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Chapter 7: Chemsex among men who have sex with men: a social psychological approach

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Chapter overview

This chapter will explore the sexualised use of psychoactive substances within the men who have sex with men (MSM) population, referred to as 'chemsex'. The social and psychological underpinnings of chemsex among MSM and the relationship between this practice and HIV risk are explored. Recent data on the prevalence of chemsex are provided and then case studies of MSM who engage in chemsex are presented to illustrate the risk factors, the lived experience and potential mental and sexual health outcomes associated with the practice. Identity process theory from social psychology is suggested as an approach to understand the relationship between psychological adversity, and engagement in chemsex behaviour. Empirical research exploring issues associated with chemsex is considered through the lens of identity process theory, case study discussions and reflective exercises. A model for supporting MSM who engage in, or who are at risk of engaging in, chemsex is outlined and thoughts given to how healthcare practitioners can offer interdisciplinary support in partnership with community services.

Introduction

In recent years, ‘chemsex’, the use of psychoactive drugs in sexualised settings, has emerged as an important public health concern among gay, bisexual and other men who have sex with men (MSM).¹ The practice was first observed in major cities in Western Europe and North America but is now increasing globally. It is acknowledged that drug use in sexualised settings exists in heterosexual populations, but the term ‘chemsex’ is most often used to refer to this practice in MSM specifically. There are several factors that make chemsex among MSM a relatively distinctive phenomenon. First, drug use in sexualised settings is more common in MSM than in heterosexual men and women (e.g. Latini et al., 2019; Lawn, Aldridge, Xia & Winstock, 2019). Second, chemsex involves the use of specific psychoactive drugs, which differ from those commonly used by heterosexuals who engage in drug use in sexualised settings (Macfarlane, 2016). Third, the prevalence of condomless sex appears to be particularly associated with chemsex among MSM and with the specific drugs commonly used in chemsex settings, but this link between condomless sex and drug use is not as strong in heterosexuals (Kenyon, Wouters, Platteau, Buyze & Florence, 2018).

Chemsex commonly involves the use of mephedrone, crystal methamphetamine, γ -hydroxybutyrate (GHB), γ -butyrolactone (GBL), and crystallised methamphetamine, which are intended to facilitate and enhance sexual encounters – often in group settings – that can last for hours or days and with multiple partners. Physiologically, the drugs have varying effects on the individual – while mephedrone raises heart rate and blood pressure resulting in increased sexual arousal, GHB and GBL function as potent psychological disinhibitors.

These drugs are often used in combination with others, including alcohol, and in addition to

¹ It is acknowledged that a wide range of terms are used to describe men who have sex with men, such as ‘gay’, ‘bisexual’, ‘queer’ and others. In this chapter, the term ‘men who have sex with men’ is used.

physical harms, the resulting states of disinhibition and altered consciousness can lead to a range of unwanted, often traumatic outcomes (Maxwell, Shahmanesh & Gafos, 2019; Morris, 2019) However, it is important to acknowledge that not all chemsex is problematic. Some MSM engage in the practice safely and there is wide variance in approaches to participation, with some subsections of the community advocating harm reduction and supporting each other to remain safe (Bourne et al 2015)

The prevalence of chemsex

There has been significant media attention to chemsex, which has led to the public perception that the practice is very prevalent in MSM. There is growing empirical research into the prevalence of chemsex among MSM in a number of countries. While initially observed in major Western cities, such as London and New York, chemsex is now being reported globally (e.g. Lea et al., 2019; Lim et al., 2018; Tan et al., 2018). It must be stated that the available empirical evidence suggests that chemsex is practiced among a minority of MSM. It is, however, difficult to ascertain the precise prevalence of chemsex in MSM communities because many empirical studies have used convenience, rather than representative, samples. As well as sampling bias in some of the studies, there is variation in the ways in which chemsex is measured – some studies ask MSM about engagement in chemsex but some individuals do not necessarily categorise their drug use in sexualised settings as ‘chemsex’. However, there have been several prevalence studies since 2014, which provide some insight into how chemsex trends appear to be changing over time.

