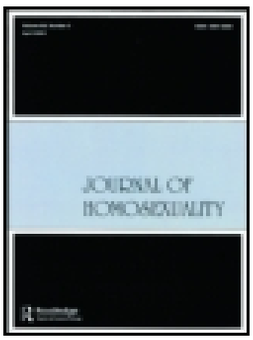

Journal of Homosexuality

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/wjhm20

"Slam Sex" - Sexualized Injecting Drug Use ("SIDU") Amongst Men Who Have Sex with Men (MSM)—A Scoping Review

Florian Scheibein , John Wells , Susana Henriques & Marie Claire Van Hout

To cite this article: Florian Scheibein , John Wells , Susana Henriques & Marie Claire Van Hout (2020): "Slam Sex" - Sexualized Injecting Drug Use ("SIDU") Amongst Men Who Have Sex with Men (MSM)—A Scoping Review, Journal of Homosexuality, DOI: 10.1080/00918369.2020.1804258

To link to this article: https://doi.org/10.1080/00918369.2020.1804258

Published online: 02 Sep 2020.

JOURNAL OF HOMOSEXUALITY
https://doi.org/10.1080/00918369.2020.1804258

Routledge
Taylor & Francis Group

"Slam Sex" - Sexualized Injecting Drug Use ("SIDU") Amongst Men Who Have Sex with Men (MSM)—A Scoping Review

Florian Scheibein, MSc[a], John Wells, PhD[a], Susana Henriques, PhD[b], and Marie Claire Van Hout, PhD[c]

[a]School of Health Science, Waterford Institute of Technology, Waterford, Ireland; [b]Centre for Research and Studies in Sociology, University Institute of Lisbon (Iscte-iul)/centro de Investigação e Estudos de Sociologia (CIES-IUL) and Universidade Aberta, Lisbon, Portugal; [c]Public Health Institute, Liverpool John Moores, Liverpool John Moores, Liverpool, UK

ABSTRACT

Sexualized injecting drug use ("SIDU") is a phenomenon associated with a wide array of high-risk injecting and sex-related practices. This scoping review establishes what is known about MSM and SIDU to assess implications for health care and policy. Characteristics of MSM for "SIDU" may include being on antiretroviral treatment and urban residency with drivers being challenging social taboos; a search for intimacy; convenience of administration; relationship breakdown and increased restrictions in clubs and saunas. Attraction for use appears to be enhancement or prolongation of sexual experiences/pleasure; intimacy and the facilitation of a range of potentially "unsafe" sexual activity. Traditional services are ill-equipped to address "SIDU" because of a lack of knowledge of practices, lack of associated vocabulary, and a failure to integrate sexual health with drug services. For effective responses, these issues need to be addressed.

KEYWORDS

Sexualized injecting drug use; "SIDU"; MSM; service responses; scoping review

Introduction

We use the term "sexualized injecting drug use ("SIDU")" to describe injecting drug use (IDU) for the purposes of facilitating, enhancing, or prolonging sexual experiences. This phenomenon—which is colloquially known as "slamming" amongst men who have sex with men (MSM)—is associated with high-risk injecting and sex-related practices within the broader environment of what in the UK is called "Chemsex" and in the USA is called "Party and Play"—PnP. 'SIDU' can be considered a form of IDU which is rarely discussed specifically (Edmundson et al., 2018; Maxwell, Shahmanesh, & Gafos, 2019) despite significant health needs being identified in this context (Bakker & Knoops, 2018). This paper, therefore, is a review of the extant literature on the topic to address this gap. The review establishes what is known about

CONTACT Florian Scheibeinf florian.scheibein@wit.ie

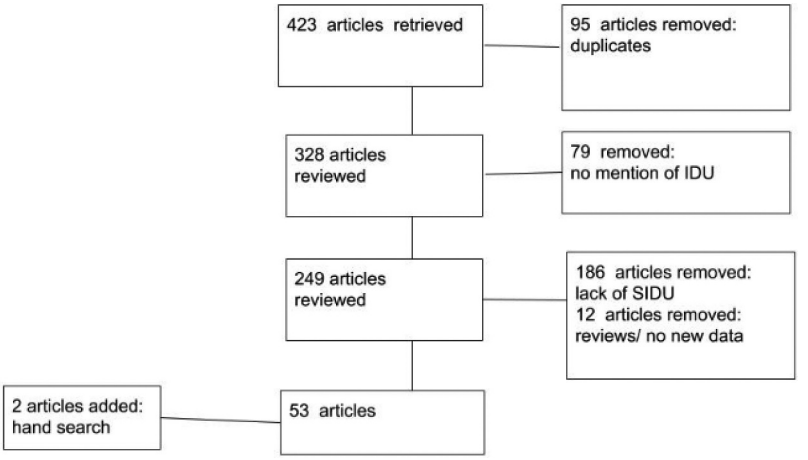

Figure 1. Search Strategy.

MSM's "SIDU" in order to assess implications for health and drug services in terms of future uptake and policy development.

MSM engaging in SIDU are considered a specific high-risk drug-using group (European Monitoring Centre for Drugs and Drug Addiction-EMCDDA, 2017) and may be considered a subpopulation of sexualized drug users (Domínguez, Picazo, Barrenechea-moxo, & González, 2018). "Chemsex" or PnP may be defined as *"intentional sex under the influence of psychoactive drugs, mostly among men who have sex with men"* (McCall, Adams, Mason, & Willis, 2015, h5790.) *and "SIDU" or 'slamming* is the injection of psychoactive substances within this context (Bourne, Hickson, Reid, Torres Rueda, & Weatherburn, 2014). Drugs that are "slammed" include methamphetamine; mephedrone; more rarely ketamine; 3,4 methylene dioxymethamphetamine (MDMA) and/or other drugs (Marillier et al., 2017; Stuart & Weymann, 2015). These drugs may be referred to as novel psychoactive substances (NPS) which can be defined as *"substances that have recently become popular/available, constituting a reason of current/potential public health concern"* (Schifano, Orsolini, & Duccio Papanti, 2015, p. 31).

