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The management of methamphetamine use in sexual settings among men who have sex with men in Malaysia

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Abstract

Background: The intentional use of illicit drugs for sexual purposes (also known as 'chemsex') is well known within the MSM communities in Malaysia although research in this population is scarce primarily because both drug use and homosexuality are illegal and stigmatised in Malaysia.

Methods: From April to December 2014, interviews were conducted with twenty men (age range 21–43) living in Greater Kuala Lumpur who had sexual intercourse with other men in the past 6 months and who used illicit drugs at least monthly in the past 3 months. Fourteen men were recruited via gay social networking smartphone applications or websites while six were referred by the participants. Data were analsed using thematic analytic approach.

Findings: The average duration of illicit drug use was 6.4 years (range 1–21) and all participants were using methamphetamine ("ice" or crystal meth) with frequency of use ranged from daily to once a month. Participants came from diverse ethnic, economic, and occupational backgrounds. Most participants used an inhalation apparatus ("bong") to consume methamphetamine and injection was rare in the sample. The primary motivation of methamphetamine use was to increase sexual capacity, heighten sexual pleasure and enhance sexual exploration and adventurism. Socializing with friends ("chilling"), and increased energy for work were secondary motivations. Participants emphasized the need to control the use of methamphetamine and some have established rules to control the amount and duration of use and a minority of men have maintained condom use during anal sex while under the influence of methamphetamine. Participants who professed to be in control of their drug use characterized themselves as functional users regardless of the health and social consequences from continuing use. Overall, participants perceived themselves differently from the traditional opioid users and reported limited access to sexual health and substance use treatment services.

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Conclusion: There is a need to increase access to HIV prevention services such as PrEP and PEP, professional support, and substance abuse treatment for drug-using MSM. A more open and friendly environment towards drug-using MSM may help them access and engage with the health services.

Introduction

Drug use and homosexuality are social taboos in Malaysia. A study of active injection drug users demonstrated that the use of amphetamine-type stimulants (ATS), including crystal methamphetamine (MA) has increased in the past 10 years in Malaysia (Chawarski, Vicknasingam, Mazlan, & Schottenfeld, 2012). In the same period, the East and Southeast Asian countries have become the major producers and consumers of ATS (United Nations Office on Drugs and Crime, 2013) The primary type of ATS use in these countries is methamphetamine (abbreviated to MA), and to a lesser extent 'ecstasy' or MDMA (methylenedioxy-methamphetamine). In 2014, 26.4% of all drug misuse cases in Malaysia were attributed to ATS use (Malaysia National Anti Drug Agency, 2015). In particular, psychiatric sequelae such as psychosis have been found to be high among patients with methamphetamine dependence (Sulaiman et al., 2014).

The use of ATS among men who have sex with men (MSM) has been a public health concern in many Western countries (Colfax et al., 2010; Vu, Maher, & Zablotska, 2015), and increasingly, ATS has been reported among MSM in the Asia Pacific and Southeast Asia, including China (Feng et al., 2010; Liu & Detels, 2012; Xu et al., 2014), Indonesia (Morineau et al., 2011), Malaysia (Lim et al., 2015), Taiwan (Ko et al., 2012), Thailand (Chariyalertsak et al., 2011; Holtz et al., 2015; Newman, Lee, Roungprakhon, & Tepjan, 2012; van Griensven et al., 2013), and Vietnam (Nguyen et al., 2016; Vu et al., 2016; Yu, Clatts, Goldsamt, & Giang le, 2015). The prevalence of drug use for sexual purposes among MSM in this region ranges from 7.0% in Malaysia (Lim et al., 2015), to 17.6% in Thailand (van Griensven et al., 2013), and 14.3% in Vietnam (Vu et al., 2016). The popularity of ATS among Asian MSM is significant as ATS, particularly crystal methamphetamine, has been found to be a strong predictor of HIV seroconversion (Menza, Hughes, Celum, & Golden, 2009; Plankey et al., 2007). A systematic review and meta-analyses of 35 studies found statistically significant associations between ATS and HIV infection across cross-sectional, case-control, and longitudinal studies (Vu et al., 2015).

