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## More than just someone to inject drugs with: injecting within primary injection partnerships

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### Abstract

**Background**—Studies have shown intimate injection partners engage in higher rates of syringe and injecting equipment sharing. We examined the drug use context and development of injection drug use behaviors within intimate injection partnerships.

**Methods**—In-depth interviews (n=18) were conducted with both members of nine injecting partnerships in Sydney, Australia. Content analysis identified key domains related to the reasons for injecting with a primary injection partner and development of drug injection patterns.

**Main Findings**—Most partnerships (n=5) were also sexual; three were blood-relatives and one a friend dyad. The main drug injected was heroin (66%) with high rates of recent sharing behaviors (88%) reported within dyads. Injecting within a primary injection partnership provided perceived protection against overdose events, helped reduce stress, increased control over when, where, and how drugs were used, and promoted the development of an injecting pattern where responsibilities could be shared. Unique to injecting within primary injection partnerships was the social connection and companionship resulted in a feeling of fulfillment while also blinding one from recognizing risky behavior.

**Conclusions**—Findings illuminated the tension between protection and risks within primary injection partnerships. Primary injection partnerships provide a potential platform to expand risk reduction strategies.

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**Contributors:** M. Morris conceived, designed, and implemented the study and subsequent analyses and wrote the study findings. A. Bates, E. Andrew, K. Page, and L. Maher contributed to the study implementation and/or analysis and conceptualization of the findings, and preparation of the article.

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## Keywords

injection drug use; injection partnership; hepatitis C virus; syringe sharing; dyad

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## 1. INTRODUCTION

According to the United Nations (UN) reference group on HIV and injection drug use, more than 16 million people currently inject drugs globally (Mathers et al., 2008). In most high- and middle-income countries, hepatitis C virus (HCV) transmission occurs primarily through the direct and indirect sharing of contaminated needles/syringes and ancillary drug injecting equipment (Hagan et al., 2010; Nelson et al., 2011; Thorpe et al., 2002). Many structural and social constraints impact access to sterile injecting equipment, resulting in injection equipment sharing rates between 30–70% among people who inject drugs (PWID; Bruneau et al., 2008; Munoz et al., 2014; Pouget et al., 2012).

Injection drug use is a highly social activity. Drug procurement processes often necessitate resource pooling, and peer networks provide an important resource for securing drugs and connecting with dealers. The drug preparation process often occurs in social settings and can include mixing or heating drugs, filtering drug and dividing drug solution into multiple syringes. The physical action of injecting drugs may require another person's help to find a vein, tie the tourniquet, or administer the injection itself. These activities lend to a social environment where relationships may develop and conversely, relationships may influence the social environment where drugs are used (Grund et al., 1996). There is a value in recognizing the injecting partnership as a unit of study and intervention (Rhodes and Quirk, 1998) given the social nature of injection drug use and that risk for infection occurs when contaminated equipment is shared between at least two people. However, much of the literature on the social nature of injection drug use focuses on the risk of sharing syringes (Davey-Rothwell et al., 2010; Hahn et al., 2010; Harris and Rhodes, 2013).

Interpersonal dynamics have been acknowledged as factors fueling syringe and ancillary equipment sharing. Several studies have shown an elevated risk of sharing behaviors when injecting with someone who is also a close friend, family member, or sexual partner (Bryant and Hopwood, 2009; Costenbader et al., 2006; Hahn et al., 2010; Morris et al., 2014; Neaigus et al., 1994; Rhodes and Treloar, 2008; Shaw et al., 2007), acknowledging the powerful role trust can exert on individual risk profiles (Harris and Rhodes, 2013; Unger et al., 2006). Understanding the motivations underlying the development of intimate injection partnerships can improve our understanding of why such partnerships are at higher risk of both sharing behaviors and HCV infection (Tracy et al., 2014). People who use drugs have been shown to be active agents in their own individual and collective protection from social and drug related harms (Friedman et al., 2007; Sirikantraporn et al., 2012). People inject with others for various reasons and while some injection partnerships only endure for short periods, others become more established. The heterogeneity in injection partnership type and related drug using contexts has previously been discussed (Costenbader et al., 2006; Gyarmathy et al., 2010; Lakon et al., 2006). However, little attention has been given to the development of primary injection partnerships and the risks and benefits associated.