In their re-analysis of data from the European Men Who Have Sex With Men Survey 2013, Bourne et al. (2014) found that a fifth of the 1142 gay male survey respondents living in

Lambeth, Southwark and Lewisham reported having engaged in chemsex in the last 5 years and that a tenth had done so in the last 4 weeks. The MSM Internet Survey Ireland 2015 revealed that 36% of respondents had used recreational drugs and that 7% had used drugs associated with chemsex (Barrett et al., 2019). The authors found that MSM living with HIV were more likely to use drugs associated with chemsex than those who are HIV-negative. In a retrospective case notes review study in two London sexual health clinics, Hegazi et al. (2017) found that 59 per cent of the MSM who used the clinic in the latter half of 2014 reported chemsex. Chemsex users were more likely to be HIV-positive than non-users. Crucially, the prevalence of chemsex appears to be higher in MSM living with HIV. In a study of HIV patients recruited from 30 UK HIV clinics in 2014 (Pufall et al., 2016), it was found that 29 per cent of sexually active MSM had engaged in chemsex and that 10 per cent had engaged in 'slamsex' (injected drug use) in the previous year.

Self-report survey data from 1484 HIV-negative or undiagnosed MSM recruited from 20 sexual health clinics in the UK demonstrated a 21.8 per cent prevalence of chemsex in the last 3 months (Sewell et al., 2017). An analysis of baseline data from the PROUD study revealed that 44 per cent of the 525 study participants reported having engaged in chemsex in the last 3 months (Dolling et al., 2016). However, it should be noted that eligibility criteria for the PROUD study was HIV risk behaviour and that this itself is often correlated with chemsex. In another retrospective case note review study, Pakianathan et al. (2018) found that 16.5% of all gay men attending two London sexual health clinics during a 12-month period reported engaging in chemsex in the past.

There is variation in the reported prevalence of chemsex in MSM but a significant minority

of MSM appear to engage in the practice, and it appears to be more prevalent in MSM living with HIV. This in turn suggests that there is a high risk of onward HIV transmission in chemsex settings.

Reflective point

Was chemsex something you had heard of or come across in your practice?

What is your response when considering this practice? How do you think this is this influenced by aspects of your own identity (e.g. gender, sexuality...) and the dominant values/norms in your particular social world?

Contextualising chemsex in people's lives

In this section, two case studies of MSM involved in the chemsex scene are presented – those of James and Juan. The case studies are drawn from previous empirical research conducted by the author and some details have been changed to protect the identities of the individuals concerned.

Case study 1: James

James is a 33-year-old gay man from Leicester. He came out as gay at the age of 18 just before starting university in London. His relationship with his parents and siblings was fraught with difficulties, as he perceived them to be unsupportive of him when he came out as gay. James had always felt dissatisfied with his body and had low self-esteem – he often felt unattractive to other men. He moved to London where he found a job and decided to move in with some gay friends. In contrast to his hometown which had no discernible gay community,

he was pleased to be living in London. All of his friends were in open relationships and most of them actually ridiculed him for being ‘too straight’ in his preference for monogamy. James met his boyfriend, Jack, a year ago. Despite being very fond of Jack, he never felt very comfortable around him due to his long-standing body image and self-esteem issues. He felt insecure and unattractive. This led him to acquiesce to all of Jack’s demands, including that they ‘open’ their relationship to others and engage in chemsex. They now use Grindr² to find other men for casual sex and regularly attend gay sex parties and gay saunas where they always use ‘chems’³ during sex with other people. Sometimes he and Jack do not use condoms when they use chems. Although he does not enjoy it much, James feels compelled to join in. Jack has told him that sober sex is boring. Yet, one advantage that James perceives is that the chems allow him to escape his feelings of insecurity about his body image and, at least for a short while, he feels euphoric. James is unhappy about his current situation and wishes to stop using chems. He is feeling useless and depressed and thinks he might end up losing Jack and his friends if he does give up chemsex.

Reflective point

Why does James keep returning to chemsex, even though he is unhappy with his situation?

