

'Sunshine on a rainy day'

Crystal methamphetamine use among gay
and bisexual men in Perth



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Abbreviations

AOD – Alcohol and Other Drugs

ART – Antiretroviral Therapy

BBV – Blood Borne Virus

BDSM - Bondage, Discipline, Dominance and Submission, Sadomasochism

CPR - Cardiopulmonary Resuscitation

GBM – Gay and Bisexual Man/Men

GCPS – Gay Community Periodic Survey

GP – General Practitioner

KI – Key Informant

LGBTIQ – Lesbian, Gay, Bisexual, Transgender, Intersex, Queer

MSM – Men who have Sex with Men

ns – non-significant

NSP – Needle and Syringe Program

PrEP – Pre-Exposure Prophylaxis

SOPV – Sex on Premises Venue

STI – Sexually Transmissible Infection

WAAC – Western Australian AIDS Council

Key findings

The study findings are from a diverse sample of men who have sex with men in Perth. Some men strongly identified as gay, others were on the periphery of LGBTIQ communities, and some men were heterosexually married, and only connected with men for sex via social media.

1. Patterns of crystal use and control

Patterns of crystal use varied widely, with men using crystal daily, or weekly, or fortnightly, and monthly to occasionally. A period of intensive crystal use followed by long breaks was a commonly reported pattern. Crystal was described as easy to access in Perth.

Most men in this study aimed to control their crystal use to avoid 'addiction', and to avoid becoming dependent on crystal-sex. Participants aspired to being 'good' neoliberal subjects who valued and exercised self-control. Despite this, participants' drug use often transitioned - back and forth - between control/functionality and loss of control/dysfunctionality.

Participants self-managed their use and some cut down or stopped if they noticed dependent patterns emerge (e.g., daily or more than weekly), or when they perceived unwanted changes to their temperament and/or to their practices. Some participants had stopped or reduced their use because of mental health concerns.

Factors which were reported to aid controlled crystal use included: fulltime employment; having diverse social and sexual networks including people who do not use crystal; implementing avoidance strategies such as cutting back on social media use and/or relocating to areas away from Perth; switching between injecting and smoking crystal to reduce injecting; having access to 'friendly' professional support if needed; and knowing where to access information about safer crystal use.

Crystal use was said to bestow a range of benefits on GBM in Perth: it gave men the confidence to have better social and sexual interactions, it helped men get the sex they wanted, and it made some men feel better about being gay, or bisexual, and/or HIV-positive.

2. Social constructions of crystal effects

Participants had used crystal in a wide variety of contexts such as working to meet deadlines, to heighten creativity for artistic pursuits, and to perform menial tasks such as housework.

Paradoxically, the folk pharmacology of GBM (i.e., how men understand drug effects)

constructs crystal as both a drug ideal for sexual activity, and a drug unsuitable for sexual activity.

As a sex drug, crystal was believed to facilitate emotional connection, lower inhibitions, increase confidence, improve stamina, clarify intent, push sexual boundaries, lead to imaginative sexual outcomes, and in BDSM scenes make pain and endurance 'more interesting'.

Alternatively, crystal was perceived by some participants to inhibit sexual activity because its effects on people were often unpredictable, with some men becoming detached from reality, and impulsive and agitated during sex. Participants said that crystal use often made getting an erection difficult, and concurrent use of erectile dysfunction medications were often said to be ineffective.

Crystal was seen to be a transformer: participants described a variety of desirable and undesirable changes in their lives which they had attributed to crystal use, including changes in sexual positioning to favour 'bottoming', seroconversion, improvements in confidence, and transitioning from smoking crystal to injecting crystal.

3. Crystal injection and harm reduction

Participants learned to inject safely by watching YouTube videos, by attending the WAAC and Peer Based Harm Reduction WA, by watching friends, and by receiving training from a health professional. These sources informed the folk knowledges that guided participants' injecting practices.

Folk knowledges, including folk pharmacologies, were often protective factors in the lives of crystal users. However folk knowledges also revealed gaps in men's understandings of injecting risk, for example about hepatitis C prevention. Participants shared and reused ancillary injecting equipment.

There was a consensus among participants that the rush of, and effects from injecting crystal, were more intense than those from smoking crystal; this can make injecting an attractive option.

Some participants had styled themselves as lay experts in harm reduction (i.e., they acted like network-nannies). These untrained 'peer-educators' drew upon folk knowledges to spread information about safer injecting and safer drug use throughout their social and sexual networks.

Participants sometimes reverted to smoking crystal to reduce their amount of injecting. Some injected at home before going to sex-parties where they preferred to smoke crystal.

Private sex-party hosts implemented strategies to facilitate injecting among guests, some of which enabled safer injecting such as dedicated injecting spaces and safe disposal of equipment. However, other strategies implemented by hosts, such as pre-filled syringes, were less safe.

4. Sex-based sociality and practice

In this study, sex-based sociality was eclipsed by the emergence of an app-based sexuality; that is, participants used social media 'hook-up' apps and websites to find sexual partners across disparate and disconnected networks of men seeking men for sex in Perth, most of whom were not gay community attached, and who had little interest in socialising within LGBTIQ communities.

Participants believed that crystal use increased sexual risk taking during extended sex sessions with multiple men because crystal helped men to explore and to push their sexual boundaries.

Biomedical technologies such as ART and PrEP, and negotiated agreements, serosorting, disclosure and personal risk assessments were widely used to avoid HIV infection and other harms. Negotiated agreements also included information about preferred ways of using crystal. There was little awareness of the sexual transmission of hepatitis C. Men tested regularly to detect STIs.

Condom use was exceptional; condom use was described as difficult to adhere to in the context of crystal-sex because sex sessions were often long, and multiple men were having sex simultaneously, which made changing condoms and applying lubricant impractical, inconvenient and frustrating.

Participants shared sex-toys and were unaware of the risks. Reports of cleaning sex-toys included vague methods for 'washing'. Similarly, in this study, BDSM equipment such as canes were 'cleaned' according to non-specific procedures IF men saw evidence of blood on them.

Participants made personal risk assessments of others, which they hoped would protect them from harms. These comprised haphazard judgements about the likelihood a casual partner might be HIV-positive or 'addicted' to 'hard drugs'.

