

An analysis of nurses' views of harm reduction measures and other treatments for the problems associated with illicit drug use

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KEY WORDS

illicit drugs, nurse, education, harm reduction, abstinence

ABSTRACT

Objective

To analyse nurses' views of harm reduction measures and other treatments for the problems associated with illicit drug use.

Design and setting

The study, a cross-sectional survey, sampled the entire registered nurse population of the ACT. A self-complete survey was posted to home or workplace addresses. The views of all nurses registered in the ACT were sought.

Subjects

The study sample ($n = 1,605$: 50% response rate), was predominantly comprised of nurses working outside specialist drug and alcohol fields (94%), with a small group from specialist fields.

Main outcome measures

A 6-point Likert scale comprising 7 items (illicit drug treatments). Comparison with the Australian population was achieved through use of the National Drug Strategy Household Survey database.

Results

Nurses mirrored the views of the Australian population, being strongly supportive of two abstinence-based measures (naltrexone for the maintenance of abstinence – 82% and rapid detoxification therapy – 77%) and one harm reduction measure (the needle and syringe program – 76%). Nurses' lower support for the methadone maintenance program (66%) was statistically significant.

Conclusions

Nurses reported high approval for the needle and syringe program but were mistakenly optimistic about abstinence-based measures for problems associated with illicit drugs. They reported significantly less support for important harm reduction measures – the methadone maintenance program and safe injection rooms. Nurses' low approval rating for these harm reduction measures is at odds with the evidence. This study highlights the need for education on the evidence base for the various illicit drug treatments.

INTRODUCTION

The last decade has seen a greatly increased scientific knowledge base concerning harm reduction measures and other treatments for individuals who use illicit drugs. Harm reduction measures aim to both minimise drug-related harm (for example, needle and syringe programs and supervised injection facilities) and lessen the demand for illicit drugs (for example, methadone maintenance programs). In contrast to harm reduction measures, abstinence-based measures focus on the cessation of illicit drug use (drug-free detoxification, the use of naltrexone in rapid detoxification therapy and naltrexone maintenance therapy for relapse prevention).

In Australia, illicit drug users (IDUs) are regular attendees at emergency departments (Krenske et al 2004) and general wards in the acute hospital sector (Tait et al 2002; Roxburgh and Degenhardt 2008). Therefore registered nurses working in non-specialist drug and alcohol areas are well positioned to play their role in assisting drug users to reduce the harms associated with illicit drug use. It is not clear, however, how these nurses view harm reduction measures and other treatments for the problems associated with illicit drug use.

The author's previously published study (Ford et al 2008, 2009) investigated registered nurses' therapeutic attitude to patients who use illicit drugs. The sample unit was the entire registered nursing workforce in the ACT. The study sample ($n = 1,605$) was 50% of the available nurse population, comprised predominantly of registered nurses working outside 'specialist' drug and alcohol fields, inclusive of medical/surgical, intensive care, emergency, midwifery, pediatrics, education and management, and others such as gerontology and community. A small segment of the study sample (6%) was from 'specialist' fields, namely, drug and alcohol and mental health. The authors found nurses' therapeutic attitude to be constrained by low levels of role support and drug education (Ford et al 2008). The authors found role support, and the combination of drug and alcohol education and role support, to be significantly associated with higher

therapeutic attitude (Ford et al 2008, 2009). Nurses' personal characteristics (age, sex, education level and religiosity) were found to have no association with therapeutic attitude, while a negative attitude to illicit drugs was marginally significant (Ford et al 2008). The current paper takes this investigation further by analysing the same nurses' views on harm reduction measures and other treatments for problems associated with illicit drug use.

LITERATURE REVIEW

Australia's early articulation of a harm minimisation philosophy in response to the problems associated with illicit drug use established it as a world leader in drug policy (Single and Rohl 1997) and was credited with 'containing the spread of HIV/AIDS more successfully than almost any other country' (Premier's Drug Advisory Council 1996, p. iv). The current drug policy, the National Drug Strategy: Australia's Integrated Framework, 2004 – 2009 (Ministerial Council on Drug Strategy 2004) continues to articulate harm minimisation as a guiding principle in all areas of action. 'Harm reduction', a clearly stated aim of the harm minimisation philosophy, refers to a number of health strategies focused on reducing the adverse consequences of illicit drug use in the event that drug use continues (Ritter et al 2004). Harm reduction strategies have been found to reduce drug-related harm and drug dependencies (Reuter and Pollack 2006) and drug-related hospital admissions and costs (Riddell et al 2008).