The current study aimed to look beyond injection related risks within an established and/or intimate injecting partnership (e.g., close friend, family member, or sexual partner) in order to examine the other side of the coin - perceived benefits. The objectives were two-fold. Qualitative data collected from both members of injection partnerships were used to identify key domains related to the reasons for injecting with a primary injection partner and development of drug injection patterns. This study adds to the literature on injection partnership typologies and the social context of drug use behaviors (Mathers et al., 2008; Nelson et al., 2011).

## 2. METHODS

Qualitative in-depth interviews using a semi-structured interview guide were conducted with nine pairs of individuals who injected drugs together (n=18) in Sydney, Australia during August 2012. Participants were drawn from the HITS-c Study- an epidemiological study of hepatitis C virus seroconversion and associated risk behaviors among PWID (Maher et al., 2010; White et al., 2014a, 2014b). Purposive sampling targeted current HITS-c participants in various injection partnership types (e.g., gender compositions, age ranges, HCV serostatus, and injecting drug profiles). We targeted participants within injecting partnerships embodying close familiarity to examine a broader intimacy definition. Eligibility included (1) injecting drugs with another person in the same physical space at least once in the past two weeks (defined as an injection partner) and (2) both members of the injection partnership completing a one-time qualitative interview. The first author (MM) conducted all individual interviews privately and all pairs, except one, completed their interviews on the same day. Each pair-member was screened, provided written informed consent and separately interviewed to protect confidentiality. The University New South Wales Human Research and the University of California, San Francisco Ethics Committees approved all protocols, and participants were remunerated \$30AUD.

Semi-structured interviews concentrated on contextualizing the partnership trajectories and the establishment of primary injection partnerships. Interviews began with structured questions relevant to participant demographics (e.g., age, sex, recent drug use behaviors) and partnership characteristics (e.g., duration of time knowing each other, needle and ancillary equipment sharing in the past month). The remaining questions were organized around the following topics: (1) Origin and development of partnership with the enrolled injection partner. Probing questions compared and contrasted different types of injection partnerships. (2) Thick description of the most recent injecting event and comparison to a typical injecting event (e.g., location, sequence of events, environment, and mood). (3) Decision making processes underlying both safe and risky injecting behaviors and the development of risk reduction strategies within partnerships. Throughout the interviews, probing questions were used to identify unsafe drug use events, and deviations from safe injecting plans; probing questions allowed follow-up on inconsistencies across partner perspectives.

Interviews lasted between 45–80 minutes, were digitally recorded and were transcribed verbatim. Following a content analysis approach, existing literature on injecting partnership dynamics informed the development of our research objective and subsequent development of our codebook. An iterative approach was taken to develop the codebook whereas after

each interview detailed notes were summarized and the interview transcripts were read (MM and AB) to identify emergent themes and inform a coding scheme. After all interviews were conducted, both MM and AB separately read and coded two interviews using the draft codebook. Coded text was compared and any discrepancies were discussed in order to refine the understanding of each code's definition. Using the coding scheme as a guide, partnership summaries were produced to develop and connect the participant data into themes that represented key domains explaining the development and operation of injection partnerships. Once the codebook was finalized a more deductive approach was adopted. First all transcript data were organized by code resulting in isolated patterns. This allowed us to identify general commonalities and differences, both between and within partnerships, in order to examine factors influencing drug use dynamics within primary injection partnerships. Content analysis allowed for the subjective interpretation of the context of the text data through systematic classification process of coding allowing for the identification of patterns and themes. We report on these patterns and themes in the subsequent section.

