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Barriers to practicing risk reduction strategies among people who inject drugs

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Abstract

Introduction and Aims—People who inject drugs (PWID) engage in practices that put them at risk for various infections and overdose. The primary aim of this study was to examine common barriers to engaging in two risk reduction practices – cleaning one’s skin at the injection site and always using new needles to inject – among heroin injectors in Denver, CO.

Method—In 2010, 48 PWIDs were recruited through street outreach and completed a structured interview that included questions on the frequency of specific risk reduction practices (skin cleaning and using new needles) and barriers associated with these practices.

Results—Though many of the reported barriers were similar across the two practices, the most common barriers associated with skin cleaning included being in withdrawal and not being prepared with materials prior to injection. Fear of being arrested and being in withdrawal were most frequently reported for using new needles. Multivariate and t-test analyses demonstrated that individuals who skin cleaned and used new needles more frequently reported less barriers to these practices.

Conclusions—Participants reported a number of barriers to risk reduction, including those that are within the personal control of the injector, barriers that are consequences of addiction or psychological problems, and those that are structural or a function of the risk environment. Statistical analysis found that PWIDs who were more likely to skin clean and use new needles reported less barriers. Addressing barriers when intervening with PWID appears important to increase the success of risk reduction interventions.

Keywords

risk reduction; harm reduction; injection drug use; heroin; barriers

Introduction

People who inject drugs (PWID) engage in a number of substance use practices that put them at risk for serious health conditions (e.g., HIV, Hepatitis C, bacterial infections) and death (e.g., overdose). Specific practices, such as sharing needles and other injection equipment, frequent injection, reusing needles repeatedly, subcutaneous and intramuscular

injection, and not cleaning one's skin before injecting, all pose risk for infections (Binswanger et al., 2000; Chitwood et al., 1995; Gordon & Lowy, 2005; Hagan et al., 2001; Hagan et al., 2010; Patrick et al., 1997; Phillips & Stein, 2010; Strathdee et al., 2001; Vlahov et al., 1992).

Various risk or harm reduction strategies and interventions have been proposed and/or tested to reduce high-risk practices for PWID who are not yet ready to stop injecting, including needle exchange, always using new needles to inject, bleach cleaning used needles, cleaning one's skin with alcohol prior to injecting, rotating one's injection site, and smoking/snorting rather than injecting, among others (Colon et al., 2009; Copenhaver et al., 2006; Des Jarlais et al., 2011; Hagan et al., 2000; Huo & Ouellet, 2007; Newmeyer, 1988; Phillips, Stein, Anderson, & Corsi, 2012). Risk reduction interventions range from self-initiated strategies to reduce individual harm to social/behavioral and community-level/public health interventions that target greater numbers. Though some risk reduction behaviors are under the more direct control of the injector him or herself, factors within the risk environment – meaning the physical surroundings and social environment of the user – interact to increase risk of harm (Rhodes, 2002; Rhodes, 2009). Aspects of the user's environment (e.g., homelessness, living in a particular neighborhood, laws and policies dictating the availability of harm reduction interventions) are likely influencing the use of various risk reduction interventions. Because it is difficult to fully understand an individual's day-to-day environment, this likely complicates our understanding of perceived barriers.

Utilizing risk reduction becomes a significant challenge when injectors see various obstacles to practicing safer behaviors. Past research has examined barriers to reducing injection-related risk practices, though often focusing on "harm reduction" broadly or one specific risk reduction strategy. Qualitative interviews with PWID have found a range of reported barriers to safer drug use or risk reduction, including withdrawal, craving, limited access to sterile injection equipment, cost associated with injection equipment, time pressures, not being organized in advance, legal reasons, and fear of rejection from fellow injectors if sharing (Phillips, Altman, Corsi, & Stein, 2012; Williams, 1991).

Several studies have found that PWID are more likely to engage in high-risk injection practices when experiencing withdrawal (Mateu-Gelabert, Sandoval, Meylaks, Wendel, & Friedman, 2010; Rhodes & Treloar, 2008; Ross, Wodak, Stowe, & Gold, 1994). Past findings suggest that experiencing withdrawal increases preoccupation with drug use and lowers consideration of possible disease risk (Hughes, 2004). In looking at reasons for sharing used injection equipment, Ross et al. (1994) found that PWID feel an urgency to inject when in withdrawal. Similarly, Mateu-Gelabert and colleagues (2010) found that being in withdrawal increased risk as a function of injecting in more risky environments, being more willing to share drugs and syringes, increasing the number of people one injects with, feeling desperate, and challenging one's motivation or capacity to be safe. Sharing equipment as a way to alleviate withdrawal is also influenced by social norms and practices, such as pooling money to buy drugs and the expectation of reciprocal drug sharing within one's social network (Grund et al., 1996; Hahn et al., 2002).

