

# Akzeptanzorientierte Drogenarbeit/ Acceptance-Oriented Drug Work

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Forschungsbericht / Research Report

## Injecting Drug Users' Attitudes to Needle-sharing, Hepatitis C, HIV/AIDS and Harm Minimisation\*

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### Abstract

**Objective** – To measure injecting drug user's attitudes to allowing other persons to use a needle and syringe known to be contaminated with hepatitis C virus.

**Methods** – Demographic and historical data were collected at interview from a convenience sample of methadone and buprenorphine maintenance patients in mid-2002. Respondents also answered 12 attitudinal items on needle-sharing, hepatitis C, HIV/AIDS and harm minimisation.

**Results** – Subjects generally understood the threat posed by HIV and hepatitis C virus including the risk of reinfection with hepatitis C. They supported needle and syringe exchanges (90%) and safe injecting rooms (84%) and a majority supported the decriminalization of cannabis (69%) and the prescription of heroin to addicts (61%). However, forty-one of 100 respondents either failed to reject the proposition that *“Even if I had hepC, I'd let people use needles after me – I'd warn them but it's their risk”* or failed to accept the proposition *“If I had hepC, I'd never let anyone use my needles after me, even if it meant they didn't get a hit”*.

**Conclusion** – Despite an awareness of the risks involved, many Sydney injecting drug users are still prepared to let other people use a needle and syringe known to be contaminated with hepatitis C virus.

**Implications** – Attempts should be made to reduce the supply of contaminated needles and syringes by encouraging injecting drug users to take responsibility for the health and safety of other users.

### Introduction

Hepatitis C infection remains the most frequently reported notifiable disease in Australia with an estimated 300 people becoming infected every week in 2001.<sup>1</sup> The overwhelming majority of these were young, illicit drug injectors.<sup>1</sup> The annual incidence of hepatitis C infection is probably around 13% in regular injectors (10 times a month) and 2.6% in irregular injectors (less than 10 times a month).<sup>2</sup> By 2010, over 17,000 Australians are thought likely to be living with cirrhosis as the result of hepatitis C infection.<sup>2</sup>

These data are surprising as Australia provides inject-

ing drug users (IDUs) with relatively easy access to sterile needles and syringes and has conducted prolonged and sophisticated awareness campaigns to reduce the incidence of needle-sharing. This raises the obvious question – *Why do IDU continue to use contaminated needles and syringes?*

By the early 1990s it had been established that injecting IDUs who use contaminated injecting equipment were aware of the risks they were taking and the implications of hepatitis C infection and, in the American context, of HIV infection.<sup>3-6</sup> (Note: in most jurisdictions in the US and many in Europe, the supply

of sterile needles and syringes is limited by legislation so that access continues to be a major problem.)

It has been found that Australian and New Zealand IDUs were more likely to use a contaminated needle and syringe when already intoxicated, particularly with alcohol, when either starting to inject drugs or relapsing to injecting drug use and when experiencing opioid withdrawals.<sup>6-11</sup> There is also a suggestion IDUs are more likely to use a contaminated needle and syringe when depressed or socially marginalised.<sup>11,12</sup>

As these factors are relatively intractable, attention is shifting to reducing the supply of contaminated injecting equipment to IDUs. This focus on the “supply-side” of needle-sharing raises the question – *Why do IDU allow other persons to use their contaminated needle and syringe when they are aware of the risk to those persons?*

An ethnographic study of a small group of New Zealand IDU found the major justification offered for supplying others with contaminated needles and syringes was “a caveat emptor approach in which the responsibility of the lender was largely limited to advising or warning”.<sup>11</sup> (“Caveat emptor” is the principle that the buyer alone is responsible if they are disadvantaged by a transaction. In Latin it means “let the buyer beware”). An American ethnographic study found a similar attitude among homeless addicts.<sup>12</sup>

However, a systematic search of the literature (below) failed to find any estimates of the prevalence of the “caveat emptor” attitude in groups of IDU. Nor was there a report of a systematic attempt to modify this attitude.

As a first step to establishing the need for an attitudinal campaign focused on the “supply side” of needle-sharing, we undertook to measure the prevalence of the “caveat emptor” attitude in a convenience sample of Sydney IDU attending two opioid maintenance programs.

## **Methods**

**Subjects** - The study group was a convenience sam-

ple of patients attending two publicly-funded Sydney opioid maintenance clinics. Subjects were invited by independent research staff to participate in a confidential survey of their attitudes and beliefs. Those who gave written consent were interviewed and completed a self-administered questionnaire that included items on their attitudes and beliefs regarding needle-sharing, hepatitis C and HIV/AIDS and harm minimisation strategies.

**Setting** - The clinics were operated by the one Sydney area health service and were located in the grounds of public hospitals. They were staffed by multi-disciplinary teams including specialist medical staff, psychologists, social workers and nurses. Members of the clinics’ staff were not directly involved in the data collection process and did not have access to individual responses.

**Data Collection** - Demographic, drug use and treatment histories and details of recent needle and syringe use were collected at interview by the authors and a trained research assistant.

