adults*; OR=0.4, 95%CI 0.25, 0.63).

Table 1: Demographic of PWID according to age, 2012

	Young Adults (n=140)	Adults (n=633)	Older Adults (n=149)
% Male	55**	66*	76
Mean years education	10	10	10
% Aboriginal and/or Torres Strait Islander	23	15	16
% Heterosexual	85**	89*	95
% Single	56	57	64
% unemployed	82	83	87
% currently in treatment	35	46	44
% prison history	39***	57	62
% arrested in past 12 months	43***	35***	18

Source: IDRS participant interviews, 2012

* significant at $p < 0.05$

** significant at $p < 0.01$

*** significant at $p < 0.001$

Drug Use

Table 2 shows the *young adults* reported initiation of injecting an average of 5.5 years earlier than the *older adults* (17.5 years vs. 23.0 years; $t_{287} = -6.1, p < 0.001$). The *adults* group reported initiation of injecting an average of 3 years earlier than the *older adults* (19.5 years vs. 23 years; $t_{780} = -5.5, p < 0.001$).

Drug of choice

The *older adults* were 2.4 times more likely to nominate heroin as the drug of choice than the *young adults*, (65% vs. 44%; OR=2.4, 95%CI 1.47, 3.83) and 1.6 times more likely than the *adults* (65% vs. 53%; OR=1.65, 95%CI 1.14, 2.40).

The *older adults* were also significantly less likely to nominate amphetamine type stimulants as their drug of choice compare to the *young adults* (12% vs. 29%; OR=0.36, 95%CI 0.20, 0.67) and the *adults* (12% vs. 21%; OR=0.54, 95%CI 0.32, 0.92).

The *older adults* were significantly less likely to report pharmaceutical opioids as the drug of choice than the *younger adults* (1% vs. 6%; OR=0.36, 95%CI 0.12, 0.67) and the *adults* (1% vs. 7%; OR=0.54, 95%CI 0.32, 0.92).

Drug most injected in past month

The *young adults* was significantly less likely to nominate heroin as the drug most often injected in the past month compared to the *older adults*. (37% vs. 49% OR=0.61; 95%CI 0.38, 0.98)

The *young adults* was 2.8 times as likely to nominate methamphetamines as the drug most often injected in the past month compared to the *older adults* (36% vs. 16%; OR=2.86, 95%CI 1.63, 5.01) and the *adults* were 1.7 times as likely than *older adults* to nominate methamphetamine (26% vs. 16%; OR=1.79, 95%CI 1.11, 2.87).

There were no statistically significant differences between the groups with respect to pharmaceutical opioids.

Injecting Frequency

No significant differences were noted between the groups on the number of participants who injected daily or more often.

Table 2: Drug use history of PWID according to age, 2012

	Younger Adults (n=140)	Adults (n=633)	Older Adults (n=149)
Mean age first injected (years)	17***	20***	23
% drug of choice			
Heroin	44***	53**	65
Methamphetamine	29***	21*	12
Pharmaceutical opioids	6*	7*	1
Cannabis	4	6	4
% drug injected most in past month			
Heroin	37*	41	49
Methamphetamine	36***	26**	16
Pharmaceutical opioids	23	30	30
% daily or more injecting in past month	44	47	42

Source: IDRS participant interviews, 2012
 * significant at $p < 0.05$ ** significant at $p < 0.01$
 *** significant at $p < 0.001$

Mental Health

The *older adults* were significantly less likely to report having a mental health problem in the last six months than the *adults* (32% vs. 47%; OR=0.36; 95%CI 0.20, 0.67) as shown in Table 3.

Two-thirds (67%) of the *older adults* who reported experiencing a mental health problem in the previous six months nominated depression and over half (53%) nominated anxiety as the mental health problem(s) they experienced.

There were no significant differences across the age groups by mental health problem / disorder.

While a higher proportion of the *young adults* self-reported experiencing schizophrenia than the *older adults*, this figure did not reach statistical significance.

No persons in the *older adults* reported drug-induced psychosis in the preceding six months.

There were no statistical significant differences in the proportion of participants who attended a professional for a mental health problem across the age groups.

Table 3: Self-reported mental health problems according to age, 2012

	Young Adults (n=140)	Adults (n=633)	Older Adults (n=149)
% Self-reported mental health problem	43	47**	32
Problem + (%)			
Depression	74	70	67
Anxiety	51	52	53
Panic disorder	18	12	9
Manic-depression	18	12	7
Post-traumatic stress disorder	5	15	9
Schizophrenia	18	10	7
Drug-induced psychosis	9	7	0
% Attended professional for MH problem	57	58	59

Source: IDRS participant interviews, 2012
 + among those who self-reported a mental health problem
 * significant at $p < 0.05$ ** significant at $p < 0.01$
 *** significant at $p < 0.001$

Risk Behaviours

Twenty percent of the *older adults* reported overdosing on any drug in the past year, similar across all age groups (see Table 4).

Five percent of the *older adults* reported borrowing needles.

The *older adults* were significantly less likely to report engaging in property crime over the previous month than either of the other two age groups. The *young adults* were 3 times more likely to report recent property crime (26% vs. 10%; OR=3.10, 95%CI 1.58, 6.10) than the *older adults*. The *adults* were more than twice as likely to report recent property crime (19% vs. 10%; OR=2.20, 95%CI 1.20, 3.87) compared to the *older adults*.

Twenty-four percent of the *older adults* reported engaging in drug dealing in the past month. All age groups reported the same proportion for this activity.

Table 4: Self-reported risk behaviours amongst PWID according to age

	Young Adults (n=140)	Adults (n=633)	Older Adults (n=149)
% overdosed in past year	21	19	20
% borrowing needles	6	8	5
% engaged in property crime in past	26**	19*	10
% engaged in drug dealing in past month	24	24	24

Source: IDRS participant interviews, 2012
 * significant at $p < 0.05$ ** significant at $p < 0.01$
 *** significant at $p < 0.001$

CONCLUSIONS

There were significant differences seen between *young adults* (≤ 29 yrs old), *adults* (30-49 yrs of age) and *older adults* (over 50+) in the 2012 national IDRS sample.

The *older adults* had a higher proportion of males and were more likely to identify as heterosexual. They were more likely to have a prison history but were least likely to have reported being arrested in the 12 months prior to the survey interview.

The *older adults* reported initiation into injecting at an older age than either the *young adults* or *adults*. The *older adults* were more likely to nominate heroin as the drug of choice and the drug most frequently injected in the month prior to interview. There were no significant differences between the groups regarding the frequency of injecting.

The *older adults* were less likely than the *adults* to report experiencing a mental health problem in the month prior to interview. There were no statistical differences across the age groups regarding the type of mental health problem / diagnosis. Interestingly there were NO persons in the *older adults* group who reported experiencing drug-induced psychosis.

REFERENCES

Stafford, J. and Burns, L. (In press). Australian Drug Trends 2012. Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trend Series No. 91*. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

Han, B., J. C. Gfroerer, et al. (2009). "Substance use disorder among older adults in the United States in 2020." *Addiction* **104**(1): 88-96.

Johnson, R. A. and D. R. Gerstein (1998). Initiation of use of alcohol, cigarettes, marijuana, cocaine, and other substances in US birth cohorts since 1919. *American Journal of Public Health*, American Public Health Association. **88**: 27-33.

Treasury, T. (2010). Australia to 2050: future challenges. Canberra.

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