HHS Public Access

Author manuscript

Int J Drug Policy. Author manuscript; available in PMC 2017 April 01.

Published in final edited form as:

Int J Drug Policy. 2016 April ; 30: 99–106. doi:10.1016/j.drugpo.2015.10.006.

A qualitative study of methamphetamine initiation in Cape Town, South Africa

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Abstract

Background—Despite a significant rise in methamphetamine use in low- and middle-income countries, there has been little empirical examination of the factors that contribute to individuals' initiation of methamphetamine use in these settings. The goal of this study was to qualitatively examine factors associated with methamphetamine initiation in South Africa.

Methods—In-depth interviews were conducted with 30 active methamphetamine users (13 women and 17 men) in Cape Town, South Africa. Interviews included narrative descriptions of the circumstances surrounding methamphetamine initiation. Interviews were audio recorded, transcribed, and translated. Transcripts were analyzed with document memos, data display matrices, and a constant comparison technique to identify themes.

Results—On average, participants began regularly using methamphetamine around age 21 and had used for seven years. Four major themes emerged related to the initiation of methamphetamine use. The prevalence of methamphetamine users and distributors made the drug convenient and highly accessible to first time users. Methamphetamine has increased in popularity and is considered "trendy", which contributes to social pressure from friends, and less often, family members to initiate use. Initiation is further fueled by a lack of opportunities for recreation and employment, which leads to boredom and curiosity about the rumored positive effects of the drug.

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Young people also turn to methamphetamine use and distribution through gang membership as an attempt to generate income in impoverished communities with limited economic opportunities. Finally, participants described initiating methamphetamine as a means of coping with the cumulative stress and psychological burden provoked by the high rates of violence and crime in areas of Cape Town.

Conclusion—The findings highlight the complex nature of methamphetamine initiation in low- and middle-income countries like South Africa. There is a need for community-level interventions to address the availability and perceived normality of methamphetamine use, and to provide young people opportunities for recreation. On an individual level, addressing mental health and misconceptions about the dangers and benefits of methamphetamine could ameliorate willingness for initiation. Potential points of intervention include mass media campaigns and school-based interventions to raise awareness of the physical and social impacts of methamphetamine, and structural interventions to create safer neighborhoods, provide opportunities for employment and recreation, and expand mental health services to improve emotional health and coping skills.

Keywords

South Africa; Methamphetamine; Substance use; Prevention; Qualitative research

Introduction

The global production and trafficking of methamphetamine, a highly addictive psychostimulant, has reached unprecedented levels (United Nations Office on Drugs and Crime, 2014). According to the World Drug Report, global methamphetamine seizures quadrupled from 2008 to 2012 (United Nations Office on Drugs and Crime, 2014). Although it is difficult to capture accurate substance use prevalence estimates in countries like South Africa, where the use of illicit substances like methamphetamine is stigmatized, the United Nations estimated that there were 610,000 amphetamine users (a category that includes methamphetamine) in South Africa in 2014 (United Nations Office on Drugs and Crime, 2014) . Localized areas, like Cape Town, have been crippled by the sudden rise in methamphetamine. In Cape Town, admissions to substance abuse treatment centers primarily for methamphetamine rose from 0.3% in 2002 to 33% in 2013 (Johnson et al., 2014). The use of methamphetamine, colloquially referred to as “tik”, is particularly common among young men of Coloured race (“Coloured” refers to people of mixed race ancestry who form a unique cultural grouping in South Africa). However, several studies have also documented high rates of methamphetamine use among women and in densely populated Black African communities (Myers et al., 2013; Wechsberg et al., 2010).

In Cape Town, methamphetamine use contributes to poor mental and physical health, disrupted relationships, and increased rates of crime, violence, and unemployment in the community (Watt et al., 2014). When compared with non-methamphetamine users, methamphetamine users reported more polysubstance use; higher rates of interpersonal violence, including childhood physical and sexual abuse, and intimate partner violence; and risky sexual behavior such as sex trade, sex with multiple partners, and unprotected sex (Meade et al., 2012; Plüddemann et al., 2013; Pluddemann, Flisher, McKetin, Parry, & Lombard, 2010; Simbayi et al., 2006; Wechsberg et al., 2012). Given the high prevalence of

methamphetamine use in this context and the well-documented detrimental effects of this drug, evidence-based strategies to prevent the initiation of methamphetamine use are urgently needed in this region. In order to develop these strategies, an in-depth understanding of the contextual and psychosocial factors that drive the initiation of methamphetamine use is required.