An extensive literature shows that while many PWID re-use syringes, needle exchange programs can effectively reduce the number of injections per syringe (e.g., Bluthenthal et al., 2004; Heimer, Khoshnood, Bigg, Guydish, & Junge, 1998), with more liberal dispensing policies having greater impact on rates of re-use (Kral et al., 2004). Legal obstacles often dictate whether PWID have access to needle exchange or pharmacy syringe purchase (Beletsky, Grau, White, Bowman, & Heimer, 2011; Hammett et al., 2014). Select studies that have examined reasons for re-using syringes or perceived barriers to not using a clean syringe for every injection have shown that lack of access to needles and supplies, injecting in an unclean environment, social influences, time pressures, impatience/urgency to inject, hassle, being high, and being in withdrawal prohibit use of new syringes (Gleghorn & Corby, 1996; Latkin et al., 1995; Nyamathi et al., 1995). Other aspects of the drug experience, such as being on a drug binge, and not wanting to carry syringes due to fears of the police, may influence PWID' intent to use a new syringe (Gagnon & Godin, 2009). Barriers to using needle exchange among infrequent exchangers and non-exchangers has shown that infrequent exchangers report convenience and operational barriers, while non-exchangers describe low need and lack of information about the program (Treloar & Cao, 2005). Both groups described issues of anonymity and possible stigma as further impediments to exchanging syringes.

Bonar and Rosenberg (2014) examined obstacles of two specific risk reduction practices – skin cleaning before injecting and using a test shot – and found that rushing to inject was the most commonly reported barrier for both risk reduction practices, while already purchasing drugs from a known dealer and lack of access to cleaning supplies were commonly reported barriers to doing a test shot and cleaning one's skin (respectively). Additional barriers – including wanting to get high, being in withdrawal, and time pressures – were consistent with barriers reported in other studies.

To increase the likelihood that PWID will practice various risk reduction strategies, it is necessary to learn more about barriers that may prevent PWID from utilizing risk reduction. The primary goal of this study was to examine the most frequent barriers to skin cleaning at the injection site and using new needles for each injection in order to inform a risk reduction intervention with PWID. It was hypothesized that withdrawal would be the most common barrier reported for both of these risk reduction strategies and that participants who reported more frequent use of each strategy would view less barriers to risk reduction compared to those who used each strategy less frequently.

Methods

Participants and Procedure

Outreach workers recruited heroin injectors in Denver, CO between Feb. 2010 and Sept. 2010 as part of a risk reduction intervention trial. For the current study, baseline data for both control and intervention participants (n = 48) was examined. Eligible PWID were adults over age 18 who: reported injection of heroin on at least three different days in the last week, had visible track marks from injecting, tested positive on a urine screen for heroin, and had been using heroin for at least three months. Participants were compensated \$30 for completing the baseline assessment.

Upon presentation to their appointment at the study site, participants reviewed informed consent procedures with a trained research interviewer and completed a structured interview lasting approximately 60–90 minutes in a private room, which included portions administered through an Audio Computer Assisted Self-Interview (ACASI; QDS Nova Software). The University of Colorado Multiple Institutional Review Board (COMIRB) and University of Northern Colorado IRB approved the study and all procedures.

Measures

Participant demographics (e.g., age, race/ethnicity, living situation, and years of education) were assessed at baseline and detailed drug use was measured through Timeline Followback (TLFB; Sobell & Sobell, 1996) for the last 30 days. For the current study, two specific risk reduction strategies were assessed: cleaning one's skin at the injection site and using new needles for each injection. Participants were asked how frequently they engaged in each practice over the last month using a five-point scale from "always" to "never/rarely."

Two questionnaires were developed to assess barriers to skin cleaning (Barriers to Practicing Skin Cleaning Questionnaire, 14 items) and barriers to using sterile/new needles (Barriers to Using New Needles, 20 items). Items were developed based on clinical work with clients as well as reasons provided from two qualitative studies that examined barriers to using needle exchange (Treloar & Cao, 2005) and barriers to bleach cleaning needles (Gleghorn & Corby, 1996). Participants were asked to indicate whether various possible reasons would present a barrier to either cleaning their skin before injecting or using a new, sterile needle for each injection (all items found in Tables 1 and 2). Responses were in the form of a 5-point likert scale, from Strongly Disagree to Strongly Agree. Cronbach alphas for each scale indicated that the measures were internally consistent (Barriers to Practicing Skin Cleaning Questionnaire, $\alpha = .81$; Barriers to Using New Needles, $\alpha = .84$).

