

A qualitative scoping review of sexualised drug use (including Chemsex)

of men who have sex with men and transgender women in Asia



## A qualitative scoping review of sexualised drug use (including Chemsex)

of men who have sex with men and transgender women in Asia



The scoping review was conducted by **Jamee Newland PhD** (Kirby Institute for Infection and Immunity in Society, UNSW Sydney), and **Angela Kelly-Hanku**, Papua New Guinea Institute of Medical Research / Kirby Institute, University of New South Wales, Australia.



Design and layout: Vaness Silpakhon Kongsakul

#### © APCOM 2021

Map Disclaimer: The designations employed and the presentation of the material on this map do not imply the expression of any opinion whatsoever on the part of APCOM concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Every effort is made to ensure this map is free of errors but there is no warrant the map or its features are either spatially or temporally accurate or fit for a particular use. This map is provided without any warranty of any kind whatsoever, either express or implied.



# Content

Background	5
Abstract	6
Introduction	7
Method	9
Review Findings	13
Discussion	23
Conclusion	26
References	28

4 A qualitative scoping review of sexualised drug use (including Chemsex) of men who have sex with men and transgender women in Asia



5

## Background

APCOM's 2018-2020 Strategy, TENACITY explicitly states that drug use is an issue that as an organisation we need to do more on.

Research from across the world indicates that men who have sex with men (MSM) are more likely to use illicit drugs than the general population (for review see Bourne, 2012). The higher levels of drug use has typically been attributed to the fact that the majority of commercial spaces that MSM occupy are those in which alcohol is served and drugs are available, or has been associated with a higher likelihood of stressful life events (such as 'coming out' receiving a HIV diagnosis or hostile reactions from family or community), which drugs help to alleviate.

An increasing number of studies in countries around the world are noting a rise in what have been termed 'new psychoactive substances'. The use of amphetamine-type stimulants increased from 17.5% in 2005 and to 20.8% in 2007 in Thailand among MSM, as an example. High rates of amphetamine-type stimulant use have been reported amongst MSM in parts of Asia, including Indonesia (15.0%), Malaysia (23.9%), Thailand (32.0%), and China (13.3%) (Lim, Guadamuz & Altice, 2013). Anecdotal evidence given that there is a serious lack of real data in the region suggest that we are seeing similar situations developing in Lao PDR, Philippines, and likely other countries.

The studies that are available from the region show a rise in the use of methamphetamine (ice), ketamine (k), gamma hydroxyl butyrate (GHB), gamma butyrolactone (GBL) and other stimulant drugs amongst gay/MSM communities in the region especially in major cities such as Bangkok, Chang Mai, Jakarta, Ho Chi Min, Hanoi, Manila and Kuala Lumpur. According to anecdotal data, intravenous injecting is becoming a more frequent practice amongst MSM who use drugs.

Recently presented data in Malaysia showed that 17% of 990 respondents to an online survey had engaged in chemsex in the previous 12 months (Iskander et al, 2016). The relatively small qualitative studies conducted highlighted a wide-range of harm may be associated with chemsex including: the transmission of HIV and other sexual infections; impacts on broader sexual well-being and relationship satisfaction; acute harms to mental health; overdose; non-consensual sex while under the influence of drugs; and injuries associated with the injection (intravenously and intra-rectally) of drugs during chemsex.

A regional assessment providing preliminary evidence on MSM who use amphetamine-type stimulants (ATS) for sexual purposes or who engage in 'chem sex' or 'high fun' and contribution to growing HIV prevalence was conducted, and APCOM is grateful for the support from UNAIDS for this research.

The scoping review was conducted by Jamee Newland PhD (Kirby Institute for Infection and Immunity in Society, UNSW Sydney), and Angela Kelly-Hanku PhD (Papua New Guinea Institute of Medical Research).

6

#### Abstract Background:

There is ongoing public health concern that sexualised drug-use (SDU) among men who have sex with men (MSM) and transgender women (TGW) results in dependence, poor mental health and increased risk of unprotected sex that may increase HIV risk. To build an evidence base from which to guide drug-related and HIV policy for MSM and TGW in Asia, a region experiencing an expanding epidemic among this population, we undertook a scoping review of locally informed qualitative research.

#### Methods:

Qualitative papers published from January 2010 to December 2019 which reported on SDU among MSM (gay, bisexual or any other identity) and transgender women in Asia were identified (Medline, Global Health and Scopus databases). Our search identified 2,413 publication titles and ten titles underwent full review. Three papers were subsequently excluded and the results of seven papers were synthesised using a narrative approach and conceptualised using a behavioural analysis framework.

#### **Results:**

SDU is occurring in social and sex work settings in the Asia region. The motivations for participating in SDU included enhanced and prolonged sexual activity and freedom and confidence to explore sexual fantasies. Other less commonly reported motivations included a coping mechanism for identity-based stigma and discrimination, perceptions of beauty and status and pride and empowerment. The settings of SDU were private and secret and whilst a range of drugs were used in these settings, the literature focuses almost exclusively on methamphetamine use. Unprotected sex was reported in both all settings and there was limited availability of and access to harm reduction services.

#### Conclusion:

SDU specific harm reduction needs to be considered at local, national and international levels, to ensure that MSM and gender minorities in Asia can participate in SDU more safely. To do so requires SDU to be understood as a social phenomenon and for acceptable and accessible harm reduction programs to be developed. There is also an urgent need to undertake more qualitative research in the region, and to increase the inclusion of minorities such as men who sell sex and transgender women, as well as to ensure a holistic examination of the types of drugs used.

#### Introduction

The social phenomenon of sexualised drug-use (SDU) is a practice in which intentional drug-taking occurs before or during sex (1, 2) where drugs are used to facilitate, initiate, prolong, sustain and intensify pleasure (3-7). SDU is not a new phenomenon. While gay and other same sex attracted men in western Europe, North America, and Oceania have dominated discussions on the social practice of SDU (3) and increasingly the public health concerns about the risk for HIV transmission (1, 8, 9), this practice is neither confined to such settings or indeed this population. With reporting among female sex workers in China (10), women who have sex with women in the UK (11), men who have sex with men (MSM) in the Middle East, North Africa (12) and Eastern Europe (13), and an increasingly recognised issue in Asia among men who have sex with men (MSM) (14-17), men who sell sex (MSW) (18-20), and transgender women (TGW) (19-22).

The view that SDU is problematic has been called into question. For example, there have been calls for the need for reframing of problematic drug-taking in sexualised settings (23) and to 'destabilise' definitions of SDU beyond pre-determined risk and to openly acknowledge the variability of settings, relations and practices in different sexualised drug-using networks (24). Others argue for a 'sex-based sociality' to explore the ways in which MSM may use SDU in building individual and community identities and establishing relationships (25), which requires expanded understandings of SDU through the constitutive element of pleasure (26).

Bearing in mind this real concern about the simplification and problematisation of SDU, there is a long history of work that charts the potential adverse health outcomes for sexually diverse men who combine sex and drugs. This risk particularly relates to HIV transmission, an increase in the number of sexual partners and unprotected anal (receptive and insertive) sex (3, 7, 8, 27). Additional risks include the transmission of hepatitis C (28), HPV (29), syphilis (30), gonorrhoea (31) and shigellosis (32) as well as concerns for psychosocial health, including people who use drugs problematically (33, 34), mental ill health (8, 28), negative effects in general life (31), and even death (35, 36).

As a region, Asia presents an interesting counterpoint to policy and scholarly debates about SDU undertaken elsewhere (3, 4, 37-39), particularly in terms of the diverse socio-cultural, institutional and legal systems that surround both drug use and sexuality in the region. For example, China, Singapore, Malaysia, Indonesia and Vietnam continue to enforce capital punishment for the production and supply of drugs (40), there are extrajudicial killings of people who use drugs in the Philippines (41), and the recent introduction of the death penalty for drug manufacture and supply in Bangladesh, accompanied with extrajudicial killings and increasing imprisonment for those who use drugs (42).

The Asia region also differentiates significantly from other parts of the world in terms of the HIV epidemic. It is estimated that three quarters of all people living with HIV in the Asia-Pacific region reside in three countries (China, India and Indonesia) (43). The steepest rise in HIV transmission from 2010-2018 occurred in the Philippines, where it rose by around 200%, while it rose in Pakistan and Bangladesh by 57% and 56% respectively (44).

Of all new infections in the Asia-Pacific region, 30% occurred among MSM (45). Where data is available as many as 15 countries in Asia have an HIV prevalence of 5% or more among MSM, but there is an uneven spread of this trend (46) ranging from an estimated 5% in Nepal to as high as 43.3% in Malaysia. As a population, MSM are becoming infected at a younger age, with rates of HIV being increasingly reported in younger men (aged 15-24 years) (45). Transgender people are also a key population that are 49 times more likely to be living with HIV than the general population (47). Globally, it is estimated that around 19% of transgender women are living with HIV (48). Again, where data is available, a HIV median prevalence of 3.1% is reported among transgender people across 13 Asian and Pacific countries (49) and city-based data indicates higher locational HIV prevalence, such as 30.8% in Jakarta, Indonesia and 19.3% in Kuala Lumpur, Malaysia (47).