Despite this need, few studies have explored factors associated with the initiation of methamphetamine use, where initiation may occur either through transition to methamphetamine from the use of other substances, such as alcohol, tobacco, and marijuana, or by using methamphetamine as the first introduction to any substance. The few studies that have investigated this topic have been conducted in high-income countries and have mainly focused on injection of methamphetamine. For example, in a Canadian study, factors such as being male, sexual abuse history, young age, neighborhood, prior illicit drug use, and homelessness were all associated with increased risk of initiating methamphetamine injection (Marshall et al., 2011). In a qualitative multi-site U.S. study, methamphetamine injectors identified several reasons for their first use, including curiosity, peer influence, popularity and availability of methamphetamine, the rush of injecting over smoking, and using methamphetamine to cope with poor mental and physical health (Lankenau et al., 2010). While these findings contribute to our understanding of the range of individual, interpersonal and environmental factors associated with the initiation of methamphetamine injection, the extent to which these findings extend to low-and-middle income countries (LMIC) is unknown. Factors leading to the initiation of methamphetamine use in LMIC may be different than those found in North America, especially given the high rates of drug-related crime and violence in regions like post-apartheid South Africa (Johnson et al., 2014; Norman, Matzopoulos, Groenewald, & Bradshaw, 2007). In addition, our current knowledge on this topic only characterizes the initiation of injection methamphetamine use and provides little insight into the initiation of smoked methamphetamine, which is related to similarly negative consequences for users (Schifano, Corkery, & Cuffolo, 2007). Further research on factors associated with the initiation of methamphetamine smoking is needed, particularly as smoking is a common route of methamphetamine administration in emerging methamphetamine “hot spots”, such as Cape Town, South Africa (Meade et al., 2015).

The current study used qualitative methods to gain an in-depth understanding of the circumstances surrounding the first use of methamphetamine among active users in Cape Town, South Africa. The primary aim was to understand the contextual, social, and individual factors that drive people to initiate methamphetamine use. Identifying the factors that contribute to methamphetamine initiation may lead to the development of additional strategies for the prevention of methamphetamine initiation in this region.

Methods

Setting

This study was conducted in Delft, a peri-urban township located 15 miles from Cape Town’s city center. The township was established in the early 1990s and has a fairly equal number of residents who are Black African and Coloured. The majority of its 150,000 residents are unemployed and there are high rates of poverty (Statistics South Africa,

2011a). This community is one of many in South Africa that has been negatively impacted by the growing methamphetamine epidemic (Meade et al., 2012; Watt et al., 2014).

Participants

Participants for the current study (n=30) were purposively selected to obtain diversity in race, gender, and drug use characteristics (e.g., age at first use) from a larger sample of active methamphetamine users recruited from the community through respondent driven sampling. The details of recruitment for the larger study are described elsewhere (Kimani et al., 2014). All participants were at least 18 years of age and had tested positive for methamphetamine use on a urine screen.

Procedures

All participants recruited for the larger study completed an audio computer-administered self-interview (ACASI) that assessed demographic information (i.e., age, race, marital status, and socio-economic status). At the same visit, they also completed a structured clinical interview. The interview included the Addiction Severity Index-Lite (McLellan, Luborsky, Woody, & O'Brien, 1980), which assesses current and lifetime history of drug use, when participants began using regularly, and years of use. The Composite International Diagnostic Interview (CIDI 3.0) was administered to determine substance dependence based on the International Classification of Diseases criteria (ICD-10th revision) (Kessler & Üstün, 2004; Robins et al., 1988).

Participants who were selected for the in-depth interviews were asked to return to the study office on a separate day for the interview. In-depth interviews were conducted by local interviewers who were matched to participants by race and language (isiXhosa or Afrikaans). All interviewers had post-secondary school education with previous experience conducting qualitative interviews, and received extensive training on qualitative methods by the second and fourth authors. The interviews took place at the local library in a private room, to encourage honesty and candidness. Written informed consent was obtained prior to the interview.