One important implication of this policy environment is the need for registered nurses to practice within a harm reduction framework, in which the role of harm reduction measures is clearly understood and valued. However, while a number of studies have assessed specialist addiction workers' attitudes to harm reduction measures, no studies were located which had a focus on registered nurses' understanding of, or attitudes to, harm reduction strategies. In their Canadian study ($n = 925$) Ogborne and Birchmore-Timney (1998) found a high approval rating for the needle and syringe program amongst specialist staff (82%). The trial of prescribed heroin

was less popular (15% - 35%), although support was higher from specialist staff working in assessment/referral (61%) and outreach programs (61%). In the United States of America, Forman et al (2001) investigated beliefs about treatments for addiction in a sample of staff ($n = 317$) working in a variety of treatment centres. They found a low percentage of staff endorsed methadone maintenance (34%), while more staff (46%) agreed that patients who failed to maintain abstinence from illicit drugs should be discharged from treatment. This finding concurs with an early Australian study by Caplehorn et al (1996) ($n = 90$), in which evidence of an abstinence-based ideology was found amongst some staff working in methadone maintenance programs.

Harm reduction measures: the evidence

The needle and syringe program (NSP), a well-established harm reduction strategy, provides injection drug users with free sterile needles and syringes and education about safe sexual and injection behaviour (Wood et al 2002). NSPs are viewed as an appropriate and pragmatic harm reduction response to disease transmission and are credited with reducing Australia's prevalence of human immunodeficiency virus (HIV) among IDUs (Law and Batey 2003). Program involvement has also been found to prompt illicit drug users to enrol in treatment and thus reduce drug use and injecting behaviour (Kidorf et al 2009).

By allowing space and time for an IDU to inject their pre-purchased illicit drug as safely as possible, a supervised injection facility (SIF) aims to lessen drug overdose, disease transmission and public drug seeking, trading and disposal conduct (Small et al 2006). Opening in Sydney in 2001, Australia's Medically Supervised Injecting Centre has been shown to attract marginalised IDUs and engage them with health and social services (van Beek 2003) and to play a role in reducing both the prevalence of HIV in the drug-injecting heterosexual community (Salmon et al 2009a) and injection-related injury and disease (Salmon et al 2009b). An injection facility affords nurses the opportunity to assess and treat an IDU's infections, to refer her/him to appropriate health and

drug treatment services (Small et al 2008) and to educate her/him about safer injecting practices, for example, 'how to find a vein and tie off properly, how to cook and filter drugs, how to inject safely' (Wood et al 2008, p.186). Nurses particularly target those at most risk of harm, ie females, sex workers and those who inject publicly, borrow/lend syringes, require help to inject and/or binge on illicit drugs (Wood et al 2008). These improved health outcomes for IDUs who use the Sydney-based safe injection facility have also been shown in Canada (Kerr et al 2007) and Europe (Bravo et al 2009).

An important harm reduction measure, the methadone maintenance program, has been operating in Australia since the early 1980s and a strong evidence base for its efficacy is well documented. For example, in a review of six randomised controlled trials of methadone maintenance therapy versus non-opioid therapies (drug-free detoxification and rehabilitation) Mattick et al (2005) found methadone maintenance therapy to be more effective in keeping heroin dependent individuals in treatment and limiting their heroin use. As well as reduced heroin use, Gowing et al (2005a) found a reduced incidence of high-risk sexual and injecting behaviours, which also limited HIV infection.

Abstinence-based measures: the evidence

Naltrexone, an opioid antagonist, is used to achieve rapid detoxification from opiates in an anaesthetised or heavily sedated patient. Evidence of the efficacy of this treatment remains inconclusive. Gowing et al's (2005b) review of clinical trials found problems with comparability, such as inconsistencies in the amounts of opioid antagonist and other medications used, differing durations of anaesthesia and lack of information on referral and long-term outcomes.