SDU in Asia, and indeed across the globe, is receiving further attention as the practice is further documented and explored, with SDU prevalence ranging between 3.6% to 91.2% in the Asia region, a prevalence SDU dependent on definition, study population, drugs used and location. For example, the prevalence of SDU by MSM in mainland China ranges between 3.6% (50) to 22.8% (51), increasing to 91.2% when reporting on popper use (52). In Hong Kong, SDU prevalence among MSM ranges between 3.7% (53) to 14% (54); in Malaysia 14% (55) to 23.9% (56); in Taiwan 7.5% (57) to 60.7% (58); in Thailand 4% (59) to 37% (60) and in Vietnam 14% (61) to 20.1% (62). Studies also report on the prevalence of SDU in transgender women in Cambodia (6%) (63), Thailand (52.7%) (64), and transgender women using poppers in China (85.4%) (22). As well as populations of sex workers, including MSM in mainland China (33.6%) (65), Thailand (62.2%) (66) and Vietnam (6%) (67) and transgender women in China (20.9%) (68) and Malaysia (33.2%) (69)

In order for drug and HIV-related responses to SDU among MSM and TGW in Asia to be evidence informed, it is essential that socially-situated understandings and appreciation for the cultural norms and practices, as well as religious and legal environments surrounding both drug use and sexuality in Asia (70), should be acknowledged and understood. Punitive drug laws and enforcement, religious conservatism, and other punitive legal frameworks that operate in Asia (71), combined with the expanding HIV epidemic in particular (44), makes a scoping review that examines SDU among MSM and TGW key populations at risk of HIV in Asia both timely and of critical public health importance.

The purpose of this review is to examine the SDU among MSM and TGW in Asia in order to understand the socio-sexual context of drug use, to inform effective HIV and drug policy and programmatic responses in Asia, and to guide future qualitative research in the region. No systematic or scoping reviews on SDU in Asia have been published previously.

## Method

#### Scoping review

A scoping review method was used to review and synthesise the qualitative literature reporting on SDU among MSM and TGW in Asia, with the aim of drawing attention to the socio-cultural context of SDU of key populations for HIV risk in the Asia region, with a specific focus on the people participating in SDU, practices, settings, motivations, positive and negative social and health impacts and accessing harm reduction for SDU in Asia.

This scoping review method is particularly relevant to bodies of evidence where the evidence is emerging (72, 73) and has the ability to synthesise findings from a variety of literature with diverse methods (74). There is no universal definition of the scoping study method (72, 73), and therefore a five-stage review framework outlined by Arksey and O'Malley (2005) has been used, including identifying the research question and search parameters, identifying relevant studies, study selection, charting, collating, summarising and reporting results (75). Two additional steps were added to this framework, including reviewing reference lists contained in the reviewed literature search and reviewing citations of the included review articles in Google Scholar.

#### Search procedures

A set of key search terms were developed (JN, AKH) to explore SDU in MSM and TGW populations in Asia relevant to two primary domains: MSM (men, male, gay, MSM, bisexual and transgender) and drug use for sex (party and play, Chemsex, and known drugs used in SDU). A medical librarian with expertise in advanced database searching was then consulted to review search terms, identify appropriate databases, and run pilot searches with JN. Three databases were searched: Medline; Scopus; and Global Health, using multiple search phrases across these databases to retrieve peer reviewed manuscripts that reported on SDU (see Appendix 1-3 for the full search terms and results for these three databases searches). All titles recovered through the different database searches were loaded into Endnote Referencing Software to complete this scoping review.

#### Inclusion and exclusion criteria

During the title abstract review process, articles had to meet nine inclusion criteria (see Table 1).

#### Table 1: Inclusion/Exclusion criteria Inclusion Present original research in a Peer reviews excluded commentary criteria 1 peer reviewed academic journal and notes. Only full studies included and scoping or systematic reviews if they included a study reporting on the Asian setting not identified in the larger search. Inclusion Published in a 10-year period January 2010 to December 2019 criteria 2 Inclusion Be a human study Exclude drug studies not reporting criteria 3 on humans and other miscellaneous scientific/medical studies. Inclusion Include a sample from Asia Asia included the following criteria 4 countries: Bangladesh, Bhutan, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea, Laos, Malaysia, Macau, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand and Vietnam Inclusion MSM included searches for male. Include a sample of MSM and criteria 5 TGW gay, bisexual, and transgender gender identities. Exclusion of cis gendered female Inclusion Report on drug use in sexualised Sex: criteria 6 contexts papers were included where descriptions of sex and drugs were mentioned together (excluding alcohol). Intentional drug use during sex encounters was not excluded at this stage Inclusion Use qualitative methodology criteria 7 Inclusion Full text available and published criteria 8 in English

Inclusion criteria 9	Inclusion of scoping or systematic review only if it contained articles not identified
	in Inclusion criteria 7

#### Screening and selection

The database searches produced a total of 2,413 citations: of these, a total of 1,181 duplicates were removed, leaving 1,225 citations to be reviewed by title and abstract. From these 1,224 citations, inclusion criteria were applied to exclude 437 titles published prior to the period under review (i.e. pre-2010); four editorial and commentaries; 11 studies that did not involve human subjects; 658 titles not reporting on the Asia region; and 19 reviews. Of the 82 remaining titles reporting on SDU in Asia, 72 used quantitative methodology and were excluded, leaving ten qualitative titles reporting on SDU in Asia for full review. After a full article review, three titles were subsequently excluded because they: did not specifically address SDU in Asia (76); the full paper was published in Mandarin (77); and referenced drug use and MSM but SDU was not considered to be reported in enough detail for the review (78). Manual reviewing of reference lists and citations of these six titles produced no extra qualitative titles for review. Seven full qualitative papers were analysed in this scoping review (See Table 2). A diagrammatic representation of these screening and selection process is contained in Figure 1.

#### Figure 1: PRISMA screening and selection process



#### Table 2 Summary of identified papers in full review

	Author [reference]	Data collection	Participants	Sample size	Location	Drug	Setting	Theme
1	Bao Ngoc et al., (2012) [1]	Interviews & Focus Group Discussions	MSM, TGW, MSW, PWUD, non-PWUD and community stakeholders	117 of which 93 PWUD	Hanoi and Ho Chi Minh City Vietnam	Poly drug use common with drug consumption shifting from heroin to ecstasy and ice	Sex work	Transactional (sex work)
2	Guadamuz & Boonmongkon (2018) [2]	Life History Interviewing & Focus Group Discussions	Young MSM aged 18-29 years	40	Urban Thailand	Methamphetamine (ya ba)	Semi-private ice parties	Secret sociality
3	Khan & Laidler (2019) [3]	Interviews & Focus Group Discussions	MSM, MSW, TGW, community key informant	40	Dhaka, Bangladesh	Methamphetamine (ya ba)	Sex work	Pride/ empower- ment Virality and strength Mental health
4	Kong. S.K. (2020)	Legislative and policy review	MSM		Hong Kong	Shifting consumptions from heroin to methamphetamine	Policy	Neoliberal policy
5	Lim et al., (2018) [5]	Interviews	MSM aged 21–43 years, predominantly Malay.	20	Kuala Lumpur, Malaysia	Methamphetamine (ice)	Not described	Control
6	Tan et al., (2018) [6]	Interviews	MSM aged 18-39 years	30	Singapore	Common - alkyl nitrites (poppers), methamphetamine (ice or crystal meth), ecstasy, ketamine, and gamma hydroxybutyric acid (g water or gina) and erectile dysfunction such as Cialis, Viagra and other phosphodiesterase (PDE)-5 inhibitors (e.g. 'black ants'), were also used during Chemsex	Clubs, parties, overseas	Perceptions, experiences and risk of Chemsex
7	Lasco, G. (2018) [7]	Interviews & focus group discussions	MSW aged 18-25 years	20	Philippines	Methamphetamine (Shabu)	Sex work	Intersections of sex work and drug use in relation to young people's moral worlds and gender ideology

## **Review findings**

This scoping review synthesises seven qualitative peer reviewed research articles reporting on SDU in seven Asian countries published from January 2010 to December 2019: Bangladesh (20); Hong Kong (79); Malaysia (70); Singapore (17); Thailand (15); Philippines (80); and Vietnam (19). This review was designed to understand the socio-sexual context of drug use, to inform effective HIV and drug policy and programmatic responses in Asia. Based on the content contained in the qualitative literature reviewed, this scoping review will provide an overview of the different constructs and uses of SDU in the literature from the Asia region, and examine the types of drugs used and the behaviour and risks of SDU in Asian countries and draw forth the positive aspects, risks and motivations, to better understand how and why MSM and TGW engage in SDU, and access harm reduction for SDU in the Asia region.

The first paper on SDU in Asia was published in 2012 and reported on SDU of MSM, MSW, and TGW in Vietnam (19). Four of the seven papers reviewed were published in 2018, including a study on crystal amphetamine use among MSM in Malaysia (16), Chemsex by MSM in Singapore (17), crystal methamphetamine use of MSW in the Philippines (80) and 'ice parties' among MSM in Thailand (15). The remaining two papers were published in 2019; one study reported on crystal methamphetamine use by MSM, MSW, and TGW in Bangladesh (20) and the other is a neoliberal analysis of chem-fun by MSM in Hong Kong (79). None of these Asian studies reporting on SDU have been reviewed in recent systematic reviews reporting on Chemsex (3) and sexualised drug use (4) published in 2019.