A search of Medline, Embase and PsycINFO using needle-sharing as a heading or needle and sharing as text words with attitude/s as a heading or text word found there was only one validated instrument to measure IDU’s attitudes to needle-sharing. However, this 53-item inventory only examined attitudes to the use of someone else’s use injecting equipment rather than allowing another person to use the respondent’s equipment.<sup>13</sup> A major Australian study of IDU’s needle-sharing also concentrated on respondents’ use of contaminated injecting equipment.<sup>9</sup>

Consequently, the authors developed five original items on needle-sharing based on those used in a non-validated survey instrument,<sup>3</sup> the results of previous ethnographic research,<sup>4,11,12</sup> and investigations of why IDU’s use other person’s contaminated equipment.<sup>9,13</sup> These were combined with three items testing attitudes to hepatitis C and HIV/AIDS and four items on attitudes to harm minimisation. The latter items were taken from an instrument currently being used to measure staff attitudes.

The 12 items were scattered throughout an 84-item instrument designed to measure maintenance pa-

tients' attitudes to addiction and their treatment. (The survey instrument completed by buprenorphine patients had an extra, 85<sup>th</sup> question.) All items were answered on a 5-point Likert scale.

**Statistical Methods** The distribution of continuous variables between groups was assessed using *t*-tests assuming equal variance while the distribution of categorical variables was assessed using chi-squares or exact calculation (SPIDA, Macquarie University, Sydney; StatXact, CYTEL Software Corp., Cambridge, Ma). No allowance was made for repeat testing.

The study was approved by the University of Sydney Human Ethics Committee and the Ethics Review Committee of the relevant Sydney Area Health

Service.

**Results**

A total of 100 opioid maintenance patients completed the attitudinal instrument, 60 at one clinic and 40 at the other. Seventy-three subjects were receiving methadone and 27 buprenorphine maintenance.

The convenience sample is described using continuous variables in Table 1 and categorical variables in Table 2. Table 2 also contains a summary of the group's use of needles and syringes in the week prior to interview. Their responses to the 12 attitudinal items are detailed in Table 3.

**Table 1:** Describing respondents using continuous variables / *n*=100

	mean	s.d.	LQ	median	UQ
Age (yrs)	32.4	8.6	25.5	31	59
Age first addicted	21.1	6.3	16	19	25
Age first maintenance ( <i>n</i> =99)	26.2	6.6	20	26	31
Years continuously in maintenance	1.9	3.4	0.3	0.5	1.9
Years since hepC diagnosed ( <i>n</i> =52)	6.4	5.9	2	4.5	10.5

**Table 2:** Describing respondents using categorical variables / *n*=100

	<i>n</i>
Gender, males	69
Marital status, single	63
Employment status, unemployed	88
Infected with hepatitis C ( <i>n</i> =94)	53
Used a needle and syringe in the last week ( <i>n</i> =98)	25
Allowed contaminated needle and syringe to be used by another person in the last week	2
Used a contaminated needle and syringe in the last week	4

**Table 3:** Frequency of maintenance patients' responses to harm minimisation and needle-sharing questions / *n*=100

Item	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
Needle and syringe exchanges should be established in all cities and towns with large numbers of injecting drug users.	3	4	3	40	50
Safe injecting rooms should be established wherever large numbers of addicts use on the street.	5	3	8	61	23
Doctors should be able to prescribe heroin to known addicts	6	15	18	33	28
The use of marihuana should be decriminalised.	3	19	9	41	28
HIV/AIDS really scares me.	5	9	4	28	54
HepC eventually kills many of the people it infects.	5	21	35	32	7
HepC is not really dangerous.	34	41	16	5	2
Once you have hepC, you may as well use a dirty needle provided you rinse it and they don't have HIV/AIDS.	52	29	8	9	2
Even if I had hepC, I'd let people use needles after me – I'd warn them but it's their risk.	46	25	2	20	7
If I had hepC, I'd never let anyone use my needles after me, even if it meant they didn't get a hit.	1	13	17	34	35
Sharing a needle with people who have hepC is OK provided you have hepC yourself.	44	35	12	7	1
Even if you have hepC, you should never use someone else's needle.	2	0	3	22	73

When the 41 subjects who either failed to reject the proposition that *"Even if I had hepC, I'd let people use needles after me – I'd warn them but it's their risk"* or failed to accept the proposition *"If I had hepC, I'd never let anyone use my needles after me, even if it meant they didn't get a hit"* were compared with the other 59 respondents, it was found they were significantly ( $p=0.002$ , exact) more likely to be unemployed (all 41 of 41 vs. 47 of 59).

It is noteworthy that one person in each group reported having allowed another person to use their contaminated needle and syringe and two in each group reported having used contaminated equipment in the week prior to interview. One older man already infected with hepatitis C reported using a con-

taminated needle and syringe after four different people in the week before interview.

### Discussion

The survey shows forty per cent of respondents either failed to reject the proposition that *"Even if I had hepC, I'd let people use needles after me – I'd warn them but it's their risk"* or failed to accept the proposition *"If I had hepC, I'd never let anyone use my needles after me, even if it meant they didn't get a hit"*. The group of methadone and buprenorphine maintenance patients was generally well-informed about the implications of hepatitis C and HIV/AIDS infection and hepatitis C re-infection.