The strategic use of recreational drugs to enhance sexual pleasure has become integrated into gay subcultures, particularly in certain Western countries (Drumright, Patterson, & Strathdee, 2006; Stall & Purcell, 2000). The intentional combining of MA, ecstasy, or GHB (gamma hydroxybutyrate) with sex has been termed 'chemsex' (Bourne, Reid, Hickson, Torres-Rueda, & Weatherburn, 2015). The situated cultural norms and practises surrounding MA use in Southeast Asian countries may be different from those in Western countries. Understanding the social and cultural contexts of drug use is important for health and harm-reduction activities to be developed and delivered to this population. Therefore, the objective of this qualitative study is to understand the motivations for, and management of, MA use among MSM in Malaysia.

Methods

We conducted 20 in-depth interviews of MSM living in Greater Kuala Lumpur from April 2014 to January 2015. Participants were recruited through social media popular among MSM (e.g. Grindr, Planet Romeo, Facebook) as well as referral from AIDS NGO staff and snowballing. To be eligible, participants had to self-report as biologically male, aged 18 years and older; have engaged in oral or anal intercourse with men in the past 6 months; and have used recreational drugs (e.g., cocaine, MA, ecstasy, ketamine, erectile dysfunction drugs, etc) at least monthly in the past 3 months. Participation in the study was voluntary and anonymous, and participants were paid RM50 (USD15) for their time.

The in-depth interviews lasted for 1-1.5 h and took place at venues requested by the participants, including the meeting room of our research center, quiet and private premises and residences. All interviews were conducted in Malay, English, or in a mixture of both languages depending on the choice of participants. We used a semi-structured guide containing a set of questions that allowed flexibility and exploration in specific areas (Gorden, 1992), including perception of drug use ("What are your views on using recreational drugs in the sexual context in Malaysia"), initiation of drug use ("Can you describe to me how you started taking recreational drugs?"), motivation for drug use, patterns of drug use, sexual behaviours ("Can you share with me your sexual experiences during or after taking recreational drugs, including bareback sex?"), as well as physical and mental health consequences of drug use. Before the interviews, we explained the benefits and potential risks associated with the study as well as the procedures for interviewing, audio recording, confidentiality and data storage. During all stages of the study, participants were asked to use a fictitious name. No identifying information such as names or national identification numbers were collected. A unique identification code was created to identify the participants. At recruitment, some participants provided their cell phone numbers which were deleted after interviews. Other participants contacted the research assistant via social networking applications to arrange the interview. Similarly, we obtained verbal informed consent instead of written informed consent to protect their confidentiality. This qualitative study was approved by the Medical Ethics Board of University of Malaya.

Most participants were Malay with a median age of 34, fully employed and attained tertiary or higher education (see Table 1). Two-thirds of the participants were recruited through social media and more than half of the interviews were conducted in English. Almost all participants used a water pipe - known colloquially as "bong" - to consume MA and participants reported a wide range in years of drug use (0.5 years-21 years). Participants also reported a range in frequency of MA use. About half of the participants used MA at least once in a month.

Analytic approach

All interviews were audio recorded, transcribed, and translated into English for analysis. Transcripts were coded and categorsed into themes using thematic analysis approach (Braun & Clarke, 2006). Analysis is an iterative process in which the investigator (first author) and coder (second author) held regular discussions to further revise and refine codes to identify

new themes and relationships within major themes. The first and second authors reviewed and analyzed the transcripts independently.

Findings

Although the study was designed to include MSM who use recreational drugs in general, all MSM in our sample used MA as participants reported MA to be their drug of choice. Three key topical themes were identified from the interviews. These included 1) motivations of drug use, 2) issues of control in using MA, 3) perception of addiction and selfidentity. Findings are presented as a summary of each theme supported by illustrative quotations identified by age and ethnicity.

Theme 1: motivations of drug use

Of all recreational drugs, participants preferred a crystallised form of MA - known colloquially as "ice". "Because we all know that in terms of sexual, sexual fun, ice is like a king. Ice is like the king of sexual fun, so, of course I choose for ice." (30 years old, Malay). Participants said that MA dramatically increases their sexual libido, heightens their sexual pleasure, and prolongs sexual activities by postponing ejaculation. They described 'chemsex as "animalistic", "raunchy", "maximum satisfaction", and "makes you fly". Almost all participants reported preferring 'chemsex to sober sex for its intensified sexual gratification and pleasure. Five participants reported that MA was so intricately linked to sex that they could have sex only when they used MA.