How might this inform the support you offer James in your clinical practice?

Case study 2: Juan

Juan is a 33-year-old gay man from Spain. He was diagnosed with HIV in his hometown in 2014 and was shocked at his diagnosis. The gay men’s health charity referred Juan to the local hospital. Although his CD4 count was still relatively high, Juan wanted to begin antiretroviral therapy immediately. Still shocked at his diagnosis, Juan viewed his medication

² Grindr is a geospatial social networking mobile application for MSM.

³ ‘Chems’ are psychoactive substances that are used in sexualised settings.

as an unfortunate daily reminder of his HIV infection. Moreover, days after initiating treatment, Juan began to experience negative physical side effects. Juan raised his concerns with his doctor who he experienced as dismissive. The doctor appeared to be suggesting that this is what life with HIV is like and that Juan should simply get used to it. He believed his doctor was discriminating against him because he was gay and HIV-positive. Juan also had a difficult relationship with his parents. He had never felt able to tell them about the sexual abuse he had faced as a child, and he also felt unable to disclose his HIV status to his family. In fact, given his strict religious upbringing, he also felt unable to come out as gay. It felt as if he was hiding a lot from his family. He moved to London but felt lonely. He disengaged from HIV care because he still felt distrustful of medical professionals. As Juan's mental health has begun to deteriorate, he is missing doses of his medication, which has increased the risk of drug resistance and of onward HIV transmission to his sexual partners. To deal with his feelings of loneliness, Juan is meeting sexual partners online and in gay bars. After facing rejection from potential sexual partners to whom he has disclosed his HIV status, he feels more ashamed and distressed about being HIV-positive. He has started to attend chemsex parties in London because nobody asks him his status there, allowing him to forget about HIV and to experience a sense of connection and intimacy with other men. Juan now has a detectable viral load but is not consistently using condoms with sexual partners at chemsex parties.

Reflective point

How might Juan's cultural background influence his perception of identity and experience?

How might you explore this with him?

As a clinician, what are the main concerns that jump out to you? What kind of thoughts and emotions accompany them and how do you think these responses would influence your clinical practice?

James and Juan have faced, and continue to face, social and psychological stressors, which undermine their psychological wellbeing. It seems that chemsex could be understood partly as a means of coping with these stressors, although both men also acknowledge the adverse impact that the practice is having on their lives. In these case studies, the psychological dimension of chemsex is clearly observable – James feels pressured into the practice due to social norms but also views chemsex as a means of deflecting his negative body image and low self-esteem, while Juan uses chemsex as a form of escapism from the stigma associated with his HIV diagnosis and the rejection he habitually faces on the basis of this. These case studies are intended to illustrate the range of social psychological factors that potentially underpin engagement in chemsex.

In the remainder of this chapter, aspects of these case studies are invoked in order to outline how clinicians can intervene to limit its adverse effects for psychological wellbeing among MSM who engage in the practice. In some cases, this work would be carried out in a psychological therapy context, although awareness of the complexity of the issues can assist all healthcare practitioners in the delivery of a considered, person-centred approach.

Identity process theory

The two case studies illustrate, there are a range of social and psychological stressors faced by many gay men, such as homophobia, parental rejection, HIV stigma, and certain coercive social norms in different subcultures of the gay scene. These events and stressors contribute to the social context in which gay men make sense of who they are. Identity process theory (Jaspal & Breakwell, 2014) from social psychology provides an integrative model of how people construct their identities, what can plausibly ‘threaten’ their identities, and how they subsequently cope with these threats. The theory posits that individuals construct their identity by engaging in two social psychological processes: assimilation-accommodation and evaluation.

