Published in final edited form as:

Arch Sex Behav. 2016 May ; 45(4): 923–933. doi:10.1007/s10508-014-0418-8.

“Nothing is free”: A qualitative study of sex trading among methamphetamine users in Cape Town, South Africa

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Abstract

South Africa is facing an established epidemic of methamphetamine, known locally as “tik”. Globally, methamphetamine has been linked to high rates of sexual risk behaviors, including sex trading. The goal of this study was to qualitatively examine the experiences of sex trading among methamphetamine users in Cape Town, South Africa. Individual in-depth interviews were conducted with 30 active methamphetamine users (17 men and 13 women) recruited from the community. Interviews were conducted in local languages using a semi-structured guide that included questions on sex trading experiences and perceptions of sex trading among methamphetamine users. Interviews were audio-recorded, transcribed, and analyzed using analytic memos and coding with constant comparison techniques. The data revealed that in a setting of high levels of addiction and poverty, sex was an important commodity for acquiring methamphetamine. Women were more likely to use sex to acquire methamphetamine, but men reported opportunistic cases of trading sex for methamphetamine. Four models of sex trading emerged: negotiated exchange, implicit exchange, relationships based on resources, and facilitating sex exchange for others. The expectation of sex trading created a context in which sexual violence against female methamphetamine users was common. Multiple sexual partners and inconsistent condom use in acts of sex trading put methamphetamine users at high risk of HIV. Interventions in this setting should address addiction, which is the primary driver of sex trading among methamphetamine users. Harm reduction interventions may include education about HIV and other sexually transmitted infections, availability of condoms and HIV testing, and sexual violence prevention.

Keywords

South Africa; methamphetamine; transactional sex; sex trading; sex work; gender

Introduction

South Africa has experienced a steady rise in the use of methamphetamine (locally known as “tik”) over the last decade, and faces a well-established drug epidemic, particularly in the Western Cape Province, where the proportion of admissions to drug treatment facilities for methamphetamine increased from 0.8% in 2002 to 52% in 2011 (Dada et al., 2012; Peltzer, Ramlagan, Johnson, & Phaswana-Mafuya, 2010). An emerging body of evidence in South Africa suggests that methamphetamine use is associated with elevated rates of sexual risk behaviors, including multiple partners and unprotected sexual intercourse (Meade et al., 2012; Parry, Pluddemann, Myers, Wechsberg, & Flisher, 2011; Simbayi et al., 2006). The practice of exchanging sex for drugs or money may be driving these risky practices, but the context and nuances of sex trading behavior among methamphetamine users in South Africa has thus far not been examined. A better understanding of these practices is important for targeting interventions to reduce transmission of HIV and other sexually transmitted infections (STIs) in this high risk population.

Sex trading refers to a transaction where sex is exchanged for goods, money or services. Although direct forms of sex trading such as formal or commercial sex work are the most visible, sex trading behaviors are heterogeneous, typically characterized by economic disparities, but in which issues of love and trust may also be at stake (Mojola, 2014). Sex trading (also referred to as transactional sex, sexual exchange, and survival sex) may range from once-off exchanges to long-term relationships, and includes both exchanges that are explicitly negotiated and those that are indirectly agreed upon through context-specific norms and expectations (Inciardi, 1995; Wojcicki, 2002a). In Sub-Saharan Africa, the practice of sex trading has been documented as a way for women in particular to gain access to resources to support themselves and their families, and to acquire goods that improve their social standing (Chatterji, Murray, London, & Anglewicz, 2005; Luke, 2003; Matasha et al., 1998; Meekers & Calves, 1997; Nyanzi, Pool, & Kinsman, 2001; Wojcicki, 2002a, 2002b). In South Africa, high rates of sex trading behaviors have been observed. Among a household sample of men aged 18-49, 18% had ever had sex with commercial sex workers and 66% reported at least one sex trading relationship (Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012b). In studies of women, 19% of teenagers reported having sex for money or presents (Jewkes, Vundule, Maforah, & Jordaan, 2001), and 21% of pregnant women reported ever having had sex with a non-primary partner in exchange for gifts or money (Dunkle et al., 2004). Sex trading has also been documented in the context of alcohol serving venues in South Africa, where qualitative research suggests that sex is widely recognized as a way for women to procure drinks and participate in the social milieu of the venues (Townsend et al., 2011; Watt et al., 2012; Wojcicki, 2002b).

Globally, high rates of sex trading behaviors have been observed among methamphetamine users (Couture et al., 2012; Kang et al., 2011; Rawstorne, Digiusto, Worth, & Zablotska, 2007; Semple, Strathdee, Zians, & Patterson, 2011; Shannon et al., 2011; Urada et al., 2014). In South Africa, 20 to 55% of methamphetamine users report that they have participated in sex trading (Meade et al., 2012; Pitpitan et al., 2014), and rates from other settings range from 26 to 43% (Semple, Strathdee, Zians, & Patterson, 2010; Semple et al., 2011). Methamphetamine is a synthetic central nervous system stimulant that acts on the

dopaminergic system, with effects that include euphoria, heightened energy, and increased sex drive (Panenka et al., 2013; Vearrier, Greenberg, Miller, Okaneku, & Haggerty, 2012). Methamphetamine is highly addictive, leading some individuals to turn to sex trading as a way to acquire the drug (Rawstorne et al., 2007; Urada et al., 2014). At the same time, methamphetamine may be used as a functional drug among sex workers, because it induces stamina and wakefulness, and allows individuals to work long hours and serve more customers (Maher et al., 2011; Urada et al., 2014). Sex trading behaviors are associated with increased risk of HIV infection (Astemborski, Vlahov, Warren, Solomon, & Nelson, 1994; Couture et al., 2011; Windle, 1997), and methamphetamine use in the context of sex trading may further increase this risk because it affects sexual decision-making (Halkitis, Green, & Mourgues, 2005) and leads to risky behavior such as inconsistent or incorrect condom use and multiple sex partners (Couture et al., 2012; Nakamura, Mausbach, Ulibarri, Semple, & Patterson, 2011; Nakamura, Semple, Strathdee, & Patterson, 2011). This is particularly concerning in South Africa, where it is estimated that 17% of the adult population is living with HIV (South African Department of Health, 2014).

Research among drug users in the United States suggests that sex trading relationships are characterized by power imbalances that may compromise individuals' abilities to negotiate sex and safety. Drug users who trade sex typically have lower socio-economic status than those who do not trade sex (Semple et al., 2011), and are more likely to have symptoms of anxiety and depression (Golder & Logan, 2007; Risser, Timpson, McCurdy, Ross, & Williams, 2006). Moreover, they have greater indications of addiction, including lack of assertiveness in turning down drugs (Semple et al., 2010) and binge patterns of drug use (Miller et al., 2006). Drug cravings may leave users vulnerable to exploitation and sexual victimization, further exacerbating power imbalances embroidered within sex trading relationships, and making it difficult for individuals to refuse or leave such relationships. Female users, in particular, are more vulnerable to such abuse. In South Africa, social constructions of masculinity place a high emphasis on heterosexual success and control of women, and women's sexuality is viewed as a commodity (Gibbs, Sikweyiya, & Jewkes, 2014; Jewkes, Morrell, Sikweyiya, Dunkle, & Penn-Kekana, 2012a; Wojcicki, 2002b). A woman's acceptance of financial or material gifts from a man may imply her willingness to engage in sex (Jewkes et al., 2012b; Meekers & Calves, 1997; Watt et al., 2012), and perpetration of physical and sexual violence against women appear to be normative forms of retribution when women do not comply with those expectations (Watt et al., 2012; Wojcicki, 2002b).

