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Steroid users and the unique challenge they pose to needle and syringe program (NSP) workers

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Abstract

Introduction and aims: Needle and syringe programs (NSPs), which provide sterile injecting equipment, are a cornerstone of Australia’s drug harm reduction strategy and assist in reducing the spread of blood-borne virus (BBV) infections such as HIV and HCV among people who inject drugs. Some reports suggest that steroid users are an increasing proportion of clientele at NSPs. In this research, we investigate the experience of NSP workers who come into contact with people who use steroid and other performance- and image-enhancing drugs (PIEDs).

Design and method: Thirteen NSP workers were recruited using purposive sampling strategies. Participants were interviewed using a semi-structured interview guide. Interviews were recorded, transcribed, and coded for themes.

Results: There are three key findings of this study. Firstly, NSP workers do not feel well informed about the substances that PIED users are injecting and, secondly, were unsure what equipment PIED users required. Thirdly, PIED users were perceived to differ from other client groups, and these differences impacted upon the level of rapport staff could build with this group.

Discussion and conclusion: PIED users pose unique challenges for NSP workers compared to other NSP client groups. The substances used and the way in which they are used is substantially different from that of other NSP clients, and there appears to be a lack of knowledge within the workforce about these substances. This study highlights the need to engage in workforce training, but also to more effectively engage with PIED users in relation to effective harm reduction strategies.

Key words: Steroids, needle and syringe program, injecting, performance and image enhancing drugs, policy
1.0 Introduction

As a number of population studies have shown, the use of anabolic-androgenic steroids (AAS; ‘steroids’) in Australia is low. Data from the 2007 and 2010 National Drug Strategy Household Surveys found that between 0.3 and 0.4% of the population reported any lifetime use of AAS for non-medical purposes, and 0.1% of the population reported use of AAS in the past year [1, 2]. While these figures are similar for substances including heroin, GHB and ketamine [2, 3], recent data from the Australian Crime Commission indicate that the number of performance- and image-enhancing drugs (PIEDs) detected at the Australian border increased by 106% between 2009/10 and 2010/11 [4], with a further 57% increase between 2010/11 and 2011/12. PIEDs detected at Australian borders are currently higher than ever previously detected [4]. This is not an isolated trend; data from New Zealand has shown an increase in steroid seizures from 79 in 2008 to 122 in 2012 [5].

The increased border detections of PIEDs may be one indication of an increase in the use of these substances in Australia. A further indication is the increase in the number of people attending needle and syringe programs (NSPs) for injecting equipment related to steroids and PIEDs. Prevalence of PIEDs as the last drug injected among Australian NSP attendees was stable at 1-2% in all years 1995 to 2010 [6, 7] but increased to 5% in 2011 and further increased to 7% in 2012. Compared with those who inject other drugs, those who inject steroids have been found to be younger, new initiates to injecting, less likely to report HCV/HIV screening, less likely to screen HCV antibody positive, and less likely to report the use of another person’s needle or syringe in the preceding month [6, 8].

This group also report low levels of engagement in injecting practices which are known to be associated with an increased risk of blood-borne virus transmission. Relatively small numbers of Australian PIED users self-report themselves as being positive for hepatitis C (HCV), hepatitis B (HBV) or HIV [9, 10], with exposure to HCV or HIV linked less to PIED use and more to other factors such as injection of other illicit drugs, sharing needles to inject drugs other than PIEDs, and a history of imprisonment [9, 10]. Despite injecting being the main route of PIED administration, little to no rates of needle sharing have been reported in both Australian and international literature [10-13]. However, anecdotal evidence suggests that PIED users are less engaged with research and stigma attached with attending NSPs to obtain
sterile equipment by this group has been reported [11]. As such, research with this group may under-represent engagement in risk behaviours.