One of the benefits of MA, reported by participants, was the tremendous energy ("nuclear energy") gained for prolonged sexual performance. Participants described the heightened sexual arousal and increased endurance that enables them to achieve sexual extremes, for example, engaging in sexual activities for up to 3 days. While some participants reported having regular chemsex partners ("buddies"), some met casual sex partners continuously through social media. Multiple sex partners and group sex were also reported. For example, one participant reported having chemsex with nine new sexual partners the day before the interview.

Participants described freedom from inhibitions as a positive aspect of using MA during sex. Enactment of sexual fantasy and changing sexual roles were said to be common during chemsex. Some participants commented that MA has helped them overcome shyness and inhibition. Other participants felt emboldened to explore sexual activities that they would not otherwise do when they were sober, such as group sex, outdoor sex, and 'marathon sex', or sex lasting for many hours with serial partners. As one participant described:

At that time I prefer to have one-to-one first, because at that time I'm still shy. So, when I'm done with one-to-one [sex], awhile, the period is like 12 h. During the 12 h [I] keep on taking it [ice], it will reach the stage where, I don't feel shy anymore. The emotion was boiling inside. Ok, [then I told myself] "why not I try threesome, foursome, group sex?" It will be like that. It will get aroused by time. Sometimes you want to try outdoor [sex], [laughter], it will keep on arising.

(27 years old, Malay)

While most participants used MA for sexual purposes, more than half reported that they used it to relax, known colloquially as "chilling". Chilling can be a solitary or social behaviour. A few participants reported chatting with friends or playing a card game, without sex, during a chilling session. However, some indicated that chilling may also lead to chemsex, depending on the availability of sex partners and circumstances that are conducive to chemsex.

Another important motivation to use MA was social, within the context of gay clubs and social gatherings. One participant explained his use of MA during social activities with his friends:

So usually I will just join them [my friends]. Usually after clubbing, ok, firstly we will plan to hang out for clubbing then after that we will go to one of the guy's place for taking ice. It's a weekend...Saturday's night or Friday's night, ok, we go, na-na-na-na, after that clubbing, then go for chem fun until morning

(28 years old, Malay)

Another reason for MA use reported by participants was to increase energy and to be more productive in their work. For example, one participant used MA to help him focus in his work:

I am in the customer service, I am more confident, more presentable, more motivated...I don't feel sleepy, I am hardworking...

(35 years old, Malay)

The participant later explained that MA confers positive effects on his emotions, such as boosting self-esteem and confidence which, in turn, enhanced his job performance.

Lastly, participants reported using MA as a coping mechanism or escape from emotional pains associated with stress and boredom:

And also, to kill boredom, especially during weekend. Long weekend, long public holiday. You don't know what to do! Yeah, boredom... Stress is something that, put it this way, we live in a stressful environment...

(36 years old, Malay)

When I'm stress. Sometimes, when I got back from work, stress, erm, there are times when I thought that "Eh I haven't taken it for a while

(28 years old, Malay)

Theme 2: the issue of control in using MA

Control or management of MA use was a central theme from the indepth interviews. While participants reported a wide range in the frequency of current MA use, from daily to once in the past month, almost all highlighted the need for controlling or managing their use, for mainly health and economic reasons (1 g of "ice" cost about MYR300–400). The issues of control included plans to control the amount and frequency of drug use, staying alert or 'in control' while having chemsex, strategies to reduce the harmful effects of "cooling down" (when the effects of drugs wear off), and strategies to cope with continuing drug use.

A few participants reported planning various aspects of their MA use, including the day and time, the amount, rituals, and sexual activities as some mentioned tht they did not want to waste the experience (chemsex was said to be financially and physically costly). Characteristics of sexual partners, physical environment, settings (room temperature, lighting) were considered important to maximize chemsex experiences. Participants also talked about watching porn to create a highly sexual environment while having chemsex. Some participants took watermelon and electrolyte sport drinks before using MA to keep their mouth hydrated while other planned their chemsex meticulously. For example, a participant who was a medical doctor followed a strict injection and polydrug use protocol as a safe way to maximise sexual pleasure:

Usually we will just plan...we will set the time, ok, what time we will start injecting, and then after that when is the next dose, and then when is the next time we are going to take the Viagra, when is the time we are going to take the ecstasy and all, and then we wifi, set our timer...Like, at the period of 1 h, we are going to drink, like a lot of drinks. And then you have to make sure exactly at what time you want to finish our session and all. So that, by the time, the next day we are prepared to, maybe working, or just proceed to our regular daily routine... [The session lasts] from 10 o'clock maybe until 6 o'clock

(30 years old, Malay).