Participants were compensated with a grocery store voucher for ZAR 70 (approximately US $7). The interviews were audio recorded and lasted approximately 60–90 minutes. Interviews followed a semi-structured guide with opening questions and follow-up probes to elicit participants' narratives regarding their reasons for initiating methamphetamine and the circumstances surrounding their first use (Mack, Woodsong, MacQueen, Guest, & Namey, 2005). Interviewers were trained prior to data collection on how to follow the open-ended guide and probe on relevant themes throughout the interviews. To ensure trustworthiness of the data collection process, interviewers received ongoing supervision and feedback throughout data collection.

Given the sensitive nature of the interviews, staff were instructed on how to offer appropriate support and referrals, and how to assess for suicide risk. At the conclusion of the interview, all participants were offered a list of referrals or the opportunity to have the interviewer make active referrals on the participant's behalf when indicated. Psychologists were on call during the interviews to provide guidance on managing distressed participants. All

procedures were approved by the ethical review boards of Duke University Medical Center (USA) and Stellenbosch University (South Africa).

Data Analysis

The interview recordings were transcribed and translated into English. The text was analyzed using four steps. First, analytic memos were written to synthesize and organize the content of each transcript into its main themes (Birks, Chapman, & Francis, 2008). Each memo was written by one research member and then reviewed by at least two others who provided input to ensure that the memo accurately captured key details from the original transcript. Relevant quotations were included in the memos to capture participants' own words. Second, the memos were discussed among the study team and primary thematic categories related to methamphetamine initiation were identified. The memos were organized into a data display matrix to identify sub-themes among narratives relevant to methamphetamine initiation. Third, the memos were uploaded to a qualitative analysis program (NVivo 10), coded for text related to the five primary themes identified, and analyzed using a constant comparison technique. Finally, the first author wrote analytic memos for each of the themes, identifying representative quotations. The analytic memos were reviewed and discussed among the team before manuscript preparation.

Description of the Sample

The demographic characteristics of the sample are displayed in Table 1. The sample included 13 women and 17 men who ranged in age from 19 to 44 years. The majority were Coloured, unmarried, and unemployed. Over 30% of the sample did not complete primary school. On average, participants began regularly using methamphetamine around age 21 and had used regularly for seven years. Over 90% of participants met ICD-10 criteria for amphetamine dependence. To better capture the participants' experiences, the local term for methamphetamine (tik) and marijuana (dagga) will be used throughout the quotations.

Results

Themes Related to Methamphetamine Initiation

Four primary themes emerged from the participants' narratives as major factors leading to methamphetamine initiation. The results begin with an introduction to the nature of methamphetamine initiation with the section, *Transition from other substances to methamphetamine initiation*. This is followed by a discussion of the contextual factors in the two sections titled, *Perceived prevalence and availability of methamphetamine* and *Lack of socio-economic opportunities*. Social factors, including perceived norms and the influence of social pressure are discussed in the section titled, *Perceived popularity and social dynamics of methamphetamine initiation*. Finally, we present the influence of individuals' efforts to cope with stress and trauma as a contributing factor to methamphetamine initiation in the section, *Coping with stressors*.

Transitions from other substances to methamphetamine initiation

Most participants (18 out of 30) reported using other substances regularly before they began smoking methamphetamine, with substance use typically beginning in their teenage years or

early adulthood. For many, the transition to methamphetamine from other substances occurred out of curiosity because methamphetamine was gaining popularity in the area. Some participants observed that, compared to other substances, methamphetamine increased their energy and "when you smoke tik you can do anything you want to do." (Black male, 38 years old, initiated methamphetamine at age 30). Others described becoming bored with other substances, and moving onto more potent drugs like methamphetamine. One man stated just that. "As we got used to the dagga it was not doing its work anymore…It was time to move to the next level, which was [tik]." (Black male, 23 years old, initiated methamphetamine at age 18). Problematic alcohol use was common before initiating methamphetamine use. One man described his transition from alcohol to methamphetamine, "I was drinking a lot and if I got paid the only thing I was thinking about was alcohol… When you're high on tik you have to smoke dagga to calm you down. I don't drink much alcohol." (Black male, 32 years old, initiated methamphetamine at age 29).