Methods

Scoping reviews are an increasingly common method for exploring broad topics (Pham et al., 2014). They allow for the mapping of the available extant literature (including "gray" literature) of previously under-researched topics (Arksey & O'Malley, 2005). This study used the iterative six-step method developed by Levac, Colquhoun, and O'Brien (2010). The six steps are: (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; (5) collating, summarizing, and reporting the

results and (6) an international expert advisory consultation exercise on initial findings with a view to establishing the credibility of these in light of the literature found and any gaps in the literature that have not been discovered.

The research question for the review was, "*What is known about sexual injecting drug use (SIDU) in the context of 'chemsex' and men who have sex with men (MSM)?*"

An exploratory search was implemented in April 2019 in the National Documentation Center for Drugs and Library catalog in the Republic of Ireland. This catalogs all drug pertinent research papers, news, and policy documents. This exercise led to a more comprehensive search of Pubmed and Google Scholar [Table 1: Search Terms]. The searches on all databases were limited to "Humans," the English language, and publications within a timeframe of 2009 to 2019. Identified papers' references were also examined for undiscovered extant literature such as "grey" literature.

Eligibility criteria centered on whether studies considered the practices, health implications, and service utilization of MSM engaging in injecting drug use of NPS during "chemsex." Review papers which did not include "new" information were excluded. The title and abstract of each citation were screened for relevance to these parameters by the lead author; where doubt remained papers were further reviewed by coauthors (Levac et al., 2010). Studies that did not include the parameters were excluded at this stage.

Mendeley™ software was used to compile all relevant papers and all duplicates were removed. Subsequently, this list was forwarded to an Expert Advisory Group of "chemsex" researchers and experts to identify other pertinent and previously undiscovered papers for inclusion.

Results

Four hundred and twenty-three papers were retrieved through the database search (Figure 1). After duplicates were removed (n = 95), 328 papers were screened for intravenous drug use (IDU) leading to the removal of 79 papers. Papers which correlated injecting of known chemsex drugs with "SIDU" were also excluded, leading to the removal of a further 186 papers. Twelve review papers which did not provide any new data were excluded. Two further papers

Table 1. Search Terms.

Drug Terms	Injecting Terms	SDU Related Terms	English language papers Retrieved
3-MMC OR 4-MEC OR 4-FA OR cocaine OR methamphetamine OR tina OR ketamine OR GHB OR GBL OR mephedrone OR meph OR methoxetamine OR MDMA OR cathinone*	injecting OR slamming OR "people who inject drugs" OR "intravenous drug use"	chemsex OR slamsex OR "party n play" OR PnP OR "sexualised drug use*"	Google Scholar: 403 Pubmed: 11

Table 2. Study type and country.

Author	Methodology	Country
Ahmed et al. (2016)	In-depth interviews	United Kingdom
Amaro (2016)	Ethnographic research	France
Bakker and Knoops (2018)	Commentary	Netherlands
Bourne et al. (2015)	In-depth interviews	England
Bourne et al. (2014)	In-depth interviews	UK
Bjerno (2017)	Semi-structured interviews	Denmark
Bracchi et al. (2015)	Commentary	United Kingdom
Chung et al. (2015)	Case Report	United Kingdom
Dolengevich-Segal et al., (2016)	Case report	Spain
Deimel et al. (2016)	In-depth interviews	Germany
Dávila (2016)	Ethnographic study	Spain
Elliot et al. (2017)	Prospective opt out	United Kingdom
Frankis et al., 2018	Cross-sectional online survey	Scotland
Frankis and Clutterbuck (2017)	Commentary	United Kingdom
Frederick (2016)	Ethnography/critical discourse analysis	England
Gilbart and Gobin (2013)	Semistructured in-depth quantitative interviews	England
Giraudon et al. (2018)	Commentary	England
Gogarty and Fairman	Documentary film	United Kingdom
Gonzalez-Baeza et al., 2018	Online survey	Spain
Gourlay et al. (2017)	In-depth interviews	England
Guadamuz and Boonmongkon (2018)	Narrative interviews	Thailand
Glynn et al. (2018)	Survey	Ireland
Hopwood, Drysdale, & Treloar (2018)	Semi-structured in-depth interviews	Australia
Hunt (2012)	In-depth interviews	United States
Javaid (2018)	Critical analysis	Ireland
Kirby and Thornber-Dunwell (2013)	Correspondence	England
Knoops et al. (2015)	Mixed Methods	Netherlands
Knowles (2019)	Commentary	Canada
Levy (2019)	Case study	South Africa
Marillier et al. (2017)	Mixed Methods	France
Macleod et al., (2016)	Mixed Methods	Scotland
Milhet et al. (2019)	In-depth interviews	France
Moncrieff (2014)	Scoping Study	England
Molina et al. (2018)	Double-blind randomized combined prevention trial	France and Canada
Mounteney et al. (2016)	Mixed Methods	Portugal
Mowlabocus et al. (2016)	Commentary	England
O'Reilly (2018)	Case Study	Australia
Page and Nelson (2016)	Commentary	England
Payne et al., (2017)	In-depth semistructured interviews	Ausralia
Power et al. (2018)	Cross-sectional survey	Australia
Pufall et al. (2018)	Cross-sectional survey	England
Ralphs, Gray, and Norton (2017)	Mixed Methods	England
Stuart (2014a)	Tool kit	England
Stuart (2014b)	Guide	England
Stuart & Weymann, 2015	Mixed Methods	England
Stuart (2016)	Commentary	England
Souleymanov (2018)	Discourse Analysis	Canada
Todd (2016)	Book	England
Vaux et al. (2019)	Cross-sectional survey	France
Wendel et al. (2011)	Mixed methods: respondent driven sampling, social actor theory	United States
Wharton (2017)	Book	England
Weatherburn et al. (2016)	Qualitative semi-structured interviews	England
Van Hout et al. (2018)	Interpretative Phenomenological Analysis	Ireland

meeting the inclusion criteria were identified through a hand search, yielding a total of 53 papers for critical appraisal (See Figure 1).