Data Analysis

Descriptive statistics (means, standard deviations, percentages) were used to summarize sample demographics, drug use, and barriers to practicing each of the risk reduction strategies. Frequency of practicing skin cleaning and using a new needle was coded into two categories: always/most of the time and less than half the time. To calculate a total barriers score for each barrier measure, the likert responses were dichotomized into yes/no categories ("yes" = agreed/strongly agreed; "no" = neither agreed or disagreed/disagreed/strongly disagreed). The "yes" responses were summed to indicate a total score of the number of barriers endorsed. A 2×2 Multivariate Analysis of Variance (MANOVA) and two follow-up t-tests were conducted to examine differences in the number of barriers endorsed between those who engaged in each risk reduction skill (skin cleaning and using a new needle) frequently or infrequently.

Results

Demographics and Drug Use

Most participants were male (75%) and reported predominantly Caucasian (54%), Latino (27%), or African American (4%) racial/ethnic background. Participants averaged 11.65

years ($SD = 2.08$) of education. Over one-third (38%) considered themselves homeless and almost 80% were unemployed or on disability. Per eligibility criteria, all participants tested positive for heroin. Participants reported injecting heroin on 23 out of the last 30 days, with over two-thirds reporting injection of black tar heroin. Participants reported frequent use of other substances. Specifically, 38% self-reported use of cocaine or speedballs and 20% used methamphetamine in the last month.

Barriers to Risk Reduction and Associations with Risk Reduction Practice

The frequency of reported barriers is reported in Tables 1 and 2 using the original likert scale responses (strongly disagree to strongly agree; items presented in the order asked during the interview). Bolded items in each table include responses that were endorsed by 50% or more of participants (i.e., 50% of those who either agreed or strongly agreed with each statement).

Being in withdrawal was perceived as the most significant obstacle to skin cleaning and was endorsed by 38 (79%) participants. Other barriers to skin cleaning reported by over half of participants included not preparing in advance of injecting by having alcohol or alcohol wipes ready, not carrying alcohol or alcohol wipes when planning to inject, and experiencing strong cravings. As a whole, participants endorsed a mean of 4.90 ($SD = 2.72$) out of 14 barriers to skin cleaning.

Perceptions of barriers to using a new needle for every injection revealed some similar responses. The most highly endorsed barrier was concern about being arrested by law enforcement for syringe possession (reported by over 90% of participants). Other highly endorsed barriers included being in withdrawal, not having access to a needle exchange program nearby, not preparing in advance of injecting by having new needles, and not carrying new needles when out. Overall, participants endorsed a mean of 7.19 ($SD = 3.62$) out of 20 barriers to using new needles.

Statistical analyses focused on: 1) whether those who skin cleaned more frequently would report fewer skin cleaning barriers and 2) whether those who used new needles more frequently would report fewer new needle use barriers. A 2×2 MANOVA was first conducted with the two independent variables (IVs; frequency of skin cleaning and frequency of new needle use) and two dependent variables (DVs; number of skin cleaning barriers and number of new needle barriers). No interaction effect was found for the overall model [Wilk's $\lambda = .92$; $F(2, 43) = 1.80$, $p = .18$], but the model did yield significant results for the main effects for frequency of skin cleaning (Wilk's $\lambda = .79$; $F(2, 43) = 5.90$, $p = .005$) and frequency of using a new needle (Wilk's $\lambda = .84$; $F(2, 43) = 4.11$, $p = .02$).

To follow-up on the main effects, two t-tests were conducted for each DV due to low power and high correlation between the two DVs in the MANOVA model. Those who skin cleaned more frequently reported less barriers ($M = 3.06$, $SD = 2.48$) than those who skin cleaned only half the time or less ($M = 6.00$, $SD = 2.24$), $t = 4.23$, $p = .000$, $d = 1.24$. Similarly, t-test results demonstrated significant differences in the number of barriers endorsed between participants who used new needles most of the time ($M = 5.19$, $SD = 3.29$) and those who used new needles half the time or less ($M = 8.19$, $SD = 3.39$), $t = 2.92$, $p = .005$, $d = .90$.