Perceived prevalence and availability of methamphetamine

Methamphetamine was consistently described as a ubiquitous feature of their community, with participants stating that it was easily accessible. Participants explained that, given the prevalence and availability of methamphetamine in their community, they saw initiation of methamphetamine as almost inevitable. One man described the ease of purchasing methamphetamine in his neighborhood: "It equates to the same thing as going to the shop for bread. That's how easy it is." (Coloured male, 45 years old, initiated methamphetamine at age 31). Participants reported having several "tik merchants" on every block, who are willing to sell to anyone without discrimination, including children. One man explains, "I think the access to tik is so immense. There are up to two or three tik merchants in one block. That means that every second street has a tik merchant. They all have access." (Coloured man, 22 years old, initiated methamphetamine at age 19). Tik merchants were the local drug dealers, often associated with gangs. Participants explained that these merchants kept methamphetamine and other drugs readily available, even in the prison system. One man described a typical experience of purchasing methamphetamine from gang members at a merchant's house in his neighborhood: "I usually go to the tik dealer's house. He usually has his soldier guys standing around, selling their stuff." (Coloured man, 30 years old, initiated methamphetamine use at age 23). Several participants lamented at the control tik merchants have over the local economies, which often drives young people to gang involvement and eventual drug use. Participants noted that, with such ease of access to methamphetamine, it was not difficult for new users to find it quickly when their interest peaked. At 20 Rand (approximately 2 USD) for a single-use packet of methamphetamine, the drug is cheap, even for someone with limited financial resources.

Lack of socio-economic opportunities

Participants expressed their discontent with the lack of opportunities for further education, employment, and recreation in their community, which they suggested contributed to the initial appeal of methamphetamine. This was especially salient for the young people who lacked opportunities for new experiences, creating a general sense of boredom and curiosity that led them to try methamphetamine for the first time. Curiosity was also relevant for adults. One man explained, "I was curious. I read about [tik] in the newspaper, and I wanted

to see what it does. I wanted to give it a try." (Coloured male, 40 years old, initiated methamphetamine at age 30).

Lack of employment opportunities and positive role models also seemed to contribute to the initiation of methamphetamine use. One participant blamed unemployment as a cause for young people becoming involved in methamphetamine. "In the block where I live, we are predominantly boys, and most of them are unemployed. If you should go there now, you'll find about thirty boys. They are just walking around, and a high percentage of them are doing tik." (Coloured male, 27 years old, initiated methamphetamine at age 18). In addition, tik merchants were described as significant "employers" in communities, exploiting the drug as a means of generating income. After initiating methamphetamine use, income typically went to purchasing more of the drug instead of food and other necessities. One Coloured man explained how the drug merchants, also referred to as tik bosses, can easily exploit young people to sell drugs because there are no other jobs for them to turn to. "In this community, there are no work opportunities. You don't have people helping you to find work. Our youth, to find a quick fix, they'd rather sell drugs, for tik. … He [tik boss] is not creating jobs, he's enriching himself. He's not assisting the community. Where we live, there's no employment." (Coloured male, 45 years old, initiated methamphetamine at age 31). In addition, participants could not identify positive role models in their community. Instead, many participants described their need to align themselves with gangsters and drug dealers who held financial power in the community. As one participant explained, "It is because of the environment, they think it's a cool thing to do because there are no role models in our communities anymore. Even parents themselves are not role models." (Black male, 23 years old, initiated methamphetamine at age 18).

Very few participants completed secondary school, and several participants recalled that their first experiences with methamphetamine occurred while enrolled in school. One man described his first experience with methamphetamine, which occurred in school. "My friends suggested that we try it, and we did. It was great and we used it every day. We did it every day before we went to school. We smoked when we walked home and during intervals. We'll leave school for an hour to smoke, and come back. We'll go, and come back all the time." (Coloured male, 26 years old, initiated methamphetamine at age 14).