Given the high prevalence of methamphetamine use in the Western Cape Province of South Africa, and clear evidence linking sex trading with methamphetamine, there is a need to examine the psychosocial context in which these behaviors occur. Understanding the motivations and meanings behind sex trading in the context of methamphetamine use may help to inform effective interventions to reduce the prevalence of and harm associated with sex trading behaviors. This study attempts to fill a gap in our understanding of this important sexual risk behavior by qualitatively examining norms and experiences related to sex trading among a community-based sample of methamphetamine users in Cape Town, South Africa.

Methods

Setting

This study was conducted among a sample of active users of methamphetamine, hereafter referred to by its local term of “tik”. All participants were recruited from Delft, a peri-urban township located approximately 15 miles from the center of Cape Town, South Africa. Delft is unique in that it is a racially integrated township, including both residents who are of Black African (primarily Xhosa-speaking) and Coloured (an ethnic group of historically mixed race unique to South Africa, primarily Afrikaans-speaking) ethnicities. Only about 27% of residents of Delft have completed a high school education or more, and very few have steady employment (Statistics South Africa, 2012). Previous research in Delft has suggested that tik use is highly prevalent with far-reaching impacts on the community (Watt et al., 2014).

Sample

Participants were identified from a larger cross-sectional study on tik use in the community (Kimani et al., 2014). Participants in the larger study were recruited via a respondent driven sampling strategy, with individuals eligible if they met the following criteria: 18 years old, residence in Delft, self-reported smoking of tik in the past week, and a urine drug screen positive for tik. A sub-set of 30 participants were invited to return on a day separate from the cross-sectional survey to complete an individual in-depth interview (IDI). The IDI participants were purposively selected from the larger sample to provide a balance of race and gender representation, and to include individuals whom the staff felt would be good informants (i.e., articulate, reflective, and willing to share their own experiences) (Morse, 1991).

Data collection

The IDIs were conducted between June and October 2013. Data collection was conducted by four South African interviewers (two men and two women). All had post-secondary education, previous experience conducting qualitative interviews, and had been trained on qualitative methods by the first and third authors. The interviewer was matched by race and language (Xhosa or Afrikaans) to the participant. The interviews took place in a private room at the study office, located in a public space in the community. Written informed consent was obtained prior to commencing the interview.

The IDIs lasted approximately 60-90 minutes each and were audio-recorded. Interviews followed a semi-structured interview guide (Mack, Woodsong, MacQueen, Guest, & Namey, 2005). The guide included opening questions and follow-up probes related to tik initiation and progression, means of purchasing or acquiring tik, sexual behavior and relationships, violence and crime, mental health and well-being, and HIV risk. Specific questions were asked about experiences with sex trading, and perceptions of sex trading among tik users, but content important to sex trading was also discussed by the respondents even at times where it was not directly probed. Interviewers were given training prior to data collection on how to follow the open-ended guide and probe on salient themes throughout the interviews, and received ongoing supervision. They also received training by a clinical psychologist on

how to support participants who spoke about past traumatic events or on-going violence, and how and when to offer active referrals to local service agencies. Participants were compensated with a grocery card in the value of 70 South African Rands (approximately US \$7) at the conclusion of the interview.

All study procedures were approved by the ethical review board at the Duke University Health System and the health research ethics committee of Stellenbosch University.

Analysis

Audio-recordings of the interviews were transcribed and simultaneously translated into English. The textual data were then analyzed in three steps. First, narrative memos were written to summarize and organize the content of each transcript into its main themes and to begin to extract meaning from the data (Birks, Chapman, & Francis, 2008). Each transcript was assigned to one of four individuals for memo writing. The other three read the transcript and memo, and provided input to ensure that the memo accurately captured key details from the original transcript. Relevant quotations were incorporated into the memos to closely reflect participants' own words. Preparing the memos enabled the authors to begin exploring the relationships and themes in the data and proceed to the next step of analysis.

Second, the memos were uploaded to a qualitative analysis software program (NVivo 10), and coded for text related to sex trading. The coded output resulted in 37 pages of single-spaced text. The coded output was reviewed and discussed among the team, and primary thematic categories related to sex trading were identified. The memos were again coded using NVivo 10 for the five primary themes and four sub-themes. Third, the first author wrote analytic memos for each of the themes, using a constant comparative method to identify both similarities and differences across participants (Glaser, 1965). Representative quotations were identified to lend evidence to each of the themes, and the corresponding memos and transcripts for each quote were revisited in order to contextualize participants' words within their overall narratives. The analytic memos were reviewed among the team to reach consensus on findings, and to discuss how to synthesize the findings for manuscript presentation.

Results

Description of sample

As described in Table 1, the sample included 13 women and 17 men, ranging in age from 19 to 44 years. The majority were Coloured, unmarried, unemployed, and with a low level of education. Participants had been using tik regularly for an average of 7 years, and most used on a daily or near-daily basis. Based on ICD-10, all men and almost all women met criteria for amphetamine dependence. Concurrent use of methaqualone (Mandrax, "buttons") and marijuana (cannabis, "dagga") was common (Table 1).

Normality of sex trading

In the context of high rates of drug dependence and unemployment, sex was viewed as a tradable resource for the acquisition of tik. The exchange of sex for tik was something that

participants recognized as “normal” and something that “happens all the time.” Sex trading for tik was described as being most common among women, with five of the women in the sample talking about their own participation in sex trading. The following woman, when asked how she gets tik, says: “Sometimes I will have sex with someone to get tik. For example, they have tik and I don't have a plan and I desperately want to smoke. Then I will smoke with that person and have sex with them after that.” (Black female, 26 years old, 6 years of tik use) Other women who did not participate in sex trading talked about how this was always a possibility for them: “Sometimes guys will take chances since they know that we are smoking. Like a guy will say to me, ‘Come, let's have sex. I will give you 30 Rands (~\$3) to have sex.’” (Black female, 22 years old, 5 years of tik use)

Women's use of sex as a commodity to get tik may be partly explained by their limited access to resources in this setting. In addition to not having employment, women were also less likely to be involved in petty theft and other illegal activities, which were central ways that men gained access to funds for tik. One man described: “Girls are weak. They can't rob, so for them to get a fix they must have sex with someone.” (Black male, 25 years old, 9 years of tik use) However, men also participated in sex trading, primarily with women. Three men in the sample described incidents where they exchanged sex to get tik. In all those cases, the men also talked about times when they exchanged tik to get sex, highlighting the potentially reciprocal relationship of sex trading in this context. Men's involvement in sex trading was notably different from women's involvement, because their participation in “selling” sex appeared to be more opportunistic than sought out. Men spoke about experiences of trading sex only when a woman approached them with an offer, or when it happened in the context of a relationship, and no men spoke about using sex as a primary means for acquiring tik. While seven men talked about giving tik in exchange for sex, only one woman (Coloured female, 26 years old, 11 years of tik use) mentioned that she had ever given someone something to have sex with her. In that case, the woman gave R150 (~\$15) to a tik using friend to have sex with her during a period when her boyfriend was in prison. Notably, this woman also spoke about years of doing formal sex work and relying on sex as her primary means to get tik, again suggesting the reciprocity of sex trading.