Naltrexone maintenance therapy is used to assist heroin dependent individuals maintain abstinence once they have completed detoxification (naltrexone blocks the effect of heroin and other opioids). Adi et al (2007) conducted meta-analysis of studies evaluating the efficacy of adjunct naltrexone therapy in preventing relapse to drug use following withdrawal. Although some studies found a link with abstinence

maintenance, the evidence was considered poor and the wide use of naltrexone to maintain abstinence was not recommended by these authors.

Implications for the nursing role

There is compelling evidence for the efficacy and effectiveness of harm reduction measures. Illicit drug users however are generally reluctant to access treatments and to maintain communication with health personnel (Ostertag et al 2006), therefore limiting the capacity of health personnel to offer assessment, advice and referral. Given their high exposure, registered nurses are in an ideal position to offer opportunistic brief interventions including harm reduction advice to this marginalised patient group. However, there is no evidence to date in Australia about how nurses view harm reduction measures and other treatments for illicit drug use. Gathering this evidence is an essential first step in nursing workforce development.

The survey tool for the main study included one variable from the National Drug Strategy Household Survey (NDSHS). The variable for analysis was 'Views on a range of measures for problems associated with illicit drug use'. There are seven items in this variable that cover a diverse range of approaches to managing the problems associated with illicit drug use. Rapid detoxification therapy and the use of naltrexone are both treatments that focus on maintaining abstinence from illicit drugs. The remaining five measures fall within the harm reduction paradigm. They include two well-established harm reduction measures, namely, the needle and syringe program and the methadone maintenance program, and three new measures, namely, treatment with drugs other than methadone, regulated injection rooms and prescribed heroin.

The NDSHS is conducted every two years in Australia; therefore, the NDSHS variable used in this study is considered a valid tool for measuring nurses' views. The NDSHS survey was conducted just prior to data collection for this study, therefore, in the absence of other findings to compare against, the study findings are compared with the Australian population, via the raw data held in the NDSHS database.

Study objectives:

1. to analyse nurses' views on harm reduction measures and other treatments for problems associated with illicit drug use; and
2. to analyse the extent to which nurses' views conform with those of the Australian population.

METHODOLOGY

The findings reported here are part of a mixed-methods study of nurses' therapeutic attitude to patients who use illicit drugs, undertaken in the ACT. The study, a cross-sectional survey ($n = 1,605$) was approved by The Australian National University Human Research Ethics Committee and data were collected in 2003. The study established the importance of role support and the combination of role support and drug education in facilitating nurses' therapeutic attitude (Ford et al 2008, 2009). The final part of the study, reported here, examines nurses' views on harm reduction measures and other treatments for the problems associated with illicit drug use.

Sample

The study used the ACT Nurses Registration Board Roll as the sample frame. The sample unit comprised all registered nurses on the Roll ($n = 3816$) (enrolled nurses were not included in this study). Non-clinical nurses such as educators, managers, policy advisors and researchers are influential within the nursing community (Eliason and Gerken 1999), therefore the views of non-clinical and clinical nurses, were considered important in this study.

Questionnaires were mailed in two waves, predominantly to nurses' home addresses but also work address. The final response to the postal survey ($n = 1605$) was 50% of the eligible sample (the eligible sample was 3,241 - 575 members of the sample unit were ineligible due to overseas travel, retirement or invalid address).

In summary, the study sample was predominately female (94%) with a mean age of 44 years (± 9). A large majority of the sample (77%) was engaged in clinical nursing work, with the largest practice group

being medical/surgical and intensive care nurses (24%), followed by midwives (15%), emergency department nurses (7%), paediatric nurses (4%) and other practice groups (44%). A small group were from fields considered to have a 'specialist' focus, namely, drug and alcohol and mental health (6%). The study sample was found to be representative of the ACT nurse population and few differences were found between responders and non-responders (see Ford and Bammer 2009).

Variable for analysis

The eight page questionnaire used in the main study contained 40 questions. The questionnaire was pre-tested in four stages and piloted with 82 participants to ensure face and construct validity.