Perceived popularity and social dynamics of methamphetamine initiation

Many participants explained that methamphetamine was perceived as popular and trendy, and young people were often pushed toward methamphetamine use directly or indirectly through pressure for social conformity. One woman stated, "Many people in my community are using the drug…it seems as if the whole of Delft is smoking tik because nobody is sleeping." (Coloured female, 40 years old, initiated methamphetamine at age 30). A man explained, "Every person you see in the road….you listen to them talking…they speak of drugs…..Tik. They'll say things like 'I just smoke so many packets', or 'I just smoke half a gram'." (Coloured male, 33 years old, initiated methamphetamine at age 20). Although methamphetamine has been popular for several years among Coloured communities, it was seen as increasing in popularity among the Black population as well, as one Black woman stated: "Everyone is using tik, young and old… everyone, I'm not lying to you." (Black

female, 23 years old, initiated methamphetamine at age 15). Participants gave the impression that using methamphetamine was trendy and that smoking it helped people connect in their social circles. One man stated that methamphetamine is “fashionable and if you are not smoking there is something wrong with you.” (Black male, 32 years old, initiated methamphetamine at age 29), and a woman stated that “if you’re not smoking than you don’t fit in” (Black female, 23 years old, initiated methamphetamine at age 18).

Most participants acknowledged that they knew many methamphetamine users before they began using themselves, including friends, family, and work colleagues. Friends were by far the most common people to introduce the participants to methamphetamine. Most participants recalled that many of their friends were smoking before them and they had a desire to “please and impress” them (Coloured male, 29 years old, initiated methamphetamine at age 21). Although three participants explained that they refused methamphetamine several times before finally trying it, most participants denied being overtly pressured by friends and instead decided to use it out of their own curiosity. One young man acknowledged the role of his older friends in his initiation. “I started tik when I was 15 years old. That time I was with my older friends so they knew all about tik. So they were praising tik every time so when they were smoking it. I also wanted to taste it to see what they were talking about.” (Black male, 20 years old, initiated methamphetamine at age 15). Only two participants stated that they received warnings from other users to not begin using methamphetamine. One woman recalled that a friend of hers cautioned her about the negative effects of methamphetamine but eventually let her try it after she persisted. “While she was smoking, I grabbed the [tik pipe] out of her hand and she grabbed it back, cautioning me not to try smoking.” (Coloured female, 40 years old, initiated methamphetamine at age 30). A man described a similar situation in which his sister discouraged him from smoking methamphetamine for the first time, but eventually let him try it. One man and one woman recalled that work colleagues were involved in their first introduction to methamphetamine. For young people, lack of family supervision in the home seemed to make it easier for participants to affiliate with methamphetamine users and begin using the drug without repercussions from authority figures. Participants described being raised by many different family members or other people, like neighbors, in their area. For some, family played a role in introducing them to methamphetamine for the first time. Two men identified a family member as the first person they used methamphetamine with; one man was given the drug by his sister for the first time, and another explained that his father, who was selling methamphetamine, was the first person to introduce him to the drug. “When my father started selling drugs, I had access to it. It was always lying around. I was very curious and wanted to know what it was, and what effect it has.” (Coloured male, 22 years old, initiated methamphetamine at age 19).

Several women recalled family members and significant others (husband/boyfriends) as the ones who introduced them to methamphetamine. Three women identified their significant other as the first person to introduce them to methamphetamine. Some women clarified that they learned of methamphetamine through their significant other, but then used it for the first time with a friend. No men identified a significant other (wife/girlfriend) as the first person to introduce them to methamphetamine. Three women recalled other family members as the first person to introduce them to methamphetamine. One woman explained that she went to

live at her grandmother's house where her aunts were using methamphetamine. She noted that seeing the women in her family use methamphetamine was particularly influential and led her to try it also. One woman explained that her first introduction to methamphetamine was through her sister, who began using before her. "I was not really interested in smoking tik, but because my eldest sister and her friend were smoking and I also regarded her as a mother figure in my life, I was beginning to show interest." (Coloured female, 39 years old, initiated methamphetamine at age 33).

Coping with stressors

Participants described a range of stressful and traumatic experiences that contributed to their initiation of methamphetamine use. Many reported neglect and abuse (physical and sexual), domestic violence, chaotic living situations with open drug use, and transient lifestyles without stable caregivers during their childhood. For many, the stressors continued into adulthood with poverty, unemployment, gang violence, crime, sexual violence, domestic violence, and the loss of loved ones.