The cost of sex trading was typically a packet of tik, enough to get high, costing as little as 20 Rands (~\$2). As a man said, “If you have either a 20 or 30 (Rand) packet for a particular girl, she'll open her legs for you.” (Coloured male, 22 years old, 3 years of tik use) The term “tolly for lolly” was frequently repeated as a term to symbolize the exchange of sex (tolly) for a smoke from a tik pipe (lolly). A man described, “Nothing is for free. If you want something, you have to pay for it. If you want something, you must be prepared to give your body. That's how tolly for lolly works. You have to pay.” (Coloured male, 45 years old, 14 years of tik use) Individuals who had access to even limited resources had nearly unlimited access to sexual partners. Those with access to greater resources, such as a the tik “bosses” or merchants who controlled access to tik distribution, were described as having sexual partnerships with multiple women across the community, including adolescent girls.

Addiction and poverty were clearly the primary drivers of the sex trade. However, there was also an indication that the physiological impact of tik in increasing sexual drive also contributed to the practice of seeking sexual partners while high. Several men talked about

how tik made them “sexually a different person” and in a “fantasy zone,” and how sex was a regular part of the tik experience for them, as this man explained: “It’s much better, after smoking, to go for sex. For me, that’s much better. At night, that’s what I do.” (Coloured male, 26 years old, 12 years of tik use) The impact of tik on women’s sex drive seemed to be more variable; some women spoke about tik making them feel “dead” inside, while others talked about how tik made them “extremely sexual.”

Models of sex trading

The description of sex trading in this sample highlighted four primary models of how sex trading occurred.

1. Negotiated exchange—The most common model of sex trading was the explicit and negotiated exchange of sex for tik or money. In this model, there were direct conversations about the exchange, with the terms of the trade being clear for both sides. Two women in the sample had done what they termed “prostitution” or “road work,” selling sex on the street where they typically received cash for their services. More commonly though, the sex exchange happened in the context of the tik use setting, which could involve either smoking together or the direct transfer of tik or money to use for tik. In the following example, a man described an incident when he negotiated for the exchange of tik for sex with a woman:

“We were drinking and some girls arrived. They used tik. It was the first time I met them. We chatted to each other. In the past, she saw me going to the drug merchant. She knew I was using tik. She asked me if I had anything. I told her that I couldn’t just make her a hit. I asked her, ‘What are you going to give me?’ She said that she had nothing to give me. I said, ‘If you don’t have anything, then I can’t give you anything.’ That’s how things started. She told me that she’ll sleep with me.... We entered a sexual relationship and smoked together.” (Coloured male, 33 years old, 13 years of tik use)

Although this type of exchange was most common for women, two men talked about gay men they knew who also traded sex, and one man talked about his own experience having sex with a woman after she offered him tik.

“There was a time when I didn’t have money, and this girl approached me. I wanted to smoke. She had some Tik, and asked me what I could offer in return for some Tik. I told her I had nothing to offer her currently, but I could repay her in the future. She didn’t accept that, and asked for sex. Initially I refused, but agreed to it later. She reminded me, that in order to smoke, there was no way I could smoke without money. We used an outside toilet to have sex. I asked for money as well. She agreed, and had no problem paying.” (Coloured male, 20 years old, 4 years of tik use)

2. Implicit exchange—In this model, there were not explicit conversations about the exchange of sex for resources, but sex trading was based on unspoken assumptions. This type of exchange happened primarily in the context of smoking together. Men spoke about giving “signals” to women that they can smoke with them, with the expectation that they would have sex in return. One man explained: “Most of the time, even girls know if they are

smoking with guys and they didn't contribute, they will just have to have sex with them.” (Black male, 23 years old, 5 years of tik use) One woman talked about how she and her friends sometimes used this implicit assumption to get tik, and then ran away afterwards: “We just seduce them to get tik, and when they want sex we run away.” (Black female, 26 years old, 6 years of tik use)

3. Relationships that are based on resources—In the third model of sex trading, individuals talked about how they entered relationships with people who could supply them with money or drugs. In some cases, these were exclusive relationships, and in others they were one of several sexual relationships that the individual described. In none of the relationships described did the couple seem to openly discuss the transaction that was involved. This woman described how she “pretends” to have a relationship with a man because he gives her money to buy tik:

“I don't have a stable relationship. I had one, but my boyfriend got arrested. Now I only have this guy that I'm having sex with. The reason why I'm saying I'm just having sex with him is because I don't like him, but he's giving me money. I have to pretend as if I'm in a relationship with him. I know what I want from him, but he is a very nice person. And the other people that I have sex with, I have sex with for tik.” (Black female, 26 years old, 3 years of tik use)

A man spoke about having relationships with two different women who both give him tik or money. He describes one of the women as “the same age as my mother.” He visits them both on occasion and spends the night, after which they give him something in return.

“I don't want to say I sell my body for money but the woman I was telling you about gives me money. Sometimes I will go and have sex with her, because I know she will give me money. I don't know, maybe I am selling myself for tik, because she love me, but I don't love her. I just know what I want is money.” (Black male, 32 years old, 3 years of tik use)

4. Facilitating sex trading for others—In some incidents, sex trading involved a third person who facilitated the sex trade encounter. In all of these cases, the individual who was commodified and sold was a woman, but both men and women were involved as the intermediaries of sex trading. Two men and one woman spoke about how they had profited in facilitating sex trading for others. One man (Coloured male, 40 years old, 10 years of tik use) talked about a “girl who works the streets for me” whom he supplies with clients. Another man (Coloured male, 20 years old, 4 years of tik use) talked about how he helps to link a woman to clients and supplies her with drugs while he collects money from the client: “In my opinion, all she needs is a tik lolly, a mandrax tablet and a R20 (~\$2) in her pocket. After that, all is well with her.” A woman talked about how she assisted her friend by standing guard and making sure that “people cannot suspect anything” while her friend had sex in exchange for tik that they then shared. A man discussed his perception that it was common for men to be involved in the exchange of others, including their girlfriends and partners