These findings support the suggestion that many injecting drug users are prepared to let others use a needle and syringe they know to be contaminated with hepatitis C virus and that they adopt the principle of “*caveat emptor* – let the buyer beware” to rationalise their denial of responsibility for the health and safety of others. While they recognise the risks involved to persons using the contaminated equipment, they consider it the other person’s responsibility to take care of themselves. More research needs to be done to determine if this attitude is less likely to be operational when the other person is a naive user or intoxicated.

While the findings indicate a significant attitudinal problem, the estimate of the prevalence of these attitudes cannot be generalised to all Sydney opioid maintenance patients, let alone all Australian injecting drug users. The study group was a convenience sample with an unusually high rate of unemployment for Sydney opioid maintenance patients. As employment status was found to be significantly associated with acceptance of the “*caveat emptor*” approach, the survey is likely to have over-estimated the prevalence of this attitude. More research is needed into the prevalence of the “*caveat emptor*” attitude among other groups of injecting drug users in other Australian cities.

The survey would also have been affected by expectation bias - subjects would be likely to give responses pleasing to healthcare workers.<sup>12</sup> While attempts were made to minimise the problem by distancing the study from the clinics, it would have tended to reduce the estimated prevalence of support for the “*caveat emptor*” attitude.

Moreover, the prevalence of the “*caveat emptor*” attitude is likely to underestimate the likelihood of injecting drug users’ actually handing over a contaminated needle and syringe as some are likely to acquiesce in the face of an angry response to an initial refusal.<sup>12,14</sup> Any attempt to encourage injecting drug users to accept responsibility for the health and safety of others will need to address this issue, e.g. the “take their keys” campaign against drink driving promoted a positive image of persons who intervened to protect their friends.

Respondents gave strong support to needle and syringe exchanges (90%) and the establishment of more safe injecting rooms (84%). They gave less wholehearted support to the decriminalisation of cannabis (69%) and the medical provision of heroin to addicts (61%). By way of comparison, a survey of 24 of the staff working in the two clinics found 96% supported needle and syringe exchanges, 88% safe injecting rooms, 71% the decriminalisation of cannabis and 50% the provision of heroin to addicts.

The results of the present study suggest a possible new “supply-side” approach to reducing the spread of hepatitis C virus infection among Australian injecting drug users. A pilot study should evaluate the feasibility and likely effectiveness of a campaign designed to encourage injecting drug users to take responsibility for the health and safety of others. One possible strategy would be to employ injecting drug users to train others to act as role models and change agents.<sup>10</sup>

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#### **References**

1. National Centre in HIV Epidemiology and Clinical Research. HIV/AIDS, Viral Hepatitis and Sexually Transmissible Infections in Australia Annual Surveillance Report 2002. National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW. 2002.
2. Law M. Modelling the hepatitis C virus epidemic in Australia. *J Gastroenterology Hepatology* 1999; 14: 1100-1107.
3. Magura S, Grossman JI, Lipton DS *et al.* Determinants of needle sharing among intravenous drug users. *Am J Public Health* 1989; 79: 459-462.

4. Connors MM. Risk perception, risk taking and risk management among intravenous drug users: implications for AIDS prevention. *Social Sci Med* 1992; 6: 591-601.
5. Caplehorn JRM, Ross MW. Methadone maintenance and the likelihood of risky needle-sharing. *Int J Addictions* 1995; 30: 685-698.
6. Gossop M, Griffiths P, Powis B, Strang J. Severity of heroin dependence and HIV risk. II Sharing injecting equipment. *AIDS Care* 1993; 5: 159-168.
7. Caplehorn JRM, Saunders JB. Factors associated with heroin users' AIDS risk-taking behaviours. *Aust J Public Health* 1993; 17: 13-17.
8. Crofts N, Louie R, Rosenthal D, Jolley D. The fist hit: circumstances surrounding initiation into injecting. *Addiction* 1996; 91: 1187-1196.
9. Ross MW, Wodak A, Stowe A, Gold J. Explanations for sharing injection equipment in injecting drug users and barriers to safer drug use. *Addiction* 1994; 89: 473-479.
10. Loxley W, Davidson R. How rational is needle sharing to young injecting drug users? *Addiction Research* 1998; 6: 499-515.
11. Plumridge E, Chetwynd J. The moral universe of injecting drug users in the era of AIDS: sharing injecting equipment and the protection of moral standing. *AIDS Care* 1998; 10: 732-733.
12. Bourgois P. The moral economies of homeless heroin addicts: confronting ethnography, HIV risk, and everyday violence in San Francisco shooting encampments. *Substance Use Misuse* 1998; 33: 2323-2351.
13. Kipke MD, Drucker E. Reliability and construct validity of the Needle Sharing Inventory. *Int J Addictions* 1989; 24: 515-526.
14. Carlson RG, Siegal HA, Wang J, Falck RS. Attitudes toward needle "sharing" among injection drug users: combining qualitative and quantitative research methods. *Human Organization* 1996; 55: 361-369.

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