#### Conceptual definition of sexualised druguse

The articles reviewed lack a consistent conceptual clarity in their reporting of SDU among MSM and TGW. While this difference allows for a greater understanding of what constitutes SDU and the various social and professional contexts in which it occurs, it also restricts the ability to be able to generalise across the studies; a methodological issue explicitly acknowledged in qualitative research (81).

In Bangladesh, for example, SDU was explored among MSM, MSW, and TGW who consume crystal methamphetamine: although SDU was not a focus, drug use for the purpose of sex was reported (20). In Hong Kong (79), SDU among MSM was described as 'chem-fun', a local term that emerged in the mid-2000s. In Thailand (15), SDU by MSM occurred at 'ice parties' where two or more people participated in sexual activities when using crystal methamphetamine, and in the Philippines, SDU was described as a practice undertaken by MSW (80). The only study that reported on drug consumption other than crystal methamphetamine was in Vietnam where MSM, MSW, and TGW consumed a range of drugs (e.g. heroin, ecstasy, crystal methamphetamine, ketamine and cannabis) (19).

# People involved in sexualised drug-use in Asia

A diverse range of people participating in SDU was reported, including the experiences of MSM (15, 16, 19, 20), gay men (17, 79), bisexual men (17), MSW (19, 20, 80), and TGW (19, 20) reported. Other people and their roles in SDU included hosts, dealers and 'icetenders' were also reported in Thai ice parties (70), and participants not identified in other papers reviewed.

#### Demographic profile

The demographic characteristics of those participating in studies on SDU varied, however most were aged between 18 and 29 years. In Singapore MSM were aged 20 to 29 years (17), whilst MSM in Malaysia were aged 21 and 43 years (16). MSM, MSW, and TGW in Bangladesh were between the age 18 to 25 (20) and MSW in the Philippines were also aged 18 to 25 (80). The age demographics were not reported for MSM participating in the study of Thai ice parties, however, MSM had to be between 18 and 29 years to be included as well as a brief description in the results of party hosts being over 25 years was also made (15).

In Bangladesh, MSM included 'feminized MSM' and 'masculine MSM' (20). Whilst young 'beautiful' men were participants at Thai ice party guests (15), Malaysian MSM in Kuala Lumpur were likely to be educated and in full time employment (16), whilst MSM in Singaporean had typically reached a pre-university education level and were likely still a student at the time of interview (17). In comparison, MSM in Bangladesh were likely to have lower levels of education compared with other MSM reported in this review (20). MSW in the Philippines are described as impoverished, disadvantaged and living in vulnerable settings and with most had finished only six years of schooling (80). Relationship status of study participants was also diverse.

#### Transgender women

Two studies incorporated the unique experiences of TGW, however where they did, they were under-represented. In Vietnam, five participants identified as TGW, but no further analysis was undertaken and therefore no insights into the specific issues and practices of this sub-population are reported (19). Similarly, in Bangladesh four TGW and who were sex workers participated in the study. In Singapore, recruitment through TGW Facebook groups was mentioned, however, TGW are not reported in study results (17). As in other studies in this review, the demographic of specific TGW cohorts was not described or if so described, was done inadequately. No study from the Asia region reported on the experience of transgender men and SDU, an absence also found in the global literature base.

# 000

#### Sex workers and people engaged in transactional sex

Sex work and transactional sex were reported in five papers (15, 17, 19, 20, 79, 80). In Vietnam 21 of the 34 MSW reported participating in SDU (19) and 20 MSW in the Philippines (80), whilst in Bangladesh, 11 MSW and four TGW who sold sex participated in the study (20). The neoliberal policy analysis reporting chem-fun by MSM in Hong Kong only identifies MSW as a vulnerable group in SDU scenes; however, no further discussion of them is included in the article (79). The only study to mention clients was in the Philippines, where clients were typically feminine in nature and who at times would be a pseudo-partner to the young MSW, providing financial and emotional support (80). Transactional sex is also reported in two papers. At Thai ice parties (15) a transactional function was used by young and beautiful MSM who commodified and marketed their beauty on social media to gain free access to parties and free ice supply. Whilst young Singaporean MSM were also likely to report transactional sex in exchange for money or gifts, no further detail of this practice was reported, or whether these gifts included drugs (17).

#### Dealers, party hosts and 'icetenders'

Dealers and party hosts described in Thai ice parties (15) were typically older than the MSM guests (>25 years) and did not have to be 'beautiful' like the party guests. 'Icetenders' had a dedicated role at these parties that could include dealing, looking after the drug supply, preparing party guests for drug consumption and for general smooth management of parties, including catering roles. The role of the icetender was also diverse with respect to their sexual participation at these parties: sometimes full participants, others only partial participants, and sometimes not at all (15).

# Types of drugs, consumption method and frequency of drug use

With the exception of ice parties in Thailand (15), all other studies focused exclusively on drug consumption before sex.

#### **Crystal Methamphetamine**

Crystal methamphetamine use in SDU was common, and in two studies exclusive. In Bangladesh (20) intranasal administration and smoking was reported, with no documentation of injecting or anally insertion. In Malaysia (16) consumption by MSM was predominantly through water pipes, with only one of 20 participants reporting injecting drug use. The frequency of consumption in this Malaysian setting was typically once a month (45% at least once a month, 25% once a week and 15% 2-3 times a week). Crystal methamphetamine was also reported as the primary drug consumed in SDU by MSM, MSW, and TGW in Vietnam (19), MSM in Thailand (15), MSM in Hong Kong (79), MSW in Philippines (80) and MSM in Singapore (17).Consumption in Vietnam is reported through inhaling through a glass jar and funnel, drug paraphernalia typically used when there is no access to pipes (19). Sourcing and preparation of drugs is not reported.

#### Other drugs

Marijuana use was reported in the Philippines (80), and heroin, ecstasy, ketamine and cannabis, as well as poly drug use (where two or more drugs are combined), were reported in Vietnam (19). Heroin is smoked or injected, and ketamine snorted through a bank note; no description of the social nature of drug-taking was reported (i.e. drug preparation or the sharing of drug paraphernalia such as bank notes, jars/pipes and injecting equipment) therefore it is not possible to know the risk associated with the mode of drug consumption. In Singapore (17), MSM use alkyl nitrites (poppers), ecstasy, ketamine, and gamma hydroxybutyric acid (g water or gina), drugs used for the treatment of erectile dysfunction (Cialis and Viagra) and other phosphodiesterase (PDE)-5 inhibitors (e.g. black ants). Drug use by MSM in Singapore being described as 'common' and 'ubiquitous' and an environment where 'drugs are freely available'. The use of poppers (alkyl nitrites) and Viagra is reported at Thai ice parties (15), and drugs used for the treatment of erectile dysfunction (Cialis and Viagra) and other phosphodiesterase (PDE)-5 inhibitors (e.g. black ants) is reported in Singapore (17); however, the sourcing and consumption of these drugs is not reported in any detail.

#### Shifting drug use consumption patterns

Shifting patterns in the types of drug consumed is reported in Hong Kong; compared to the 2000-2010 where consumption typically included ecstasy, ketamine, Viagra, and poppers, crystal methamphetamine is now the most used drug (79). Similarly, in Vietnam (19) this shifting pattern of drug use has seen a change in consumption from heroin to both crystal methamphetamine and ecstasy.



## Sexualised drug-use settings

The settings in which SDU takes place are private – safe – social spaces, such as clubs, homes, hotels, in both local and international settings (15, 17, 79). SDU also takes place in professional (sex-work) environments. Increases in enforcement of a drug prohibitionist policy in Hong Kong (79), negative and legal consequences of drug use in Thailand (15), and the zero-tolerance policy on drugs in Singapore (17) demands private spaces for SDU. Conversely criminalisation of male-to-male sex in Bangladesh (20) enforces to the need for private spaces. The settings of MSW in Philippines are not discussed (80).

In Vietnam, ecstasy is commonly taken in more public spaces such as bars, clubs and karaoke, whilst crystal methamphetamine is used in hotels because drug paraphernalia for consumption was harder to hide in public spaces, and clubs and discos had air-conditioning and fans that made smoking difficult (19). No detail on the settings used by Malaysian MSM is described but participants reported planning for the physical environment, where room setting temperatures and lighting were taken into account to 'maximise' SDU (70). Singaporean MSM attending overseas circuit parties provided MSM who use drugs with greater anonymity, however, no further detail of international circuit party settings is described (17).

#### Technology as a facilitator to sexualised drug-use

The important role of technology, including social media and mobile apps, for meeting and initiating SDU is commonly reported. In Malaysia, for example, MSM use social media to meet casual sex and multiple sex partners as well as group sex partners (70). Technology is also used by MSM at Thai ice parties; social media profiles, gay dating apps, and 'hook-up' websites are commonly used to identify guests before the party and to extend last minute invitations for party guests (15). Because of the negative punitive social and legal environments surrounding drug use in the Asia region, MSM and others soliciting for SDU use 'coded languages, secret gatherings and secret transactions' such as placing a snowflake emoticon in an application profile to indicate interest in participating in SDU using Ice in Thailand (15) and using symbols and emojis (snowflake or ice cream) and code acronyms/phrases such as CF or 'chill fun' on online profiles in Singapore (17).