“It’s their men who threaten them, their own men. They work the streets to supply their own men with drugs. They use their bodies. She must use her body to feed his addiction. She must support not only herself, but also her boyfriend’s addiction. The boyfriend usually stands on the other side of the road, just to secure that nothing happens to her.” (Coloured male, 45 years old, 14 years of tik use)

There were also two women who talked about being sold by someone else in exchange for money or tik, in both cases without their knowledge. One woman said that she had an “affair” with her husband’s friend, and later learned that her husband had received money from this man to have sex with her. Another woman spoke about how her sister accepted tik from a man in exchange for letting him have sex with her. The woman was unaware of this arrangement, and described how she narrowly escaped this set up:

“When I moved in with her she sold me one day to a man for tik. I will never forget that day. I went to go and pee at a dilapidated building and when I started pulling my pants down I saw the man standing behind me with a knife. He told me that he has given tik to my sister so that he could have sex with me. I was in shock. I still have a scar on my arm (showing me the scar) because I kicked him and fell to the ground. I started running and fell down again. Luckily I escaped being raped that day.” (Coloured woman, 26 years old, 11 years of tik use)

Sexual violence related to sex trading

The ubiquity of sex trading created a context in which sexual violence against female tik users was common. The expectation that sharing tik was an implicit agreement to sex was very strong. Several people talked about women they knew who had been raped after smoking with a man and refusing to have sex. One man talked about his own experience as a perpetrator of rape:

“We smoked, and after that she wanted to go home. I told her she is not going anywhere, she will have sex with me first. She just smoked and expected me to get nothing. So we had a fight and I hit her, and then she ended up going with me. We went home and we had sex till the next morning then I took her home. After that I regretted doing that, because I thought to myself what if she can tell the people I raped her. But she never did that. I was lucky because when you are thinking of it I did rape her, because she didn’t want to have sex with me.” (Black male, 32 years old, 3 years of tik use)

Two women in the sample described being raped when they refused sex after smoking with a man, and two described attempted rapes. In all of these cases, the sexual violence occurred after the two had smoked together and the man felt that it was time to get his “payment” from the woman. This woman explains how she was raped at gunpoint after smoking tik with a man throughout the day:

“We were smoking tik the whole day. At nighttime he asked me to go with him to go and fetch another gram of tik. I went with him and we walked and walked and walked to a deserted place. I asked him where we were going. I asked him if we are not going to fetch the tik. He told me not to worry and showed the gun on his hip. My heart started pounding wildly in my chest because I did not understand what

was happening. I was very afraid. He took me into the bushes. I asked him whether we are going to fetch the tik in the bushes. He told me that it was time for me to pay him back for smoking his tik the whole day. I told him that I did not ask him to give me the drugs he offered. I will never forget that day. He commanded me to sit on my knees. He told me to bend and had doggy style sex with me. While he was having sex with me he was holding the gun against my body.” (Coloured woman, 19 years old, 4 years of tik use)

The acceptance of sexual violence appeared to be closely related to the labeling of tik-using women that supported their commoditization. A man explained this: “I hear guys boasting that they bought a girl for a R20 or R30 (~\$2 or \$3) packet. When these girls walk in the road, guys mock them. They are called ‘20 Rand packet.’” (Coloured male, 30 years old, 7 years of tik use)

HIV risk

Sex trading created risk for HIV in terms of multiple partners and unprotected sex, including in the context of sexual violence. From the side of supplying sex, individuals were often seeking multiple partners in order to procure tik. Both those who traded sex formally (i.e., through formal sex work) and those who traded sex informally (i.e., in tik using settings) appeared to have multiple partners in a single week. From the side of demanding sex, individuals had ample opportunity to have multiple partners, either through seeking out partners or by being sought out by people who were looking to smoke. As noted earlier, the actual cost of having a new sex partner was low, typically just the cost of a tik packet (~\$2). Sex trading partners were often in addition to an individual's more stable partner or spouse. Two women (one who engaged in sex trading and one who did not) spoke about how their husbands had sex with other women in exchange for giving them tik.

Participants in the sample were keenly aware of the risk of HIV. They noted that everyone is “very aware of condoms,” and almost all talked about their own diligence in using condoms. However, the relative importance of condoms in a sexual encounter appeared to depend in part on the desperation for tik and the demands of the more powerful tik-providing partner, especially when violence or force was involved. One woman explained how she was at risk of HIV due to her sex trading: “I think I'm at risk, because sometimes you can find someone who won't use a condom. And because you smoked his tik, you have to do it.” (Black female, 26 years old, 6 years of tik use) Another woman spoke about how the craving of her addiction sometimes made her careless in the act of sex trading: “Anything happens to a person if you are craving to smoke. You don't take note of what you are doing or your circumstances. You are just focused on the money for a hit.” (Coloured female, 26 years old, 11 years of tik use) It appeared to be difficult to negotiate condom use in the act of sex trading, given strong power differentials, threats of violence and intimidation, and what some perceived as a preference by men to have sex without a condom.

Factors of resiliency

Despite the ubiquity of sex trade for tik, there were individuals who adamantly avoided sex trading. Men were more likely to speak insistently about their conviction not to sell their own bodies for tik, speaking about it as a “sin in God's eyes,” something a “man” would

never do, and something that people do not do if they have “self respect.” In speaking about a conviction not to “buy” sex, the reasons were more related to self protection, as this man explained: “It happens, but not in my case. I will smoke with a girl, but I don't demand sex. I don't sleep around because I know that HIV is rife. I'll make a lolly with no expectations of you.” (Coloured male, 23 years old, 9 years of tik use)

For women, the conviction that they would not engage in sex trading was primarily related to an identity that they were not “desperate” or “addicted” enough that they would need to pursue sex trading to get tik. One woman, in defending that she was not an addict, said: “These people who will have sex with people just for drugs, all of them are addicts.” (Black female, 23 years old, 8 years of tik use) Another said that sex trading is a “last resort” for getting tik, and that she has not reached that point of desperation.

Discussion

Previous research has documented high rates of sex trading among methamphetamine users in South Africa (Meade et al., 2012). By qualitatively examining norms and practices related to sex trading among 30 active methamphetamine users in Cape Town, this study provides insight into the context and norms of this behavior, and highlights the risk that sex trading introduces for those involved. The data revealed that sex trading is highly normative as a way to procure access to drugs in this high-poverty setting. It provides insight into the heterogeneity of sex trading behaviors in this setting, including formal sex work, negotiated sex exchange in tik-using settings, and implicit understandings that smoking together is a contract for sex. In addition to people describing their own experiences as both active buyers and sellers of sex, there were also several accounts of people being involved as third parties in facilitating sex exchange for others. The practice of sex exchange created risks in terms of interpersonal violence and HIV exposure, and is therefore an important intervention target in this setting.