Introduction

Using drugs for sex is a social practice that has been documented since classical antiquity [1]. Modern western societies characteristically demand a variety of psychoactive drugs, which are often used to facilitate and enhance sociality and sexual practice. Perth, capital of Western Australia, is a city of over 1.5 million people with diverse social and sexual practices. The city comprises sizeable lesbian, gay, bisexual, transgender, intersex and queer (LGBTIQ) communities, and heterosexual youth dance and music cultures, whose members often interact socially and sexually in the city's suburbs and entertainment precincts.

Some gay and bisexual men (GBM) practice a sex-based sociality where methamphetamine and other drugs are consumed. Findings of the Perth Gay Community Periodic Survey (GCPS) 2017 [2] show that crystal methamphetamine use among GBM has decreased since the last survey conducted in 2016 (10.7% vs 7.2%, $p < .05$) and similarly, when compared with previous years (i.e., 2010-2017), there has been a decrease in the rate of crystal use among all GBM respondents to the Perth GCPS. The survey shows that crystal use among HIV-positive GBM in 2017 was 20%, and among HIV-negative men the rate of crystal use was 6.6%, a decrease from 2016 figures and figures for 2010-2017 ($p = .002$). HIV-positive men are more likely to report any illicit drug use compared with HIV-negative men, which is a common pattern. Among all Perth GBM, the rate of injecting drug use in 2017 was 3.4%, which has remained stable since 2010. In 2017, HIV-positive men in Perth were more likely than HIV-negative men to report any injecting drug use (13.3% vs. 3.0%, ns, due to the small numbers of HIV-positive men in the sample). In 2017, 14.4% of all men reported using 'party drugs' (undefined but implies psychostimulants) for sex in the six months prior to the survey and 9.5% of GBM reported engaging in group sex during or after drug use. The proportion of men using party drugs for sex had not changed between 2010 and 2017 (18.2% vs. 14.4%, ns) [2].

Currently, there are no studies which have explored the ways that gay and bisexual men in Perth understand crystal methamphetamine, and how they incorporate the drug into sexual practice. To address this gap, this study aimed to explore: (i) patterns of crystal use, sex practices and the sharing of injecting and other equipment; (ii) men's understandings and use of crystal and harm reduction practices in sexual contexts, and how these perceptions and experiences influence decisions regarding drug use and sex; and, (iii) feasible harm reduction strategies, including HIV and hepatitis C prevention strategies, for scale-up and use by gay and bisexual men who use crystal in sexual contexts.

Method

Semi-structured, in-depth interviews, conducted face-to-face (n=13) and via telephone (n=8), were completed with 16 GBM from Perth and with five key informants (KIs) from LGBTIQ, viral hepatitis and harm reduction organisations. Interviews were held from October 2017 to April 2018. Each interview lasted approximately 30-60 minutes and was audio-recorded and transcribed verbatim. All participants were assigned a pseudonym.

The findings of an inductive analysis identified key themes and salient issues in these data, and findings from GBM and KIs were triangulated. A final stage of analysis pointed to recommendations for collaborative development with health promotion agencies for future piloting of new health promotion strategies for GBM who use crystal for sex in Perth.

Crystal-sex: using crystal methamphetamine for sexual activity

In this report, the authors use the term crystal-sex as shorthand for sexual activity among men who predominantly use crystalline methamphetamine. Crystal-sex describes a similar phenomenon to 'chemsex' in the UK [3], which is a label denoting a range of illicit stimulants and depressants used by London GBM for sexual activity, such as gamma hydroxybutyrate (GHB) and mephedrone. These drugs were not evident among Perth men who participated in this study. Conversely, the stimulant crystalline methamphetamine (also known as ice, Tina, crack, meth) is used in Perth by men who have sex with men.

Findings

Participants and 'community'

Participants in this study were gay and bisexual men from Perth, ranging in age from 26 years to 63 years: nine men were under 40 years of age and seven men were over 40 years of age. The sample was diverse and included men who were gay community attached and men who were not. While several participants said most of their friends were gay, more participants reported having few gay friends. Perth gay community was only one space that men played in; it was in the virtual communities formed through connections on multiple online social networking applications such as Grindr and the websites such as Craig's List and biaustralia.com where sex-based sociality and crystal use were negotiated and enacted. The Internet has helped to blur long-established boundaries between gay men and men from mainstream communities and networks, as reported by Arthur, an avid user of social network applications in Perth:

'I also find it interesting too that I used to have a sort of group of friends, but now I have a lot of friends who are totally disconnected from each other. Do you know what I mean? So, I don't have that tribe I guess that I used to have ... a lot of these sort of straight guys, they will only contact you when they want it [crystal-sex] ...' (Arthur, 54)

Disparate and disconnected networks characterized many of the study participants' experiences of sex-based sociality and crystal use in Perth. When reading the findings below, it is important to consider how geographically, and demographically dispersed networks of Perth crystal users affect sex-based sociality, and how the diffusion of innovation [3] required of health promotion to reduce harms is constrained by heterogeneous networks. Online health promotion messaging is likely to become more important in the future to increase accessibility of information among disconnected networks across Perth.

1. Patterns of crystal use and control

Frequency of use and control

A major theme identified in these data was controlled crystal use. This theme drew attention to how most study participants, for most of the time, managed their crystal use well. The men aimed to remain functional in their work and relationships while using crystal, and they generally acted in ways to avoid becoming dependent on crystal. The frequency of crystal use in this study was linked to participants' reported levels of control and functioning, with some daily and weekly users reporting that they felt 'addicted'. Overall, patterns of

use varied widely in this study, ranging from daily to weekly, to fortnightly, and monthly to occasionally:

‘So, I’ll spend 12 weeks of my life working my arse off to be able to have five or seven days off my head [on crystal] and that’s the choice that I make, rather than going to Bali.’ (Grant, 32)

Fulltime employment limited participants’ opportunities for using crystal to weekends, which assisted men to maintain control. Some men restricted their use to special occasions, and regular periods of cutting down or stopping were said to limit the likelihood of building a tolerance to crystal. Participants often reduced their use because they had become aware of a creeping dependence, or they had noticed unwanted transitions and transformations in their temperaments and practices (see below), or they had experienced an acute episode of poor mental health that they attributed to crystal use, or they had felt their mental health decline over time.