A variable taken from the National Drug Strategy Household Survey (NDSHS) was used to examine nurses' views on a range of measures for problems associated with illicit drug use. The NDSHS is based on households and information, collected via computer assisted telephone interview, drop and collect self-complete questionnaire and face-to-face interview. The survey was completed by 26,744 Australians aged 14 years and over (AIHW 2002). The variable was thus considered a valid means of measuring nurses' views, and the raw data held in the NDSHS database could be used for comparison purposes with this study's data.

The variable for analysis 'Views on a range of measures for problems associated with illicit drug

use', was scored on 6-point Likert scale: 1 – strongly support, 5 – strongly oppose, and 6 – *don't know enough to say* (thus a higher score showed more opposition for the measure). While the *don't know enough to say* data are presented in this paper, they were not included in the analysis.

Statistical methods

The statistical analysis was performed using STATA software (version intercooled (8.2) (STATACorp 2003). Parametric statistics (t-test, Spearman rank order correlation, Chi-square test and ANOVA) were used for descriptive and inferential purposes. To minimise type 1 errors (resulting from multiple testing), a significance level of <0.01 was used. The summary scores, an analysis of nurses' views about harm reduction measures and other treatments, and a comparison between nurses' views and those of the Australian population are presented below.

FINDINGS

Nurses' views on measures for problems associated with illicit drug use

The seven items in this variable are displayed in table 1 in the same order as they appeared in the NDSHS (AIHW 2002). One item was deleted from further analysis: 'treatment with drugs other than methadone' was affected by a high percentage of *don't know enough to say* responses (27%) and missing responses (2%). In total, 470 nurses did not express an opinion on this measure.

Table 1: Nurses' views on a range of measures for the problems associated with illicit drug use (n, % in brackets, n = 1,605)

	Strongly support	Support	Neither support/oppose	Oppose	Strongly oppose	Don't know enough to say	Missing
Regulated injection rooms	336 (21)	535 (33)	137 (8)	233 (15)	265 (17)	70 (4)	29 (2)
Trial of prescribed heroin	260 (16)	488 (30)	159 (10)	268 (17)	292 (18)	107 (7)	31 (2)
Rapid detoxification therapy	347 (22)	627 (39)	181 (11)	70 (4)	34 (2)	322 (20)	24 (2)
Use of naltrexone	368 (23)	713 (44)	160 (10)	44 (3)	28 (2)	269 (17)	23 (1)
Needle and syringe program	571 (35)	644 (40)	121 (8)	101 (6)	95 (6)	44 (2)	29 (2)
Methadone maintenance program	299 (19)	708 (44)	231 (14)	157 (10)	92 (6)	86 (5)	32 (2)
Treatment with drugs other than methadone	255 (16)	541 (34)	239 (15)	60 (4)	40 (2)	443 (27)	27 (2)

Attitude scores are negatively coded: 1 strongly support to 5 strongly oppose

Of the remaining six items, it can be seen that a substantial percentage of nurses did not express an opinion on two: 'rapid detoxification therapy' (20%) and 'use of naltrexone' (17%). This level of *don't know enough to say* responses caused a problem for interpreting nurses' preferences. Therefore, the *don't know enough to say* and *missing responses* ($n = 559$) were removed so that the analysis was conducted only on respondents who expressed an opinion on all measures ($n = 1,046$). Nurses' preferences were evaluated from the most popular to the least, and significant differences between their choices were identified.

Table 2 shows nurses' preferences from the most popular to the least popular - the mean score, standard deviation of the mean and the percentage of nurses who *strongly supported* or *supported* each measure are provided. A high level of support for abstinence-based measures (use of naltrexone for the maintenance of abstinence and rapid detoxification therapy) is evident. There is no statistical difference in nurses' support for the use of naltrexone (82%), rapid detoxification therapy (77%) or the harm reduction measure, the needle and syringe programs (76%).

However, nurses reported significantly more support for the relatively new measures, the use of naltrexone ($t = 10.95, p \leq .001$) and rapid detoxification therapy ($t = 8.24, p \leq .001$), than the long-established methadone maintenance program. They were also significantly more supportive of the needle and syringe program than the methadone maintenance program (66%) ($t = 11.84, p \leq .001$). Regulated injection rooms (58%) and prescribed heroin (52%) gained least support.