## Motivations for sexualised drug-use

# Enhanced and extended sexual gratification and pleasure

SDU is described as providing a positive scene that encompasses pleasure and agency with beautiful men in Thailand (15), sexual pleasure in Hong Kong (79), and in enhancing and stimulating the sexual experience in Singapore (17), and the Philippines (80). In Malaysia, motivations were described as providing "intensified sexual gratification and pleasure due to dramatically increased sexual libido, heightened sexual pleasure, and prolonged sexual activities by postponing ejaculation" (16). SDU and pleasure were also reported in sex work settings, as drug use during sex with respect to sexual desires and made painless anal sex possible, and as such, pleasurable (20). Extended, sustained and enhanced sex activities over longer periods of time were reported, particularly associated with crystal methamphetamine use: sometimes providing the ability to engage in sexual activities for several hours to days (15, 16, 80). SDU was described as a tool for use in sex work settings because sex workers could increase performance or have sex with multiple clients in Bangladesh, Vietnam and the Philippines (19, 20, 80).

#### Freedom and confidence to explore sexual fantasies

The motivations of SDU are described in terms of 'freedom' by Malaysian MSM (16) because it reduces sexual inhibitions, shyness and increases confidence, enabling the enactment of sexual fantasies and change sex roles, as well as exploring other sexual practices, such as group sex, outdoor sex, and marathon sex: sexual possibilities described as not being possible without the drug use. MSM, TGW and MSW in Bangladesh also spoke of freedom to explore sexual fantasies and diverse sexual practices that their clients requested, such as being beaten or spanked by their sexual partner, hitting or pretending to discipline their sexual partner or being disciplined by their partner, practices which were reported to evoke sexual pleasure (20). MSW in Vietnam discussed freedom with respect to confidence, particularly in 'approaching, negotiating and having sex with clients', and for those who preferred having sex with women it assisted in participating in anal sex with their clients (19). Drug use for disinhibition is reported by MSW in the Philippines so that these young MSW could think of their clients as belonging to another gender, reducing threats to their 'masculinity' (80).

#### Pride and empowerment

Drug use in Bangladesh was reported as a psychosocial motivator, of restoring 'social and sexual self-worth, pride and empowerment' (20). For Bangladeshi masculine MSM, crystal methamphetamine was described as enhancing feelings of masculinity and sexual prowess and empowering them so they could participate in different sex practices and increase their number of clients. Inversely, for Bangladeshi feminised MSM crystal methamphetamine use was used to increase feelings of femininity which similarly impacted their ability to undertake sex work and their capacity to service multiple partners each night. For all Bangladeshi participants, crystal methamphetamine restored self-esteem and relieved the stress resulting from stigma resulting from their sexual minority status (see below).

#### Beauty and social power

MSM at Thai ice parties described motivations of drug use as heavily influenced by perceptions of, and motivations for, 'beauty and status' (15).a motivator not influenced by SDU itself, but rather the cultural scene in which SDU occurred. Crystal methamphetamine use was reported to be a motivator for weight-control substance and skin whitening substance, with use resulting in a 'thin and white persona' and a substance of choice to 'achieve and sustain perfect bodies and complexion'. In addition, ice parties were explained as 'exclusive, on trend and luxurious'. Given the beauty and social status elements of crystal methamphetamine use in the Thai MSM community, those who attend these SDU events are reported to be viewed as more beautiful, connected and relevant and described as a 'cultural elite sub-group or elite social network of MSM'.

#### Social and sexual lubricant

Drug use before sex was reported as an important 'social lubricant and sexual stimulant' by the majority of MSM in Malaysia MSM (16), used to relax and 'chill', with participants describing hanging out, going clubbing, and then after clubbing and socialising going to someone's house, taking crystal methamphetamine and having sex. Drug use was also described by Vietnamese MSW as a professional social lubricant: drug use gave the sex worker the ability to have sex with a client to whom they were not sexually attracted (19).

#### Community identity and culture

In Singapore, drug use in sexualised settings was described as part of gay community identity and culture passage (17), whilst for others in this study, SDU was also reported as a rite of passage for acceptance in the gay community, where to be accepted drugs needed to be part of the scene. In the Philippines, drug use is described as a social mechanism to increase MSWs' social bonds with peers (80).

# Health and psycho-social motivations and impacts of sexualised drug-taking

#### Drug use as a coping mechanism

Described as a positive impact of sexualised drug use, a number of studies report on drug use as a coping mechanism for MSM and TGW who had experienced stigma, rejection, and/or who described feelings of lost social and sexual worth. For example, MSM in Malaysia reported drug use as a coping mechanism or escape from emotional pains associated with stress and boredom (16), whilst in Singapore it was described by MSM as a coping mechanism 'in the face of perceived and experienced stigma as a sexual minority' (17). In Bangladesh drug use is engaged in as a coping strategy in the face of criminalisation of same sex relations, negative societal views that exclude MSM and TGW from family, society and religion and to overcome the challenge of transgressing heteronormative expectations (20). In this way drug-taking provides a mental escape from feelings of shame, guilt, sadness and stress.

#### Control of drug use

The ability to control drug use in SDU is described as either problematic or nonproblematic, a binary description layered with stigma, judgement and othering typically based on drug of choice and the need for support with use. For example, Malaysian MSM who use crystal methamphetamine resist the term 'drug users', preferring to be labelled 'chem users', a label they believe positions their drug use as less dangerous and socially acceptable, and resists the stigma typically attached to 'drug users' (16), whilst in Vietnam, men who used heroin were labelled 'addicted' and 'drug addicts', and experienced drug withdrawal; impacts and labels not given to recreational drug use of ecstasy, ice, ketamine or cannabis: drugs that were used for fun (19). In Hong Kong non-problematic drug use is described when MSM take control of their lives through drug use free from state power, and problematic use relates to those when a diverse array of social and health problems arise, including the need for 'help'. Health systems are not designed to acknowledge SDU as a social phenomenon, and therefore all drug use is described as problematic (79).

#### Mental ill health, depression and suicidal ideation

Most studies highlighted the positive mental health impacts of SDU, such as coping with stigma and minority status as described in detail above. Among Malaysian MSM (16) the potential for adverse and mental ill health outcomes associated with SDU, specifically crystal methamphetamine, are described and these include paranoia, depression, hallucinations (voices and imagery), suicidal ideation, and suicidality. In Thailand (15) and Singapore (17) mental ill health outcomes are also reported, albeit briefly.

#### Physical health impacts of drug use

The study of Malaysian MSM is the only paper to report on the physical impacts of drug use (16), where methamphetamine use is reported to impact a range of physical health issues particularly associated with long-term use: tooth decay; blurred vision; insomnia; (unintended) weight loss; heart palpitations; memory lapses; cramps; and shaking.



#### Psycho-social impacts of drug use

Malaysian MSM reported a diverse array of psycho-social impacts, including socio-economic (poor performance in school, loss of employment, and challenges in maintaining relationships with family and friends); mental and physical health (reduce the impact of coming down, addiction, overdose, becoming aggressive, emotional, compulsive or violent); and economic (relatively expensive drug to procure) (16).

# Sexual risk taking, HIV and STIs and harm reduction

#### Sexual risk taking and condom use

Sexual risk taking in the form of unprotected sex, defined as condomless or inconsistent condom use during sex, was reported in all papers; findings which build on the quantitative literature reporting on condomless SDU by describing the context and rationale for this practice. In Thailand, MSM using crystal methamphetamine reported having unprotected sex, including SDU involving sex with multiple partners (15), a finding also reported by MSM in Malaysia, where unprotected sex was described as a social norm and included beliefs that condoms were not important, perceptions of sexual freedom, reduced sensitivity and difficultly in maintaining erections when using methamphetamine (16). In Hong Kong, MSM participating in SDU were reported to more likely to have unprotected sex than gay men who did not take drugs for sex because drug use for sex lowered inhibitions and reduced condom use (82). Unprotected sex was also reported by MSW and TGW sex workers in Vietnam, including during group sex, a practice also reported due to loss of control experienced when using drugs for sex (20). In Vietnam, MSW also reported unprotected sex in public venues where access to condoms and lubricants was limited (19).

## HIV and other STIs

While the HIV risk of SDU was identified in all papers, not all reported the HIV status of participants. In the Malaysian study of crystal methamphetamine using MSM (16), self-reported HIV status suggests 30% were HIV positive. Half of the Malaysian men who self-reported that they were HIV positive had also been diagnosed with multiple sexually transmitted infections, but there are no reports as to what these STIs were, nor are other STIs reported in the other literature reviewed. Self-reported HIV status is much higher in Singapore, with over 70% of MSM who participated in SDU self-reporting that they were HIV positive. These HIV positive Singaporean men also reported a significant time since last testing for HIV (17), suggesting that these were not new infections. In Hong Kong, HIV was discussed in terms of lack of testing and a dearth of HIV related harm reduction approaches, particularly PrEP (Pre-Exposure Prophylaxis), available elsewhere outside of Asia (79). However, unprotected sex was not the only risk factor for HIV in these papers; in Bangladesh injecting drugs, stigma and the absence of harm reduction coalesce in SDU contexts to create multiple vulnerabilities (20). HIV risk was also described as being a by-product of the secret sociality of MSM in Thailand associated with ice parties (15). Because of this secret sociality, these settings were described as settings that encouraged neither safer sexual activities nor HIV disclosure.