Specific information including author, year of publication, methodology, and study location were noted (See Table 2). Data were broken down thematically into: "SIDU Profile and Catalysts"; "Health Harms"; "Service Responses" and "Service Utilisation."

"SIDU" Profile and Catalysts

SIDU is reported in several countries including the United Kingdom; United States; Australia; the Netherlands; France; Spain; Portugal; Thailand; Ireland; Czech Republic; Germany; Denmark; Finland and Greece (Glynn et al., 2018; Guadamuz & Boonmongkon, 2018; Hopwood, Drysdale, & Treloar, 2018; Knoops, Bakker, Van Bodegom, & Zantkuijl, 2015; Wendel, 2011). Reported prevalence figures for MSM engaging in "SIDU" range between 1% and 50% (Bourne, Reid, Hickson, Torres-Rueda, & Weatherburn, 2015; Elliot, Singh, Tyebally, Gedela, & Nelson, 2017; Frankis & Clutterbuck, 2017; Frankis, Flowers, McDaid, & Bourne, 2018; Molina et al., 2018; Power et al., 2018). In a population of HIV-positive MSM recruited through UK health clinics, Pufall et al. (2018) found that a minority of MSM reported engaging in SIDU: 10.1% (any drug); 4% (multiple drugs); 6.7% (methamphetamine); 0.4% (GHB/GBL); ketamine (1.1%) and mephedrone (6.6%). In a small population (n = 16) of MSM who used methamphetamine for sex recruited from a variety of Australian services (LGBTIQ, viral hepatitis, and harm reduction organizations) 50% reported engaging in SIDU. The drugs injected may vary according to the local context (Giraudon, Jeremias, & Mohammed, 2018) and the drugs thought to be injected may vary in purity and can contain close chemical analogues—that is compounds having a structure similar to that of another compound, but different from it in respect to a certain component in order to either bypass drug laws or to input cheaper compounds to maximize profits—rather than the substance expected by the user (Marillier et al., 2017).

The term "slamming" may be used by individuals to distinguish recreational injecting from traditional social perceptions associated with injecting of opioids and other drugs in the broader drug-injecting population (Bourne et al., 2014; Gilbart & Gobin, 2013; Knoops et al., 2015). In London, Moncrieff (2014) reports that "SIDU" started to occur as MSM moved from licensed gay venues and clubs—a move prompted by increased security enforcement against recreational drug use—to private parties—a move that was facilitated through the use of geospatial mobile applications such as Grindr™; Scruff™; Hornet™ and Jack'd™. Ahmed et al. (2016) report that a population of MSM from South London boroughs reports SIDU being virtually absent from licensed venues due to the stigmatization associated with this behavior and the practicality of injecting in a venue with restrictions. Suspected SIDU is

reported in a sauna in Barcelona (Dávila, 2016). In South Africa, there have been calls for "safe" consumption sites to be established in MSM sex-related venues (Levy, 2019).

MSM engaging in "slamsex" operate in different networks within chemsex scenes (Knoops et al., 2015). In this regard, "SIDU" is motivated by the excitement associated with crossing a social taboo line (Ralphs, Gray and Norton, 2017) as this relates to a behavior (injecting) that maybe stigmatized, fetishized and carry risks (both social and health)(Van Hout, Crowley, O'Dea, & Clarke, 2018; Wharton, 2017). In the United Kingdom, the practice is reportedly becoming less stigmatized and more normalized within the MSM community (Gourlay et al., 2017). "SIDU" may be an opportunity to increase intimacy between sexual partners (Hunt, 2012) and a minority within the "SIDU" scene may share injecting equipment as the *"ultimate form of connectedness"* (Knoops et al., 2015, p. 31).

Several studies report that "SIDU" facilitates, enhances, and/or prolongs sexual experiences (Amaro, 2016; Deimel et al., 2016; Hunt, 2012; Weatherburn, Hickson, Reid, Torres-Rueda, & Bourne, 2017). Sexual liberation and self-medication for low sex drives can be a motivating factor for "SIDU" (Deimel et al., 2016; Milhet, Shah, Madesclaire, & Gaissad, 2019; Souleymanov, 2018; Weatherburn et al., 2017). Amaro (2016) reports that many MSM initiate "SIDU" after the breakdown of previous relationships. Conversely, "SIDU" may facilitate romantic experiences and become a component of forming relationships with other MSM who "slam" (ibid.). In a Scottish survey of six MSM who reported engaging in SIDU, two reported SIDU during 50–100% of all sexual encounters (Macleod et al., 2016).

Some male sex workers may engage in "SIDU" to facilitate more extreme sexual practices motivated by the opportunity to earn more money from clients (Knoops et al., 2015). Weatherburn et al. (2017) report a case where "SIDU" allowed an MSM to *"get horny"* despite no longer having a sex drive. Indeed, in that case the respondent reported that *"It's one of the reasons why I started using chems"* (p. 2).