Nurses' responses to these measures showed a particular pattern. In table 3 the Spearman's rank-order correlation (ρ), shows strong correlation between attitudes to the two abstinence measures, rapid detoxification therapy and use of naltrexone ($\rho = 0.66$). Strong correlations were also found between attitudes to the four harm reduction measures ($\rho = 0.45$ to 0.75). Weak correlations existed between harm reduction measures, and abstinence-based measures ($\rho = 0.11$ to 0.26), suggesting that nurses held either an abstinence-based or a harm reduction ideology.

Table 2: Nurses' views on a range of measures for problems associated with illicit drug use ($n = 1,046$: nurses who expressed an opinion on all measures)

	Mean (SD)	Support or strong support (%)
Use of naltrexone	2.0 (0.9)	82
Rapid detoxification therapy	2.1 (0.9)	77
Needle and syringe program	2.0 (1.1)	76
Methadone maintenance program	2.4 (1.2)	66
Regulated injection rooms	2.7 (1.4)	58
Trial of prescribed heroin	2.9 (1.4)	52

Attitude scores are negatively coded: 1 strongly support to 5 strongly oppose

Table 3: Nurses' attitudes to abstinence (*italics*) and harm reduction measures (bold**): Spearman rank-order correlations showing the size of the relationship between measures**

	1	2	3	4	5	6
<i>Use of naltrexone</i>	1.00					
<i>Rapid detoxification therapy</i>	.66	1.00				
Needle and syringe program	.26	.18	1.00			
Methadone program	.26	.17	.51	1.00		
Regulated injecting rooms	.19	.11	.60	.46	1.00	
Trial of prescribed heroin	.20	.14	.52	.45	.75	1.00

Comparison with the population

Nurses' views were compared with those of the general population via the raw data held in the NDSHS database (AIHW 2002). The age spread of the population was restricted to 21 to 72 years to match the nurse sample. Most of the nurses were women (94%), therefore data from women in both samples who expressed an opinion on all measures was used in the analysis (nurse sample $n = 1,046$; population $n = 6,441$).

The female nurse sample was compared with the female population using the one-way analysis of variance (ANOVA), a test that compares pairs of means. Table 4 shows the mean score, the standard deviation of the mean, and the f statistic and p value from the one-way ANOVA tests.

Female nurses and women in the population reported the same high level of support for the use of naltrexone for the maintenance of abstinence. There was no statistical difference between the samples. Both also supported rapid detoxification therapy but the female nurses were significantly less supportive than women in the population.

Female nurses were significantly more supportive of two harm reduction measures than women in the population - the needle and syringe program and the trial of prescribed heroin. Female nurses reversed this trend however, by being significantly less supportive of the methadone maintenance program than women in the population. Finally, female nurses and women in the population were not different in their low support for regulated injecting rooms.

Table 4: Comparison of the female nurse sample and the female population for measures used for the problems associated with illicit drug use (means, SD)

	Nurse sample $n = 1,046$	Population $n = 6,441$	f	p
Use of naltrexone	2.0 (0.9)	2.0 (1.1)	0.01	= .90
Rapid detoxification therapy	2.1 (0.9)	1.8 (1.0)	38.51	≤ .001
Needle and syringe program	2.0 (1.1)	2.4 (1.4)	50.14	≤ .001
Methadone program	2.4 (1.2)	2.3 (1.2)	6.90	≤ .01
Regulated injecting rooms	2.7 (1.4)	2.8 (1.5)	1.72	= .19
Trial of prescribed heroin	2.9 (1.4)	3.1 (1.5)	10.41	≤ .001

Attitude scores are negatively coded: 1 strongly support to 5 strongly oppose

Relevance to nursing practice

Nurses in this study supported the needle and syringe program and, like the Australian population, preferred abstinence-based measures over the methadone maintenance program, regulated injection rooms and prescribed heroin. The differences between the nurse sample and the Australian population showed some statistical significance, the most interesting being nurses' lower support for the methadone maintenance program. However, no clear trends were evident in these differences, and were of minimal real importance.

The controversy over methadone, according to Sees et al (2000), possibly rests on the fact that it is a 'dependence-producing medication' (p.1303).