Women were more likely to be the “sellers” of sex in this setting, and women universally spoke about sex trading as an option for them to procure tik and money. Only women spoke about personal experiences of sexual violence in relation to sex trade, and about having their bodies “sold” by other individuals for profit. The dynamics of sex trade in this setting therefore reflect the dominant gender norms in this setting, whereby men exert control over women's sexuality (Jewkes et al., 2012a). At the same time, there were also descriptions of men trading sex. For these men, the incidents of selling sex were largely opportunistic or based on on-going transactional relationships. They typically participated in both the buying and selling of sex, depending on who had access to resources. This finding may help to explain previous research, where almost a third of males said that they had had sex to get methamphetamine, and there was a high overlap between men who sold and men who bought sex (Meade et al., 2012). No men in this study reported participating in formal sex trade, or openly soliciting sex. Notably, no men in our sample reported having sex with other men in exchange for drugs, although there were anecdotal accounts of other men they knew who traded sex with male partners. It is possible that this behavior was not discussed because it was highly stigmatized, and likely deserves further investigation.

Addiction was clearly a driver of sex trading in this sample, where over 90% of respondents met criteria for amphetamine dependence. Methamphetamine is highly addictive, and over time many users become dependent on the drug (Barr et al., 2006; Darke, Kaye, McKetin, & Dufrou, 2008). Respondents often noted desperation for getting the drug, and the setting of high poverty and unemployment meant that people often had to turn to illicit or informal means to procure drugs. While men often participate in petty or violent crime to support their drug habit (Watt et al., 2014), women did not appear to have this option. This disparity in access to resources made sex a tradable resource, and sex trading appeared to be a way that women could share in men's spoils from criminal activity and gain access to drugs.

Sex trading in this setting was most often explicitly negotiated prior to any exchange. This is in contrast to sex trading behaviors for alcohol, where sexual exchange was more likely undertaken as an implicit expectation (Townsend et al., 2011; Watt et al., 2012; Wojcicki, 2002b). However, similarly to alcohol settings, the ubiquity of sex trading behaviors created norms that put women at risk of physical and sexual violence if they did not comply with expectations. Women discussed being beaten or raped if they did not agree to sex after sharing drugs with a man, and several men were very forthcoming about their own experiences forcing women to have sex after smoking with her.

Although very few individuals in our sample spoke about participating in formal sex work, there were several indications of the recognized business of sex work in this sample. Male respondents spoke about profiting from the sex trade of other women, including their own wives or partners. The exploitation of women by their own partners has been documented elsewhere (Wechsberg et al., 2013). Although sex trafficking usually focuses on the sexual exploitation of individuals by organized groups and strangers (Adepoju, 2005), the trafficking of women and girls by family members, especially in the context of drug use, deserves attention.

Other studies have documented HIV risk behaviors, including multiple partners and inconsistent condom use, among methamphetamine users in South Africa (Meade et al., 2014; Meade et al., 2012; Parry et al., 2011; Pluddemann, Flisher, Mathews, Carney, & Lombard, 2008; Simbayi et al., 2006; Wechsberg et al., 2010). Our data suggests that sex trading norms and behaviors may help to explain these risk behaviors. Multiple partners were easy to obtain by providing someone with even small amounts of methamphetamine, and individuals who relied on sex trading to procure drugs necessarily had a large number of partners. Even those who did not trade sex themselves may have been at risk, as many respondents spoke about how their partners engaged in sex trade with others. The increased sexual drive that many people experience with methamphetamine may have contributed to the pursuit of multiple sexual partners through sex trading relationships (Volkow et al., 2007). Given the power differentials in sex trading relationships, it appeared to be difficult to negotiate and insist upon condoms, which has been documented in other transactional sex relationships in South Africa (Dunkle et al., 2007; Dunkle et al., 2004; Watt et al., 2012). Further, rape in the context of sex trading behaviors or expectations further contributes to HIV risk, as forced sexual experiences are not only less likely to be protected, but may also result in trauma to the genital tract that facilitates HIV transmission (Maman, Campbell, Sweat, & Gielen, 2000). South Africa is widely recognized as having one of the highest rates

of sexual violence globally, with estimates that one in three women experience rape in their lifetimes (Jewkes & Abrahams, 2002). The risk of sexual violence is likely exacerbated by the physiological impact of methamphetamine, which impairs judgment and increases aggression (Sommers, Baskin, & Baskin-Sommers, 2006).

Given the normality of sex trading among methamphetamine users in this setting, and the impact that sex trading appears to have on violence and HIV risk, there is a dire need for intervention in this area. Given the heterogeneity of sex trading behaviors that were documented, and the fact that these individuals are typically hidden from view, there are unique challenges to addressing this problem. Nevertheless, some clear opportunities for interventions emerge. First and foremost is a need to address the problem of methamphetamine addiction. Given that sex trading was almost always done to procure drugs, providing treatment and rehabilitation for methamphetamine use is likely the most effective intervention for reducing sex trading behaviors in this setting. Secondly, there is a need for harm reduction interventions among active methamphetamine users who may engage in sex trading. For sexual health promotion, such interventions include HIV testing, education about HIV acquisition and transmission, and availability of condoms. Peer-based interventions with drug-using populations have shown success in delivering sexual health interventions in other parts of the world and could be adapted for this context (Latkin et al., 2013). There is also a need for harm reduction interventions related to sexual violence in the context of sex trading. Such interventions may include education of methamphetamine-using populations about how to prevent, recognize and report sexual violence; clarification that sexual violence is always wrong, even in the context of sex trading relationships; and education of law enforcement to effectively respond to sexual violence among drug users. Intervention studies that address sexual behavior among drug-using populations should target and measure sexual relationship power as an outcome, given the important role of gender power relations in contributing to sexual risk behaviors in this population (Campbell et al., 2009; Campbell, Tross, Hu, Pavlicova, & Nunes, 2012).

This study must be considered in light of its limitations. As a qualitative study, the results are not meant to be generalizable, but instead to give insight into a culturally situated phenomenon that may be relevant to other settings and populations. The sample was selected based on the study team's perception that individuals would be good qualitative informants (Morse, 1991), but it is possible that this sampling strategy missed a key group of people who may have been initially more reticent, but who could have offered different or unique insights into the phenomenon of sex trading in this setting. Given that the interviews were conducted using a semi-structured guide, the exact questions asked and the depth of discussion about sex trading varied across respondents. It is therefore impossible to report with any accuracy the proportion of respondents who had participated in sex trading behavior. Additionally, it is possible that it was difficult for some people to talk about their personal experiences trading sex for methamphetamine, and that some nuances of sex trading practices may remain hidden from view. That said, a large number did speak openly about their experiences both selling and buying sex in exchange for methamphetamine. Finally, the interviews were simultaneously transcribed and translated, so the original language of the interview was not retained or analyzed directly. It is possible that nuances in meaning were lost in the interpretive work of translation (Squires, 2009). Future qualitative

work on this topic would benefit from discourse analysis (Hyland & Paltridge, 2011), an analytical approach that examines how social systems and hierarchies are expressed and reproduced in language, to gain insight into the words and expressions that individuals use to describe sex trading behavior.