#### Agency, hierarchy, coercion and power

SDU settings could create issues of hierarchy and power and be used for peer pressure and coercion. For example, in Thai ice parties dealers and hosts were in control due to their access to drugs, the party space and who could join, had to leave or be invited back to subsequent parties (15). In Singapore, the researchers said younger MSM are subjected 'to peer pressure to use drugs by their sexual partners' for fear of rejection from their partners, particularly if their partners were perceived to be more sexually attractive than them (17). In sex work settings, the trading of sex for drugs and problematic drug use and withdrawal were reported to reduce agency and power of MSW in Vietnam (19), whereas the use of drugs in sex work settings was reported to make MSW in Bangladesh less selective about their clients (20). In the Philippines clients provided financial support but had influence beyond this domain acting as pseudo-partners providing emotional and practical support when conflict arouse with the MSWs primary partner, which could influence agency and power of MSW in this setting (80).

#### Health seeking behaviour and harm reduction

More than half of the Singaporean study participants reported existing national drug laws as the main barrier to having open discussions about their SDU practices with health care workers and their social networks, discussions that were also restricted by the shame and stigma attached to being a drug user (17). In Malaysia, HIV-related stigma amongst Malaysian MSM resulted in participants being reluctant to talk about their HIV status and antiretroviral therapy (ART) (16). Familial, peer and social stigma surrounding male-to-male sexual activities in Thailand was reported to hinder peer and social network supports and health seeking behaviour of MSM (15). In the Philippines, young MSW are aware of genital warts, gonorrhoea and HIV, however, folk and local models of knowledge and prevention do not correspond to medical knowledge and prevention approaches (80).

Harm reduction services were absent, limited and where they existed, not appropriate for Asian MSM, and TGW. For example, in Hong Kong, the absence of appropriate harm reduction programs for SDU as the result of siloing of drug and sex policy, resulted in MSM and TGW participating in SDU falling between two contradictory policy and legal frameworks of 'drug prohibition and harm reduction'. In practice, health care workers in Hong Kong have identified MSM participating in SDU as an emergent user group, but are currently unable to address drugs and sex issues simultaneously in clinical and harm reduction program settings (79).

Suggestions to improve health-seeking behaviour and the provision of appropriate harm reduction programs include the raising of awareness of drug use through venue-based harm reduction promotion and education of younger MSM through social media in Singapore and Malaysia (16, 17). In Bangladesh, harm reduction approaches are identified as crucial, but need to be 'resilience-based' (15). Paying specific attention to the 'socio-cultural realities' and power relationships in sex work settings is reported in Bangladesh and the Philippines (20, 80). The involvement of a diverse array of stakeholders in harm reduction and advocacy initiatives is also suggested in Bangladesh (20). Specific harm reduction approaches focused on crystal methamphetamine use were reported in Bangladesh and Malaysia (15, 16); the introduction of PrEP in Hong Kong (79); as well as harm reduction initiatives that reduce stigma relating to drug use and sexual diversity and the impact of punitive drug policy and law in Bangladesh, Thailand and Hong Kong (15, 20, 79) and reducing stigma from family and friends to enable support in Malaysia (16).

#### Discussion

Consuming illicit drugs as part of sexual cultures has been documented for close to two decades in a number of different settings, including a growing evidence base in this review reporting on SDU in Asia, literature from a region not typically featured in the growing number of systematic and scoping reviews exploring SDU globally (3, 4, 7, 38, 39).

MSM & TGW typically aged between 18 and 29 years participated in SDU where two distinct settings in the Asia region are social and sex work settings: the latter being particularly important. Aggleton and Parker (2014) highlight that although there has been a significant increase in research attention focusing on diverse sexual practices and communities, this attention seems to have "largely by-passed the study of male sex work and the lives of men who sell sex" (83). Sex work settings as settings of SDU were reported in this review by MSW in the Philippines (80), MSM, and TWG in Vietnam (19), and MSM, and TGW in Bangladesh (20), however, it is not known whether clients also participated in SDU.

The most common motivation to participate in SDU is for the enhancement of sexual pleasure and prolonged sexual activity, findings commonly reported in the literature from the western Europe, North America, and Oceania (84, 85). Freedom to participate in sexual fantasies, as well as to be associated with beauty and have status, was also reported. Sex work settings-based motivations include reduced pain from anal sex, increased income from more clients and the ability to have sex with males when their preference is to have sex with females. Pleasure as a motivator for participation in SDU is commonly reported in the literature (4, 39), a motivator replicated in the Asian literature. Positive social-structural motivators of SDU, such as a coping mechanism for gender and sexuality stigma, are also reported; a finding reported elsewhere (86).

SDU in social contexts is typically in private spaces such as hotels, houses, apartments and condominiums, with some settings described as small scale and others as more glamourous and lavish (15). Across the literature there was no reporting on the number of people participating in SDU events, although the literature made use of terms such as 'multiple partners' and 'group sex' and no detail on the frequency of these events was provided. Whilst it is not expected of qualitative literature to quantify aspects of SDU, further understandings of the settings in which SDU takes place would benefit from contextual information describing the diversity of people and settings in which SDU takes place.

In these SDU settings, a diverse array of drugs were consumed, however, reporting focused almost exclusively on the experience and use of crystal methamphetamine, a finding also common in the literature from western Europe, North America, and Oceania (39), and a focus even where a diverse array of drugs consumed were reported. In this review, crystal methamphetamine was consumed orally or by smoking with only a small number reporting injecting, and this injecting was not able to be determined to occur in SDU settings. Injecting drug use for sex was also less commonly reported than in the western Europe, North America, and Oceania (3).

Unprotected sex was commonly reported, a finding also reported elsewhere (3, 4), however, in an Asian setting, this practice was explained as a social norm in some cases (16, 19). However, the types of sexual roles and practices (aside for a few mentions of BDSM), including sexual practices that extend beyond unprotected sex that may lead to increased HIV risk (such as slamming and rimming) were not reported. Diverse sexual motivations for SDU are also reported, ranging from describing SDU as a social and sexual lubricant that increased pleasure and sexual and physical stamina to have sex over long periods with multiple people; to beauty, status and freedom to participate in sexual fantasies that may not otherwise have been undertaken if drug use had not occurred.

Common across SDU settings reported in this review are themes of privacy, anonymity and secrecy, a finding hardly surprising in an environment where death penalties, incarceration and enforced treatment occurs with respect to drug supply and use (Singapore, Bangladesh, Hong Kong), and peer and family exclusion due to sexuality and criminalisation of same sex intercourse (Bangladesh, Indonesia). In social settings, this privacy and secrecy is maintained by the use of a specific coded language, emojis and emoticons to market parties, and communicate with other MSM about initiating and participating in SDU activities, a finding similar to western Europe, North America, and Oceania (2, 3, 87, 88).

#### Implications for harm reduction and advocacy

In the Asia region, there are no documented harm reduction programs that simultaneously address risk of drug use and sexual activity, that is, harm reduction for SDU; a growing focus of programs particularly from Oceania and the UK (39, 84, 89). Harm reduction in the Asia region faces significant barriers, such as the siloing of drug use and sex harm reduction, as previously described, as well as an absence or limitations of particular harm reduction activities that are known to reduce risk, including access to PrEP (90), barriers to ART access and adherence, access to sterile injecting equipment (91), access to and consistent use of condoms (92).

Asia is a region where punitive drug and sexuality policies can result in enforced treatment, detention and the death penalty. Despite this punitive context, failing to respond to SDU as a specific social phenomenon and addressing the intersection of sexual health and harm reduction needs and priorities of the MSM, MSW and TWG participating in these activities will lead to increased adverse impacts. The adverse impacts are also compounded by an almost exclusive focus on positive aspects of SDU in the literature reviewed, with little detail on physical and psychological impacts of SDU, impacts commonly reported in the global literature (3). Whilst the positive focus on SDU in the papers reviewed provides critical insight into community and sex-based sociality aspects of SDU in the Asia region, a lack of detail on physical and psychological impacts provides little information to develop and implement harm reduction policies and programs for SDU in the Asia region.

Whilst the harm reduction settings in the countries included in this review are similar, they are also very different and as such, researchers and policy experts should remain open to the variability and contingency of these diverse settings. In western Europe, North America, and Oceania, fear of judgement impacts MSM who participate in SDU from engaging with harm reduction programs (84). However, in Asia fear, punitive drug policies, policing of sexual and gender identity and a lack of harm reduction services restrict the willingness of many to attend services, such as general practice (93), because these settings are legally risky, and they are currently unable to address drugs and sexual health issues simultaneously (79). Harm reduction also needs to target programs that extend beyond those who self-identify or are identified as commercial sex workers (94).

Local level peer-driven harm reduction programs may be more likely to reach MSM and TGW in Asia and be more acceptable and effective. Particularly those with community-led content and design that can address the motivations and needs, as well as using the language of the 'sub-culture's participating in SDU (89, 95). The use of technology and social media based harm reduction currently being expanded globally (3, 96) should also be considered given the importance that this medium has in sexualised drug-taking scenes in the Asia settings in this review (15-17, 82).

Stevens and Forrest (2018) also draw attention to the need for international policy to acknowledge the interplay between sex and drugs in gender and sexuality diverse populations and for the need for key advocates to work to change the understandings of and positions of members states, both within global health and harm reduction frameworks (9). Whilst the harms from drug use need to be addressed, attention must also be paid to issues of shame and stigma that could influence drug use and sexual practices (97).