"SIDU" can lower inhibitions and can increase stamina and performance (Dolengevich-Segal, Rodríguez-Salgado, Gómez-Arnau, & Sánchez-Mateos,2016). Some 'SIDU's inject vasodilators directly into their penises to facilitate erections during chemsex sessions (Knoops et al., 2015). The injecting use of crystal methamphetamine has been reported to facilitate movement from active to passive sexual roles (Knoops et al., 2015), it is unclear as to what extent the injecting behavior itself promotes this sexual role change in comparison to other routes of methamphetamine administration.

Moving toward "SIDU" from other forms of administration may serve practical purposes as injecting may limit the amount of time required with non-injecting administration of a drug (for example, smoking methamphetamine) and speeding up the time of the impact of the effect of the drug (Hopwood

et al., 2018; Hunt, 2012). It may also decrease side effects from administering the drug in other ways—for example, cold-like symptoms from snorting (ibid.).

"SIDU" Practices

Those engaging in "SIDU" may identify themselves on dating apps through ideograms such as syringes and suggestive phrases such as "to the poinT" (Bourne et al., 2014; Gogarty & Fairman, 2015; Guadamuz & Boonmongkon, 2018; Knoops et al., 2015). They may also connect with fellow 'SIDUs' through online forums and porn sites devoted to "SIDU" and may inject communally whilst online (Bakker & Knoops, 2018; Frederick, 2016; Guadamuz & Boonmongkon, 2018; Mouneteney, Po, Oteo, & Griffiths, 2016; Pirona et al., 2017; Wendel, 2011).

Whilst low levels of sharing of equipment are reported, MSM who engage in SIDU may lack knowledge of proper injecting technique and are reported as frequently injected by partners (Bourne et al., 2015). Stuart and Weymann (2015) describe a UK-based MSM population engaging in "SIDU" a majority of whom surveyed reported not sharing needles; 23% reported never sharing; 27% reported never injecting themselves; 16% had only injected themselves and 30% had injected themselves and others. At times, MSM who engage in SIDU may be injected by trained medical professionals (Knoops et al., 2015) who are also engaging in SIDU and indeed, are often sought out for their medical skill in relation to injecting (Hopwood et al., 2018; Todd, 2016). Injecting techniques may be learnt through Youtube™ videos; engagement with harm reduction services; watching friends inject; and through training from medical professionals (Hopwood et al., 2018).

A tendency not to filter solutions, to mix in the syringe barrel and to inadequately dispose of used equipment has also been reported (Knoops et al., 2015). Some participants may withdraw their own blood, use it as a solvent for injectable drugs, and inject themselves and/or others with this solution (Kirby & Thornber-Dunwell, 2013). This interaction can be viewed as a power negotiation between sexual participants which renders those with less power at a disadvantage (Javaid, 2018).

Dosing may be learnt interactionally between SIDU participants (Bjerno, 2017). In a case report, Dolengevich-Segal et al. (2016) note that one participant (MSM) engaging in SIDU reported injecting 0.1–0.2 mg mephedrone every hour, consuming 3–4 grams on a weekend. In some cases, MSM engaging in SIDU may stop injecting methamphetamine due to the intensity of the experience and may switch to other drugs such as 4-Methylethcathinone (4-MEC), 3-Methylmethcathinone (3-MMC), cocaine, methoxetamine (MXE) or 4-Fluoroamphetamine (4-FA) (Knoops et al., 2015).

"SIDU" appears to be associated with several potentially harmful drug-related practices including polydrug use; poor injection technique; injection by partners; sharing (sometimes intentionally) of equipment; people not filtering solutions; mixing in syringe barrels; using blood as a solvent; frequent redosing and prolonged use (Bourne et al., 2014; Knoops et al., 2015). "SIDU" has also been associated with several potentially harmful sex-related practices to obtain sexual arousal such as fisting (Knoops et al., 2015; Stuart, 2014a; Weatherburn et al., 2017).

Health Harms

Injecting and/or polydrug use may expose people who engage in "SIDU" to the risk of substance use disorders (Bourne et al., 2014; Knoops et al., 2015). The sharing of equipment and using blood as a solvent expose MSM engaging in SIDU to increased risk of human immunodeficiency virus (HIV), hepatitis C (HCV) and other blood-borne viruses (BBVs) (Bourne et al., 2015; Kirby & Thornber-Dunwell, 2013; Knoops et al., 2015; Page & Nelson, 2016; Stuart & Weymann, 2015). In an English case study, Chung et al. (2015) report that the sharing of a drug-blood mixture led to infection of a second strain of HCV in one patient. In a French cross-sectional survey, chronic HCV prevalence of 10.6% was reported in a population of MSM engaging in SIDU (Vaux et al., 2019). Further harms that may appear include abscesses; phlebitis; track marks and muscle damage (Knoops et al., 2015; Payne et al., 2017). Prolonged use may lead to delusional thoughts; paranoid ideation; hallucinations and suicidal ideation (Dolengevich-Segal et al., 2016) which can be exasperated by long sessions with little sleep and poor nutrition (Bourne et al., 2014).

In a UK study of attendees of HIV clinics, Pufall et al. (2018) found that being on anti-retro viral treatment (ART) was a predictor of engaging in "chemsex" and that 10.1% of the HIV+ positive MSM engaged in "slamsex." Those engaging in "slamsex" and/or "chemsex" were reportedly likely to have more causal partners; serodiscordant unprotected anal intercourse and detectable viral load serodiscordant unprotected anal intercourse (Pufall et al., 2018). ART medication may exasperate severe organ-related toxicity associated with some drugs associated with SIDU (Bracchi et al., 2015).