However, it is essential that nurses look beyond such controversies and inform themselves about the aims of harm reduction treatments. The nursing workforce is large and has many and varied points of contact with this patient group. Nurses are well-positioned to play a role in helping to reduce the harms associated with illicit drug use.

Some nurses in this study demonstrated their lack of knowledge of drug treatments with approximately 35% of the study sample ($n = 559$) either failing to provide a response, or choosing the *don't know enough to say* option, on at least one of the six treatments. The study sample is representative of the full spread of nursing specialties; therefore it might be reasonable to expect a lack of knowledge from some

nurses. However, illicit drugs are a major public health concern in Australia, and nurses in almost all fields of nursing are involved in the care of patients who use them. An evidence base should inform nurses' professional practice with this patient group, just as it does with other patient groups. Small et al (2008) provide examples of how nurses in a safe injecting facility provided harm reduction interventions to patients, namely, referral to appropriate health and drug treatment services, education about safer injection practices and assessment and treatment of infectious complications. Wood et al (2008) also found that nurses' care assisted IDUs to minimise harms associated with injecting practices, while Krüsi et al (2009) found nurses' care to improve IDUs' uptake of health care.

An abstinence-based ideology fails to recognise that illicit drug dependence is a chronic disease that is influenced by genetic makeup and in which pathophysiological changes occur (McLellan et al 2000). Thus drug use problems are not acute problems with immediate and lasting solutions, but chronic problems with a requirement for on-going care. Once an individual has reached the stage of dependence they can enter a spiral – dependent use, followed by abstinence, followed by lapse to use, followed by abstinence. It is important that nurses understand the harms that non-abstinent individuals experience in the event that abstinence is the only option provided to them. Nations that prioritise a drug-free society (and therefore prohibit methadone maintenance and needle and syringe programs) have been found to have a high rate of blood borne disease, a high proportion of HIV disease in IDUs, a high rate of risky drug use practice – all without a reduction in drug use (Aceijus et al 2004; Reid et al 2007; Bravo et al 2007). In those nations and cities where sterile needles and syringes are prohibited, active policing causes IDUs to engage in rushed, risky injecting practices, syringe sharing and unsafe equipment disposal (Aitken et al 2002).

Harm reduction measures improve the health and well-being of individuals who use illicit drugs. As inpatients in hospital wards and departments,

individuals will benefit greatly from their interactions with nurses if these nurses understand and value harm reduction measures. In addition, an informed nursing workforce will go some way towards informing the public about the efficacy and effectiveness of both harm reduction and abstinence-based measures, based on the evidence. Without knowledge of the evidence base, nurses risk denying their patients appropriate care and also perpetuating the myths commonly held by the general public.

DISCUSSION

The aim of this study was to gather evidence on how registered nurses in Australia view treatments for illicit drugs, as an essential first step in workforce development. This study provides evidence that registered nurses closely match the views of the Australian public in their preferences for illicit drug treatments. Like the Australian population, nurses were misguided in their optimism about untested abstinence-based measures (approximately 80% support) and their scepticism about proven harm reduction measures, particularly the methadone maintenance program (66% support).

Illicit drug use behaviour is interpreted in different ways by individuals in society. Those people who view drug use as wilful misconduct see the solution as belonging primarily in the criminal justice domain, while others see medical treatment (drug use as an illness) or forced abstinence (drug use as moral failing) as the answer (Wild et al 2001). It is possible, but not proven in this study, that nurses form their views in the same way that the Australian population does, namely, through the mass media and other informal channels. In the years leading up to data collection, claims were made in the popular press about the usefulness of abstinence-based treatments (Elliot and Chapman 2000) with ambivalence or opposition reported for supervised injecting facilities and the trial of prescribed heroin (Mendes 2002). From the perspective of nursing care provision, however, patients who use illicit drugs are entitled to high quality care that is based on the best available research evidence. The challenge for nursing is to

educate and upskill nurses so that they are able to offer nursing interventions, advice, and referral that will maximise IDU's health outcomes.

Twenty-five years ago, of the entire Australian health workforce, nurses were singled out as the largest professional group involved in the treatment and management of drug-related problems. The importance of the role of the registered nurse was highlighted in a report by the Task Force for the Training Requirements of Professionals and Non-professionals in the Alcohol and Drug Field (Ministerial Council on Drug Strategy 1986). It recommended the establishment of a national minimal standard of basic training.