### 3. FINDINGS

#### 3.1. Sample description

Of the nine injection partnerships interviewed, the plurality (44 %) were male-female partnerships who also identified themselves as intimate sexual partners, one (11%) partnership was male-male and engaged in a casual sexual relationship. Three (34%) partnerships were family members; one was a father-daughter and two were sibling partnerships. Table 1 provides both individual and partnership characteristics. The majority (55%) were HCV negative, 8 (44%) were HCV positive, and one was unaware of his HCV status. One was HIV positive (IP#8) and disclosed his status to his partner. When asked about the injection partnership's drug using behaviors in the past month, two-thirds (66%) reported exclusively injecting together, four (44%) partnerships reported a recent event where a syringe had been shared between partners and seven (77%) reported a recent event where a drug mixing container had been contaminated or reused. All 18 participants also reported reusing what they believed was their own syringe at some time during the past month. However, upon prompting during the interview, many (n=7) acknowledged they could not be certain it was always their own syringe.

#### 3.2. Motivations identified for injecting with a primary injection partner

Participants conceptualized primary injection partnerships as partnerships where more emotional and monetary resources were invested, and typically involved the main person they injected with even if this person was not always their sole injection partner. Participants recognized the close familiarity unique to these partnerships. Three key domains were identified as primary motives for selecting and retaining a primary injection partner: 1) to protect against drug overdose; 2) an increased intimacy of using with someone you're close to; and 3) to reduce stress and increase control over when, where, and how drugs are procured

**3.2.1. To protect against overdose**—Past personal experience with overdose, either one's own or being witness to another's overdose, was cited as a conscious reason to inject

with another person. Gav, who primarily injects heroin with his brother DD, explained the strategy developed in an overdose event:

[A]fter having [overdosed], I sort of know what to expect now and say, “Can you keep an eye on me?” or “If I fall asleep or whatever, check I’m still breathing,” or whatever. Like with [DD]... That’s what we do for each other, not that we’ve had to actually do it. But we’re ready to, I should say, prepared to (Gav; Injection Partnership [IP]#6; Gav (male, 28, HCV positive) & DD (male, 25, HCV negative), siblings).

The ability to develop and implement a strategy like this requires being able and willing to communicate within the partnership. All participants acknowledged this same communication level was not present when injecting with someone other than their primary partner.

When asked why he always injects with Bob, Travis responded:

In case someone overdoses. At least you know that you’ve got someone there to look out for you. If you’re injecting by yourself and you overdose, there’s no one there to look at you. So, there’s always someone good to have there by your side (Travis; IP#7: Travis (male, 30, HCV negative) & Bob (male, 27, HCV negative), siblings).

However, when asked about the distinctive primary injection partner attributes, all participants noted that primary injection partners were loyal; one participant described it as being “*less likely to leave your side*” when things became “*complicated*” (Craig; IP#8: Craig (male, 25, HCV positive) & Cameron (male, 23, HCV positive), friends who inject together). Participants also noted the increased attention from first responders and “*other people*” during an overdose event could result in attention from police. Many identified that because they “*cared*” about their primary injection partner’s safety they were willing to place themselves at greater risk.

Injecting with a primary injection partner also protected against potential overdose events by providing a more controlled environment to inject in. Participants all acknowledged that when injecting with a primary injection partner the event was “*less rushed*.” Often the event occurred in a familiar physical location. They were able to prepare their drugs and inject without interruption. Additionally, participants recognized the added trust level they felt when injecting with a primary partner that allowed them to feel more “*mellow*” and relaxed - both physically and emotionally - when injecting drugs. They worried less about their personal safety, and being cheated on the drug quality/quantity. Participants believed being able to “*get on*” without feeling rushed or worried helped to avoid overdose.