When compared to a group reporting chemsex but not SIDU, MSM engaging in SIDU were found more likely to report multiple STIs including Chlamydia, Gonorrhea, and Syphilis (Pufall et al., 2018). People with HCV were found to be more likely to report to engage in SIDU in Madrid, Spain (Gonzalez-Baeza et al., 2018) and a minority of an English and Welsh population diagnosed with Shigellosis also reported engaging in SIDU (Gilbart & Gobin, 2013). HCV infection may occur from both injection and sexual practices (Gonzalez-Baeza et al., 2018).

Service Responses and Engagement

Many people engaging in SIDU may not consider "SIDU" risky and/or may see themselves as different when compared with other people who inject drugs (Stuart & Weymann, 2015; Frankis & Clutterbuck, 2017; Gogarty & Fairman, 2015). As a result, it may be more appropriate to have SIDU services within existing gay-specific health services (Frankis & Clutterbuck, 2017). One well-known service is 56 Dean Street in London in the United Kingdom (Stuart & Weymann, 2015).

In a Canadian review Knowles (2019) found that services should seek to open discussions within the MSM community; provide culturally competent information; talk to MSM about consent and remain sex positive. Canadian programs that include such elements include the "Let's Talk and Test" Campaign (cabaret-style evening); "Spill the Tea" Campaign (safer partying kits including injecting equipment; lube, condoms, and gloves; snorting kits; methamphetamine pipes); AIDS Community of Toronto "Spunk Support" Groups (six-week program which includes motivational interviewing; cognitive behavioral therapy and other components); AIDS Community Care Montreal's "Kontak" program (safer partying kits; an available outreach worker and the holding of workshops) and Gay Men's Sexual Health Alliance of Ontario (GMSH) "Party and Play Your Way" which is producing color-coded injecting packets to reduce the likelihood of sharing equipment modeled from the Gay Men's Health Collective's "Pic Pacs" (Knowles, 2019).

In a Scottish commentary, Frankis and Clutterbuck (2017) suggest a highly personalized approach is required which seeks to minimize biomedical harms. Such measures should include:

> frequent regular STI testing; for HIV-negative men, HIV testing; and for HIV-negative chemsex users who struggle with condom use and safer injecting practices, access to postexposure prophylaxis and information on and support with PrEP (whether funded or self-sourced). (Frankis & Clutterbuck, 2017, p. 1)

The importance of integrated services and use of chemsex slang during interactions has been stressed by several authors (Bakker & Knoops, 2018; David; Stuart & Weymann, 2015). A number of specialized services have been developed within sexual health services, online, and physical peer outreach (Bakker & Knoops, 2018; Hugo et al., 2018; Mowlabocus, Haslop, & Dasgupta, 2016; Mowlabocus et al., 2016; Stuart & Weymann, 2015).

The United Kingdom-based Chemsex Care Support Plan TM is an online motivational interviewing-based intervention which can be used by MSM engaging in "SIDU" directly or with a practitioner (O'Reilly, 2018; Stuart & Weymann, 2015). This tool is widely utilized in over a dozen languages (https://www.davidstuart.org/care-plan) and may be useful in cases where

information on "SIDU" is not volunteered and may elicit discussion around the topic (O'Reilly, 2018).

As has been discussed previously, several interventions center on community engagement such as cabaret-style events, outreach work, and workshops (Knowles, 2019). Anova Health Institute utilizes peer support workers to engage with MSM engaging in "SIDU" in Cape Town, South Africa (Hugo et al., 2018). MSM engaging in SIDU can also be reached through online outreach (Mowlabocus et al., 2016).

There is widespread acceptance that non-specialized services for people who inject drugs and standard sexual health services are relatively unsuitable for people who engage in "SIDU" (Bakker & Knoops, 2018; Bourne et al., 2014a; Knoops et al., 2015; Stuart & Weymann, 2015). Knoops et al. (2015) report that a Dutch population of MSM engaging in "SIDU" *"did not know local needle exchange programmes even existed, let alone how they worked, where they were and when they opened" (*p. 59). Those who did know, did not use them out of fear of being branded *"a junkie"* (ibid). Knoops et al. also recounts a case where a "SIDU" registered at a local drug-treatment clinic and:

> found myself having to give an introductory course on crystal meth. She [the drug worker] knew nothing about crystal meth. She didn't know you could inject the drug nor did she know its street name. She even asked if tina was my ex-girlfriend's name. I'd had just about enough by then. It had been a complete let down. I went straight back to using. (ibid).

Discussion

"SIDU" is an under-researched and under-reported phenomenon amongst MSM populations. "SIDU" by MSM, based upon the above review, should be considered a distinct phenomenon within chemsex populations since, it may be argued, both reinforcers for engaging in the behavior and consequences are distinct from other forms of drug injecting. An unintended consequence of enforcement of drug restrictions in licensed venues and premises (arguably in response to pressure from both law enforcement and broader public health agendas) may have contributed to a transition to private parties which may facilitate the engagement of MSM in "SIDU" (Moncrieff, 2014).

The underground nature with which SIDU amongst MSM is associated and the extreme sexualized injecting it can lead to make those who engage with the practices a "hard to reach" population in relation to harm reduction initiatives. As we have indicated, some attempts have been made to engage with this population, however data as to success in such engagement are weak. Furthermore, the nature of the engagement, such as the provision of syringes and latex gloves for the purpose of public protection through the promotion of safer extreme sexual practices may be publicly controversial and may

discourage mainstream statutory public health bodies from providing the specialist service that is needed.