#### Quality of literature reviewed

The qualitative reporting on SDU in Asia among MSM and TGW in the academic literature is in its infancy. Whilst the literature included in this review provides important knowledge about this practice in the region, important limitations of this data also need to be noted. At the participant level, the data presented made understanding who participates in SDU hard. In some instances, no demographics are reported, whilst others provide demographics of multiple cohorts including MSM, MSW and TGW in a single table, making the unpacking of who these MSM and TGW are impossible. The small sample size of specific participants, such as MSW and TGW, in these papers also limits what we know about sexualised drug use in these specific key populations.

The articles included in this review identify a diverse range of drugs being consumed, however, the focus in reporting on crystal methamphetamine use has excluded description and understanding of how and why other drugs are used in SDU settings. Although drug use frequency is mentioned in some studies, no study reviewed discusses the frequency of SDU nor the quantity of drugs consumed, which again may be due to the qualitative nature of these studies; however, context is important and further detail surrounding the people, practice and settings is crucial to understanding SDU as a social phenomenon. With the exception of the Thai ice party study (15), other studies do not discuss when the consumption took place, nor the sourcing or preparation of drugs, factors which impact power relations, drug use, sexual practice and risk (98, 99).

Another limitation was a lack of standardisation of terminology and definitions across these qualitative studies, a limitation that extends to the literature beyond the Asia region. Whilst standardising definitions and terminology may seem intuitive to explore the practice of SDU, this standardisation may also reduce the ability to capture a complex social practice and the nuance within discreet practices, settings and experience in the qualitative evidence base. Standardisation may also colonialise the exploration of SDU, marginalising experiences from outside of western Europe, North America and Oceania, through the use of definitions and labels that just don't fit or not used or accepted in the Asia region. Whilst this lack of clarity makes understanding the global evidence base more complex, it also respects that there will be differences across the diverse settings in which SDU takes place. To overcome this, more detail should be provided in the methods of these qualitative studies, so that readers and policy makers can ensure they are understanding to what is being reported.

Further limitations surrounding the participation of different MSM and TGW with respect to representation and presentation in results was also evident. The use of sexual identity labels in the literature for MSM included gay, bisexual, men who have sex with men, male sex workers, and heterosexual men. Whilst not in the scope of this review to further explore identity labels and their appropriateness or indeed understanding in the Asia region, needs to be highlighted. The inclusion of TGW in the reporting of SDU experience of MSM is also problematic, particularly where small numbers of TGW are recruited to study and subsequently collapsed into a larger MSM cohort, as this data management practice silences the experience of TGW in these studies. Whilst risk behaviours in SDU and sex work may be similar, the needs, supports and harm reduction programs for these women may be very different to MSM. Consideration needs to be given to ensuring that the experiences and needs of TGW are documented and considered.

### Conclusion

This is the first paper to review the qualitative literature reporting on the participation of MSM and TGW in the Asia region; a part of the world that has not typically featured in systematic and scoping reviews of SDU and Chemsex where the focus has been, almost exclusively, on the experience of MSM in western Europe, North America, and Oceania.

The qualitative literature synthesised in this review, to an extent, reproduces findings that have already been widely reported from western Europe, North America, and Oceania, particularly with respect to the social practices of SDU and motivations for participation (3), and the public health concerns about the risk for HIV transmission (1, 8, 9). However, acknowledgement of SDU as an important and current social phenomenon in communities of MSM and TGW in the Asia region is important. This acknowledgement is the first step to responding to the practice in diverse settings and in informing effective HIV and drug policy and programmatic responses in Asia.

To improve understandings of SDU in the Asia region further insights into SDU, the contexts in which SDU occurs, its frequency, and how the social contexts of drug use, such as drug sourcing, preparation, and consumption, influence sexual practices, would provide vital information to better understand SDU in Asian settings. Future research should consider the use conceptualisations such as sex-based sociality (25) and pleasure (26), and socio-ecological frameworks (100), which describe and explore the complex interactions between individual, social network, community, institutional and structural factors that influence norms and practices in SDU (see Figure 2); as well as describing negative social and health impacts of this practice. These conceptualisations and frameworks allow for more effective understandings of the risks and enabling environments in SDU, leading to more appropriate and context specific harm reduction programs and services for diverse MSM in Asia.



#### FIGURE 2:

#### Future qualitative research areas on sexualised drug-use among MSM in Asia

1.	Report on diverse country-based settings in which SDU occurs in Asia,
	including countries where there is currently no research occurring, such as
	Bhutan, Cambodia, China, Indonesia, India, Laos, Myanmar, Nepal, Pakistan,
	Sri Lanka, and Taiwan.
2.	Improve the evidence for HIV and sexualised drug-taking harm reduction by:
	exploring the organisation of sexualised drug-taking events; the diverse sexual
	roles and practices occurring within sexualised drug-taking; drug use sourcing
	preparation and consumptions practices; other social norms, practices and
	and the second second second second the time to second the second s

customs as well as power and agency that in these settings and; the role of PreP to and other harm reduction activities that support sexual and gender minorities in engaging safely in sexualised drug-taking.

Examine the role and place of pleasure in risk and risk reduction strategies.
Address the social phenomenon of SDU in diverse populations of Asian MSM, and TGW communities with designs that explore the diverse locations, drug use consumption patterns and social settings to further understand the diversity in which sexualised drug taking occurs in Asia.

5. Explore the use of sex-based sociality conceptualisations, where issues of identity, community and non-problematic drug use can be further explored to understand sexualised drug-taking as a social phenomenon should also be promoted

6. Widen the inclusion of reporting on drugs consumed in sexualised drug-taking practices from the current focus on methamphetamines to include the reporting of consumption of all drugs, and poly drug use, occurring in these settings. As well as

7. Document and describe drug use that occurs before, during and after sexualised drug-taking in these settings.

8. Include a socio-ecological framework to both describe and understand the different influences that individual, social network, community, institutional and structural factors have on the motivation of MSM to participate in, and in the actual practices, of sexualised drug-taking.

#### References

- McCall H, Adams N, Mason D, Willis J. What is chemsex and why does it matter? BMJ, 2015;351:h5790.
- 2. Race K. 'Party and Play': Online hook-up devices and the emergence of PNP practices among gay men. Sexualities. 2015;18(3):253-75.
- 3. Maxwell S, Shahmanesh M, Gafos M. Chemsex behaviours among men who have sex with men: a systematic review of the literature. International Journal of Drug Policy. 2019;63:74-89.
- 4. Tomkins A, George R, Kliner M. Sexualised drug taking among men who have sex with men: a systematic review. Perspectives in Public Health. 2019;139(1):23-33.
- 5. Flores-Aranda J, Goyette M, Aubut V, Blanchette M, Pronovost F. Let's talk about chemsex and pleasure: the missing link in chemsex services. Drugs Alcohol Today. 2019;19(3):189-96.
- Souleymanov R, Brennan DJ, Logie C, Allman D, Craig SL, Halkitis PN. Pleasure and HIV biomedical discourse: The structuring of sexual and drug-related risks for gay and bisexual men who Party-n-Play. International Journal of Drug Policy. 2019;74:181-90.
- Troiano G, Mercurio I, Bacci M, Nante N. Hidden dangers among circuit parties—A systematic review of HIV prevalence, sexual behaviors and drug abuse during the biggest gay events. Journal of Human Behavior in the Social Environment. 2018;28(8):983-91.
- 8. Pufall E, Kall M, Shahmanesh M, Nardone A, Gilson R, Delpech V, et al. Sexualized drug use ('chemsex') and high Trisk sexual behaviours in HIV positive men who have sex with men. HIV medicine. 2018;19(4):261-70.
- 9. Stevens O, Forrest JI. Thinking upstream: the roles of international health and drug policies in public health responses to chemsex. Sexual Health. 2018;15(2):108-15.
- 10. Zhang X-D, Kelly-Hanku A, Chai J-J, Luo J, Temmerman M, Luchters S. Sexual and reproductive health risks amongst female adolescents who use amphetamine-type stimulants and sell sex: a qualitative inquiry in Yunnan, China. Harm reduction journal. 2015;12(1):34.
- 11. Hibbert MP, Porcellato LA, Brett CE, Hope VD. Associations with drug use and sexualised drug use among women who have sex with women (WSW) in the UK: findings from the LGBT sex and lifestyles survey. International Journal of Drug Policy. 2019;74:292-8.
- 12. Pebody R. Chemsex is an emerging issue in the Middle East and eastern Europe: NAM aidsmap; 2019 [Available from: http://www.aidsmap.com/news/dec-2019/chemsex-emergingissue-middle-east-and-eastern-europe.
- 13. The EMIS Network. EIMS-2017 The European Men-Who-Have-Sex-With-Men Internet Survey. Key findings from 50 countries. Stokholm; 2019.
- 14. Wong NS, Kwan TH, Lee KCK, Lau JYC, Lee SS. Delineation of chemsex patterns of men who have sex with men in association with their sexual networks and linkage to HIV prevention. International Journal of Drug Policy. 2020;75.
- Guadamuz TE, Boonmongkon P. Ice parties among young men who have sex with men in Thailand: pleasures, secrecy and risks. (Special Section: Sexualised drug use.). International Journal of Drug Policy. 2018;55:249-55.
- 16. Lim SH, Akbar M, Wickersham JA, Kamarulzaman A, Altice FL. The management of methamphetamine use in sexual settings among men who have sex with men in Malaysia. International Journal of Drug Policy. 2018;55:256-62.
- Tan RKJ, Wong CM, Chen MI, Chan YY, Bin Ibrahim MA, Lim OZ, et al. Chemsex among gay, bisexual, and other men who have sex with men in Singapore and the challenges ahead: A qualitative study. International Journal of Drug Policy. 2018;61:31-7.
- 18. Yang GL, Zhang AD, Yu Y, Liu H, Long FY, Yan J. Drug use and its associated factors among money boys in Hunan Province, China. Public Health. 2016;140:213-20.
- Bao Ngoc V, Mulvey KP, Baldwin S, Son Thanh N. HIV risk among drug-using men who have sex with men, men selling sex, and transgender individuals in Vietnam. Cult Health Sex. 2012;14(1/2):167-80.
- 20. Khan SI, Khan MNM, Hasan AMR, Irfan SD, Horng LMS, Chowdhury EI, et al. Understanding the reasons for using methamphetamine by sexual minority people in Dhaka, Bangladesh. International Journal of Drug Policy. 2019;73:64-71.
- Zhao P, Tang S, Wang C, Zhang Y, Best J, Tangthanasup TM, et al. Recreational drug use among Chinese MSM and transgender individuals: results from a national online cross-sectional study. PLoS ONE. 2017;12(1).
- 22. Shan D, Yu MH, Yang J, Zhuang MH, Ning Z, Liu H, et al. Correlates of HIV infection among transgender women in two Chinese cities Infect. 2018;7(1).
- Pienaar K, Murphy DA, Race K, Lea T. Problematising LGBTIQ drug use, governing sexuality and gender: A critical analysis of LGBTIQ health policy in Australia. International Journal of Drug Policy. 2018;55:187-94.
- 24. Drysdale K, Bryant J, Holt M, Hopwood M, Dowsett GW, Aggleton P, et al. Destabilising the 'problem'of chemsex: Diversity in settings, relations and practices revealed in Australian gay and bisexual men's crystal methamphetamine use. International Journal of Drug Policy. 2020;78:102697.
- Bryant J, Hopwood M, Dowsett GW, Aggleton P, Holt M, Lea T, et al. The rush to risk when interrogating the relationship between methamphetamine use and sexual practice among gay and bisexual men. International Journal of Drug Policy. 2018;55:242-8.
- Race K, Lea T, Murphy D, Pienaar K. The future of drugs: recreational drug use and sexual health among gay and other men who have sex with men. Sexual health. 2017;14(1):42-50.