### **3.2.2. The “joy” or increased intimacy of using with someone you are close to**

—Participants candidly discussed the enjoyment that came with using with someone they also liked spending time with; a characteristic absent when injecting with casual injecting partners. The ability “*to enjoy regular life stuff*” when getting high was an added benefit for selecting a primary injection partner. Angie’s account emphasized this:

I just kind of like having a using partner, I prefer not doing it on my own or with someone random ... to have someone to share the experience with ... it cost me a lot more money to support him but I did it anyway (Angie; IP#5: Angie (female, 29, HCV negative) & Pete (male, 31, HCV negative but previously cleared infection) romantic/sexual partners).

When asked why she preferred to inject primarily with her brother Zack, Anne gave a similar response:

[B]ecause it is comfortable to be at home, and yeah, you know clean the house and you know, just be with people that you know will ... you know, not have any other people come over, and all those other people, and like, not strangers (Anne; IP#2 Anne (female, 33, currently HCV negative with previous anti-HCV positive test) & Zack (male, 27, HCV negative), siblings).

During Zack's interview he agreed the familiarity of injecting with Anne provided him with comfort, and acknowledged he enjoyed how they were able to share their thoughts freely when they used drugs together. He noted he was willing to "*share things with her that [he] wouldn't share with other [injecting partners].*"

Participants often used the word "*junkie*" when describing people they preferred not to inject with. They referred to a "*junkie*" as someone who wasn't selective about who they injected with and who would do anything for drugs. By selecting a primary injection partner, participants were able to both avoid seeing themselves as a "*junkie*" and control who knew about their drug use.

I have a huge hang up about my habit. Huge ... I wouldn't inject in front of a stranger. I've only had him do me up in front of people that I know really well ... oh, that dirty junky stigma ... yeah I'm a needle user. People don't understand that not every needle user is living on the streets and stealing for their ... It could be anyone who uses (Cleo; IP#1: Odd (male, 33, HCV negative) & Cleo (female, 41, HCV positive), romantic/sexual couple).

Cleo began injecting about five years ago-- before injecting with Odd. She went on to explain that since primarily injecting with Odd, she had a better grasp on how and why she used drugs. She explained they prefer to use together in order to enjoy the things they do. During Odd's interview, he confirmed this, stating that prior to meeting Cleo his use was motivated more by trying to "*lose himself*".

There is only one reason for us to use, and that is so we can have fun together, and spend time together, and clean up the house and have a day off from work, and yeah ... de-stress. That is why we use (Odd; IP#1: Odd (male, 33, HCV negative) & Cleo (female, 41, HCV positive), romantic/sexual couple).

When asked what the most important thing Gav gets out of injecting with his brother DD he stated:

Just being there for each other. If anything happens or whatever, you know you can trust the other one to look after you or help you out (Gav; IP#6: Gav (male, 28, HCV positive) & DD (male, 25, HCV negative), siblings).



**3.2.3. To reduce stress and increase control over when, where, and how drugs are procured**—For someone dependent on drugs, a considerable stress may arise from not knowing where the next injection will come from. Participants acknowledged that when they had a primary injection partner this stress was reduced for two reasons.

First, resources for obtaining drugs, including connection with dealers and money, could be shared across both people. For example, Cameron injects with Craig and they don't keep track of who puts more money in. Instead they allow it to *"balance out over time"*.

We pretty much both have money then we both go get [the drugs]. If one person doesn't have money, the other person will throw in ... over time it all equals out (Cameron; IP#8: Cameron (male, 23, HCV positive) & Craig (male, 25, HCV positive), friends who inject together).

Second, selecting a primary injection partner is often a conscious effort to select someone with similar injecting practices or street values. For example, because Gav contracted HCV a few months prior to the interview, he made a point of only injecting with people he knew and trusted.

I know to be more careful and whatever now, and try to be anyway as careful as possible, and sort of only use more or less with myself and one or two other people which I know I can trust. And they're as careful as I am (Gav; IP#6: Gav (male, age 28, HCV positive) & DD (male, age 25, HCV negative), siblings).