Discussion

Few studies have addressed multiple barriers to practicing risk reduction among PWID. Participants in this study endorsed a variety of barriers, although some barriers were reported by a larger percentage of participants. The most common barriers to skin cleaning included withdrawal, not preparing in advance of injecting, not carrying alcohol or alcohol wipes, and experiencing strong cravings. Over one-third of participants also described not wanting to take the time to skin clean due to concerns about arrest and not skin cleaning if already high or drunk. Barriers to needle cleaning that were highly endorsed included concern about being arrested by law enforcement for syringe possession, being in withdrawal, not having close access to a needle exchange program, not preparing in advance of injecting by having new needles, and not carrying new needles when out. A large proportion of participants also reported craving, time constraints, inconvenience, lack of access to needles in places where one injects, and hassles from pharmacy staff when trying to purchase needles. Barriers in this study are similar to those found in other risk reduction barrier studies with PWID (e.g., Bonar & Rosenberg, 2014). As hypothesized, the data suggests that PWID who perceive greater barriers to both skin and needle cleaning actually engage in the behaviors less than those who report fewer barriers.

Discussion of barriers to harm reduction has been ongoing for over 30 years, with early dialogue (e.g., Des Jarlais, Friedman, & Hopkins, 1985; Stryker, Coates, DeCarlo, Haynes-Sanstad, Shriver, & Makadon, 1995) emphasizing problems related to funding, cultural/societal resistance, and skepticism about research. Aspects of drug use culture and society that interfere with risk reduction have been discussed, such as social networks that reinforce sharing as a form of bonding and economics, stigma, limited access to injection equipment, and withdrawal, among others, (e.g., Friedman, Des Jarlais, & Sotheran, 1986). As shown in the current study, PWID continue to experience similar barriers today. Early recommendations for reducing the salience of barriers focused not only on increasing access to risk reduction supplies (e.g., needle exchange) and drug treatment, but also working to change the subculture and social circumstances of the individual user, often through organizations that are knowledgeable about the population and in face-to-face interactions with PWID (Friedman et al., 1986). Though there has been significant progress towards these goals, far more needs to be accomplished.

One way to categorize barriers to risk reduction includes impediments that are within the personal control of the injector (individual level), barriers that are consequences of addiction or other psychological problems, and those that are structural or a function of the risk environment. At the individual level, PWID could plan to have materials (e.g., needles, alcohol pads) prepared in advance of injecting so that risk reduction isn't inconvenient. Factors that are a consequence of one's addiction, such as withdrawal and craving, appear quite salient to many PWID, especially heroin injectors. Withdrawal has been shown to contribute to more risky injection practices due to PWID placing themselves in certain settings where they may be sharing syringes with a number of other injectors due to the need to use quickly (Mateu-Gelabert et al., 2010). Knowing that most heroin injectors will eventually experience withdrawal suggests that interventionists need to help PWID develop strategies to engage in risk reduction despite such factors. For example, PWID may feel

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rushed to inject due to feeling sick, thus prohibiting them from taking the time to get new needles. It should be recommended that PWID obtain needles and other supplies at times when they are not in withdrawal. Although they cannot always predict specific symptoms, most experienced heroin injectors have a sense of the timeframe in which they will begin having symptoms if they don't use. Other researchers have described strategies proposed by PWID who practice risk reduction regularly. For example, some PWID avoid high-risk drug use during withdrawal by being sure they have "back-up" or "morning" bags available (Friedman et al., 2011). Other injectors report keeping prescription opioids or other medications on hand in case they experience significant withdrawal (Mateu-Gelabert et al., 2010).

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Knowing that factors such as inconvenience and time also influence whether an injector uses select risk reduction strategies implies that we should also consider the complexity of the skills that are taught. The risk reduction skills that were selected in a recent intervention to prevent bacterial infections (Phillips et al., 2012) focused on simple and memorable steps. Hand washing and skin cleaning with alcohol wipes can be accomplished in less than 15 seconds. Though it is important to advocate that PWID use a new needle for every injection, many injectors reuse their works. Because of this, it is still important to recommend easy-to-use needle cleaning protocols. Protocols endorsed by NIDA and harm reduction advocates include a series of water and bleach rinses (Royer et al., 2004; Harm Reduction Coalition, 2012). Although such a sequence may help kill HIV and HCV, the time commitment may be too much for some injectors. It is also important to recognize that barriers for reduction of HCV may be even more complex than those for HIV due to the ease of transmitting HCV. Finding a balance between stressing individual risk reduction practices and acknowledging the role of social context is an issue that continues to confront the harm reduction movement (Fraser & Moore, 2011).