In this context, the initiation into "SIDU" may be a "line in the sand" (Smith & Tasker, 2017; Wharton, 2017) which exposes MSM to greater physical and mental health harms that cannot be addressed by health services because of the stigmatized nature of the practices within wider society (sexualized injecting and extreme sexual behavior). Yet such a stigmatized group could pose a health risk to the wider MSM population if their practices are not addressed through specialized public health response that does not alienate them.

Traditional services for PWID appear to be ill-suited for people engaging in "SIDU" (Stuart, 2016). Central to effective services, the literature scoping review seems to indicate, is to develop an individualized sex-positive led approach characterized by cultural competence which integrates with other sexual health-related and addiction services (Bakker & Knoops, 2018; Frankis & Clutterbuck, 2017; Knowles, 2019).

Limitations

We only included English language studies and as a result have excluded research from other pertinent regions such as Asia and South America. Several studies were excluded as they conflated reported injection of chemsex drugs with "SIDU." The reported injection of chemsex drugs may be indicative of "SIDU" but such drugs may be injected in other contexts and their inclusion could have led to the contamination of the review with the injection by MSM of chemsex drugs in other contexts.

Conclusions

Future studies of MSM engaging in chemsex should report specifically on the engagement in "SIDU." Care should be taken not to conflate reported injecting drug use with "SIDU" as "SIDU" is associated with differing practices, risks, and service needs. Law enforcement should be cognizant of the potential influence of policing licensed premises on increased prevalence of "SIDU" in private parties.

Acknowledgments

We would like to acknowledge the support of the Expert Advisory Group which included David Stuart, Leon Knoops and Ben Collins.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Florian Scheibein MSc http://orcid.org/0000-0001-9585-5068

References

Ahmed, A. K., Weatherburn, P., Reid, D., Hickson, F., Torres-Rueda, S., Steinberg, P., & Bourne, A. (2016). Social norms related to combining drugs and sex ("chemsex") among gay men in South London. *International Journal of Drug Policy, 38*, 29–35. https://doi.org/10.1016/j.drugpo.2016.10.007

Amaro, R. (2016). Taking chances for love? Reflections on love, risk, and harm reduction in a gay slamming subculture. *Contemporary Drug Problems, 43*(3), 216–227. doi:10.1177/0091450916658295

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*, *8*(1), 19–32. doi:10.1080/1364557032000119616

Bakker, I., & Knoops, L. (2018). Towards a continuum of care concerning chemsex issues. *Sexual Health*, *15*(2), 173–175. doi:10.1071/SH17139

Bjerno, T. N. (2017). *Accounting for Chemsex : Danish Chemsex Users' Accounts of their Chemsex Engagement - Findings from a Qualitative Study*.

Bourne, A., Hickson, F., Reid, D., Torres Rueda, S., & Weatherburn, P. (2014, March). *The Chemsex Study* . doi:10.1021/nl015672h

Bourne, A., Reid, D., Hickson, F., Torres-Rueda, S., & Weatherburn, P. (2015). 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*, *91*(8), 564–568. doi:10.1136/sextrans-2015-052052

Bracchi, M., Stuart, D., Castles, R., Khoo, S., Back, D., & Boffito, M. (2015). Increasing use of "party drugs" in people living with HIV on antiretrovirals: A concern for patient safety. *Aids*, *29*(13), 1585–1592. doi:10.1097/QAD.0000000000000786

Chung, E., Ferns, R. B., He, M., Rigatti, R., Grant, P., McCormick, A., … Waters, L. J. (2015, March). Ultra-deep sequencing provides insights into the virology of hepatitis C super-infections in a case of three sequential infections with different genotypes. *Journal of Clinical Virology*, *70*, 63–66. doi:10.1016/j.jcv.2015.06.105

Dávila, P. F. (2016, April). *" ChemSex in the sauna": An ethnographic study on the use of drugs in a gay sex venue in Barcelona* (pp. 1–2). doi:10.13140/RG.2.1.1895.7205

Deimel, D., Stöver, H., Hößelbarth, S., Dichtl, A., Graf, N., & Gebhardt, V. (2016). Drug use and health behaviour among German men who have sex with men: Results of a qualitative, multi-centre study. *Harm Reduction Journal*, *13*(1), 1–12. doi:10.1186/s12954-016-0125-y

Dolengevich-Segal, H., Rodríguez-Salgado, B., Gómez-Arnau, J., & Sánchez-Mateos, D. (2016). Severe psychosis, drug dependence, and hepatitis C related to slamming mephedrone. *Case Reports in Psychiatry*, 1–5. https://doi.org/10.1155/2016/8379562

Edmundson, C., Heinsbroek, E., Glass, R., Hope, V., Mohammed, H., White, M., & Desai, M. (2018). Sexualised drug use in the United Kingdom (UK): A review of the literature. *The International Journal on Drug Policy, 55*, 131–148. doi:10.1016/j.drugpo.2018.02.002

Domínguez, D. R., Picazo, L., Barrenechea-moxo, M. L. D., & González, J. (2018). Chemsex: are we prepared? *Adicciones, 30*(2), 158–159. doi:10.20882/adicciones.1062

Elliot, E. R., Singh, S., Tyebally, S., Gedela, K., & Nelson, M. (2017). Recreational drug use and chemsex among HIV-infected in-patients: A unique screening opportunity. *HIV Medicine*, *18*(7), 525–531. doi:10.1111/hiv.12487

EMCDDA. (2017). *High-risk drug use and new psychoactive substances – results from an EMCDDA trendspotter study*. June. Retrieved from https://doi.org/10.2810/583405

Frankis, J., & Clutterbuck, D. (2017). What does the latest research evidence mean for practitioners who work with gay and bisexual men engaging in chemsex? *Sexually Transmitted Infections*, *93*(3), 153–154. doi:10.1136/sextrans-2016-052783