Given the suggestion that the use of PIEDs is increasing in Australia, and that anecdotally, people who inject PIEDs are accessing NSPs for injecting equipment, this study aimed to understand the experiences of NSP staff in dealing with this group. Specifically, this study sought to investigate whether the users of PIEDs pose any unique challenges to NSP workers.
2.0 Methods

Approach
This study used qualitative methods to explore the challenges faced by NSP workers by people who inject PIEDs. In this study, we investigated the individual opinions of NSP workers toward PIED users and some of the drivers behind these opinions. Ethical approval was granted from the Deakin University Human Research Ethics Committee.

Sampling and Recruitment
A purposive sample of participants was recruited via industry online fora and an industry email list; participants were also recruited through snowball sampling. Interested participants were asked to contact the lead researcher for inclusion in the study. This sampling method ensured that individuals who were currently working in NSP were included, and allowed for the self-selection of those individuals who had experience with steroid users.

Data Collection
Telephone interviews were conducted between January 2013 and April 2013 and were between 20 and 60 minutes in duration. Interviews were digitally recorded and transcribed by a member of the research team (either MD or FHM). A semi-structured interview schedule was designed. The questions relating to this paper included a uniform set of ‘prompt’ questions, namely: the working background of the participant; information regarding the characteristics of the NSP (geographical location, the approximate number of clients each day, the general characteristics of the clients, the average age, gender breakdown, main drug of choice of clients, number of needles and syringes given out); any reflections on drug use trends; information regarding NSP services; and interventions offered or referral pathways. The main component of the interviews was an investigation of the experience of the NSP workers with steroid users or other PIED users. This section of the interview included a discussion of the PIED client population at the NSP, the frequency of their visits, the general characteristics of this group, their needs, the engagement of the workers with this group, and a discussion of the substances this group use. Within these questions we also investigated any challenges experienced in working with this group and if there was any ways that NSPs could work more effectively with this group.

Data Analysis
Data analysis was informed by Grounded Theory techniques [14]. The data were analysed continuously throughout the study. The transcripts were read and reread to identify codes, categories and themes. The data was sorted to identify any concepts or theories recognised were appropriate, and to highlight any differences. Regular meetings of the researchers were held to interpret and discuss findings. NVivo Version 10 was used to assist with content and thematic analysis of the transcripts [15].
3.0 Results

Throughout this paper we use quotes to illustrate the research findings. To maintain anonymity of the participants, all participants’ quotes are identified with a number.

General characteristics

In total 13 NSP workers consented to be interviewed for this study. Of these, eight were from New South Wales, three from Victoria and two from Queensland. The majority of the participants were experienced NSP workers; only two had fewer than 12 months experience, while seven participants had worked in an NSP for over 10 years.

Three key themes emerge from the analysis.

Theme 1: Knowledge

Participants highlighted their limited knowledge, or gaps in their knowledge, around steroid and other PIED use. For many participants, this related to a lack of basic understanding of what the drugs were, or how they were injected, while for others this limited knowledge was around the purpose of the drug. When exploring this further, participants suggested that the newness of these drugs combined with the increase in the number of NSP presentations by people who inject steroids was the main reason that they felt under informed.

There was a big learning curve, because all of a sudden we were faced with this new sort of drug use, you know what I mean? We had never expected to see it, and, you know there was some mad internet research happening, you know, trying to download information. (P4)

For many participants, the only way to increase their knowledge was through discussion with the steroid clients themselves.

They’re good people to talk to… [some] know their stuff, and are quite happy to sit with me and have a chat with me and quite, happy to sit down and explain it all to you and how it works. (P1)

However, many of the participants were concerned with the accuracy of the information that the steroid clients had. When we explored these opinions further, the NSP workers were
concerned by the source of the information; many of the steroid clients were getting their information from the internet or from local gyms.

Most of these guys get their information from either gym buddies or online through forums. (P9)

Other participants were more positive about the connection of the steroid clients with the local gyms, particularly the peer based information sharing, or peer distribution that the connection fosters.