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Structural barriers such as lack of access to needle exchange and refusals by pharmacy staff to sell syringes are more a function of the risk environment and are more challenging to overcome. Although legal in the state of Colorado, a number of pharmacies/pharmacists in Denver won't sell syringes to drug users (Compton et al., 2004). Discrimination and judgment are real issues for many PWID that prohibit practice of risk reduction. Even when programs are available, operational aspects of needle exchange programs (e.g., syringe dispensing policies) further inhibit access to clean needle use (Bluthenthal et al., 2007; Kral et al., 2004). Policy changes are necessary to make risk reduction a more viable option for PWID who have limitations on their practice and choices.

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Finally, it is important to recognize that PWID also protect themselves in ways that may not be identified as disease prevention. As discussed by Friedman and colleagues (Friedman et al., 2011; Vazan et al., 2012), symbiotic goals that facilitate safe behavior (e.g., maintaining a positive non-user social network), but aren't directly focused on disease prevention, also contribute to reduced disease risk. Public health services that connect PWID to healthcare, improve services for the homeless (e.g., increased low-cost housing), improve mental health access, etc., are also helping PWID reduce their risk of various diseases.

This study has limitations. The sample included a number of PWID who were homeless and/or unemployed. Many were injecting on the street and in other public places. Barriers to risk reduction may be very different depending on the population and location of drug use. In addition, at the time of the study, needle exchange was not legal in the city of Denver. Therefore, it is possible that participants in this study viewed greater barriers to using new needles compared to PWID in cities that operate needle exchange. Because there were a low number of participants, conducting more sophisticated analyses wasn't possible. Future research could benefit from a factor analysis on barrier items that could be grouped together by similar dimensions. Finally, examining sample differences in reported risk reduction barriers (e.g., by drug type, such as heroin-only vs cocaine-only injectors) could provide additional validity to the association between certain barriers (e.g., withdrawal) and risk reduction practices.

Conclusions

In summary, there remains a strong need to intervene with PWID to reduce disease risk. Although it is useful to teach PWID information on contributing factors to viral and bacterial infections, how the information is presented and whether it addresses practical and/or environmental barriers likely has a substantial influence on the actual practice of risk reduction strategies. Incorporating discussion on barriers and ways to overcome barriers in all risk reduction interventions is needed to increase the success of interventions.

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Table 1

Barriers to practicing skin cleaning ($N = 48$)

Barriers	Frequency (n, %) of Responses				
	SD	D	N	A	SA
It takes too long to clean my skin before injecting.	3 (6.3)	30 (62.5)	6 (12.5)	9 (18.8)	0 (0)
It's inconvenient to clean my skin before injecting.	4 (8.3)	30 (62.5)	3 (6.3)	11 (22.9)	0 (0)
I often don't want to clean my skin before injecting because my cravings or urges to use my drugs are too strong.	4 (8.3)	10 (20.8)	8 (16.7)	21 (43.8)	5 (10.4)
I often do not want to clean my skin before injecting if I am drug sick or in withdrawal.	3 (6.3)	7 (14.6)	0 (0)	25 (52.1)	13 (27.1)
I don't clean my skin before injecting because I can only think about getting high.	4 (8.3)	25 (52.1)	4 (8.3)	12 (25)	3 (6.3)
I don't clean my skin before injecting if I'm already high or drunk.	2 (4.2)	25 (52.1)	4 (8.3)	16 (33.3)	1 (2.1)
The places where I inject usually do not have a sink where I can clean up.	5 (10.4)	33 (68.8)	3 (6.3)	4 (8.3)	3 (6.3)
I often do not have alcohol or alcohol wipes with me when I plan to use drugs.	3 (6.3)	14 (29.2)	2 (4.2)	24 (50)	5 (10.4)
After I inject, I don't prepare in advance by getting alcohol or alcohol wipes ready for my next injection.	1 (2.1)	8 (16.7)	3 (6.3)	28 (58.3)	8 (16.7)
Feeling sad or depressed would get in the way of cleaning my skin.	6 (12.5)	27 (56.3)	4 (8.3)	8 (16.7)	3 (6.3)
I don't know how to clean my skin properly.	5 (10.4)	39 (81.3)	1 (2.1)	3 (6.3)	0 (0)
I often don't take time to clean my skin before injecting if I think there is a chance I may get arrested for using drugs.	1 (2.1)	21 (43.8)	5 (10.4)	19 (39.6)	2 (4.2)
*My peers/friends look at me funny if I clean my skin before I inject. (Coded as 0 if client always injects alone)	4 (8.3)	30 (62.5)	5 (10.4)	3 (6.3)	2 (4.2)
Cleaning my skin before injecting interrupts the ritual of using.	7 (14.6)	29 (60.4)	5 (10.4)	6 (12.5)	1 (2.1)