In conclusion, this study offers rich insight into the largely hidden behavior of sex trading among methamphetamine users in South Africa. The data helps to explain the context of high rates of sexual risk behavior that have been documented among this population, and offers a call for action in order to prevent the spread of HIV and other sexually transmitted infections. Policy approaches are needed to increase the availability of acceptable and accessible drug treatment services in the community, and targeted and tailored harm reduction interventions are needed to curb HIV transmission and prevent sexual violence among methamphetamine users. Sex trading among methamphetamine users in South Africa represents a public health problem that deserves concerted attention.

Acknowledgments

This study was funded by grants R03-DA033282 and K23-DA028660 from the National Institute on Drug Abuse and was supported by the Duke Center for AIDS Research (P30- AI064518). We wish to acknowledge the support of Jennifer Karp and Katie Guidera who assisted with data analysis. We are grateful to all of the men and women who participated in this study and our study staff in South Africa (Albert Africa, Tembie Mafikizolo, and Mariana Bolumbe).

References

- Adepoju A. Review of research and data on human trafficking in sub-Saharan Africa. *International Migration*. 2005; 43:75–98.10.1111/j.0020-7985.2005.00313.x
- Astemborski J, Vlahov D, Warren D, Solomon L, Nelson KE. The trading of sex for drugs or money and HIV seropositivity among female intravenous drug users. *American Journal of Public Health*. 1994; 84:382–387.10.2105/AJPH.84.3.382 [PubMed: 8129052]
- Barr AM, Panenka WJ, MacEwan GW, Thornton AE, Lang DJ, Honer WG, Lecomte T. The need for speed: an update on methamphetamine addiction. *Journal of Psychiatry and Neuroscience*. 2006; 31:301–313. Retrieved from <http://jpn.ca/>. [PubMed: 16951733]
- Birks M, Chapman Y, Francis K. Memoing in qualitative research probing data and processes. *Journal of Research in Nursing*. 2008; 13:68–75.10.1177/1744987107081254
- Campbell AN, Tross S, Dworkin SL, Hu MC, Manuel J, Pavlicova M, Nunes EV. Relationship power and sexual risk among women in community-based substance abuse treatment. *Journal of Urban Health*. 2009; 86:951–964.10.1007/s11524-009-9405-0 [PubMed: 19921541]
- Campbell AN, Tross S, Hu MC, Pavlicova M, Nunes EV. Predictors of relationship power among drug-involved women. *AIDS and Behavior*. 2012; 16:1532–1541.10.1007/s10461-012-0208-z [PubMed: 22614746]
- Chatterji M, Murray N, London D, Anglewicz P. The factors influencing transactional sex among young men and women in 12 sub-Saharan African countries. *Biodemography and Social Biology*. 2005; 52:56–72.10.1080/19485565.2002.9989099
- Couture MC, Evans JL, Sothy NS, Stein ES, Sichan K, Maher L, Page K. Correlates of amphetamine-type stimulant use and associations with HIV-related risks among young women engaged in sex work in Phnom Penh, Cambodia. *Drug and Alcohol Dependence*. 2012; 120:119–126.10.1016/j.drugalcdep.2011.07.005 [PubMed: 21820251]
- Couture MC, Sansothy N, Sapphon V, Phal S, Sichan K, Stein E, et al. Page K. Young women engaged in sex work in Phnom Penh, Cambodia, have high incidence of HIV and sexually transmitted infections, and amphetamine-type stimulant use: new challenges to HIV prevention and risk.

- Sexually Transmitted Diseases. 2011; 38:33–39.10.1097/OLQ.0b013e3182000e47 [PubMed: 21085056]
- Dada S, Pluddemann A, Parry C, Bhana A, Vawda M, Perreira T, et al. Weimann R. Monitoring alcohol & drug abuse trends in South Africa. SACENDU Research Brief. 2012; 15:1–15. Retrieved from: <http://www.sahealthinfo.org/admodule/sacendu/SACENDUBriefJune2012.pdf>.
- Darke S, Kaye S, McKetin R, Duflou J. Major physical and psychological harms of methamphetamine use. Drug and Alcohol Review. 2008; 27:253–262.10.1080/09595230801923702 [PubMed: 18368606]
- Dunkle KL, Jewkes R, Nduna M, Jama N, Levin J, Sikweyiya Y, Koss MP. Transactional sex with casual and main partners among young South African men in the rural Eastern Cape: prevalence, predictors, and associations with gender-based violence. Social Science and Medicine. 2007; 65:1235–1248.10.1016/j.socscimed.2007.04.029 [PubMed: 17560702]
- Dunkle KL, Jewkes RK, Brown HC, Gray GE, McIntyre JA, Harlow SD. Transactional sex among women in Soweto, South Africa: prevalence, risk factors and association with HIV infection. Social Science and Medicine. 2004; 59:1581–1592.10.1016/j.socscimed.2004.02.003 [PubMed: 15279917]
- Gibbs A, Sikweyiya Y, Jewkes R. ‘Men value their dignity’: securing respect and identity construction in urban informal settlements in South Africa. Global Health Action. 2014; 7:23676.10.3402/gha.v7.23676 [PubMed: 24717188]
- Glaser BG. The constant comparative method of qualitative analysis. Social Problems. 1965:436–445.10.2307/798843
- Golder S, Logan TK. Correlates and predictors of women's sex trading over time among a sample of out-of-treatment drugs abusers. AIDS and Behavior. 2007; 11:628–640.10.1007/s10461-006-9158-7 [PubMed: 16909324]
- Halkitis PN, Green KA, Mourgues P. Longitudinal investigation of methamphetamine use among gay and bisexual men in New York City: findings from Project BUMPS. Journal of Urban Health. 2005; 82:i18–25.10.1093/jurban/jti020 [PubMed: 15738324]
- Hyland, K.; Paltridge, B. Continuum Companion to Discourse Analysis. London: Continuum; 2011.
- Inciardi JA. Crack, crack house sex, and HIV risk. Archives of Sexual Behavior. 1995; 24:249–269.10.1007/BF01541599 [PubMed: 7611845]
- Jewkes R, Abrahams N. The epidemiology of rape and sexual coercion in South Africa: an overview. Social Science and Medicine. 2002; 55:1231–1244.10.1016/S0277-9536(01)00242-8 [PubMed: 12365533]
- Jewkes R, Morrell R, Sikweyiya Y, Dunkle K, Penn-Kekana L. Men, prostitution and the provider role: understanding the intersections of economic exchange, sex, crime and violence in South Africa. PLoS One. 2012a; 7:e40821.10.1371/journal.pone.0040821 [PubMed: 22911711]
- Jewkes R, Morrell R, Sikweyiya Y, Dunkle K, Penn-Kekana L. Transactional relationships and sex with a woman in prostitution: prevalence and patterns in a representative sample of South African men. BMC Public Health. 2012b; 12:325.10.1186/1471-2458-12-325 [PubMed: 22551102]
- Jewkes R, Vundule C, Maforah F, Jordaan E. Relationship dynamics and teenage pregnancy in South Africa. Social Science and Medicine. 2001; 52:733–744.10.1016/S0277-9536(00)00177-5 [PubMed: 11218177]
- Kang D, Liao M, Jiang Z, Zhang X, Mao W, Zhang N, et al. Jia Y. Commercial sex venues, syphilis and methamphetamine use among female sex workers. AIDS Care. 2011; 23:26–36.10.1080/09540121.2011.560930 [PubMed: 21660748]
- Kimani SM, Watt MH, Merli MG, Skinner D, Myers B, Pieterse D, et al. Meade CS. Respondent driven sampling is an effective method for engaging methamphetamine users in HIV prevention research in South Africa. Drug and Alcohol Dependence. 2014; 143:134–140.10.1016/j.drugalcdep.2014.07.018 [PubMed: 25128957]
- Latkin CA, Davey-Rothwell MA, Knowlton AR, Alexander KA, Williams CT, Boodram B. Social network approaches to recruitment, HIV prevention, medical care, and medication adherence. Journal of Acquired Immune Deficiency Syndromes. 2013; 63:S54–58.10.1097/QAI.0b013e3182928e2a [PubMed: 23673888]