However, other participants perceived injection as harmful and they preferred to use "bong" as it was considered a safer way to use MA. Another participant talked about smoking cigarettes while taking MA as a strategy to reduce the amount of MA used during chemsex. Participants also talked about eating plenty of fruits with high water content to prevent dehydration in mouth. During "cooling down" period, participants talked about going to the sauna, exercising, and eating plenty of fruits and vegetables. For example, this participant described his method of getting rid of the residual MA from his body after chemsex.

Normally, hot water and sauna, will take out all the stuff inside me. Hot water, green tea, I drink to detox inside me. And, eat fruits that is dark in colour and high in antioxidant. Will take close to 100% of it. That is for me. I know how to get rid of it very fast. Some will take a few days

(40 years old, Chinese)

One participant reported keeping a journal to monitor and limit his usage of MA and some participants even went further by deleting social media in order to avoid "triggers" and using MA again.

Subtheme: perceived control during chemsex

Participants commented that the disinhibiting effect of MA lessened the belief that condoms were important or even necessary during sex. Other contributing factors to condomless anal intercourse were reduced sensitivity when using condoms and difficulty in maintaining an erection after using MA. As illustrated by these participants:

Because while we are on ice, sometimes we, we cannot get 100% erection...If we don't use condom, throughout the session is ok, because, even if we didn't have an

erection, [we would] relax...[and then we could have an erection and anal] sex in few hours. So we don't use condoms, not wasting the condom.

(23 years old, Malay)

Because you are already high, you have the sexual desire. The sexual desire is getting more and more [intense]. You want to get more sexual feeling, that you thought that not using a condom will make you more high, or more adventure to try something new then. And somehow, chem user [would] also have one problem: sensitive to condom...meaning that when they put the condom they won't feel high. That is why they are not using condom.

(38 years old, Chinese)

Another participant who was diagnosed with HIV mentioned that condomless anal intercourse was a social norm among MA users, particularly among those who were not in control of their MA use:

They are like [drug] addict already. So, they wanted to take [ice] more, they dared to give you more. Like, for example, it was supposed to be safe sex. After taking it [ice] a lot, and they want to continue the high feeling. So they don't care whether it is safe or not. They will play it raw [without condom].

(38 years old, Chinese)

However, about one fifth of participants reported always using condoms during chemsex. One participant said that he would not have anal intercourse with a partner without a condom, even when he was aroused:

While we're having it, while he was teasing me, I was a bottom at that time, he wanted to, he, how do I *say* this, his penis is close to my anus. He was teasing, then after that it slipped, aaaa, I just missed it. It did feel great, but after that I took it out [and said], "No no no" So I teased him, I said, "No, no condom, you cannot have this [pointing to his asshole]"He then picked up the condom reluctantly, and, I put it on, stimulated it and then it went in

(28 years old, Malay)

Other participants talked about the need to carefully control their MA use to avoid overdose, becoming aggressive, emotional, compulsive or even violent. A few participants recounted unpleasant experiences with sexual partners who "lost control" after taking MA:

Drugs kind of twist a person's mind. When they take it, sometimes they lose control of their inhibition or, they don't really care about what they are doing. So we may meet people with, really, really bad character, so they might do something terrible to you. I have met people who have been too high, and they can't do anything, squirming and I have to baby-sit them. The longest I have to baby-sit someone was for 5 h...And I have met people who totally lost control of themselves and they get angry, they break things, they threaten to do this, and do that

(28 year old, Malay)

This desire to maintain control was further emphasised by two other participants:

There is a saying, if you work for ice, you will be suffering. But if you let ice works for you, then you can control yourself

(38 years old, Malay)

I can't condone using drugs, I can't say it is good. A choice like smoking (cigarettes). If you lose control of it, then smoking controls you. If any addiction controls you, basically you are going to lose your life.