There are kind of peer leaders in a way in these groups, people that know, ‘oh he’s the guy that gets the needles, he knows how to inject’… We have people come in they say ‘oh, our friend from the gym sent us in here’. (P5)

While participants described some clients as having good knowledge and having good links with gyms, their local GP, or other sources of information, others were concerned about the limited knowledge of the clients, particularly the younger clients.

A lot of the steroid users are around 20-21 around that age group and very unsure and naive when they come in, they don’t really know what they are doing. (P10)

This concern was highlighted by many of the participants who stated that they felt constrained as they didn’t have any information to give the clients so that they could engage in safer practices.

We don’t have education. We’ve only recently got a steroid book that basically talks about everything. And even those are really expensive and we have had to photo copy parts of it to give to the clients, and so there is a real lack of education. I mean there isn’t a lot of education on it yet anyway. (P10)

Theme 2: Needs

As a way to begin the discussion about resourcing and resource demands, all participants were asked about the number of steroid clients they see. Most participants said that about 10% of the clients they see were steroid clients, with some variation for season. For most participants, this number of steroid clients did not put a strain on the budget or resources of the NSP.
All of the injecting equipment is paid for by the Department, so it’s not a budgetary issue for us. And if that’s the amount of equipment that people need, then they should be able to access it. (P11)

While participants did not identify major resourcing issues, they did make clear that they were initially unsure of the equipment that the steroid clients needed. This uncertainty made them rely more on the clients themselves to provide feedback on their needs.

The first couple of fellas that came in, they knew they needed some stuff but they weren’t sure what it was, so they said it’s a bit thicker so what do I need… I got some different gauges, I just give them a few choices of stuff. They took it away, came back a second time, and then they knew what they needed. (P1)

In the discussions about assisting the steroid clients with getting the right equipment, many of the participants brought up an individual steroid worker. This worker is located on one state and limits their work to that state. For the participants located in the same state as the steroid worker, they all said that they use the knowledge and expertise of this person when dealing with steroid clients.

We have a worker called X who works all over [location] and advises. We give them [the steroid clients] her card and tell them to call X with any questions or any information that you need because she’s really friendly and they take the card happily. (P6)

Many of the participants in other states stated that when they are really unsure, or when they face a particular issue, they also call X, while others had arranged to have X give presentations in their state to up skill the NSP workers.

We organised a seminar last year at the hospital, we had X come down from [location] and do a talk on steroids. We did identify that as a gap in our knowledge. (P13)

One common point of discussion was the volume of equipment taken by the steroid clients. Many NSP workers commented on the higher volume of equipment taken by steroid clients (when compared with other clients), however, there was a general agreement that this was a positive response. Most NSP workers highlighted that the high volume of equipment taken
was usually related to either peer-distribution (i.e. obtaining large amounts of equipment for others) or because, due to the nature of steroids (which are taken in periods called ‘cycles’), they took a large volume of equipment to last for up to a few months and then take no equipment for another few months.

Many of the NSP workers described their inexperience with steroid clients and in some cases the difficulties when working with this group. However, in the end, many stated that steroid clients should just be treated like all other clients of the NSP.

The point of view, you know, that we hold, or I hold here, is quite firmly is that you know they’re injecting drugs, whether it’s intravenous or intramuscular, they’re injecting drugs and the behaviour is no different to someone who is injecting heroin or cocaine or steroids or whatever, you know what I mean, so I think they should be treated as a client of the service. (P4)

Theme 3: Perceptions

During the interviews, participants often compared the steroid clients with the other clients that they see at the NSP. For most of the NSPs, the most commonly seen client were those who use heroin or methamphetamine. Participants mentioned that as soon as a steroid client walked in, it was clear why there were there, but also, they were more likely identify themselves as ‘healthy’.

They feel that because they’re always at the gym and they’re always working out, that this is just a helper, and they are only doing it for a short term period. They actually do feel that they are healthy and that what they are doing isn’t really, doesn’t have health consequences. (P10)

When describing individual steroid clients who visit the NSP for injecting equipment, most participants highlighted similar characteristics: almost all participants described the steroid clients as looking ‘different’ to their regular cliental.