- Luke N. Age and economic asymmetries in the sexual relationships of adolescent girls in sub-Saharan Africa. *Studies of Family Planning*. 2003; 34:67–86. Retrieved from: <http://www.jstor.org/stable/3181180>.
- Mack, N.; Woodsong, C.; MacQueen, K.; Guest, G.; Namey, E. In-depth interviews Qualitative research methods: A data collector's field guide. Research Triangle Park, NC: Family Health International; 2005. p. 29-50.
- Maher L, Phlong P, Mooney-Somers J, Keo S, Stein E, Couture MC, Page K. Amphetamine-type stimulant use and HIV/STI risk behaviour among young female sex workers in Phnom Penh, Cambodia. *International Journal of Drug Policy*. 2011; 22:203–209.10.1016/j.drugpo.2011.01.003 [PubMed: 21316935]
- Maman S, Campbell J, Sweat MD, Gielen AC. The intersections of HIV and violence: directions for future research and interventions. *Social Science and Medicine*. 2000; 50:459–478.10.1016/S0277-9536(99)00270-1 [PubMed: 10641800]
- Matasha E, Ntembelela T, Mayaud P, Saidi W, Todd J, Mujaya B, Tendo-Wambua L. Sexual and reproductive health among primary and secondary school pupils in Mwanza, Tanzania: need for intervention. *AIDS Care*. 1998; 10:571–582.10.1080/09540129848433 [PubMed: 9828954]
- Meade CS, Towe SL, Watt MH, Hobkirk AL, Skinner D, Myers B, et al. Pieterse D. HIV testing behaviors and attitudes among community recruited methamphetamine users in a South African township. *AIDS and Behavior*. 2014 Advance online publication. 10.1007/s10461-014-0795-y
- Meade CS, Watt MH, Sikkema KJ, Deng LX, Ranby KW, Skinner D, et al. Kalichmann SC. Methamphetamine use is associated with childhood sexual abuse and HIV sexual risk behaviors among patrons of alcohol-serving venues in Cape Town, South Africa. *Drug and Alcohol Dependence*. 2012; 126:232–239.10.1016/j.drugalcdep.2012.05.024 [PubMed: 22717338]
- Meekers, D.; Calves, AE. 'Maina' girlfriends, girlfriends, marriage, and money: the social context of HIV risk behaviour in sub-Saharan Africa; *Health Transition Review*. 1997. p. 361-375. Retrieved from: <http://www.jstor.org/stable/40652313>
- Miller CL, Kerr T, Frankish JC, Spittal PM, Li K, Schechter MT, Wood E. Binge drug use independently predicts HIV seroconversion among injection drug users: implications for public health strategies. *Substance Use and Misuse*. 2006; 41:199–210.10.1080/10826080500391795 [PubMed: 16393742]
- Mojola, SA. Love, Money, and HIV : Becoming a Modern African Woman in the Age of AIDS. Oakland, CA: University of California Press; 2014.
- Morse, JM. Strategies for sampling. In: Morse, JM., editor. *Qualitative Nursing Research: A Contemporary Dialogue*. Newbury Park, Calif: Sage Publications; 1991. p. 127-145.
- Nakamura N, Mausbach BT, Ulibarri MD, Semple SJ, Patterson TL. Methamphetamine use, attitudes about condoms, and sexual risk behavior among HIV-positive men who have sex with men. *Archives of Sexual Behavior*. 2011; 40:267–272.10.1007/s10508-009-9566-7 [PubMed: 19856091]
- Nakamura N, Semple SJ, Strathdee SA, Patterson TL. HIV risk profiles among HIV-positive, methamphetamine-using men who have sex with both men and women. *Archives of Sexual Behavior*. 2011; 40:793–801.10.1007/s10508-010-9713-1 [PubMed: 21203813]
- Nyanzi S, Pool R, Kinsman J. The negotiation of sexual relationships among school pupils in south-western Uganda. *AIDS Care*. 2001; 13:83–98.10.1080/09540120020018206 [PubMed: 11177467]
- Panenka WJ, Procyshyn RM, Lecomte T, MacEwan GW, Flynn SW, Honer WG, Barr AM. Methamphetamine use: a comprehensive review of molecular, preclinical and clinical findings. *Drug and Alcohol Dependence*. 2013; 129:167–179.10.1016/j.drugalcdep.2012.11.016 [PubMed: 23273775]
- Parry CD, Pludemann A, Myers B, Wechsberg WM, Flisher AJ. Methamphetamine use and sexual risk behaviour in Cape Town, South Africa: a review of data from 8 studies conducted between 2004 and 2007. *African Journal of Psychiatry*. 2011; 14:372–376.10.4314/ajpsy.v14i5.4 [PubMed: 22183467]
- Peltzer K, Ramlagan S, Johnson BD, Phaswana-Mafuya N. Illicit drug use and treatment in South Africa: a review. *Substance Use and Misuse*. 2010; 45:2221–2243.10.3109/10826084.2010.481594 [PubMed: 21039113]