Four women linked the initiation of their methamphetamine use to specific stressors. The first explained that she decided to use methamphetamine after being left by her husband because it gave her the energy and confidence to demand money from him to raise their child. The second reported that she began using ecstasy and eventually methamphetamine after having an abortion, because the drugs allowed her to forget mental images of the fetus. The third noted that her husband's murder pushed her toward using methamphetamine. The fourth woman, who was raped as a teenager, explained how methamphetamine helped her to forget. "Anytime I have painful memories, I take my refuge in tik." (Coloured female, 39 years old, initiated methamphetamine at age 33). One man explained that he began using methamphetamine to cope after his father burned down their home in an attempt to kill his mother. "My father burnt our house down, and he beat my mom. We couldn't stand up against him, because he was our father. All we could do was run with my mom. He had an argument with my mom. We were sitting at my friend's place. When we got home, all we saw was our house burning down. After that, I decided to do my own thing. That's how I started smoking tik." (Coloured male, 20 years old, initiated methamphetamine at age 15).

The death of loved ones at a young age was very common. Some participants reported that one or both of their parents died in their teens or twenties, which was a major source of stress. In addition to dealing with the emotional pain of losing a parent at a young age, many participants were charged with supporting and caring for mothers or younger siblings in addition to their own families. A woman explained that her mother had cancer and her father left their family to be with another woman, leaving her to care for her mother and children on her own. She described the role of methamphetamine in her situation. "I won't say that I am smoking because of my mother's illness but if I have money then I feel that smoking tik is the only way to calm me down. I also have a lot of energy to do my tasks." (Coloured female, 32 years old, initiated methamphetamine use at age 26).

Discussion

This study is the first to identify factors contributing to the initiation of methamphetamine smoking in a LIMC with an emerging methamphetamine problem. Specifically, participants reported a variety of contextual, social, and individual factors that contributed to their initiation of methamphetamine use. Contextual factors include the widespread availability of this drug, social norms supportive of methamphetamine use, as well as limited socio-economic opportunities. South Africa opened its borders to trade in the post-apartheid era with little control over the influx of illicit substances (Peltzer, Ramlagan, Johnson, & Phaswana-Mafuya, 2010). In densely populated settings where methamphetamine has developed a strong foothold, it has become difficult to avoid the social pressure of trying methamphetamine. This pressure seems to be fueled by the perceived normality of methamphetamine use, the desire of young people and young adults to “fit in”, and the fact that methamphetamine is easily and quickly obtainable and present in the environment. Furthermore, affiliation with gangs and trading methamphetamine are viewed as providing income-generating opportunities in this very poor community, which also increases the availability of methamphetamine in the community. On a local level, education about the dangers of methamphetamine and social interventions to change the perception of methamphetamine use as “normal” and “common” may reduce the rates of initiation, especially for young people.

In the United States, there is evidence for the effectiveness of education campaigns that promote awareness of risks associated with methamphetamine use. For example, the Montana Meth Project, a methamphetamine prevention initiative in the United States, has shown promise for using mass media to improve community knowledge of methamphetamine, increase negative perceptions of methamphetamine use, and reduce the rates of use (McGrath, 2007); however, critics have disputed the interpretation of these results and instead suggest that the intervention may have reduced the perceived risk of using methamphetamine (Erceg-Hurn, 2008). Approximately 75% of the South African population reports watching television and /or listening to the radio (Statistics South Africa, 2011b). This has made mass media campaigns aimed at HIV risk behavior reduction feasible in South Africa (Peltzer et al., 2012), and points to the potential utility of a mass communication strategy targeting methamphetamine use. Given conflicted outcomes of the Montana Meth Project and the unique social dynamics of the South African setting, messages contained in such media campaigns must be well-balanced in order to avoid exacerbating the stigma and discrimination methamphetamine users often experience in communities in the Western Cape (Myers, Fakier, & Louw, 2009).