### 3.3. The development of injecting patterns within primary injection partnerships

When asked how injecting with a primary partner differed from injecting with other PWID, participants discussed how within primary injection partnerships each member often took on specific responsibilities for drug preparation process (i.e., mixing up drug in a container, splitting drugs), obtaining sterile syringes and injection equipment, and cleaning up after using. The process was much more communal than injecting with other partners and quickly these behaviors became routine. For example, when Anne and Zack inject together:

[Zack] mixes it all up, he does himself, and then gives [Anne] what [she] wants. [Anne] hold on to her fit, until [Zack] finishes and then [Anne] puts a tourniquet on, and then [Zack] just injects [Anne] (Anne; IP#2 Zack (male, 27, HCV negative) & Anne (female, 33, currently HCV negative with previous anti-HCV positive test), siblings).

When prompted about how this was unique to a primary injection partnership, Anne and Zack noted the clear roles assignment and responsibilities early in the partnership. Because injecting behaviors were more shared, participants identified an early decision to assign roles and responsibilities as a way to implement *"safe"* injecting practices into their drug use pattern.

For all participants the division of roles and responsibilities also helped ensure sterile injecting equipment was usually on hand by having one or both members routinely pick up sterile equipment from needle and syringe programs (NSP) or syringe vending machines. One partnership went a step further by marking their new sterile syringes with a red or blue



stripe and in this way assign syringes to specific users. Tom who has been injecting with his daughter Tammy for the past nine months explained their process of obtaining and disposing of injecting equipment:

[W]e drive to the NSP on Fridays ... [Tammy] takes 10 boxes, so like 100 [syringes]. And that will last us for probably a week ... when we use Tammy takes them out of the box, mixes up, and we use our own syringe. Then inside the box there is a little thing to poke the thing off, so just screw it around, wrap it up throw it away ... a little production line, all in the same ... [Tom] puts all the dirty ones in the box ... they go in the plastic container. That goes into a bag, into the wardrobe. And we drop them off on Fridays (Tom; IP#3 Tom (male, 55, HCV unknown) & Tammy (female, 33 HCV negative), father/daughter).

Participants accounts of injection events with primary partners also highlighted the potential risks inherent in communal nature of injecting with a primary partner. For example, even when each partner individually prepared their drugs and injected without physical assistance from their partner they often stored used syringes and ancillary equipment in the same location. Although they tried to avoid this, participants described times where they “reached into the bag” of used syringes and may have used their partner’s syringe. Some partners were also unknowingly exposed to unsafe injection practices by deferring responsibility for aspects of the drug preparation process to their partner. At the time of interview, Angie had been injecting with Pete for over a year. Within the partnership, Pete was responsible for preparing the drugs by mixing up in one syringe and then backloading (a syringe-mediated form of sharing prepared drug) the drugs into a second syringe. When Cleo was asked if the syringe used to prepare drugs was new, she said “*Of course!*” but after further discussion realized there were times when she only found one syringe wrapper when cleaning up— indicating that only one syringe was sterile.

Participants also remarked on how the familiarity of injecting with a primary partner and the comfort of their injecting pattern led to complacency and reduced vigilance. Some participants suggested once they shared syringes or injecting equipment (even once) with someone it was easier to justify future risk behavior.

It’s like, “Yeah, I’m sick but I don’t care. I’m still not going to use your syringe after you. Don’t take offense to it. It don’t matter whether you’ve got anything or not.” That’s just -- I’m not going to let myself get in -- because that’s it. If you let yourself get into that habit or bad habit, you’re not going to take proper precautions. So, I’m one to take precautions, I guess (Ellen; IP#4: Edward (male, 44, HCV negative) & Ellen (female, 35, recently tested anti-HCV positive), romantic/sexual couple).

