Exploring the Complex Interplay Between the Use of Pharmaceutical Opioids and Pain Management Among People Who Inject Drugs Regularly in Australia

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Introduction

Since the heroin shortage the Illicit Drugs Reporting System (IDRS) has noted an increase in the use and injection of morphine and oxycodone. Over the same period the age of people who inject drugs (PWID) has also increased. The Australian Needle Syringe Program (NSP) survey[1] noted similar findings over the same period. We know from a number of Australian and international studies that PWID experience excess morbidity and mortality when compared to those in the general population[2-5] and that prescribers are often reluctant to prescribe opioid analgesics to people with a history of injecting drug use[6,7]. Currently there is no evidence in Australia on the prevalence of chronic pain among PWID and the use of pharmaceutical opioids (PO) for the legitimate therapeutic goals of pain management.

Aim

The aim of this poster is to examine pharmaceutical opioid use among a sample of PWID and to understand to what extent does this group experience pain.

Methodology

The IDRS is a national drug monitoring system that serves as a strategic warning system to identify emerging local and national trends. Face-to-face surveys with people who inject drugs regularly# are administered annually in every capital city across the country. To assess the severity of pain and the impact on pain on daily functions elements of the Brief Pain Inventory (BPI) were included in the 2011 IDRS survey. The BPI is a brief and widely validated tool for accessing pain in both clinical and research settings and uses a simple numeric scale with scales from 0-10. The preliminary screening question asks *'have you had pain other than everyday pain?'*—defining *everyday pain* as toothache, sprains, and minor headaches. In 2011 there was 868 participants in the IDRS.

References, footnotes & contact

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regular injection is defined as at least 6 occasions in the last 6 months

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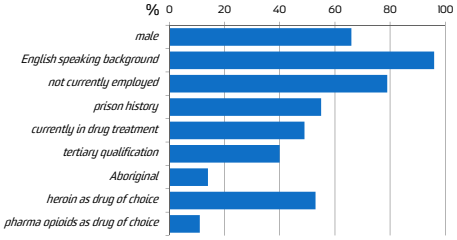
Results

Figure 1: Demographics (n=868)

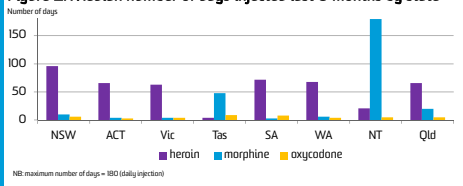


The mean age of participants in 2011 was 38 years old (range: 17-65), this continues to rise over time and follows similar trends noted in the Australian Needle and Syringe Program (NSP) Survey, suggesting an ageing population of PWID in Australia.

Heroin and pharma opioid use	n=868
% used heroin last 6 months	67%
Median number of days used heroin in last 6 months	72 (approx every 3 days)
% used any pharmaceutical opioids last 6 months	53%
% used any morphine last 6 months	43%
% used any oxycodone last 6 months	36%
Median number of days used any morphine last 6 months	20 days (approx weekly use)
Median number of days used any oxycodone last 6 months	5 days (approx monthly use)

The frequency of opioid injection varies across jurisdictions. For all states except Tasmania and the NT the frequency of morphine and oxycodone injection less than weekly.

Figure 2: Median number of days injected last 6 months by state



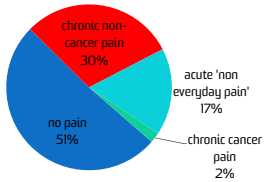
NB: maximum number of days = 180 (daily injection)

Pharma opioid injection	n=868
% injected morphine last 6 months	41%
% injected oxycodone last 6 months	31%
Median number of days injected morphine last 6 months	15 days (approx fortnightly)
Median number of days injected oxycodone last 6 months	5 days (approx monthly)

Pain

Half the sample (49%: figure 3) reported non everyday pain in the 6 months prior to interview. The most prevalent type of pain was chronicn non-cancer pain (30%) , followed by acute pain (17%) and only small numbers (2%) reported chronic cancer pain (figure 3). One-third (33%) of the sample reported 'non-everyday pain' in the past 4 weeks.

Figure 3: Self-reported pain last 6 months (n=868)



The BPI interference score (figure 4) provides measure of pain interference on daily life by using a numerical scale from 0-10. Among the sample pain was seen to interfered with mood, general activity, sleep and enjoyment of life the most. While walking ability and relations with other people were seen to have the least pain-related inference. A score of ≥5 across any of the 7 domains has been characterised as severe pain interference and is seen as clinically significant.

Figure 4: Impact of pain on daily functions (BPI interference score)

We noted a significant difference between the those reporting any form of *'non everyday pain'* and those reporting *no pain* over the last 6 months. There was significant differences in regard to their drug of choice being pharma opioids, their recent use of illicit pharma opioids and their recent use of over the counter (OTC) codeine.

	n=415 *Non everyday* pain	n=436 No pain
Mean age	40 years	40 years
Gender (male)	66%	67%
% Aboriginal &/or Torres Strait Islander	15%	13%
% not current employed	80%	79%
% prison history	56%	53%
% currently in drug treatment*	46%	49%
% heroin as drug of choice	52%	53%
% pharma opioids as drug of choice**	**14%**	**8%**
% used illicit pharma opioids last 6 mths**	**54%**	**44%**
% used OTC codeine last 6 mths***	**49%**	**37%**

* p<0.05, ** p<0.01, *** p<0.001

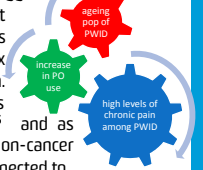
Those reporting a BPI pain interference score of ≥5 were more significantly likely to have a prison history, report pharmaceutical opioids as their drug of choice, recently used illicit pharmaceutical opioids and recently used over the counter codeine.

	BPI ≥5 n=275	no pain n=415
Mean age	40 years	40 years
Gender (male)	67%	67%
% Aboriginal &/or Torres Strait Islander	17%	13%
% not current employed	80%	79%
% prison history**	**57%**	**53%**
% currently in drug treatment	46%	49%
% heroin as drug of choice*	**52%**	**53%**
% pharma opioids as drug of choice**	**16%**	**8%**
% used illicit pharma opioids last 6 mths***	**58%**	**44%**
% used OTC codeine last 6 mths***	**51%**	**37%**

* p<0.05, ** p<0.01, *** p<0.001

Discussion

Preliminary findings have found significantly higher recent use of non-prescribed (illicit) pharmaceutical opioids & OTC codeine among those reporting 'non-everyday pain' and those scoring ≥5 on the BPI. This suggests that the motivations for use of illicit pharmaceutical opioids among this population may be more complex than a mere substitute for heroin. This population already experiences excess morbidity and mortality[2-5] and as they continue to age both chronic non-cancer pain and chronic cancer pain are expected to increase. The challenge ahead is considering the harm caused by not providing pharmaceutical opioids when restricting access to reduce the harm of non-prescribed use.



Limitations & acknowledgements

These are only preliminary results and further investigation and analysis are required. Participants (n=868) were recruited via NSPs during business hours. This sample is not representative of all people who inject drugs regularly.

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