A decade after these recommendations were published, a review of drug and alcohol education for frontline workers found education for nurses to be poor in terms of its 'delivery, quality and content' (Allsop et al 1998 p.25). It was found that, if drug and alcohol subjects existed in undergraduate nurse curricula, they were generally offered as elective (rather than core) subjects, and the volume and quality of the education rested on the initiative of individual nurse academics with an interest in the field (Allsop et al 1998; Siggins Millar Consultants 2003). Recently published results from this current study (Ford et al 2008; 2009) show that pre-service drug and alcohol education for nurses in the ACT is a scarce resource, with one-third of the study sample reporting no pre-service education and a further one-third reporting less than five hours. It can be said that drug and alcohol education continues to have a low priority and remains vulnerable in the undergraduate nursing curriculum.

Workplace drug and alcohol education for practicing nurses is also limited. A study of critical care nurses in Melbourne metropolitan hospitals ($n = 89$) found that over half the study sample did not know the signs of intoxication or side effects of common illicit drugs such as amphetamine, cocaine, ecstasy and heroin (Brotto 2005). Most study participants (85%) agreed that they needed education on how illicit drugs affected critically ill patients. Our study (Ford et al 2008, 2009) found workplace education to be

limited, with 34% reporting no education, a further 32% reporting less than five hours and only 22% reporting education in the preceding 12 months.

Nurses need education on the evidence for illicit drug treatments; they need to be able to clearly articulate the costs and benefits associated with various harm reduction and abstinence-based treatments. Recent calls have been made for undergraduate and postgraduate education supported by clinical placement in the field (Lovi and Barr 2009) and workplace education and support (Ford 2008, 2009). The findings of this study add weight to this call for education.

Strengths and limitations of the study

This study appears to be the first to evaluate nurses' views on harm reduction measures and other treatments for the problems associated with illicit drug use. The approach used allowed an analysis of the views of the total population of nurses in the ACT and a comparison between these nurses and the Australian population.

A limitation of a cross-sectional study is that it provides a snapshot of attitudes at a specific time, and this may rapidly cease to represent reality. The data for this study was collected in 2003, however, the issue under study, nurses' attitudes to illicit drugs management, is unlikely to undergo a rapid change given that community attitudes and values are very slow to change and particularly when nurses' pre-service and workplace illicit drugs education remains limited. The study has provided important insights into nurses' views and this knowledge can now be used to guide professional development.

A second limitation of a cross-sectional survey is that it may leave the study open to bias from an unrepresentative sample. In this case however, the study sample was found to be representative of the ACT nurse population and few differences were found between responders and non-responders (see Ford and Bammer 2009). It is not clear that these results can be extrapolated beyond the ACT, but there is no reason to expect differences in nurse characteristics in other states and territories in Australia: the nursing

workforce is homogenous in terms of most available demographic characteristics (female, middle class, mainly university educated), nursing education is based on national standards that aim to engender a common worldview, and nursing practice is governed by a national code of ethics.

CONCLUSION

Given their high exposure to patients who use illicit drugs, registered nurses are in an ideal position to offer appropriately targeted nursing interventions, drug treatment advice and referral to this marginalised patient group. A large majority of nurses in this study (approximately 80%) were mistakenly optimistic about abstinence-based measures. One harm reduction measure, the needle and syringe program was also well supported by nurses (76%), however, there was significantly lower support for the methadone maintenance program (66%), regulated injection rooms (58%) and prescribed heroin (52%). Nurses mirrored the Australian population's attitudes of high support for abstinence-based measures for the problems associated with illicit drug use. The study calls for pre-service and workplace education for nurses so that they can understand and articulate the evidence for harm reduction and abstinence-based treatments. The nursing workforce is large and has many and varied points of contact with this patient group, nurses are well-positioned to play a role in helping to reduce the harms associated with illicit drug use. An evidence base must inform nurses' professional practice with this patient group.

RECOMMENDATIONS

Targeted education on the scientific evidence of the efficacy and effectiveness of various illicit drug treatments is recommended.

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