#### 4. DISCUSSION

Using qualitative data from both members of an injecting dyad, we were able to describe the contexts and individual motivations leading to the selection and development of primary injection partnerships. Our findings build on the field by furthering our understanding of the social context of drug use behaviors as a function of closeness. Our data indicate that given the opportunity, people preferred to inject with a primary injection partner. Primary injection

partners offered protection from overdose events, reduced the stress associated with drug procurement and facilitated an increased control over when, where, and how drugs were injected. Unique to primary injection partnerships was the social connection and companionship resulted in a feeling of wellbeing and enjoyment. These findings contribute valuable knowledge by identifying the tension between protection and risk present within primary injection partnerships, and the potential barriers intimacy presents in recognizing individual risk.

Among our participants, strategies to reduce both drug and non-drug related harms were a core motivation for selecting and retaining primary injection partners. For example, the formation of primary injection partnerships provided protection against overdose events. Take-home naloxone programs have been implemented throughout Europe and the United States to address the deaths due to opioid overdose with great success (Doe-Simkins et al., 2014; Enteen et al., 2010; Maxwell et al., 2006; Strang et al., 2013). Programs traditionally combine training for dealing with overdose and naloxone distribution. In Australia, naloxone products are currently prescription-only medications (Lenton et al., 2009) with drug researchers advocating broader availability (Lenton et al., 2014). Increasing access to naloxone can further empower partners to prevent overdose. Peer-distribution programs could include training on developing an overdose prevention plan including naloxone administration and encourage dual prescriptions for partnerships. Partnerships could also be targeted with a “how-to” brochure for overdose prevention strategies with specific instructions on how to communicate this strategy to injection partners.

Our data highlight how injection partnerships offer scaffolding where harm reduction practices can take place. Intimate injection partnerships can also offer protection from social and health related harms (Mateu-Gelabert et al., 2005; Vazan et al., 2012). A few studies of intimate injection partnerships have shown the “interplay of social factors such as the distribution of power and control, particularly regarding the division of money and drugs between injecting couples, may influence the way HIV risks are managed” (Barnard, 1993; Bryant et al., 2010). Furthermore, participants note injecting with a primary injection partner was more cooperative than when injecting with other PWID. Even partners who prepared and injected independent of their primary partner typically stored their equipment in the same location, making it difficult to differentiate each other’s equipment. Within these partnerships we saw a conscious effort to assign roles and responsibilities with the intention to increase opportunities to inject together safely. Even the initial primary injection partner selection could include identifying someone with the same street values and injection style/ethics, creating greater opportunity for cooperation. These findings build upon the emerging field on the inadvertent protective potentials of preparedness, stress reduction, and control in regard to injecting (Mateu-Gelabert et al., 2014; Meylakhs et al., 2015).

While pooling money is frequently associated with higher HIV and HCV risk (Andia et al., 2008; Go et al., 2011), pooling often acts as a way to leverage social capital in times of need (Bourgois et al., 2004). Viewing drug-using behaviors as one aspect of a larger relationship allows researchers to acknowledge traditional proxies such as pooling money for drugs and sex for drugs slightly differently. Our findings reflect such an illustration and acknowledge

the additional nuanced aspects of pooling money and engaging in sex as functions of the larger relationship rather than simply a strategy to obtain drugs.

These benefits do not counterweigh the fact that ancillary equipment sharing frequently occurred within the partnerships studied and syringes were regularly reused without confidence that they were their own. Contexts where sharing took place were complex, but two key factors appeared to be most often responsible for syringe sharing: access to sterile syringes and division of responsibility. In a recent meta-analysis sterile syringes access, Australia was ranked as a high coverage country by global standards (Mathers et al., 2010). Similarly a study of NSP attendees in Sydney, Australia found very high coverage rates among attendees, with an average of two syringes per client per day (Iversen et al., 2012). Combined with our findings showing syringe reuse occurred with 100% of our sample, this reinforces the importance of scaling up prevention strategies. While sharing the responsibilities associated with the drug procurement and injection equipment can help mitigate the stress for PWID it also introduces vulnerabilities. Independent of whether a recent syringe-sharing event occurred within partnerships, participants noted the closeness unique to a primary injection partner made it easier to rationalize engaging in such behaviors. Similar findings were reported by Loxley et al showing sharing with friends and sexual partners was more likely because they believed they could deduce their partners HIV/HCV infection status through their observed behaviors (Loxley and Ovenden, 1995).