Our results also highlight how the lack of meaningful outlets for production and socialization contributes to the initiation of methamphetamine use. Participants highlighted how boredom (fueled by unemployment and lack of recreational facilities) led to curiosity about drug use and methamphetamine initiation. This finding is in keeping with earlier research on boredom as a risk factor for substance use initiation in Cape Town (Sharp et al., 2011). These findings suggest that environmental interventions that provide safe recreational opportunities and create employment and income generation opportunities are urgently needed. In other settings, creating recreational opportunities through sports has been shown

to lower rates of illicit substance use (Kwan, Bobko, Faulkner, Donnelly, & Cairney, 2014). As most of our participants were undereducated and had few employment prospects, adult education programs that give people who have not completed their education an opportunity to get a secondary school certificate and job skills training programs may increase their future prospects of finding employment. This should be combined with after school programs that provide young people with supervision and structure after school, as well as opportunities to identify adult role models in the community. Other countries, such as Iceland, have had some success in reducing rates of substance use in adolescence through combined social support, adult supervision, work, and sports programs (Sigfusdottir, Kristjansson, Gudmundsdottir, & Allegrante, 2011; Sigfusdottir, Kristjansson, Thorlindsson, & Allegrante, 2008).

Our results point to the importance of engaging schools in these programs, especially given that many participants reported being introduced to methamphetamine by their friends as a teenager. Several reported that their first introduction to methamphetamine was in school, suggesting the drug is being distributed and consumed within or near schools. Better regulations and education regarding the use of all substances, not just methamphetamine, within schools could prove to be an effective intervention in combination with after school recreational programs and the aforementioned environmental interventions. South Africa is already utilizing the school system as a vehicle for behavior change. In the early 2000s, the South African Department of Education implemented Life Skills, a mandatory school-based HIV/AIDS risk reduction program for grades 8–12 (James, Reddy, Ruiter, McCauley, & van den Borne, 2006; Magnani et al., 2005). A more recent Life Skills program, HealthWise South Africa, is a school-based risk reduction intervention adapted from a U.S. program and designed to improve knowledge and attitudes, and develop skills to help young people make healthy decisions regarding sexual health and substance use (Caldwell et al., 2004; Wegner, Flisher, Caldwell, Vergnani, & Smith, 2008). HealthWise teaches students to make recreational activities positive and meaningful, to cope with stress, to successfully negotiate relationships, and identify and avoid risky situations involving sex and drug use. Despite some positive outcomes (Caldwell, Patrick, Smith, Palen, & Wegner, 2010; Smith et al., 2008; Tibbits, Smith, Caldwell, & Flisher, 2011), this school program is not being widely implemented in the Western Cape, largely because all additional life skills programs that fall outside of the school curricula have been abandoned due to concerns about loss of teaching time. Our findings suggest the need to revisit this policy decision, and to include a more concerted focus on methamphetamine within HealthWise or similar curricula.

The finding that most participants transitioned to methamphetamine from other substances like alcohol, tobacco, and marijuana supports the legitimacy of the gateway hypothesis, which purports that the initiation of “hard” drugs, like methamphetamine, cocaine, and heroin, is typically preceded by the use of licit and “soft” substances (i.e., alcohol, tobacco, and marijuana) (Kandel, 1975). However, the current study is not exempt from the limitations most often noted by critics of the gateway hypothesis (Vanyukov et al., 2012). First, our observational and retrospective data collection does not allow for an examination of causation; in other words, that the use of licit/soft substances *causes* a progression to methamphetamine use. A great deal of other confounding biological (e.g., genetics, neurotransmitters) and environmental (e.g., poverty, parental substance use) factors may

drive this link. Second, as others have pointed out, when the rates of all of licit/soft substance use is taken into account, the link between licit and illicit substance use often becomes negligible (Earleywine, 2002). For example, there were an estimated 4,230,000 marijuana users in South Africa in 2014, and based on the rates of methamphetamine use in the country, the vast majority of these marijuana users will not go on to initiate methamphetamine use (United Nations Office on Drugs and Crime, 2014). Finally, this transition to methamphetamine is expected in a region like Cape Town where tobacco, alcohol, and marijuana are readily available, as was evident in participants' reports that substances were accessible even in the school system. In contrast, drug use progression in countries with reduced access to "gateway" drugs shows that drug initiation often begins with hard substances if they are more readily available (Degenhardt et al., 2010).

Another factor contributing to methamphetamine initiation was participants' desire to mitigate distress after trauma and stressful life circumstances. The high rates of violence, crime, and poverty make residents of Cape Town particularly vulnerable to mental and emotional disorders, and with limited opportunities for psychological counseling, individuals may turn to drugs as a way of managing these issues (Norman et al., 2010). Participants tended to recall multiple stressful life events that contributed to their methamphetamine initiation, not just one, suggesting a cumulative burden of stressful and traumatic events over time. In the face of continued stress, it may be more difficult to resist pressure from peers and family members.