Frankis, J., Flowers, P., McDaid, L., & Bourne, A. (2018). Low levels of chemsex among men who have sex with men, but high levels of risk among men who engage in chemsex: Analysis of a cross-sectional online survey across four countries. *Sexual Health*, *15*(2), 144. doi:10.1071/sh17159

Frederick, B. J. (2016). *Exploring the (Sub)Cultural Dynamics of Gay, Bisexual and Queer Male Drug Use in Cyberspace*. doi:10.13140/RG.2.2.14304.07683

Gilbart, S., & Gobin, O. H. (2013). High-risk drug practices in men who have sex with men. *The Lancet*, *381*(9875), 1358–1359. doi:10.1016/S0140-6736(13)60882-X

Giraudon, I., Jeremias, A., & Mohammed, H. (2018,). International Journal of Drug Policy Surveillance of sexualised drug use – The challenges and the opportunities. *International Journal of Drug Policy*, 1. doi:10.1016/j.drugpo.2018.03.017

Glynn, R. W., Byrne, N., O'Dea, S., Shanley, A., Codd, M., Keenan, E., … Clarke, S. (2018). Chemsex, risk behaviours and sexually transmitted infections among men who have sex with men in Dublin, Ireland. *International Journal of Drug Policy*, *52*, 9–15. doi:10.1016/j.drugpo.2017.10.008

Gogarty, M., & Fairman, W. (2015). *Chemsex*.

Gonzalez-Baeza, A., Dolengevich-Segal, H., Perez-Valero, I., Cabello, A., Tellez, M. J., Sanz, J., … Ryan, P. (2018). Sexualized Drug Use (Chemsex) Is Associated with High-Risk Sexual Behaviors and Sexually Transmitted Infections in HIV-Positive Men Who Have Sex with Men: Data from the U-SEX GESIDA 9416 Study. *AIDS Patient Care and STDs*, *32*(3), 112–118. doi:10.1089/apc.2017.0263

Gourlay, A., Fox, J., Gafos, M., Fidler, S., Nwokolo, N., Clarke, A., … Hart, G. (2017). A qualitative study exploring the social and environmental context of recently acquired HIV infection among men who have sex with men in South-East England. *BMJ Open*, *7*(8), e016494. doi:10.1136/bmjopen-2017-016494

Guadamuz, T. E., & Boonmongkon, P. (2018). Ice parties among young men who have sex with men in Thailand: Pleasures, secrecy and risks. *The International Journal on Drug Policy*, *55*, 249–255. doi:10.1016/j.drugpo.2018.04.005

Hopwood, M., Drysdale, K., & Treloar, C. (2018). *'Sunshine on a rainy day' Crystal methamphetamine use among gay and bisexual men in Perth*.

Hugo, J. M., Rebe, K. B., Tsouroulis, E., Manion, A., De Swart, G., Struthers, H., & Mcintyre, J. A. (2018). *Anova Health Institute' s harm reduction initiatives for people who use drugs* (pp. 176–178).

Hunt, K. E. (2012). The Social Economy of Buying, Selling, Trading, and Consuming Drugs: A Comparison of Individual and Sub Cultural Strategies Among Methamphetamine Users and Dealers in Two Cities. https://doi.org/10.7916/D8NV9R93

Javaid, A. (2018). The interconnectedness of chemsex, drugs, sexual promiscuity and sexual violence. *Irish Journal of Sociology*, *26*(2), 183–207. doi:10.1177/0791603518773703

Kirby, T., & Thornber-Dunwell, M. (2013). New HIV diagnoses in London's gay men continue to soar. *The Lancet*, *382*(9889), 295. doi:10.1016/S0140-6736(13)61609-8

Knoops, L., Bakker, I., Van Bodegom, R., & Zantkuijl, P. (2015, November). *Tina and slamming*.

Knowles, Z. (2019). *Party and play in Canada: What is its impact on gay men's health?* Retrieved from Prevention in Focus website: https://www.catie.ca/en/pif/spring-2019/party-and-play-canada-what-its-impact-gay-men-s-health

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science : IS*, *5*(1), 69. doi:10.1186/1748-5908-5-69

Levy, J. (2019). *Chemsex: A Case Study of Drug-Userphobia*. London: International Network of People Who Use Drugs.

Macleod, K., Pickering, L., Gannon, M., Greenwood, S., Liddell, D., Smith, A., Johnstone, L., & Burton, G. (2016). *Understanding the patterns of use, motives, and harms of new psychoactive substances in Scotland*. Edinburgh: Scottish Government.

Marillier, M., Batisse, A., Richeval, C., Labrouve, V., Martinez, M., Allorge, D., … Djezzar, S. (2017). CHEMSEX, NPS et réduction des risques et des dommages: Résultats préliminaires d'une étude pilote. *Toxicologie Analytique et Clinique*, *29*(1), 47–56. doi:10.1016/j.toxac.2016.12.003

Maxwell, S., Shahmanesh, M., & Gafos, M. (2019). Chemsex behaviours among men who have sex with men: A systematic review of the literature. *International Journal of Drug Policy, 63*, 74–89. doi:10.1016/j.drugpo.2018.11.014

McCall, H., Adams, N., Mason, D., & Willis, J. (2015, November). What is chemsex and why does it matter? *BMJ (Online)*, *351*, 2–3. doi:10.1136/bmj.h5790

Milhet, M., Shah, J., Madesclaire, T., & Gaissad, L. (2019). Chemsex experiences: Narratives of pleasure. *Drugs and Alcohol Today*, *19*(1), 11–22. doi:10.1108/DAT-09-2018-0043

Molina, J.-M., Meyer, L., Fressard, L., Pialoux, G., Spire, B., Tremblay, C., … Sagaon-Teyssier, L. (2018). Is on-Demand HIV Pre-exposure Prophylaxis a Suitable Tool for Men Who Have Sex With Men Who Practice Chemsex? Results From a Substudy of the ANRS-IPERGAY Trial. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, *79*(2), e69–e75. doi:10.1097/qai.0000000000001781

Moncrieff, M. (2014). *Out of your mind*.