- **Assimilation-accommodation** refers to the absorption of new information, such as new identity characteristics or social representations (values, beliefs, practices shared amongst specific group/communities) into identity and the creation of space for it within the identity structure. For instance, an HIV diagnosis must be absorbed into existing information about the self, namely that one is HIV-positive (assimilation). Given the stigma associated with this new identity element, individuals may need to make adjustments to the existing content of identity, for example their relationships with their family members, from whom they may wish to conceal this identity element (accommodation).
- **Evaluation** refers to the process of attributing meaning and value to the components of identity. For example, a gay man diagnosed with HIV may initially attach negative meaning to his infection, viewing this as a deadly virus, but subsequently come to view it as a positive turning-point in his life. This demonstrates how the meanings and values appended to one’s HIV status can change over time.

Reflective point

Think about an event or situation in your life that led you to assimilate and accommodate a new identity element. How did this make you feel and why?

Clearly, social representations will in part determine which identity elements are assimilated and accommodated and how they are evaluated. Some identity elements, such as being gay or HIV-positive, are stigmatised in some social contexts and there may be difficulties in assimilating and accommodating them due to their negative evaluation. The two identity processes do not function randomly, but rather they are guided by various motivational principles, which are outlined below. These principles essentially specify the desirable end-states for identity:

- **Self-esteem** refers to personal and social worth.
- **Self-efficacy** can be defined as the belief in one's competence and control.
- **Distinctiveness** refers to feelings of uniqueness and differentiation from others.
- **Continuity** is essentially the psychological thread between past, present and future.
- **Coherence** refers to the perception that relevant aspects of identity are coherent and compatible.

It could be speculated that James' dissatisfaction with his body is causing him to experience *low self-esteem* and that his inability to leave the chemsex scene might challenge his perception of *self-efficacy*, in that he lacks a sense of competence and control. Similarly, as an unexpected, undesirable life event, Juan's diagnosis of HIV could lead him to experience *distinctiveness* in an undesirable way. It could also plausibly undermine the *continuity* principle of identity as this may have changed how he views himself, perhaps influenced by how he imagines others will now view him. This, in turn, may impact a sense of *coherence*,

particularly if aspects of the self relating to HIV are kept hidden or perhaps cause internalised stigma (please see chapter 8)

More generally, the multiple social and psychological stressors that MSM tend to face, such as homophobia, stigma, rejection, and body image issues, can challenge all or some of the identity principles (Jaspal, 2019).

Reflective point

Think about a situation or event that compromised your own sense of self-esteem, continuity, distinctiveness and so on. How did this make you feel?

How might this apply to someone who participates in chemsex? Try to consider the identity principles when thinking about this.

When the identity principles are compromised, for instance by changes in a person's social context, identity is said to be threatened. Identity threat is generally aversive for psychological wellbeing. However, the degree to which wellbeing is compromised is determined by the nature of the threat, the number of principles curtailed by the threat, and a person's ability to cope effectively. For instance, it is easy to see how an HIV diagnosis could threaten several identity principles simultaneously – self-esteem, self-efficacy and continuity – meaning it can have a detrimental impact on psychological wellbeing (Daramilas & Jaspal, 2016). Furthermore, personality traits, such as optimism and resilience, and access to high-quality social support are likely to reduce the impact of an adverse event (e.g. an HIV diagnosis, relationship breakdown) on the identity structure, leading to a decreased risk of identity threat (Please see 4 and 6).

Identity process theory posits that people attempt to cope in response to identity threat and describes coping strategies at three distinct levels of human interdependence: *intrapsychic*, *interpersonal* and *intergroup*.

- **Intrapsychic** refers to internal psychological processes (thoughts and associated feelings) and, thus, intrapsychic coping strategies function at a psychological level. Some can be regarded as deflection strategies in that they enable the individual to deny or think about the threat in a different way. For instance, an individual diagnosed with HIV may initially deny that they have the infection and disengage from HIV care, as Juan has. However, this can then lead to further health risks. Conversely, there are acceptance strategies that might help an individual change the way they respond to the threat – in a manner that may help facilitate behaviours that are associated with better outcomes. For instance, some individuals respond to their HIV diagnosis with acceptance by initiating medication, engaging with other people living with HIV and advocating for the rights and wellbeing of people living with the condition.
- **Interpersonal** strategies aim to change the nature of relationships with others. Some of these can have unwanted consequences and therefore may be considered ‘unhelpful’ in the longer term. For instance, the threatened individual may isolate himself from others or feign membership of a group or network of which they are not really a member, in order to avoid exposure to stigma. For instance, Juan has isolated himself from others to avoid stigma and, thus, threats to self-esteem. James does not actually wish to engage in chemsex but does so in order to derive a sense of belonging in the gay community and to maintain the affection of his boyfriend. An example of a proactive interpersonal strategy might be for a person to share their HIV status with trusted others. This can help access support, which