- Pitpitan EV, Kalichman SC, Eaton LA, Watt MH, Sikkema KJ, Skinner D, et al. Cain D. Men (and women) as “sellers” of sex in alcohol-serving venues in Cape Town, South Africa. *Prevention Science*. 2014; 15:296–308.10.1007/s11121-013-0381-y [PubMed: 23494405]
- Pluddemann A, Flisher AJ, Mathews C, Carney T, Lombard C. Adolescent methamphetamine use and sexual risk behaviour in secondary school students in Cape Town, South Africa. *Drug and Alcohol Review*. 2008; 27:687–692.10.1080/09595230802245253 [PubMed: 18825548]
- Rawstorne P, Digiusto E, Worth H, Zablotska I. Associations between crystal methamphetamine use and potentially unsafe sexual activity among gay men in Australia. *Archives of Sexual Behavior*. 2007; 36:646–654.10.1007/s10508-007-9206-z [PubMed: 17690971]
- Risser JM, Timpson SC, McCurdy SA, Ross MW, Williams ML. Psychological correlates of trading sex for money among African American crack cocaine smokers. *American Journal of Drug and Alcohol Abuse*. 2006; 32:645–653.10.1080/00952990600919062 [PubMed: 17127553]
- Semple SJ, Strathdee SA, Zians J, Patterson TL. Social and behavioral characteristics of HIV-positive MSM who trade sex for methamphetamine. *American Journal of Drug and Alcohol Abuse*. 2010; 36:325–331.10.3109/00952990.2010.505273 [PubMed: 20955106]
- Semple SJ, Strathdee SA, Zians J, Patterson TL. Correlates of trading sex for methamphetamine in a sample of HIV-negative heterosexual methamphetamine users. *Journal of Psychoactive Drugs*. 2011; 43:79–88.10.1080/02791072.2011.587390 [PubMed: 21858954]
- Shannon K, Strathdee S, Shoveller J, Zhang R, Montaner J, Tyndall M. Crystal methamphetamine use among female street-based sex workers: Moving beyond individual-focused interventions. *Drug and Alcohol Dependence*. 2011; 113:76–81.10.1016/j.drugalcdep.2010.07.011 [PubMed: 20810223]
- Simbayi LC, Kalichman SC, Cain D, Cherry C, Henda N, Cloete A. Methamphetamine use and sexual risks for HIV infection in Cape Town, South Africa. *Journal of Substance Use*. 2006; 11:291–300.10.1080/14659890600625767
- Sommers I, Baskin D, Baskin-Sommers A. Methamphetamine use among young adults: health and social consequences. *Addictive Behavior*. 2006; 31:1469–1476.10.1016/j.addbeh.2005.10.004
- South African Department of Health. The 2012 National Antenatal Sentinel HIV and Herpes Simplex Type-2 Prevalence Survey, South Africa. Pretoria: Government of South Africa; 2014.
- Squires A. Methodological challenges in cross-language qualitative research: a research review. *International Journal of Nursing Studies*. 2009; 46:277–287.10.1016/j.ijnurstu.2008.08.006 [PubMed: 18789799]
- Statistics South Africa. Census 2011 Municipal Report - Western Cape. Pretoria: Statistics South Africa; 2012.
- Townsend L, Ragnarsson A, Mathews C, Johnston LG, Ekstrom AM, Thorson A, Chopra M. “Taking care of business”: alcohol as currency in transactional sexual relationships among players in Cape Town, South Africa. *Qualitative Health Research*. 2011; 21:41–50.10.1177/1049732310378296 [PubMed: 20671303]
- Urada LA, Strathdee SA, Morisky DE, Schilling RF, Simbulan NP, Estacio LR Jr, et al. Raj A. Sex work and its associations with alcohol and methamphetamine use among female bar and spa workers in the Philippines. *Asia Pacific Journal of Public Health*. 2014; 26:138–146.10.1177/1010539512471969 [PubMed: 23343641]
- Vearrier D, Greenberg MI, Miller SN, Okaneku JT, Haggerty DA. Methamphetamine: history, pathophysiology, adverse health effects, current trends, and hazards associated with the clandestine manufacture of methamphetamine. *Disease-a-Month*. 2012; 58:38–89.10.1016/j.disamonth.2011.09.004 [PubMed: 22251899]
- Volkow ND, Wang GJ, Fowler JS, Telang F, Jayne M, Wong C. Stimulant-induced enhanced sexual desire as a potential contributing factor in HIV transmission. *American Journal of Psychiatry*. 2007; 164:157–160.10.1176/appi.ajp.164.1.157 [PubMed: 17202559]
- Watt MH, Aunon FM, Skinner D, Sikkema KJ, Kalichman SC, Pieterse D. “Because he has bought for her, he wants to sleep with her”: alcohol as a currency for sexual exchange in South African drinking venues. *Social Science and Medicine*. 2012; 74:1005–1012.10.1016/j.socscimed.2011.12.022 [PubMed: 22326304]

- Watt MH, Meade CS, Kimani S, MacFarlane JC, Choi KW, Skinner D, et al. Sikkema KJ. The impact of methamphetamine (“tik”) on a peri-urban community in Cape Town, South Africa. *International Journal of Drug Policy*. 2014; 25:219–225.10.1016/j.drugpo.2013.10.007 [PubMed: 24246503]
- Wechsberg WM, Jones HE, Zule WA, Myers BJ, Browne FA, Kaufman MR, et al. Parry CDH. Methamphetamine (tik) use and its association with condom use among out-of-school females in Cape Town, South Africa. *American Journal of Drug and Alcohol Abuse*. 2010; 36:208–213. [PubMed: 20560840]
- Wechsberg WM, Myers B, Reed E, Carney T, Emanuel AN, Browne FA. Substance use, gender inequity, violence and sexual risk among couples in Cape Town. *Culture Health and Sex*. 2013; 15:1221–1236.10.1080/13691058.2013.815366
- Windle M. The trading of sex for money or drugs, sexually transmitted diseases (STDs), and HIV-related risk behaviors among multisubstance using alcoholic inpatients. *Drug and Alcohol Dependence*. 1997; 49:33–38.10.1016/S0376-8716(97)00136-1 [PubMed: 9476697]
- Wojcicki JM. Commercial sex work or ukuphanda? Sex-for-money exchange in Soweto and Hammanskraal area, South Africa. *Culture, Medicine, and Psychiatry*. 2002a; 26:339–370.10.1525/maq.2002.16.3.267
- Wojcicki JM. “She drank his money”: survival sex and the problem of violence in taverns in Gauteng province, South Africa. *Medical Anthropology Quarterly*. 2002b; 16:267–293.10.1525/maq.2002.16.3.267 [PubMed: 12227257]

Table 1
Sample characteristics by gender (n=30)

	Total	Women (n = 13)	Men (n = 17)
Age in years, M (SD)	28.5 (6.7)	28.2 (6.5)	28.6 (7.1)
Coloured, n (%)	20 (66.7)	9 (69.2)	11 (64.7)
Completed primary school education, n (%)	20 (66.7)	7 (53.8)	13 (76.5)
Unemployed in the past year (part- or full-time), n (%)	26 (86.7)	9 (69.2)	17 (100)
Unmarried, n (%)	27 (90.0)	10 (76.9)	17 (100)
Days of methamphetamine use in past 30, M (SD)	25.0 (8.0)	21.7 (9.2)	27.5 (6.0)
Years of regular methamphetamine use, M (SD)	7.2 (4.0)	5.5 (3.4)	8.5 (4.1)
ICD-10 Amphetamine Dependence, %	27 (93.1)	10 (83.3)	17 (100)
Concurrent other use in past 30 days, n %			
Methaqualone	19 (63.3)	5 (38.5)	14 (82.3)
Marijuana	21 (70.0)	5 (38.5)	16 (94.1)