Personal networks

Participants who had diverse social and sexual networks said that this had helped them to avoid habituating to crystal use and to crystal-sex. Connecting online for sex with non-crystal users helped to reduce the frequency of use, as did not knowing a crystal supplier.

Avoidance approaches

Online apps and websites were said to act as triggers for continuing crystal use. Several men in this study had moved away from Perth or they were in the planning stages of leaving, as a strategy to stop – at least temporarily - their app use, which had facilitated their drug use. By relocating to regional centres or by moving interstate participants avoided their usual networks and their access to crystal. Other avoidance approaches implemented by participants to reduce their frequency of crystal use included: setting a phone-alarm to signal time to leave a sex-party; moving away from spaces where crystal is used, such as a bedroom (short-term) or a share-house (long-term); and, removing the means of contacting crystal suppliers (e.g., deleting phone numbers).

Modes of use

To facilitate control over their patterns of use, participants sometimes switched back and forth between modes of administration. While over the long-term, men in this study had transitioned from smoking crystal to injecting crystal, some men who injected occasionally reverted to smoking, because they perceived that smoking reduced the amount of crystal they used, which they believed reduced their likelihood of participating in high risk practices.

Professional support

Participants in this study were usually able to manage their crystal use without a need for professional intervention. However, several participants had been in rehabilitation programs following periods of crystal dependence, and some men said they required support from health professionals to help manage pre-existing mental health issues, or crystal-related mental health problems. These men sought the help of general practitioners (GPs),

psychiatrists or alcohol and other drug (AOD) specialists. However, some men reported difficulty locating mental health services relevant to crystal users in Perth.

A KI recommended an audit of the AOD sector to see 'how comfortable' workers were with engaging GBM crystal-users. The KI was concerned that GBM might not feel comfortable disclosing practices around the social and sexual use of crystal and were possibly likely to feel 'judged' in AOD service contexts. One KI reported that there is 'a real opportunity for AOD services that provide services to GBM or LGBTI people in general to upskill their staff on the issues that were needed'. Workforce development was also recommended for pharmacy staff to improve the experience of people who inject drugs when accessing injecting equipment from pharmacies.

Information sources

Participants who were interested in learning about crystal use accessed information from a variety of sources, including the WAAC and the M-Clinic, and Peer Based Harm Reduction WA. Participants spoke positively about these organisations, their staff, their resources and their services. Several participants had consulted GPs and a psychiatrist for information. Online sites such as Erowid, Blue light, drugs.org, YouTube, 'chemsex' sites in the UK, and social media platforms were often used to find crystal-related information to support controlled use. Participants had also acquired information from friends, for example about how to inject, and from their crystal suppliers. Nevertheless, participants reported difficulty in finding the specific types of information they needed, for example about how to access mental health services for crystal users in Perth, particularly when they had no history of mental illness.

On the one hand, information contained in government funded anti-methamphetamine campaigns did not engage with issues of controlled crystal use, but instead perpetuated the 'just say no' approach. In this study, drug-war messages were viewed as unrealistic and ineffective as a deterrent. On the other hand, participants reported that their real-life encounters with regular crystal users had informed them of the risks of crystal and in some circumstances such encounters acted as a deterrent to continuing or to escalating patterns of use:

'When I first went to that supposed orgy thing the first time I did [crystal], I met a guy there and he was very stunning at the time ... and I met him again a year later and he's obviously continued to do [crystal] the entire time and I think he started around the same time I did. So, he had deteriorated, I guess is the word, and so he was very skinny, and you could see the effects it took on his body, and it kind of really put me off the idea of continuing it.' (Brendan, 28)

Losing control of crystal use

Generally, participants said that they managed their crystal use well, nonetheless some periodically lost control of their patterns of use, despite their best intentions to maintain control, while others on occasion used large quantities of crystal for extended periods to 'lose control'. The signs of physical dependence were well understood by participants and

seemingly by the people around them. Some had family and friends who they trusted and relied upon to alert them of their escalating use:

‘When you decided that you had a problem, what made you think you had a problem?’ *Everyone telling me I did ... literally everyone, the people I lived with, my sister, my family, my best friend, everybody ... I was fucking everything I did ... I specifically remember like a friend of mine who’s passed away now, he was like “you’re an addict, man, you’re an addict ...”* (Justin, 28)

Participants spoke about losing control from the cumulative effects of taking crystal over several days without sleep. During extended use, where some men would forget to eat and drink water, symptoms of acute psychosis sometimes emerged.

Controlling crystal use presents a significant challenge, in part, because of the drug’s reported wide-spread availability. Key informants and participants said that crystal is easy to access via social networking applications, and the online apps and websites were used to connect users with each other. On the one hand, KIs reported that some GBM ‘*get quite annoyed*’ to see crystal suppliers on the apps, or their sexual partners reporting they were ‘*blazed*’, but on the other hand, some men have told the KIs that this is ‘*part of the social and sexual landscape now ...*’. This is despite the apps’ ‘*best efforts ... to kind of expel [crystal] from those platforms*’. Judging by its salience on hook-up apps, one KI said that crystal use, and injecting crystal, have become more ‘*normative*’ among GBM, because discussion is ‘*more fluid and free-flowing than it used to be*’.

2. Social constructions of crystal effects

Crystal: A sex drug

In this study, participants perceived and experienced the drug ‘crystal’ in diverse ways. Crystal was understood within GBM’s folk pharmacologies (i.e., how men understand drug effects) as both a sex drug and not a sex drug. These opposing constructions of crystal are explored below. For some men, crystal was understood to be a drug that facilitated a deep emotional connection, even when used between sexual partners who were unknown to each other. Sex was perceived as being better on crystal because the drug lowered inhibitions and increased users’ confidence, which made expressing one’s sexual desires and obtaining sexual satisfaction easier. Crystal reportedly ‘*facilitates direct action*’; it was said to make shy people have confidence and to make confident people clarify their intent about what they want and what they do:

‘[Sex on crystal] is more charged, it’s more open, it’s more aggressive, your guard’s right down ... when you have sex on gear, then it’s much more pornographic, I guess. It’s much more exploratory ... [crystal] removes the romance and makes it pure sex and pure testosterone, grunty, manly sex. So, and plus you go for hours and hours and hours.’ (Jessie, 34)

Participants believed that crystal use improved their sexual expertise; it helped them explore their sexual fantasies and to become more adventurous in their sexual play, with many willing

to try *'different things'*. Some said that their crystal use had led to greater sexual stamina, greater ability, and more imaginative outcomes, where sex became more *'playful, nuanced and suspenseful'*. Physical touch was described as more intense on crystal and emotions were said to be heightened, which contributed to more fulfilling sexual experiences. Men's sexual boundaries changed, in part because crystal helped to reduce anxiety and make men feel *'like you are more of yourself'*, capable of doing anything sexually. Two participants involved in Perth's BDSM scenes said they preferred to hook-up with other crystal users because men in these scenes wanted to *'partake in the same general sensory world'*. One of these men said that while he often had sex without crystal, crystal made pain and endurance in BDSM *'more interesting'*.