(28 years old, mixed ethnicity)

While a handful of participants reported no health issues related to MA use, most participants reported a range of physical and psychological problems associated with their long-term use of MA. These symptoms include tooth decay, "blurred vision", insomnia, (unintended) weight loss, "heart palpitation", "memory lapse", "cramps", "shaking", "paranoia", and "suicidal thoughts". With respect to sexually transmitted infections, eight men self-reported to be HIV positive and four had been diagnosed with multiple sexually transmitted infections. Two participants were certain that they contracted HIV during chemsex. Additionally, participants also talked about depression, hallucination ("hearing voices", "seeing the things we aren't supposed to see"), and suicidality:

I notice, a lot of damages to your [my] health, firstly on the teeth, they become erosive. Then they start falling off. Then your eye sight. It becomes blurr...glary. Your blood pressure [will increase], you'll get cramps at no time of any day...And your lungs...you'll cough, you'll have [a] lot of phlegms a lot of time.

(43 years old, Malay)

For my case, I was afraid to face it. I am afraid to face my family who know that I am using drug. So, the voice that I was hearing was mostly my families' voice. And then they would be talking something [behind me] as though they already knew it [about me using drug]. So, it was the fear that I was facing and the fear was enhanced and enhanced until I got the illusion, and the voice.

(38 years old, Chinese)

Additionally, some participants who lost control over MA use reported other social consequences of using MA, such as poor performance in school, loss of employment, and challenges in maintaining relationships with family and friends. One participant struggled to perform adequately at work or when studying:

For a period of time, 2 years ago. I, got really addicted to 'ice'. And it affected my work and my studies and my life very, very badly because I used to take drugs almost everyday. And I used to go out and I didn't come home. My parents worried. I disappeared like, 3 days without telling my family anything. And, I kept missing classes. I didn't hand in my work. And lecturers got pissed with me, my director got pissed with me, in the end, I lost everything. I had to stop my studies, because I skipped too many classes and I couldn't do the exam

(28 years old, mixed ethnicity).

Theme 3: perceptions on addiction and self-identity

Some participants progressed from using MA in a sexual context to use in other contexts. Participants also reported using MA more frequently and some went into a downward spiral of addiction and spent their financial resources procuring the drug. As one participant who lost his job said,

Yes. It is easily available...even if you are unemployed, and you have no income, that thing is so addictive, [chuckled] you have to find money to get it

(43 years old, Malay).

Some participants reported that their frequency of MA use had declined in the past few years, from heavy use to non-heavy use, as evidence that they had controlled their drug use. Although our study did not objectively assess drug dependence, few participants felt that their MA use was a form of addiction. Despite severe health consequences, most participants claimed that they were in control of their habit ("Addiction is either uncontrollable or controllable. I think it is controllable addiction, at the moment. So far so good."28 years old, Malay). The majority of participants, including those who used MA daily and weekly, viewed their use as controlled. However, they often commented that others' use of MA was unmanageable. Only one participant was in pharmacological treatment to reduce methamphetamine-induced psychosis and one was seeking treatment for a drug use disorder.

Participants who perceived themselves to be in control said that they would continue to use MA unless they experienced significant health problems, financial difficulties or when their sexual partners stopped using MA. As one participant puts it:

As long as I can control it, as I said just now, as long as I'm in control and I don't have any complication from all things I take, I will take it [ice]. But if I was diagnosed with pneumonia, TB or anything I will quit at that very moment. Like, because I know, maybe I have reach my limit, so I will stop

(24 years old, Malay).

Perhaps to resist the social stigma, many participants refused to refer MA as a drug. Most participants refused to identify as "drug users," instead they preferred to view their drug use as functional and recreational. Identifying themselves as "chem users" as opposed to "traditional drug users" (e.g., people who use heroin) allowed them to view their drug use as less dangerous and more socially acceptable. Participants also noted that MA is used by a diverse class of people, gay or straight, including students and professionals. One participant was defensive about him and his friends who use MA:

Because I think they are decent people. The people that I'm hanging out are those who contribute a lot to the society, pay their taxes, and just take this [drug] recreationally. My friends are not the type who took weeds by the road, homeless... [They are] people like me, who, can have a little extra money. Those are the kind of people.