The difference between these guys is that they think that they’re healthy; they think it’s healthy… You know they go, “we aren’t junkies, we’re not into that stuff”. (P10)

Many participants said that steroid clients were easily identifiable because of their size, or because they looked like ‘body builders’.
Some of these dudes are big. You know, they turn sideways to get through the door. (P2)

Also identified were the differences between the lifestyles of the steroid clients and the other clientele of the NSP.

They’re normally employed, just like me I suppose, you know what I mean, they’ve all got jobs. One of these guys is a teacher, for instance. (P1)

In other NSPs, the steroid clients were others differentiated based on the services that they didn’t use:

Where I work there is a drop in centre, you know where people can make coffee and tea and hang around and have showers. They don’t have the need that the other groups have, like homelessness who have a shower, wash their clothes, use the computer. They already have access to those sorts of things and I don’t think they want to mix in with what they consider ‘drug users’. (P6)
4.0 Discussion

Multiple indicators suggest that the use of AAS and other PIEDs is increasing in Australia; evidence also suggests that more of this group are attending NSPs [8]. The aim of this study was to investigate the experience of NSP workers who come into contact with steroids and other PIED users. Interviewing those who come into contact with a particular client group has limitations. For instance, views may be biased by stand-out adverse effects which, although infrequent in nature, may have greater salience in the workers’ minds. On the other hand, workers can build rapport with their clientele and may be able to report on and elaborate on special circumstances not captured through research with the target group under investigation. The current study, in support of similar studies [16], shows that NSP staff can have a detailed understanding of their clientele and have a unique perspective that may inform responses to emerging issues.

PIEDs can encompass a range of substances [17, 18]. The most predominant and most researched is AAS, both human and veterinarian. Other PIEDs include human growth hormones, insulin, insulin-like growth factors and beta-agonists. The type of PIED used can be influenced by the desired effect of the users. AAS are used to increase muscle mass and strength, while diuretics are used to reduce body weight and to increase muscle definition [18]. Some, such as ephedrine, may be used as a weight loss agent [18], while PIEDs such as anti-oestrogenic agents are used to counter-act the undesirable side effects of AAS use [17]. Concomitant substance use appears to be the norm; the term ‘stacking’ is used to refer to the use of drugs in a variety of combinations [18]. A major theme that emerged from this study was the limited knowledge that participants had regarding PIEDs. While the majority of participants had extensive experience working in NSPs, their ‘typical’ clients used substances such as amphetamines and opioids, and staff had very limited knowledge of PIEDs.

Furthermore, many PIEDs such as AAS are injected intramuscularly, not intravenously [17, 18]; as such, many of the staff was unaware of the different equipment that may be needed for the different substances. Some NSP workers are ill-equipped to deal with the relatively sudden emergence of a larger group of PIED users and this demonstrates a gap in the knowledge base in this workforce. Over time, changes in the drug market have created difficulties for the alcohol and other drug (AOD) workforce [19, 20], such as the shift from amphetamine to methamphetamine [21] and the practice of injecting pharmaceutical opioids
In some NSPs, PIED users are now a mainstream part of the client base, and as such, training and education that is informed by best practice should be made available to NSP workers to ensure workers can meet the education needs of this group [20]. Increased education and training for the workforce may serve a dual purpose. A sample of injecting drug users in a study by Neale, Sheard & Tompkins suggested that improvements in staff-related aspects of service provision, including better trained staff, could increase service and treatment uptake [23]. As such, increased workforce development around PIEDs may increase staff engagement with this group, which in turn may increase this group’s engagement with NSPs and their services.