Mouneteney, J., Po, A., Oteo, A., & Griffiths, P. (2016). *The internet and drug markets. European Monitoring Centre for Drugs and Drug Addiction, Insights 2*.

Mowlabocus, S., Haslop, C., & Dasgupta, R. K. (2016). From Scene to Screen: The challenges and opportunities of commercial digital platforms for HIV community outreach. *Social Media and Society*, *2*(4). doi:10.1177/2056305116672886

O'Reilly, M. (2018). Chemsex case study: Is it time to recommend routine screening of sexualised drug use in men who have sex with men? *Sexual Health*, *15*(2), 167. doi:10.1071/sh17156

Page, E. E., & Nelson, M. (2016). Cme Genitourinary Medicine. *Clinical Medicine*, *16*(2), 189–192. Retrieved from http://www.clinmed.rcpjournal.org/content/16/2/189.full.pdf

Payne, L., Lawrence, D., Soni, S., Llewellyn, C., & Dean, G. (2017). Investigating factors for increased gonorrhoea re-infection in men who have sex with men attending a genitourinary clinic: A qualitative study. *International Journal of STD and AIDS*, *28*(9), 858–863. doi:10.1177/0956462416677916

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & Mcewen, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, *5*(4), 371–385. doi:10.1002/jrsm.1123

Pirona, A., Bo, A., Hedrich, D., Ferri, M., van Gelder, N., Giraudon, I., … Mounteney, J. (2017). New psychoactive substances: Current health-related practices and challenges in responding to use and harms in Europe. *International Journal of Drug Policy*, *40*, 84–92. doi:10.1016/j.drugpo.2016.10.004

Power, J., Mikołajczak, G., Bourne, A., Brown, G., Leonard, W., Lyons, A., … Lucke, J. (2018). Sex, drugs and social connectedness: Wellbeing among HIV-positive gay and bisexual men who use party-and-play drugs. *Sexual Health*, *15*(2), 135. doi:10.1071/sh17151

Pufall, E. L., Kall, M., Shahmanesh, M., Nardone, A., Gilson, R., Delpech, V., … Bruton, J. (2018). Sexualized drug use ('chemsex') and high-risk sexual behaviours in HIV-positive men who have sex with men. *HIV Medicine*, *19*(4), 261–270. doi:10.1111/hiv.12574

Ralphs, R., Gray, P. M., & Norton, A. (2017). *New psychoactive substance use in Manchester*: *Prevalence, nature,* challenges and *responses*. Manchester Metropolitan University.

Schifano, F., Orsolini, L., & Duccio Papanti, G. (2015). Novel psychoactive substances of interest for psychiatry. *World Psychiatry*, *14*(1), 15–26. doi:10.1002/wps.20174

Smith, V., & Tasker, F. (2017). Gay men' s chemsex survival stories. *Sexual Health*, *15*(2), 116–122. doi:10.1071/SH17122

Souleymanov, R. (2018). Party-N-Play and Gay and Bisexual Men: Critical Discourse Analysis Study. *Thesis*. Retrieved from https://tspace.library.utoronto.ca/bitstream/1807/92059/3/Souleymanov_Roustam_201811_PhD_thesis.pdf

Stuart, D. (2014b,). *ChemSex and hepatitis C : A guide for healthcare providers*.

Stuart, D. (2014a). Sexualised drug use by MSM (ChemSex): A toolkit for GUM/HIV staff. *HIV Nursing*, *14*(2), 15–19.

Stuart, D. (2016). Resourcing peer support volunteers in HIV prevention and sexual wellbeing: NHS settings. *HIV Nursing*, *16*, 33–36.

Stuart, D., & Weymann, J. (2015). *One year in practice* (pp. 24–28). February 2014. doi:10.1126/scitranslmed.3001148.Function

Todd, M. (2016). *Straight Jacket*. Ealing: Bantam Press.

Van Hout, M. C., Crowley, D., O'Dea, S., & Clarke, S. (2018). Chasing the rainbow: Pleasure, sex-based sociality and consumerism in navigating and exiting the Irish Chemsex scene. *Culture, Health and Sexuality*, 1–13. doi:10.1080/13691058.2018.1529336

Vaux, S., Chevaliez, S., Saboni, L., Sauvage, C., Sommen, C., Barin, F., … Robineau, O. (2019). Prevalence of hepatitis C infection, screening and associated factors among men who have sex with men attending gay venues: A cross-sectional survey (PREVAGAY), France, 2015. *BMC Infectious Diseases*, *19*(1), 1–14. doi:10.1186/s12879-019-3945-z

Weatherburn, P., Hickson, F., Reid, D., Torres-Rueda, S., & Bourne, A. (2017). Motivations and values associated with combining sex and illicit drugs (chemsex) among gay men in South London: Findings from a qualitative study. *Sexually Transmitted Infections*, *93*(3), 203–206. doi:10.1136/sextrans-2016-052695

Wendel, J. T. (2011). Dynamics of methamphetamine markets in New York city. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, *72*(5–A), 1785. Retrieved from http://ezproxy.lib.cam.ac.uk:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2011-99210-108&site=ehost-live&scope=site

Wharton, J. (2017). *Something for the Weekend: Life in the Chemsex Underworld*. London: Biteback Publishing.