Our results draw attention to several drug and non-drug related benefits associated with established partnerships. Often research is focused on individual drug using behaviors. Our study findings describe the social context beyond the individual and provide specific descriptions of closeness and intimacy within the ritual of drug use. Our findings build upon the few previous qualitative studies drawing the positive aspects of injecting within a drug-using couple (Bourgois et al., 2004; Meylaks et al., 2015; Neaigus et al., 1994; Simmons and Singer, 2006) and offers suggestions for expanding harm reduction strategies to make use of the injecting partnership unit. For example, (1) by encouraging individuals to identify and establish a primary injection partnership we could reduce their total partner number thus reducing the injecting network size; (2) extending naloxone trainings to leverage the partnership as a unit of intervention to reduce overdoses and educate about safe drug using practices with primary partners; (3) encourage testing together where injecting partners are screened and provided status disclosure strategies tailored to different injecting relationship types; and (4) expand current prevention messages to harness the strong interpersonal aspects within primary injecting partnerships. PWID are not routinely provided with information on how to negotiate complex relationships to protect against sharing when access to sterile equipment is reduced. Expanding harm reduction strategies that combine messages encouraging people to select a primary injection partnership with tools for negotiating safe injection practices could bolster prevention strategies while strengthening social networks and mutual support among PWID (Fraser, 2013).

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**Highlight**

- Primary injection partners offered protection from drug related harms and facilitated control of individual's use.
- Study findings describe the social context beyond the individual.
- Provide specific description of closeness and intimacy within the context of drug use.
- Study findings build upon the few previous qualitative studies drawing on the positive aspects of injecting within a drug-using couples



**Table 1**

## Study sample characteristics

	N (%)
Individual characteristics (n=18)	
<b>Median age (IQR)</b>	30 (28–35)
<b>Education level</b>	
No formal education	1 (6)
7–10 years	8 (44)
11–12 years	7 (39)
Post-high school education	2 (11)
<b>Hepatitis C virus (HCV) status</b>	
Positive	7 (44)
Negative	10 (55)
Unknown	1 (6)
<b>Primary source of income (past 6 months)</b>	
Formal employment	4 (22)
Sex-work	1 (6)
Partner	2 (11)
Friends	2 (11)
Social security/pension	8 (44)
Theft/property crime	1 (6)
<b>Injection frequency past month</b>	
Once a week or less	6 (33)
Weekly	6 (33)
Daily	1 (6)
Multiple times per day	5 (28)
<b>Drug injected most often (past month)</b>	
Heroin	12 (67)
Methamphetamine	6 (33)
Partnership characteristics (n=9)	
<b>Relationship type</b>	
Sex partner or romantic partner	4 (44)
Casual sex partner	1 (11)
Friend	1 (11)
Blood relative	3 (33)
<b>Hepatitis C virus (HCV) status</b>	
Both partners are HCV negative	4 (44)
Both partners are HCV positive	1 (11)
Partners are HCV serodiscordant*	4 (44)
<b>Median time knowing partner, in years (IQR)</b>	9 (2–12)
<b>Syringe sharing in past 3 months</b>	
Yes	3 (33)

	N (%)
<b>Injection equipment sharing in past 3 months</b>	
Yes	7 (78)

IQR: interquartile range;

\* Includes partnerships where one person has "unknown" HCV status

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