both of the James and Juan appear to lack. However, it is important to remain mindful that stigma and discrimination are a reality for people living with HIV and that the decision to tell others must be based on a person's knowledge and experience of their own particular social context.

- **Intergroup** strategies aim to change the nature of our relationships with groups. Individuals may join groups of like-minded others who share their predicament in order to derive social support. They may create a new social group to derive support or a pressure group to influence social representations. For instance, some MSM diagnosed with HIV report benefits of joining a support group in order to manage the psychosocial challenges of their diagnosis. However, again, it is important to be aware that there is not a 'one size fits all' approach as some people may have difficult experiences if attempting to join a group does not fit with their needs.

Reflective point

How do you tend to cope with threatening events and situations? What do you do? How do you relate to others in your life at difficult times?

Do you think changing how you tend to cope would be easy?

Think about your own clinical work. How might you work with service users to understand what is, and what is not, working for them?

Jaspal (2018) has provided an extensive overview of the coping strategies that may be used by MSM who face identity threat. In that overview, it is argued that both personality traits and the availability of coping strategies in any given social context will determine the

threatened individual's choice of coping strategy. Social representations also play a crucial role because they influence the availability and the individual's evaluation of particular coping strategies. Identity threat is by no means unusual but, given the minority status and stigma experienced by MSM, threat may be more persistent and therefore be detrimental to psychological and emotional wellbeing in this population. All of the available evidence shows that effective coping is central to psychological wellbeing. However, it must always be remembered that what makes a coping strategy effective can vary for different individuals and can be specific to context. Additionally, although some coping strategies may be considered generally 'ineffective' they may be the only way that individual can find a way to cope in that particular moment. Coping strategies are based on complex factors that include the current situation and environment, wider social structures and an individual's personal history (please see chapter 6).

As highlighted in the remainder of this chapter, engagement in chemsex commonly constitutes a strategy for coping with threats to identity but it may also be a practice that itself threatens identity. Chemsex may provide temporary respite from the adverse psychological effects of events and experiences that MSM face but for many, in the long term, it is unlikely to be a fruitful and productive coping strategy in that it can lead to considerable harms. Crucially, engagement in chemsex appears to be associated with heightened sexual risk, as outlined next.

Chemsex and sexual risk

Empirical research into issues associated with chemsex is now emerging and is beginning to provide insight into the factors – social, psychological, economic and others – that appear to

be related to both the practice of chemsex and those individuals who engage in it. This is gradually enabling us to understand the practice and, crucially, to predict who might be more likely to participate. This in turn allows policy-makers to develop more effective interventions for preventing unhelpful chemsex engagement and for providing treatment and support to those who require it.

A consistent finding in most studies is that MSM who engage in chemsex are at increased risk of HIV infection and that MSM living with HIV are more likely to report engagement in chemsex than those who are HIV-negative or undiagnosed (e.g. Maxwell, Shahmanesh & Gafos, 2019). In their cross-sectional analysis of clinic service data, Stevens, Moncrieff and Gafos (2019) found that MSM who reported chemsex were more likely to be HIV-positive and to have had more than 6 sexual partners in the last 90 days. Coupled with the empirical observation that condomless sex is prevalent, these data suggest that the risk of HIV transmission could be high. The available evidence shows that condomless sex is prevalent in chemsex settings (Glynn et al., 2018), and that MSM who report condomless chemsex are more likely to be HIV-positive (Kenyon et al., 2018). Data collected from a 2014 survey of people attending HIV clinics in England and Wales showed that 3 in 10 sexually active MSM living with HIV engaged in chemsex in the past 12 months (Pufall et al., 2018).