Participants said that crystal made a positive difference to how they approached sex and sex-based sociality, when compared to their pre-crystal sex lives. Participants' construction of crystal as a sex-drug was partly informed by social modelling. By talking to and watching other men use crystal, participants had come to associate the drug with sexual activity. Yet several men spoke about how crystal played *'tricks'* on them as they believed their memory was distorted by the drug's effects:

'... the thing about meth is that it paints this grand picture of what you think you're experiencing in memory, when you remember the times you've done it and you remember as you're having a fabulous time, and everything worked out well and everything was great, when in fact what is actually happening is not like that. You remember it differently to how it actually happened ... and the only reason [my partner and I] have kept using it is because we remember it as a positive, when it actually wasn't really that much of a positive experience to begin with.' (Darren, 32)

Participants' enthusiasm for crystal-sex was tempered by an acknowledgement that the drug had drawbacks in sexual contexts. Whereas newcomers were often effusive about crystal-sex, several long-term users, such as Darren above, queried the assumption that crystal was a drug that complemented sexual practice.

Alternative constructions of crystal

Participants in this study had used crystal as a recreational drug to socialize, to work long hours to meet deadlines, to study, to pursue creative and artistic interests, and to perform menial tasks such as labouring and housework. Drawing upon these experiences, and experiences of sex-based sociality, such as at sex-parties and one-on-one or small group sexual encounters, participants noted that crystal affects people differently. Reportedly, crystal use often produced bad behavior and affected people showed a lack of basic courtesy, both when hooking-up online and when attending sex-parties in Perth. Contrary to the social construction of crystal as a builder of deep emotional connections, some participants found that people cared less about each other when having crystal-sex, and became impulsive, agitated, abusive, and careless about risk practices. Indeed, some men had reached a turning point regarding their participation in the local crystal-sex scenes:

'I'm on the cusp of giving up because of that really. I absolutely hate everything that goes with it. I hate the shallowness of people and the lies and things that people will tell you and broken promises and the loss of dignity and integrity.' (Arthur, 54)

Furthermore, crystal use often resulted in an inability to get and to sustain an erection. Nearly all participants said they had experienced erectile dysfunction, particularly as they had progressed to frequent crystal use. They described attending sex-parties where only fondling and oral sex occurred because no one could get an erection. Erectile dysfunction medications were often described as ineffective in these circumstances:

'Every time [crystal-sex] has been terrible, to be honest. I haven't had good sex on it, which kind of makes me wonder why ...?' (Brendan, 28)

Some men said they had overcome crystal-induced erectile dysfunction by masturbating, such as Gene, 29, who claimed that *'practice makes perfect'*. Similarly, Mark, 51 and Arthur, 54, believed injecting crystal had made it easier to get and maintain an erection than when they had smoked. In this study, crystal was understood by men as both a sex-drug and not a sex-drug; these opposing constructions of crystal were a function of social learning, men's patterns of use and control, and modes of administration.

Transitions and transformations

Crystal was seen to be a transformer in this study; participants reported that crystal use had changed their practices, and to a degree, also their identities. Some welcomed these changes while others did not like the person they had become, or the practices they had enacted. Below are some of the main transitions and transformations that were identified in this study, by participants or by the authors. Several of these transformations are well known, having previously been identified and documented in the scholarly methamphetamine literature. Transitions and transformations were inter-related, such as increased confidence, receptive anal intercourse and change in BBV serostatus.

Smokers become injectors: in this study, participants mostly initiated crystal use by smoking, however many spoke about transitioning to injecting:

'Do you smoke or inject? I used to only smoke, but in that 6-month period, I started injecting for the first time.' (Sebastian, 32)

Tops become bottoms: participants observed from their own sexual practices and through observation of others, that men often change their sexual positioning preferences on crystal to favour receptive anal intercourse (i.e., bottoming):

'... Yeah, like to have sex and using meth has probably increased my desire to have... to be a bottom and to have anal sex more, I think.' (Mark, 51)

Heterosexual men become 'gay': related to the above transformation whereby men often favoured bottoming on crystal, one participant said that in his experience, the reason some heterosexually identified men use crystal is to explore their male-on-male sexual fantasies:

'... [A] lot of the guys I hook up with, I meet through Craig's List and they're often straight guys ... Yeah, I have had quite a few of them who suddenly when they have meth, turn into the biggest bottom in the whole world and want cock straight away. But, quite intriguingly they're not attracted to men, they don't like gay porn, but they're right in the moment when they are wired.' (Arthur, 54)

Shy men become sexually disinhibited: Participants believed crystal enabled them to have the type of sex and the type of interactions with others that they had always wanted but, when not affected by crystal, had felt too shy to enact. Because crystal was widely believed to remove sexual inhibitions, men tended to try new sexual practices, which sometimes heightened risks:

'Yeah, especially I think with the MSM thing, I've got a feeling that it gears a lot of people's minds towards doing things that they wouldn't do. Obviously, I guess it gives people confidence to do things that maybe they wouldn't come out with normally ...'
(John, 34)

Sero-negative become Sero-positive: as the literature reports, some participants believed that their HIV (and hepatitis C) seroconversions occurred during crystal-sex, because they had changed their sexual practice on crystal:

'It's the reason we ended up positive, because of the drugs I think, possibly so, because you do ... feel a little bit invincible on crystal or something like that, you do drop normal ... I think you've got that willingness and that desire and yeah, I don't want a condom and ...' (Henry, 59)

Generally, crystal use was described by KIs as accepted within Perth gay community; it was said to help some GBM who experience shame or guilt regarding their sexuality, and/or HIV status, to dissociate from their psychological insecurities; it helped to instill confidence in people who might not be normally confident; and, it helped men get the types of sex they wanted. Transitions and transformations were key themes in these data, and they can help to inform health promotion of the multiple ways that men understand the drug crystal methamphetamine, their sexual practices, and the interrelationship of the two.