Note: SD = Strongly Disagree, D = Disagree, N = Neutral (Neither Agree or Disagree), A = Agree, SA = Strongly Agree

* Four participants reported that this item "does not apply" due to injecting alone

Bolded items indicate items that were endorsed by 50% or more participants

Table 2

Barriers to using new needles ($N = 48$)

Barriers	Frequency (n, %) of Responses				
	SD	D	N	A	SA
It takes too long to get a new needle every time I inject. I inject.	5 (10.4)	20 (41.7)	3 (6.3)	15 (31.3)	5 (10.4)
It is inconvenient to get a new needle every time I inject.	5 (10.4)	21 (43.8)	3 (6.3)	15 (31.3)	4 (8.3)
I often don't want to take the time to get a new needle because my cravings or urges to use drugs are too strong.	5 (10.4)	21 (43.8)	1 (2.1)	16 (33.3)	5 (10.4)
I often do not take the time to get a new needle if I am drug sick or in withdrawal.	2 (4.2)	11 (22.9)	4 (8.3)	23 (47.9)	8 (16.7)
I don't take the time to get a new needle before injecting because I can only think about getting high.	3 (6.3)	22 (45.8)	7 (14.6)	11 (22.9)	5 (10.4)
I don't take the time to get a new needle before injecting if I'm already high or drunk.	5 (10.4)	29 (60.4)	1 (2.1)	10 (20.8)	3 (6.3)
The places where I inject usually do not have access to new needles.	4 (8.3)	18 (37.5)	4 (8.3)	18 (37.5)	4 (8.3)
*If I am in a shooting gallery, I often do not use a new needle. (Coded as 0 if client doesn't go to shooting galleries)	0 (0)	5 (10.4)	3 (6.3)	0 (0)	0 (0)
I often do not carry new needles with me when I'm out.	3 (6.3)	15 (31.3)	1 (2.1)	19 (39.6)	10 (20.8)
There isn't a needle exchange close by for me to get needles.	3 (6.3)	15 (31.3)	1 (2.1)	19 (39.6)	10 (20.8)
Pharmacies sometimes give me hassle when I try to buy needles.	6 (12.5)	20 (41.7)	2 (4.2)	15 (31.3)	5 (10.4)
After I inject, I don't prepare in advance by getting new needles ready for my next injection.	2 (4.2)	13 (27.1)	4 (8.3)	24 (50)	5 (10.4)
It's too expensive to buy new needles from the pharmacy for every time I inject.	10 (20.8)	22 (45.8)	0 (0)	13 (27.1)	3 (6.3)
Feeling sad or depressed would get in the way of my using a new needle every time I inject.	9 (18.8)	29 (60.4)	3 (6.3)	7 (14.6)	0 (0)
It is embarrassing to buy needles at the pharmacy.	10 (20.8)	29 (60.4)	3 (6.3)	5 (10.4)	1 (2.1)
I worry that someone (friends, family, etc.) may see me buying needles at the pharmacy.	8 (16.7)	28 (58.3)	2 (4.2)	9 (18.8)	1 (2.1)
**My peers/friends would look at me funny if I used a new needle every time I inject. (Coded as 0 if client always injects alone)	11 (22.9)	31 (64.6)	1 (2.1)	1 (2.1)	0 (0)
Having to worry about using a new needle interrupts the ritual of using.	9 (18.8)	28 (58.3)	4 (8.3)	7 (14.6)	0 (0)
I am unlikely to use a new needle if a friend lets me borrow his or her used needle.	19 (39.6)	23 (47.9)	2 (4.2)	4 (8.3)	0 (0)
I could get in trouble from the police if I carry needles around with me.	2 (4.2)	1 (2.1)	0 (0)	29 (60.4)	16 (33.3)

Note: SD = Strongly Disagree, D = Disagree, N = Neutral (Neither Agree or Disagree), A = Agree, SA = Strongly Agree

* Forty participants reported that this item "does not apply" due to not attending shooting galleries

** Four participants reported that this item "does not apply" due to injecting alone