Participants showed concern for the level of knowledge that PIEDs users themselves had regarding these substances and the unique injecting practices, in particular among younger PIED users. Few studies have investigated knowledge of PIEDs among those who use them. Richards, Copeland & Dillon [24] found that 68% of their sample of PIED users self-rated their knowledge of PIEDs as good or very good. When asked where they obtained their information about PIEDs, friends, ‘steroid handbooks’, and fitness magazines rated higher than a doctor or medical literature, and only 11% indicated they obtained information from an NSP. Staff in the current study indicated that they engaged with PIED users, although this generally occurs in order for staff to learn more about the substances being used. This is important, as previous research has found that PIED users do access NSPs to obtain their injecting equipment [11]. PIED users have been identified as a particularly difficult group to engage [25]; empowering staff to engage with this group may be beneficial not only to the staff themselves but also to the user group.

The issue of whether PIED users should be NSP clients was a point of discussion in all interviews. The view held by some interviewees was that PIED users were not a traditional client base for NSPs, and that by resourcing this group funds were being diverted from other projects within NSPs. NSPs are one of nine interventions endorsed by the World Health Organisation, United Nations Office of Drug Control and the Joint UN Programme on HIV/AIDS for the prevention, treatment, and care of HIV/AIDS among people who inject drugs (PWID) [26]. Of the many potential interventions offered to avert injecting-related blood borne virus, such as HIV, NSPs represent one approach with great potential, alongside opioid substitution treatment (OST) and anti-retroviral therapy (ART) [27]. NSPs have been operating in Australia since 1986 and, have been credited as having a major role in the low
prevalence of HIV among Australian PWID [27, 28]; reports from Australian studies have shown a HIV prevalence of 1.1% among this group [29].

Previous Australian studies have identified PIED users as a group with a low prevalence of hepatitis C and HIV [6, 9, 25]; despite this, limiting or discouraging access to injecting equipment by this group is likely to have negative consequences, such as injecting-related injuries. The National Needle and Syringe Program National Strategic Framework 2010-2014 identifies ‘people who inject steroids’ as a group who may be targeted by outreach campaigns [30], a view endorsed by some of the staff in the current study. Staff in the current study also indicated that some PIED users preferred not to attend NSPs as they did not identify as ‘drug users’. Given these findings, other models of outreach may be considered for this client group.

4.1 Limitations

There are a number of limitations to this study. Firstly, only 13 participants were recruited, and the views and opinions presented here may not reflect those of the broader NSP workforce, in particular those NSPs with low levels of engagement with PIED users. The number of participants reflects the limits placed on the research team by ethical constraints; for instance, the research team were unable to contact participants directly and were reliant on participants making contact with the researchers. The use of online recruitment methods (e.g. posts on email distribution lists) may have meant that those not using these technologies were unaware of the study. While the number of participants is not large, the purpose of this research, as in much qualitative research, was to collect detailed information on the phenomena under question, rather than generalizable data [31]. This was reflected in the current study, where data saturation on the major themes occurred quite quickly.

The second limitation of this study is that the majority of participants came from NSW. Different NSP policies and practices across Australian jurisdictions may mean that the findings of this research are more applicable to one state over another. Despite these limitations, there was consistency across major themes regardless of where participants were from, with differences noted in relation to local issues (e.g. being in a regional or rural area) rather than state-based. Finally, the nature of qualitative study is that the analysis is reflective of the author’s interpretation of the data. While the analysis was completed within the research team, it may be that others could interpret the data in different ways, and therefore
draw differing conclusions. Despite these limitations, the strengths of this research lie in the novel approach to recruitment, and the importance of investigating whether the users of PIEDs pose any unique challenges to NSP workers.

4.2 Conclusion

The aim of this study was to investigate the experience of NSP workers who come into contact with steroids and other PIED users. In general, PIED users pose some challenges for the NSP workforce. In particular, the substances used and the way in which they are used is substantially different from that of other NSP clients, and there appears to be a lack of knowledge within the workforce about these substances. This study highlights the need to engage in workforce training, but also to more effectively engage with PIED users in relation to effective harm reduction strategies.
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