3. Crystal injection and harm reduction

In this study, half of the participants had injected crystal (n=8). These men were either regular injecting drug users, or they injected occasionally, which ranged from weekly to every few months. Participants had learned to inject by watching YouTube videos, by watching their friends inject, by accessing information from WAAC and Peer Based Harm Reduction WA, and occasionally by receiving training from a nurse or another health professional. Some men in this study injected themselves while others preferred another person to inject them. There was a consensus among participants that the rush of, and effects from injecting, were more intense than from smoking crystal:

'... [Injecting crystal] was probably one of the best feelings I've ever had in my life ... Yeah, literally as soon as I did, I took all my clothes off and we just started [having sex] on the couch ... but like as soon as it happened, I didn't do it myself, I sat there with my arm out and let him do it to me. And it like, in an instance, like my body got really warm, it felt like I could literally feel it running through my blood and my veins and I just like got this real big rush of just feeling like amazing and then I got really hot and that's when I took all my clothes off and then it was just kind of like euphoria, I guess that's what they call it. I was just like... yeah, it was just amazing. It's really hard to describe

actually and I think that's why a lot of people do it again and again, because it's just a really good feeling.' (Neville, 26)

Folk knowledges and folk pharmacology

Folk knowledges shaped participants' practices in this study [4,5]. Folk knowledges, a major theme, were a compendium of experiential knowledge acquired from illicit drug use and evidence-based information derived from health promotion sources. There were multiple folk knowledges reported by participants in this study, reflecting participants' diverse understandings of drug effects, risk and harm reduction. For example, a folk pharmacology [4,5] is a knowledge system grounded in the drug-related experiences of everyday drug users; it was how men came to understand the effects of specific drugs and how drugs can be combined and choreographed to achieve desired outcomes. For instance, participants reported feeling irritable and anxious while coming-down after injecting crystal; a folk pharmacology men employed in this study to ameliorate coming-down was to use, often in combination, alcohol and cannabis, and pharmaceuticals especially diazepam (e.g., Valium) and/or Amitriptyline (an antidepressant), because from experience these drugs were understood to relieve feelings of being 'wired' from crystal use and they helped to promote sleep. This type of experiential information is mostly unavailable, which is why folk knowledges are potentially valuable sources of peer-based 'expertise' for developing harm reduction interventions. However, folk knowledges are also contestable as they were largely grounded in participants' experiences and beliefs. For instance, in the above example, participants' poor understandings of drug-related contraindication, from combining alcohol and diazepam, meant they were at risk of an overdose.

Reuse of injecting equipment

In this study, folk knowledges about BBV transmission, particularly hepatitis C and safer injecting highlighted how vulnerable participants were to harm. Time and again, participants proclaimed to follow safer injecting guidelines, because they did not share needles and syringes. However, men said they shared ancillary injecting equipment, such as spoons, water phials and tourniquets, because they believed sharing and reusing this equipment was safe. Similarly, the reuse of one's own injecting equipment, which was reported by several participants, is further evidence of gaps in men's folk knowledges regarding safer injecting. Reuse was understood by men to be safe; they were unaware of potential harms such as bacterial infections and vein damage from reusing one's own needles and syringes.

It is important to acknowledge that this study did not recruit a representative sample of GBM in Perth, so it is not possible to determine Perth men's levels of knowledge about risk. Despite this, the sharing of injecting equipment other than needles and syringes is commonly reported in surveys (i.e., between 30% and 50% of users report sharing ancillary equipment). In this study, sharing may be explained by participants' familiarity with HIV-era safe-sex and safer drug use messages, and a lack of familiarity with hepatitis C prevention. Within the context of health promotion for HIV prevention, people were instructed not to share needles and syringes. Conversely, the message about not sharing any injecting equipment including spoons, water phials and tourniquets has emerged relatively recently to prevent the spread of hepatitis C, and this latter information must compete with long-held gay community

knowledge that only warns against needle and syringe sharing.

Lay experts in harm reduction

Participants who were experienced at injecting, but who were not trained peer-educators, sometimes performed the role of ‘network-nannies’ [4,5]. These lay experts in harm reduction drew upon folk knowledges to spread safer drug use information through their friendship networks. Sebastian was a clearly identifiable lay expert in this study who informed his group of mostly heterosexual crystal-injecting friends about the Needle and Syringe Program (NSP) services for people who inject. Previously, his friends had bought their injecting equipment from pharmacies. Sebastian had also helped to change his friends’ injecting practices by modelling best-practice injecting techniques:

‘... I kind of always felt like when it came to injecting, it kind of always felt like no one knows how to use a swab properly and I used to be like, “hey, funny fact”. And everyone would just like, jab away and I’m like, “hey, how about we just drink some water before we do this and just chill out and have a shower ... Just have a shower and some water and maybe do a few sit-ups, push-ups and then it’ll be fine”.’ (Sebastian, 32)

A KI reported that the WAAC aimed to locate and train ‘ambassadors’ (i.e., peer-educators) to go out into their social and sexual networks to educate other GBM about safer crystal use. Reportedly however, it has been difficult to attract men to become ambassadors, perhaps as one KI suggested because the Perth *‘gay community is not as strong as it used to be’*. Nevertheless, peer-based ‘word-of-mouth’ approaches were described by a KI as *‘the best tool ever’* for harm reduction, which suggests that folk knowledges and lay experts are integral to developing crystal-related harm reduction interventions.

Disclosure of injecting

Men who injected acknowledged that it is a stigmatised practice in Perth. To try to circumvent stigma, men often disclosed their preference for ‘blasting’ (i.e., injecting) in their online profiles prior to hooking up with sexual partners. On the one hand, disclosing injecting in online profiles was a strategy to ensure everyone present at a hook-up or at a sex-party would be comfortable and compatible with injecting. On the other hand, some men perceived injectors as too ‘hard-core’, or into riskier practices, and the disclosure of injecting drug use on profiles enabled men who did not inject to limit their exposure to injecting networks.