There is also evidence that MSM who engage in chemsex are more likely to test positive for bacterial STIs – in one study, the STI positivity rate was 44% (Evers, van Liere, Hoebe & Dukers-Muijrers, 2019). In that study, it was also found that those MSM who reported using three or more chemsex drugs exhibited a higher STI prevalence than those who used fewer chemsex drugs. Kohli, Hickson, Free, Reid and Weatherburn (2019) found that MSM who reported using GHB or GBL in the last 12 months were more than twice as likely as other

MSM to be diagnosed with gonorrhoea and, as in Evers et al.'s (2019) study, those reporting use of all three chemsex drugs had the highest odds of infection.

The elevated HIV and STI prevalence among MSM who engage in chemsex can be attributed at least in part to the empirical observation that the practice of chemsex is associated with various sexual risk-taking behaviours. For instance, in their retrospective case-notes review study of 124 MSM attending sexual health clinics in the latter part of 2014, Hegazi et al. (2017) found that 59% reported engagement in chemsex and that this practice was positively associated with transactional sex, group sex, fisting, sharing sex toys and HIV/ hepatitis C serodiscordant sexual relations. Studies also show that chemsex users are more likely to engage in other high risk sexual practices, such as fisting or having sex in exchange for money (e.g. Frankis, Flowers, McDaid and Bourne, 2018).

Reflective point

On considering James' and Juan's circumstances, and the identity principles we have explored (self-esteem, self-efficacy, distinctiveness, continuity and coherence), why do you think MSM who feel vulnerable are more likely to engage in sexual risk taking behaviour?

In terms of sexual risk taking, is it the sole responsibility of the person living with HIV to ensure protection is used or should everyone be responsible for their own safety?

If we place all responsibility for safe sex choices on people living with HIV, what impact do you think this has on societal attitudes towards people living with HIV?

Despite the association of chemsex with sexual risk, there is emerging evidence that chemsex users are informed about HIV risk and, thus, in a position to minimise this risk through other preventative routes. For instance, in a study of MSM in Hong Kong (Kwan & Lee, 2019), it was found that MSM who are currently using, or have recently used, drugs common in chemsex are more likely to have heard of pre-exposure prophylaxis (PrEP), which is an effective method of preventing HIV. Furthermore, a correlation between chemsex and correct use of PrEP has been observed in MSM, which suggests that this could be a viable HIV prevention option – especially in view of the fact that condomless sex is prevalent in chemsex settings (Roux et al., 2018).

Given the involvement of psychoactive drugs, it is likely that chemsex users feel disinhibited in relation to sexual exploration, which can include condomless sex and other sexual risk behaviours. Many chemsex users are already living with HIV and, thus, may be less concerned about bacterial STIs. Yet, there appears to be an opportunity for intervening to decrease the risk of HIV infection through the use of PrEP.

Reflective point

Why do some people take risks despite awareness of the hazard?

Think about a time you took a risk, knowing there could be negative consequences. What do you think made you do it?

Why engage in chemsex? Social and psychological drivers

There has been relatively little empirical research into the social psychological underpinnings of chemsex. However, qualitative research has provided some important insights. Smith and

Tasker (2018) conducted a qualitative interview study of six gay men involved in the chemsex scene. Using a life course perspective, they found that engagement in chemsex was related to the development of gay identity and involvement in the gay community – chemsex was perceived to facilitate a sense of belonging. This fits with James report of the pressure from his friends to engage in chemsex, given its consensual acceptance in his friendship circle. In their study of attitudes towards drug use among 2,112 MSM in Australia, Lea et al. (2019) found that 61% reported drug use in the last 6 months and that gay men who were most socially engaged with other gay men were more likely to endorse drug use for social and sexual encounters. They attribute drug use in gay men at least in part to social norms within gay social networks, as illustrated by James’ case. Additionally, geospatial gay social networking applications, such as Grindr, can facilitate access to chemsex in that population (Tan et al., 2018).