(28 years old, Malay)

Discussion

This qualitative study provides greater context to explain findings from previous surveys that have found a positive association between illicit drug use and HIV infection among MSM (Kanter et al., 2011; Lim et al., 2013). Sexual risk taking behaviours, such as condomless anal intercourse, multiple casual sex partners, extended sexual activities resulting from heightened sexual arousal and disinhibition (Halkitis, Fischgrund, & Parsons, 2005; Leonard, Dowsett, Slavin, Mitchell, & Pitts, 2008; McKirnan, Ostrow, & Hope, 1996; Reback, 1997) were reported in this study. However, a significant proportion of our participants said they were able to exert control and practise safer sex, a finding supported by a qualitative study of chemsex conducted in London (Bourne, Reid, Hickson, Torres-Rueda, Weatherburn et al., 2015).

The motivation for using MA to achieve sexual capacity and sexual qualities idealised by gay men have been well described in the literature (Halkitis et al., 2005; Jerome, Halkitis, & Siconolfi, 2009; Leonard et al., 2008; Weatherburn, Hickson, Reid, Torres-Rueda, & Bourne, 2017). Sexual pleasure was the primary reason for continuing MA use although there was evidence that some participants were using MA as a habit or when they experienced cravings (Newton, De La Garza, Kalechstein, Tziortzis, & Jacobsen, 2009). In addition to being used to increase sexual capacity, MA is used by participants to increase sociability. In other words, MA serves as both a social lubricant and a sexual stimulant (Leonard et al., 2008) which is indicated by "chilling" where participants recounted having conversations with buddies without having sex.

Narratives presented in the study show that participants were trying to manage or control their MA use. All had experienced (or at least showed awareness of) the health and social consequences of losing control of their use. Those who perceived themselves to be in control reported using MA less frequently and not experiencing adverse health effects associated with MA-dependence. Participants provided compelling testimony to the powerful and deleterious effects of MA use. In the absence of approved pharmacotherapies in treating MA addiction, current treatment of MA addiction focuses on behavioural change by increasing cognitive skills and psychosocial support (Colfax et al., 2010; Meader et al., 2013; Rawson, 2013). Behavioural interventions such as the Matrix Model of Cognitive Behavioural Therapy, especially the one culturally tailored to MSM, have demonstrated efficacy in reducing risky sexual behaviours and MA use (Shoptaw et al., 2005). The Matrix Model can be delivered individually or in a group setting, and can be combined with other evidencebased approaches such as contingency management (Reback & Shoptaw, 2014) and motivational interviewing (Bux & Irwin, 2006). Other innovative approaches such as textmessaging (Reback et al., 2012) and smartphone apps (Schulte et al., 2016) may be particularly suitable for drug-using MSM as most of them are already using this phone technology to seek sexual partners and hide from mainstream society. Harm reduction messages to reduce health hazards of drug use (e.g., prevent overdose, dehydration, and reduce side effects of "cooling down") can be delivered via the smartphone apps that drugusing men use for social networking.

Public health services will need to address both the sexual health needs and the substance misuse treatment in this particular group of MSM. As the primary motivation of chemsex is about maximising sexual pleasure and condoms are barriers to such pleasure, condoms are rarely used during chemsex. This means HIV-negative MSM who use MA are ideal candidates for HIV pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP). Secondly, HIV and STI testing should be promoted so that those who are diagnosed with HIV can be linked to care and begin antiretroviral therapy. In the present study, one third of participants have not been tested for HIV and were unaware of their status and HIV was not discussed during chemsex. Given the high-risk behaviours in this population, regular HIV testing, such as every 3 months, would be ideal to detect sero-conversion. The present qualitative study was not designed to examine differences in risk behaviours between HIVnegative and HIV-positive MSM even though motivation for drug use could differ for HIVnegative versus HIV-positive men. The latter may self-medicate to address the negative feeling of stigma associated with HIV infection (Mimiaga et al., 2008; Semple, Patterson, & Grant, 2002). Perhaps due to HIV-related stigma in Malaysia (Krishnan, Wickersham, Ferro, & Altice, 2016), participants in the study were generally reluctant to talk about their HIV status and whether they have begun antiretroviral therapy (ART). A systematic review found that HIV-positive MSM and who use MA, report lower adherence to ART, which may contribute to transmission of resistant virus (Rajasingham et al., 2012). In the era of treatment as prevention, utilisation of, and adherence to ART should be promoted in this population in order to reduce the viral load and onward transmission of HIV (Shoptaw et al., 2013).