- 27. Bourne A, Reid D, Hickson F, Torres-Rueda S, Weatherburn P. Illicit drug use in sexual settings ('chemsex') and HIV/STI transmission risk behaviour among gay men in South London: findings from a qualitative study. Sexually Transmitted Infections. 2015;91(8):564-8.
- Schecke H, Lea T, Bohn A, Köhler T, Sander D, Scherbaum N, et al. Crystal Methamphetamine Use in Sexual Settings Among German Men Who Have Sex With Men. Frontiers in Psychiatry. 2019;10.
- 29. Ocampo Cancelas A, Diniz Freitas M, Pérez González A, Pérez Castro S, Carballo Fernández R, Iribarren Díaz M, et al. Concordance between oral and anal human papillomavirus infection in HIV infected men who have sex with men. Oral Diseases. 2020.
- 30. Rana S, Macdonald N, French P, Jarman J, Patel S, Portman M, et al. Enhanced surveillance of syphilis cases among men who have sex with men in London, October 2016–January 2017. International journal of STD & AIDS. 2019;30(5):422-9.
- 31. Glynn RW, Byrne N, O'Dea S, Shanley A, Codd M, Keenan E, et al. Chemsex, risk behaviours and sexually transmitted infections among men who have sex with men in Dublin, Ireland. International Journal of Drug Policy. 2018;52:9-15.
- 32. Gilbart V, Simms I, Jenkins C, Furegato M, Gobin M, Oliver I, et al. Sex, drugs and smart phone applications: findings from semistructured interviews with men who have sex with men diagnosed with Shigella flexneri 3a in England and Wales. Sex Transm Infect. 2015;91(8):598-602.
- 33. Smith V, Tasker F. Gay men's chemsex survival stories. Sexual Health. 2017;15(2):116-22.
- Mattison AM, Ross MW, Wolfson T, Franklin D, Neurobehavioral HGTSDH, Center R, et al. Circuit party attendance, club drug use, and unsafe sex in gay men. Journal of substance abuse. 2001;13(1-2):119-26.
- Troya J, Martínez de Gándara A, Ryan P, Cuevas G, Pardo V. Mephedrone and chemsex: when it stops being a party and becomes a fatal problem. International journal of STD & AIDS. 2019;30(10):1028-30.
- Corkery JM, Loi B, Claridge H, Goodair C, Schifano F. Deaths in the lesbian, gay, bisexual and transgender United Kingdom communities associated with GHB and precursors. Current drug metabolism. 2018;19(13):1086-99.
- Melendez-Torres GJ, Bourne A, Reid D, Hickson F, Bonell C, Weatherburn P. Typology of drug use in United Kingdom men who have sex with men and associations with socio-sexual characteristics. (Special Section: Sexualised drug use.). International Journal of Drug Policy. 2018;55:159-64.
- Vosburgh HW, Mansergh G, Sullivan PS, Purcell DW. A review of the literature on event-level substance use and sexual risk behavior among men who have sex with men. AIDS Behav. 2012;16(6):1394-410.
- Edmundson C, Heinsbroek E, Glass R, Hope V, Mohammed H, White M, et al. Sexualised drug use in the United Kingdom (UK): a review of the literature. International Journal of Drug Policy. 2018;55:131-48.
- 40. Girelli G. The death penalty for drug offences: Global overview 2018. London: Harm Reduction International; 2019.
- 41. Johnson DT, Fernquest J. Governing through killing: The war on drugs in the Philippines. Asian Journal of Law and Society. 2018;5(2):359-90.
- 42. IDPC. Harm Reduction International condemns new Bangladesh law expanding use of the death penalty for drugs 2020 [Available from: https://idpc.net/alerts/2018/10/harm-reduction-international-condemns-new-bangladesh-law-expanding-use-of-the-death-penalty-for-drugs.
- 43. UNAIDS. UNAIDS DATA 2017. 2017.
- 44. AVERT. HIV and AIDS in Asia & the Pacific regional overview 2020 [cited 2020 20 February]. Available from: https://www.avert.org/professionals/hiv-around-world/asia-pacific/ overview#footnote7\_no4p1zt.
- 45. UNAIDS. UNAIDS Data 2019. Geneva: UNAIDS; 2019.
- Closson EF, Mitty JA, Malone J, Mayer KH, Mimiaga MJ. Exploring strategies for PrEP adherence and dosing preferences in the context of sexualized recreational drug use among MSM: a qualitative study. AIDS Care. 2018;30(2):191-8.
- 47. UNAIDS. Prevention gap report. 2016.
- 48. UNAIDS. People left behind: Transgender people. 2014.
- 49. UNAIDS. AIDS data 2019. 2019.
- 50. Nehl EJ, He N, Lin L, Zheng T, Harnisch JA, Ding Y, et al. Drug use and sexual behaviors among MSM in China. Substance use & misuse. 2015;50(1):123-36.
- 51. Tang W, Mao J, Tang S, Liu C, Mollan K, Cao B, et al. Disclosure of sexual orientation to health professionals in China: Results from an online cross-sectional study. Journal of the International AIDS Society. 2017;20(1).
- 52. Li D, Yang X, Zhang Z, Qi X, Ruan Y, Jia Y, et al. Nitrite inhalants use and HIV infection among men who have sex with men in China. Biomed Res Int. 2014;2014:365261.
- 53. Wang Z, Lau JT, Fang Y, Ip M, Gross DL. Prevalence of actual uptake and willingness to use preexposure prophylaxis to prevent HIV acquisition among men who have sex with men in Hong Kong, China. PLoS One. 2018;13(2).
- 54. Kwan TH, Lee SS. Predictors of HIV Testing and Their Influence on PrEP Acceptance in Men Who Have Sex with Men: A Cross-Sectional Study. AIDS Behav. 2018;22(4):1150-7.