It can be about the sex, the confidence and the connection

In exploring the possible drivers of chemsex, it has been suggested that multiple levels of stigma, the stress associated with belonging to a minority group and coping strategies that could be considered unhelpful may be contributing factors (Pollard, Nadarzynski and Llewellyn, 2017). In their qualitative research with chemsex users, Weatherburn et al. (2017) describe two distinct sets of motivations underlying the practice. On the one hand, chemsex can enable individuals to have the type of sex that they desire by increasing their sexual stamina and confidence and by decreasing inhibitions. On the other hand, chemsex drugs can enhance the quality of the sexual encounter on a relational level by increasing attraction and facilitating greater interpersonal rapport (see also Bourne et al., 2014).

A systematic review of the literature on chemsex behaviours in MSM indicated that men tend to engage in chemsex because they believe that this will enhance their sexual encounters and increase the pleasurability of sex. Chemsex users tend to report better sexual experiences than when sober, given that some of the substances utilised reduce inhibitions and increase sexual pleasure (Maxwell, Shahmanesh & Gafos, 2019). In their interview study of MSM in Malaysia, Lim, Akbar, Wickersham, Kamarulzaman and Altice (2018) found that the desire to increase sexual pleasure and to engage in sexual exploration underpinned use of metamphetamine in sexualised settings.

In addition to noting the perceived pleasurability of chemsex in terms of sexual enhancement and prolongation, MSM have described a fear of rejection from potential sexual partners, which decreased when they engaged in chemsex. Moreover, it appeared that chemsex constituted a strategy for coping with societal rejection on the basis of sexual orientation (Lim et al., 2018). Engagement in chemsex can decrease the presence of negative affect associated with stressors, such as internalised homophobia and HIV stigma and, thus, protect feelings of self-esteem (Bourne et al., 2014). Some MSM who engage in chemsex do so in part because they wish to increase feelings of intimacy with partners but feel unable to do so in sober settings (Graf, Dichtl, Deimel, Sander & Stöver, 2018). James indicated how his low body image and self-esteem constituted a barrier to acquiring feelings of intimacy with his partner. Juan anticipated stigma from sexual partners, and perhaps thought of this as an obstacle to finding a sense of intimacy in potential sexual and/or romantic connections. The use of drugs can reduce these concerns via disinhibition.

The positive affect experienced in chemsex sessions can lead to a form of psychological dependence as some people may become immersed in this environment, which they find

pleasurable and as meeting their sexual and social needs, and, thus, lose the ability to enjoy sex outside of it. On considering why MSM keep revisiting chemsex, despite the potential harms, the intense experience of both connection and sexual pleasure as powerful reinforcers must be recognised. Indeed, Bourne et al. (2014) have shown that chemsex users come to find ‘sober’ sex unsatisfactory, leading to an inability to engage in sex without the use of psychoactive drugs. Thus, chemsex can constitute a strategy for enhancing identity and wellbeing.

Psychological issues: What comes first - the adversity or the chemsex?

Reflective point

What are the main sources of psychological adversity among MSM?

Is chemsex the cause of, or the response to, psychological adversity?

The predisposing factors

There are indications in the literature that chemsex is associated with psychological adversity that existed before chemsex participation. In their online survey of 1648 MSM, Hibbert, Brett, Porcellato and Hope (2019) found that 41% of respondents reported recent sexualised drug use, and that the practice was associated with lower satisfaction with life but greater sexual satisfaction. It could be hypothesised that MSM who are dissatisfied with their lives are more likely to engage in chemsex, which they then perceive to provide greater sexual satisfaction. Moreover, the authors of that study found that low sexual self-efficacy was a significant predictor of engaging in chemsex, suggesting that decreasing self-control may lead to the practice.