Injecting and private sex-partying

All eight men in the sample who injected crystal said they employed their own harm reduction strategies to manage the risks associated with injecting, both at home and at sex-parties. Their strategies were often an outcome of ‘common sense’ and folk knowledges acquired from lay experts. One strategy was to limit the amount of crystal injected in a single session, so crystal was injected at home prior to heading out for sex. Some men preferred to smoke crystal at sex-parties instead of injecting as smoking was considered less confronting for non-injecting party guests. Conversely, sex-parties were held for men who preferred

to inject, and some guests aimed to inject during sexual activity. At parties where injecting occurred openly, hosts provided safe spaces to inject:

'We always made sure that if we have got people over, there's always a plastic milk container or something there that they can put things in and out of the way, so you know, they're not left lying around, they're sort of disposed of with the least chance of anybody touching them again.' (Henry, 59)

Sex-party hosts at times supplied pre-prepared syringes for guests to use. Drug solutions were mixed and loaded into syringes prior to guests arriving. One participant expressed his reservations regarding this practice:

'I said, "I've never had a discussion about drugs with you before, you've got three fits on the table, all mixed up ready assuming that I would have one, I've got no idea what's in them so why would I take that?" And he just sort of got really angry with me, because he wasn't you know ... he thought I'd let him down or whatever, so you know.' (Arthur, 54)

Participants did not inject in public spaces such as a sauna or a sex-on-premises venue (SOPV) because of concerns about the hygiene of public spaces. They preferred private sex-parties because it was easier to maintain safer injecting practices.

A critical issue for Perth is how to get reliable information into crystal using networks, which in this study appeared to be heterogeneous. Key informants reported a need for new messages around interventions regarding drug use among GBM; they said that past messages aimed at dance party attendees are less relevant to men who mix in crystal-using networks. Key informants said that engaging with the social networking apps was necessary to get harm reduction messages out to men in these networks:

'To be able to do some more targeted social marketing would be a dream. To do some quite specific messaging in the places that people are accessing, either sexual partners or methamphetamine themselves. So, what I'm thinking about is Grindr and Grindr is hellishly expensive to do any advertising with, and so we're working a bit more closely with them to do some harm reduction work across their [platform].' (Perth KI)

In this study, injecting played a pivotal role in the production of crystal-sex; some men found it easier to get an erection when injecting crystal compared to other modes of using the drug. Injecting crystal also helped one participant reduce his alcohol consumption (i.e., by substitution). For other men, injecting crystal represented a pathway to 'addiction', which was a disincentive for them to increase their crystal use, lest they become dependent. These men tended to inject crystal sparingly to maintain control.

4. Sex-based sociality and practice

In Perth, sex-based sociality was initiated, navigated and performed through social media apps and websites, rather than through more traditional avenues such as saunas and SOPVs. Explicit information regarding sexual practice preferences and crystal use was usually traded online before men met face-to-face. Some apps and websites provided more

information than others about men in their online profiles, making some hook-ups potentially riskier than others. The apps and websites were the preferred ways to meet and connect with sexual partners. They enabled participants to set up social and sexual networks, and in some instances, men stopped using apps and websites, or reduced their use, once they had established their personal networks.

Risk practice and safe sex

Men in this study said that crystal use had increased their sexual risk taking, and they believed that increased sexual risk practice was a common pattern among crystal users. Participants identified their crystal-related sexual risk practices as condomless anal intercourse, sex with multiple partners, extended sex sessions, the sharing and reuse of sex toys and BDSM equipment, and sexual practices such as fisting and sounding¹. In this context, the factors men saw as important for HIV prevention were adherence to antiretroviral therapy (ART), an undetectable viral load, the uptake of pre-exposure prophylaxis (PrEP), the enactment of negotiated agreements, personal assessments of risk environments and 'risky individuals', implementing serosorting, having regular BBV/STI tests, and to a lesser extent, using condoms with casual partners.

Condom use

Participants reported that condomless anal intercourse was their normal practice. Among the few men who used condoms for casual sex, they reported often '*slipping up*' and not using condoms '*in the heat of the moment*'. Men in regular relationships also did not use condoms. Key informants and GBM reported that condom use in the context of crystal-sex is difficult to maintain as men are having sex over longer periods, requiring multiple condoms, with multiple partners, which was considered impractical.

Antiretroviral therapy

Participants understood that an undetectable HIV viral load, when on ART, indicated that the likelihood of HIV transmission was a negligible risk. Knowing that 'undetectable equals untransmissible' was the primary justification for not using condoms among study participants:

'... And I'm an HIV positive man who is undetectable and I'm of the belief that my undetectability is keeping me safe and keeping the people that I have unprotected sex with - well it's not unprotected sex anymore is it? The people I'm having sex with without a condom, I'm keeping them safe. So that's my belief.' (Mark, 51)

Pre-exposure prophylaxis

At the time of interview, several men were accessing and paying for their own PrEP medication, and several others were enrolled in a PrEP trial that was to commence in Perth in late 2017. Men on PrEP knew they needed to also use a condom however combined PrEP and condom use was not evident in these data:

1 Sounding is the practice of inserting something, often a metal rod, into the urethra of an erect penis.

'... I didn't know a lot about [PrEP] and obviously they're saying you're supposed to take PrEP and still use condoms. I think that's crazy, no one's going to do it, not going to happen. Well, five percent of the good people might, but I can say that in the real world, it's not going to happen.' (Michael, 48)

Key Informants reported that GBM are taking control of HIV via their uptake of biomedical prevention technologies, such as ART and PrEP. They said that the *'behavioural stuff'* attached to crystal use, meaning men who experience compulsive sexual practice and drug use, is a bigger health concern than HIV prevention, particularly now that PrEP is widely available. The findings of this study support these assertions.

Disclosing HIV infection

HIV-negative men reported being comfortable with condomless sex; one man *'put a lot of trust in random people'* and believed that HIV-positive men would usually disclose their status. Indeed, it was common for men to disclose their HIV-positive status in their online profiles. Conversely, some participants made a point of asking direct questions about serostatus, either online or in face-to-face hook-ups. Not all HIV-positive men disclosed their status because they believed in the efficacy of ART and PrEP, which they said made disclosure unnecessary.