In the present study, participants who used MA daily and weekly did not perceive their use as problematic and characterised themselves as functional users and their behaviour as normative within the gay communities in Kuala Lumpur. For those who are not ready to pursue abstinence, harm reduction interventions may be useful to reduce sexual risks in the context of MA use (Bourne, Reid, Hickson, Torres-Rueda, Steinberg et al., 2015; Carrico et al., 2014). The harm reduction approach may aim to increase knowledge about drug overdose, drug combination, and sharing needles and to reduce the undesirable effects of MA use. All treatment approaches have to ensure confidentiality and protect the anonymity of these men who bear two or three stigmatised identities: gay, drug users, and possibly HIV-positive. The intersecting stigma may drive this population and behaviour underground. As exemplified in a previous study, drug-using MSM often suffer from shame and guilt and MA use is reinforced as an escape from this stigma (Reback, 1997). Therefore, reducing stigma is necessary before drug-using MSM can access sexual health and substance misuse services.

Findings of the study must be interpreted in the context of changing HIV epidemic in Malaysia from injection drug use to sexual transmission. With the success of harm reduction programs (syringe exchange and methadone maintenance therapy), transmission of HIV due to heroin injection has been reduced dramatically and has been surpassed by sexual transmission (Malaysia Ministry of Health, 2015). Evidence has also shown that over the past decade the decline of heroin use has been followed by the increase of MA use (Chawarski et al., 2012). Other studies suggest that MA use is prevalent among female sex workers and transgender women (Wickersham et al., 2017). The social and demographic

profile of MA users may be different from that of heroin users (Bazazi et al., 2015). Our findings suggest that a significant proportion of MSM who use MA come from the higher social class and wish to disassociate themselves from the "drug users". Future intervention will need to find innovative ways to reach this hidden population.

The subculture of gay men who use drugs in their sexual practise is mostly hidden, because they risk legal punishment and social rejection (Grov, Bux, Parsons, & Morgenstern, 2009). Because of this, enrolment in this study has been challenging, and interviewing participants, especially at their private residences, entailed potential legal and physical risks to the research team (Liamputtong, 2007). It was extremely difficult for outsiders (non-MSM, non-drug users) to gain access to this subculture. As a result of stigma and illegality of MA use in Malaysia, suspicion was high. Building trust was a major challenge and recruitment to the study was slow. Although the final sample may be biased towards those who were more open about their drug use, some participants may still under-report "risk behaviours" because of the related stigma. Furthermore, future study needs to investigate other psychosocial factors, including the role of stigma, depression, social isolation and homophobia in driving drug use among MSM in Malaysia.

Conclusion

MSM who use MA in Malaysia should be supported to access HIV prevention services such as PrEP and PEP and substance use treatment in order to reduce HIV transmission, as well as physical and psychological problems induced by their MA use. Targeting treatment and harm reduction messages in social media used by MSM may be effective in increasing the knowledge of MA-using men in minimising the harms associated with MA use. A holistic approach that combines treatment and social support from the family and MSM communities may be most effective in helping this subpopulation of MSM.

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Table 1

Socio-demographic characteristics of participants (n=20).

Age	
median (range)	34 (21–43)
Race	
Malay	11 (55%)
Chinese	4 (20%)
Indian	1 (5%)
Indigenous people (Kadazan)	1 (5%)
Mixed	2 (10%)
Thai	1 (5%)
Living in	
Greater Kuala Lumpur	20 (100%)
Education level	
Less than secondary	2 (10%)
SPM/A level (pre-University)	1 (5%)
College/University	15 (75%)
Masters' degree	2 (10%)
Employment	
Full time	15 (75%)
Part time	1 (5%)
University student	3 (15%)
Self-employed	1 (5%)
Recruitment methods	
Social media (Facebook, Grindr, PlanetRomeo)	15 (75%)
Referral by NGO	2 (10%)
Referral by participants	3 (15%)
Language of the interview	
Bahasa Malaysia	8 (40%)
English	12 (60%)
Primary Method of Consumption	
Glass water pipe ("bong")	19 (95%)
Injecting	1 (5%)
History of drug use, median (range)	5.5 years (0.5-21 years)
Frequency of stimulant use	
Daily	3 (15%)
Once a week	5 (25%)
2–3 times a week	3 (15%)
At least once a month	9 (45%)
HIV status	
Positive	6 (30%)
Negative	8 (40%)

Unsure/never tested/did not mention

6 (30%)