Individual or community based programs to provide people with emotional support and teach alternative skills for coping with stress could be of benefit if implemented on a large scale. Improving mental health care in LMIC presents unique challenges. In a situational analysis of mental health services in multiple LMIC sites involved in the PRIME study (Lund et al., 2012), the South African site located in the North West Province had a number of advantages compared to other sites (Hanlon et al., 2014). It was the only site with mobile health clinics, a psychiatric hospital, pre-service training in mental health care for primary care workers, a reliable supply of psychotropic medications in health care settings, evidence-based psychotherapy administration, mental health referral systems, and follow-up clinical care for those with severe mental illness. However, there were also several barriers to mental health service utilization such as limited awareness of mental health treatment, stigma toward and abuse of persons with mental disorders (most commonly financial exploitation), and limited availability of mental health services at a community level (Hanlon et al., 2014; Petersen & Lund, 2011). Although the mental health care system in South Africa has room for improvement, the findings suggest that if the mental health care net is expanded to include community-level mental health promotion services it could have a significant impact in reducing the rates of drug initiation for those using methamphetamine to manage mental health symptoms.

Several limitations inherent in qualitative data collection and analysis are relevant to the current study. The in-depth interviews provided a detailed understanding of the individual, social, and contextual factors driving the initiation of methamphetamine among participants in Delft (Western Cape); however, the results may not generalize beyond this township. The participants were specifically selected to capture varying demographic characteristics, and

thus may over-represent the experiences of less common subpopulations of methamphetamine users in this area (e.g., Black women). Given the high rates of methamphetamine dependence among the sample, we may not have captured the experiences of those who initiated use and successfully discontinued use. On the other hand, this sample brought to light the experiences of the most affected groups of methamphetamine users, including those groups where rates of methamphetamine use are increasing and who may benefit most from efforts to prevent further increases in rates of use. Each participant was asked specifically about the circumstances surrounding their first use of methamphetamine and the semi-structured interview style allowed for variation in the extent to which this topic was discussed. Therefore, it is possible that information regarding similarities and differences among participants may have been missed as the discussion was guided toward experiences that were most relevant for the participant.

In summary, this study identified contextual, social, and individual factors that contribute to the initiation of methamphetamine smoking in Cape Town, South Africa and that may serve as targets for preventative interventions. Specifically, our findings suggest that a multi-pronged approach to preventing the initiation of methamphetamine smoking is needed. These interventions should include a combination of efforts to control the trafficking of methamphetamine, school and community outreach programs to educate residents about the harms of methamphetamine and provide alternative recreational activities, economic empowerment initiatives to reduce poverty, and mental health services that address trauma and coping. Given the highly addictive nature of methamphetamine and its devastating impact on affected communities, preventing the first use of methamphetamine is essential to curbing the prevalence of this epidemic, and should be an urgent priority.

Acknowledgements

This study was funded by grants R03-DA033828, K23-DA028660, and F32-DA038519 from the United States National Institutes of Health and a DGHI postdoctoral fellowship. We are grateful to all of the men and women who participated in this study and our study team in South Africa and the United States, especially Desiree Pieterse, Albert Africa, Tembie Mafikizolo, Mariana Bolumbe, Jessica MacFarlane, Stephen Kimani, Katie Guidera, Sheri Towe, Ryan Lion, and Daniella Cordero.

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Highlights

- Meth's popularity, accessibility, and perceived normality contribute to initiation.
- A lack of socio-economic opportunities contribute to meth initiation.
- Peers, more so than family, are influential in introducing others to meth.
- Meth initiation may occur as a means of coping with stress and trauma.
- Many reported transitioning to meth from other substances, like alcohol.

Table 1

Characteristics of the sample

	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, n (%)	26 (86.7)	9 (69.2)	17 (100)
Unmarried, n (%)	27 (90.0)	10 (76.9)	17 (100)
Age of first methamphetamine use, M (SD)	21.0 (6.5)	21.4 (7.0)	20.6 (6.3)
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, n (%)	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)

Note. M = Mean, SD = Standard Deviation.