Negotiated agreements

Men in regular relationships had negotiated agreements with their regular partners, where they disclosed their intention to have sex outside of their primary relationship, or they had decided as a couple to not have anal sex with casual partners, or they had agreed to limit the number of men they had casual sex with. Regarding casual sex partners, online profiles included explicit or coded information about an individual's serostatus, their attitude to condoms, and sometimes their preferred sexual practices. Similarly, online profiles contained coded information about drug use:

Do you usually agree to use drugs before you go meet them or is it something that just sort of happens? *'I don't tell anyone that I'm using [crystal], so there maybe something in their profile or something that makes me aware. What sort of thing would you be looking for? Well like on Grindr there might be a picture of clouds ... Bi-Australia somebody might, you know yeah ... 'sunshine on a rainy day', you know, just little things that I've picked up over time myself ...'* (Warren, 45)

Participants negotiated agreements with casual partners about issues such as accessing crystal, sexual positioning (i.e., top, bottom, versatile), role-play in the context of BDSM practice, the quantity of crystal smoked or injected, access to needles and syringes, and information about the number of people attending a sex-party. Online negotiated agreements comprised both verbal and non-verbal screening, which helped to establish what guests could expect at a sex-party.

Personal risk assessments

Some participants said they were ‘a good judge of character’ and that they were ‘educated’ about sexual and drug use risk practice, and therefore could make ‘calculated risks’ regarding HIV infection and STIs. These men were confident that their risk-based decision-making would protect them from BBV infections and from people who were heavily dependent on drugs. Personal risk assessments were often comprised of haphazard strategies and/or judgements. For example, Chuck, 63, looked for signs of HIV infection during hook-ups with casual partners:

‘... I maybe go to their house, I look in the medicine cabinet when I go to the toilet. Are there medications and if there aren’t any medications, then you know it’s okay.’ (Chuck, 63)

BBV and STI testing

The reported frequency of testing for BBVs and STIs was usually dependent upon the amount of casual sex participants were having. Some men only tested occasionally because they went without sex for lengthy periods. One bisexual man in the study, Warren, 45, reported that he had never tested for HIV, viral hepatitis or STIs, because he ‘had never got around to it’. Most participants however reported testing frequently, ranging from monthly to every three to six months.

Sharing sex-toys and cleaning BDSM equipment

Participants reported sharing sex-toys with their regular partners, and some shared with casual partners. Arthur, 54, said that while he ‘washes’ his equipment between use with casual partners, in his experience this was unusual, as he said most men were not aware of the risks of sharing sex toys. Participants made visual assessments of people’s cleanliness and the hygiene of their homes to determine the likelihood of acquiring an infection from sharing sex-toys or BDSM equipment. Two participants who were into BDSM practices reported vague and ineffective approaches to infection control. Chuck’s claim, below, that ‘I’ve never drawn blood’ revealed a lack of awareness about hepatitis C prevention, and how a microscopic amount of blood on equipment is enough to transmit the hepatitis C virus:

‘You also mentioned disinfecting equipment. How do you disinfect your equipment?’ *Well leather restraints and that sort of thing, after use ... I hang them all up from the ceiling beam and I spray them down with Dettol spray you know and that not only keeps them from getting ... developing fungus in our damp winters, but it also just basically keeps them from building up crud that could you know expose somebody to skin infections or other kinds of infections. So, I do that ... with the canes, the canes generally get soaked in hot water before use and I just let them dry out, I don’t really do anything with them. Maybe I should, but I’ve never actually drawn blood with them either, so ... the whip is the one thing, I’ve never drawn blood with the whip, but if I did, I would probably have to do something like I do with the rest of the leather gear, but perhaps a bit more intensively. Maybe put in a microwave or do the Dettol thing several*

times you know ... so, the real answer for that is that any kind of porous material like that, you dedicate to one person and you don't use it on a bunch of different people, especially if you're expecting to draw blood.' (Chuck, 63)

Conclusion

Researchers interviewed a self-selected sample of gay and bisexual men from Perth for this study and therefore the findings are not generalizable to all men who have sex with men in Perth. Despite this limitation, the findings highlight salient issues and themes relevant to health promotion for Perth-based GBM who use crystal for sex.

Participants' frequency of crystal use ranged widely in this study, with periods of heavy use being a notable pattern. Conversely, long periods of abstinence were also reported. Generally, men were motivated to avoid drug dependence and other harms through controlling their patterns of use, and many vacillated between controlled and uncontrolled crystal use, including periods of dependence. There were a variety of factors that facilitated control in this study, for example, an awareness of unwanted transitions and transformations within participants' lives, which they had attributed to crystal use. Men who had diverse sexual networks that included non-crystal users, were able to move in and out of crystal use and they were able to avoid habituating to crystal-sex. Participants moved away from Perth and their usual networks to reduce their crystal use, and some switched back and forth between modes of administration (e.g., smoking to injecting to smoking) to facilitate better control. Controlled crystal use was aided by building supportive therapeutic relationships with private health professionals and community organisations, some of whom provided advice around mental health issues and crystal dependency. The fear of not being able to have sex without crystal was an incentive to moderate use over the long term. Individual 'common sense' factors such as a healthy diet, and social factors such as having a supportive family and friends also helped to facilitate controlled crystal use among men in this study.

The study findings point to a range of issues that should be addressed, or which need to be reinforced, in health promotion messaging for people who inject crystal in Perth. It is likely that some of the recommendations below are already realised within the harm reduction programs of LGBTIQ and drug user organisations (e.g., WAAC's Ambassadors program). However, a critical issue for Perth is how to get reliable information into crystal using networks, which in this study appeared to be heterogeneous.

These data indicate that participants viewed HIV prevention strategies as important however HIV infection was less of a concern for men than maximising the pleasure of crystal-sex. Men in this study participated in a wide variety of sexual practices, including condomless anal intercourse. ART and PrEP were the primary strategies used by men to avoid transmitting or acquiring HIV. Similarly, folk knowledges and folk pharmacologies were evident in this study, which at times increased men's vulnerability to harms, such as hepatitis C infection, and at other times increased the pleasure of crystal use, for example, by easing the come-down.