- 55. Lim SH, Mburu G, Bourne A, Pang J, Wickersham JA, Wei CKT, et al. Willingness to use preexposure prophylaxis for HIV prevention among men who have sex with men in Malaysia: Findings from an online survey. PLoS ONE. 2017;12(9).
- 56. Kanter J, Koh C, Razali K, Tai R, Izenberg J, Rajan L, et al. Risk behaviour and HIV prevalence among men who have sex with men in a multiethnic society: a venue-based study in Kuala Lumpur, Malaysia. International journal of STD & AIDS. 2011;22(1):30-7.
- 57. Lee Y-C, Chang S-Y, Lin K-Y, Chang L-H, Liu W-C, Wu C-H, et al. Awareness and willingness towards pre-exposure prophylaxis against HIV infection among individuals seeking voluntary counselling and testing for HIV in Taiwan: a cross-sectional questionnaire survey. BMJ Open. 2017;7(10):e015142.
- 58. Huang S-W, Wang S-F, Cowó ÁE, Chen M, Lin Y-T, Hung C-P, et al. Molecular epidemiology of HIV-1 infection among men who have sex with men in Taiwan in 2012. PloS one. 2015;10(6).
- 59. Piyaraj P, van Griensven F, Holtz TH, Mock PA, Varangrat A, Wimonsate W, et al. The finding of casual sex partners on the internet, methamphetamine use for sexual pleasure, and incidence of HIV infection among men who have sex with men in Bangkok, Thailand: an observational cohort study. Lancet HIV. 2018;5(7):e379-e89.
- 60. Phanuphak N, Teeratakulpisarn N, van Griensven F, Chomchey N, Pinyakorn S, Fletcher JL, et al. Anogenital HIV RNA in Thai men who have sex with men in Bangkok during acute HIV infection and after randomization to standard vs. intensified antiretroviral regimens. Journal of the International AIDS Society. 2015;18(1):19470.
- 61. Vu NT, Holt M, Phan HT, La LT, Tran GM, Doan TT, et al. The Relationship Between Methamphetamine Use, Sexual Sensation Seeking and Condomless Anal Intercourse Among Men Who Have Sex With Men in Vietnam: Results of a Community-Based, Cross-Sectional Study. AIDS & Behavior. 2017;21(4):1105-16.
- 62. Vu NT, Holt M, Phan HT, Le HT, La LT, Tran GM, et al. Amphetamine-type stimulant use among men who have sex with men (MSM) in Vietnam: Results from a socio-ecological, community-based study. Drug & Alcohol Dependence. 2016;158:110-7.
- 63. Pawa D, Firestone R, Ratchasi S, Dowling O, Jittakoat Y, Duke A, et al. Reducing HIV risk among transgender women in Thailand: a quasi-experimental evaluation of the sisters program. PLoS ONE. 2013;8(10):e77113.
- 64. Yi S, Plant A, Tuot S, Mun P, Chhim S, Chann N, et al. Factors associated with condom use with non-commercial partners among sexually-active transgender women in Cambodia: findings from a national survey using respondent-driven sampling. BMC Public Health. 2019;19(1):326.
- 65. Yan H, Ding Y, Wong FY, Ning Z, Zheng T, Nehl EJ, et al. Epidemiological and molecular characteristics of HIV infection among money boys and general men who have sex with men in Shanghai, China. Infection, Genetics and Evolution. 2015;31:135-41.
- 66. Yoon Y, Tangtammaruk P. "Taking Risk" in the Era of HIV: A Closer Look at Selling Sex in Thailand. Pertanika J Soc Sci Humanit. 2016;24:175-88.
- Yu G, Clatts MC, Goldsamt LA, Giang LM. Substance use among male sex workers in Vietnam: Prevalence, onset, and interactions with sexual risk. International Journal of Drug Policy. 2015;26(5):516-21.
- Cai Y, Wang Z, Lau JT, Li J, Ma T, Liu Y. Prevalence and associated factors of condomless receptive anal intercourse with male clients among transgender women sex workers in Shenyang, China. Journal of the International AIDS Society. 2016;19:20800.
- 69. Wickersham JA, Gibson BA, Bazazi AR, Pillai V, Pedersen CJ, Meyer JP, et al. Prevalence of human immunodeficiency virus and sexually transmitted infections among cisgender and transgender women sex workers in greater Kuala Lumpur, Malaysia: Results from a respondent-driven sampling study. Sexually Transmitted Diseases. 2017;44(11):663-70.
- Lim S, Mohd A, Wickersham JA, Adeeba K, Altice FL. The management of methamphetamine use in sexual settings among men who have sex with men in Malaysia. (Special Section: Sexualised drug use.). International Journal of Drug Policy. 2018;55:256-62.
- 71. Lasco G. Drugs and drug wars as populist tropes in Asia: illustrative examples and implications for drug policy. International Journal of Drug Policy. 2020;77:102668.
- 72. Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. Implementation science. 2010;5(1):69.
- Colquhoun HL, Levac D, O'Brien KK, Straus S, Tricco AC, Perrier L, et al. Scoping reviews: time for clarity in definition, methods, and reporting. Journal of clinical epidemiology. 2014;67(12):1291-4.
- 74. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Information & Libraries Journal. 2009;26(2):91-108.
- 75. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. International journal of social research methodology. 2005;8(1):19-32.
- Hardon A, Idrus NI, Hymans TD. Chemical sexualities: the use of pharmaceutical and cosmetic products by youth in South Sulawesi, Indonesia. Reproductive health matters. 2013;21(41):214-24.
- 77. Zhang D, Chen Z, Ma Y, Wu Z. Qualitative study on unprotected sexual behaviors among male students who have sex with men in Beijing. Zhonghua yu fang yi xue za zhi [Chinese journal of preventive medicine]. 2018;52(12):1234-8.
- 78. Felix M. Disjoint between intention and implementation: The safer sex conundrum of gay men in Penang, Malaysia. Pertanika Journal of Social Science and Humanities. 2017;25(1):221-38.



- 79. Kong TSK, Laidler KJ. The Paradox for Chem-Fun and Gay Men: A Neoliberal Analysis of Drugs and HIV/AIDS Policies in Hong Kong. J Psychoact Drugs. 2019.
- 80. Lasco G. Call boys: Drug use and sex work among marginalized young men in a Philippine Port Community. Contemp Drug Probl. 2018;45(1):33-46.
- 81. Patton MQ. Qualitative research. Encyclopedia of statistics in behavioral science. 2005.
- 82. Kong TSK, Laidler KJ. The Paradox for Chem-Fun and Gay Men: A Neoliberal Analysis of Drugs and HIV/AIDS Policies in Hong Kong. J Psychoact Drugs. 2020;1(52):77-85.
- 83. Aggleton P, Parker R. Male sex work: current characteristics and recent tranformations. Men Who Sell Sex: Routledge; 2014. p. 21-34.
- 84. Bourne A, Reid D, Hickson F, Torres-Rueda S, Steinberg P, Weatherburn P. "Chemsex" and harm reduction need among gay men in South London. International Journal of Drug Policy. 2015;26(12):1171-6.
- 85. Halkitis PN, Fischgrund BN, Parsons JT. Explanations for methamphetamine use among gay and bisexual men in New York City. Subst Use Misuse. 2005;40(9-10):1331-45.
- Pollard A, Nadarzynski T, Llewellyn C. Syndemics of stigma, minority-stress, maladaptive coping, risk environments and littoral spaces among men who have sex with men using chemsex. Cult Health Sex. 2018;20(4):411-27.
- 87. Blackwell CW, Dziegielewski SF. Using the Internet to Meet Sexual Partners: Research and Practice Implications. J Soc Serv Res. 2012;38(1):46-55.
- Boonchutima S, Kongchan W. Utilization of dating apps by men who have sex with men for persuading other men toward substance use. Psychology research and behavior management. 2017;10:31.
- 89. Stardust Z, Kolstee J, Joksic S, Gray J, Hannan S. A community-led, harm-reduction approach to chemsex: case study from Australia's largest gay city. Sexual Health. 2018;15(2):179-81.
- Lau JY, Hung CT, Lee SS. A review of HIV prelexposure prophylaxis (PrEP) programmes by delivery models in the Asia@Pacific through the healthcare accessibility framework. Journal of the International AIDS Society. 2020;23(7):e25531.
- Tran LT, Peacock A, Colledge S, Memedovic S, Grebely J, Leung J, et al. Injecting risk behaviours amongst people who inject drugs: A global multi-stage systematic review and meta-analysis. International Journal of Drug Policy. 2020;84:102866.
- Deuba K, Kohlbrenner V, Koirala S, Ekström AM. Condom use behaviour among people living with HIV: a seven-country community-based participatory research in the Asia-Pacific region. Sexually Transmitted Infections. 2018;94(3):200-5.
- 93. Ma R, Perera S. Safer 'chemsex': GPs' role in harm reduction for emerging forms of recreational drug use. 2016;66(642):4-5.
- 94. Aggleton P, Parker R. Men who sell sex: Global perspectives: Routledge; 2014.
- Bedi A, Sewell C, Fitzpatrick C. Peer-led education may be an effective harm reduction strategy for men who have sex with men engaging in 'chemsex'. International Journal of STD & AIDS. 2020;31(4):392-3.
- 96. Platteau T, Herrijgers C, de Wit J. Digital chemsex support and care: The potential of just-intime adaptive interventions. International Journal of Drug Policy. 2020;85:102927-undefined.
- 97. Giorgetti R, Tagliabracci A, Schifano F, Zaami S, Marinelli E, Busardò FP. When "chems" meet sex: a rising phenomenon called "chemsex". Curr Neuropharmacol. 2017;15(5):762-70.
- 98. Pouget ER, Hagan H, Des Jarlais DC. Metalanalysis of hepatitis C seroconversion in relation to shared syringes and drug preparation equipment. Addiction. 2012;107(6):1057-65.
- Clatts MC, Welle DL, Goldsamt LA. Reconceptualizing the interaction of drug and sexual risk among MSM speed users: Notes toward an ethno-epidemiology. AIDS Behav. 2001;5(2):115-30.
- 100. Baral S, Logie CH, Grosso A, Wirtz AL, Beyrer C. Modified social ecological model: a tool to guide the assessment of the risks and risk contexts of HIV epidemics. BMC Public Health. 2013;13(1):482.



We are united in advocating for issues around HIV and those that advance the rights, health and well being of people of diverse sexual orientation, gender identity, gender expression and sex characteristics.



APCOM Secretariat | 48 Soi Udomsuk 13, Bangna Bangkok 10260 Thailand +66 2399 1145 / +66 2399 1146 www.apcom.org | apcom@apcom.org