For the successful diffusion of innovation in health promotion [6] to Perth-based crystal-users, it is necessary to first understand the target population and the factors influencing their rate of adoption of new ideas and behaviours. This requires ongoing research, and ultimately engagement with online 'hook-up' apps and websites to facilitate referrals to information, support and treatment. Additionally, consideration could be given to the effectiveness of strategies suggested by the findings of this research, which are presented below.

Recommendations

Prevention and education

Promote consistent adherence to ART: Remind men who have an undetectable viral load from ART about the need for consistent adherence to the regimens for viral load to remain undetectable.

Promote PrEP use: Promote the existence of PrEP widely so that GBM, and other men who have sex with men, can decide whether to adopt its use.

Promote condom use: Promote condom use for HIV-positive men to prevent transmitted resistance, to prevent STIs, and to ensure that biomedical technologies, such as ART and PrEP, are maximally effective.

Engage with community-based organisations: Widely promote the programs available through key organisations and services such as the Western Australian AIDS Council and Peer Based Harm Reduction WA. Identify the available mental health services for crystal users.

Promote the locations of the Needle and Syringe Program: Advertise where NSPs are located through online apps and websites used by people who inject crystal.

Increase the number of injecting vending machines and secondary NSP sites: Increase the provision of sterile injecting equipment through a variety of easily accessed sources, such as vending machines and secondary NSP sites.

Sustain efforts to teach safer injecting: Emphasise the edict 'do not share a thing' when injecting. In campaigns, clearly state the risk of sharing tourniquets, water phials, spoons etc. instead of using the less specific term 'injecting equipment', which some people interpret as meaning only needles and syringes. Highlight how being injected by another person increases the risk of hepatitis C transmission. Highlight how syringes are designed for single use and how reuse can lead to serious vein damage and other complications.

Highlight the risk of transitioning to injecting: Inform new crystal smokers about a risk of transitioning to injecting crystal and how crystal injecting increases the risks of use, such as greater exposure to BBV infections and higher risk of overdose.

Encourage periodic breaks from crystal use: Encourage regular crystal users to have prolonged breaks from using. Highlight the benefits of a 'take a break' strategy for mental health and for maximising the pleasurable effects of crystal use.

Shift between modes of use to reduce frequency of injecting: Suggest that if people are intending to inject crystal, they do so at home before going to a party, instead of at the party. Suggest the use of other modes of administration such as smoking when out socialising.

Adopt avoidance approaches: Suggest a variety of avoidance approaches to improve control, such as deleting phone contacts, deleting apps, moving to an area where it is difficult to access crystal, and shifting between injecting and smoking.

Avoid pre-loaded syringes: Alert sex-party guests to the heightened risks of using pre-loaded/pre-mixed syringes, such as poor hygiene in preparation and contaminants in the prepared solution.

Testing and diagnosis

Promote regular hepatitis C testing (and treatment): Alert men about their risk of acquiring hepatitis C from sexual practices that can lead to mucosal trauma, e.g., rough-sex and fisting.

Promote regular testing for STIs: Encourage men who do not use condoms to test regularly for STIs.

Promote the use of self-testing kits for HIV: Encourage crystal users to self-test regularly by using HIV self-testing kits. This will help to increase awareness of HIV and the need for regular testing.

Disease management and clinical care

Encourage crystal users to build supportive relationships with health professionals: Advise crystal users where to access 'crystal-friendly' or 'drug user-friendly' GPs and alcohol and other drug specialists in Perth.

Promote treatment with Direct Acting Antivirals (DAAs): For men who acquire hepatitis C infection, promote the availability, the tolerability and the efficacy of DAAs for curing hepatitis C.

Promote uptake of psychological services: Highlight how cognitive-behavioural therapy and motivational interviewing may assist some crystal users to develop and manage avoidance approaches regarding their drug use and to foster individual and social resilience.

Workforce development

Identify and train lay experts in harm reduction to become peer-educators/

Ambassadors: Lay experts can be identified and trained to become peer-educators/ Ambassadors and help to diffuse information about safe crystal-sex and safer injecting to men in Perth-based networks.

Implement LGBTI+ cultural competency training for AOD services staff: Alcohol and Other Drug (AOD) organisations that provide services to LGBTI+ people should offer cultural competency training to upskill their staff on issues that affect GBM crystal users.

Sensitivity training for pharmacy staff: Workforce development is required for pharmacy staff to improve the experience of people who inject drugs when accessing injecting equipment from pharmacies.

Enabling environment

Promote diverse sexual networks: Encourage crystal users to develop relationships with casual sexual partners and friends who do not use crystal.

Promote sex-party hosting etiquette: Target sex-party hosts with 'safe-hosting' campaigns through online media and encourage them to adopt a range of harm reduction strategies for people who inject, such as providing safe disposal containers, quiet 'chill' spaces, a well-lit room, CPR training and other basic first-aid training.

Encourage familiarity with online codes for crystal use: Raise awareness of the symbols profile users adopt to signal their preferences for crystal smoking/injecting and their preferred sexual practices.

Promote negotiated agreements: Advise men about negotiation skills and provide a short check-list of questions to ask online casual partners, to help establish their BBV and STI status, and to mutually agree on aspects of crystal use (such as injecting or smoking) and sexual practice prior to meeting face-to-face.

Promote caution and safety: When playing online, men should be aware of the limitations of personal risk assessments for reducing their exposure to risk. HIV-negative men should also be aware that some practices, such as serosorting, can stigmatise HIV-positive men.

Nurture individual and social resilience: Highlight the protective value of a good diet, adequate hydration during strenuous activity, physical fitness, and strong supportive relationships with family and friends for maintaining controlled crystal use.

Research, evaluation and surveillance

Research exploring folk knowledges, including folk pharmacologies: Further research is required to describe and document the multiple ways that men understand crystal use and sexual practice in Perth and how these understandings might complement and/or contradict evidence-based health promotion sources.

Evaluate and use the study findings: The WA Department of Health should consider including the findings of this study in relevant state policy and programs in the future.

Consider the implications of sexualised drug use for government departments and service providers: The WA Department of Health should work with other government departments and service providers to consider the implications of crystal-sex and other sexualised drug use among all men who have sex with men in the provision of sexual health, mental health and alcohol and other drug services.

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