The high prevalence of chemsex in MSM living with HIV has been noted earlier in this chapter. Pakianathan et al. (2018) found that MSM reporting chemsex behaviour were more likely to report recent HIV infection. This may mean that chemsex constitutes a behavioural response (possibly as a coping strategy) to the social psychological stressors associated with HIV infection. Indeed, Juan became immersed in the chemsex scene soon after his HIV diagnosis to attempt to escape the stressors associated with this psychologically adverse event in his life. In their study of HIV-positive gay men, Pufall et al. (2018) found that the practice was associated inter alia with diagnosed depression/ anxiety. It appears that, for some MSM, chemsex may constitute a form of escapism in that it enables those facing social and psychological stressors, such as a recent HIV infection, to disconnect from their reality and to seek respite in a context in which these social psychological stressors cease to threaten identity. For instance, MSM may derive confidence about their physical appearance or sexual performance in this context (as highlighted in James' case) and those living with HIV report that HIV status a non-issue, thereby ceasing to constitute a source of stigma or a basis for sexual rejection (as indicated in Juan's case).

When the party is over: The unwanted impact

In their interview study, Smith and Tasker (2018) found that, although chemsex can initially be construed as exciting and conducive to self-exploration, it can come to represent an isolating and distressing phenomenon in the people's lives over which they have little control. This reiterates the notion that it is challenging for self-efficacy. The negative effects of chemsex appear to be wide-ranging. In a study of 510 MSM in Dublin (Glynn et al., 2018), it was found that one in four MSM reported that chemsex was having an adverse impact on their lives and almost a third of respondents reported a desire for help or advice in relation to chemsex. Furthermore, Hegazi and colleagues (2017) found that 42% of the chemsex users

who participated in their study perceived the practice to have had an adverse impact on their physical or mental health or their careers. There is a need to understand the identity principles that might be challenged as a result of engaging in chemsex. This should constitute the focus of future research.

Chemsex and identity threat: A complicated, bidirectional relationship

As much of the existing research looks is correlational, and therefore can only document associations, it is difficult to draw conclusions about what comes first - does chemsex cause MSM to experience identity threat or is it a response to identity threat?

In view of the evidence presented, it is likely that chemsex is both the cause and product of identity threat. There is a general (although not rigid) pattern of those who have a more significant history of psychological adversity being more likely to become involved in the practice, which is likely to be due to longstanding coping tendencies. The unwanted consequences of chemsex can then have a detrimental impact on psychological and emotional states, perhaps more so for those with a more considerable history of mental health issues. There is mounting evidence regarding the exposure to trauma for those who participate in chemsex, and this is likely to build on existing adverse experiences. This is perhaps particularly pertinent for people living with HIV as there are high levels of trauma in this population (Applebaum, Andres Bedoya, Hendriksen, Wilkinson, Safren et al., 2015). Negative outcomes and harms such as experiencing or witnessing disturbing events, sexual assault or criminal activity outside of someone's normal moral compass can lead to feelings of shame, fear and a general sense of being out of control (Maxwell et al., 2019; Morris, 2019). These experiences will no doubt act as exacerbating and re-traumatising factors (see chapter 6).

Attitudes towards chemsex vary among MSM. For James, chemsex is the cause of psychological distress and he feels compelled to engage in the practice due to pressure from his friends and partner while, for Juan, it is clearly a strategy for coping with the stigma and rejection he faces on the basis of his positive serostatus. Some MSM view chemsex as harmless and engage in the practice transiently, while others clearly experience physical and psychological health problems as a result of it. In their qualitative interview study with 10 gay men who were experiencing difficulties with chemsex and wished to cease the practice, van Hout, Crowley, O’Dea and Clarke (2019) found that chemsex constituted a maladaptive form of escapism for participants who, nonetheless, felt compulsively attached to the practice and, thus, unable to leave the chemsex scene. This gives credence to the complexity of the phenomenon. The remainder of the chapter focuses on potential pathways to supporting MSM struggling with chemsex.

So how can we help promote wellbeing?

In this chapter, various social and psychological stressors and their potential impact for identity processes have been described. Effective coping is key to both psychological and physical wellbeing. Drawing on much of this empirical evidence, Jaspal (2018) has proposed a multi-level model that can enable practitioners to predict, and to intervene in order to mitigate, poor sexual health (and other health and mental health) outcomes associated with chemsex (see figure 1).

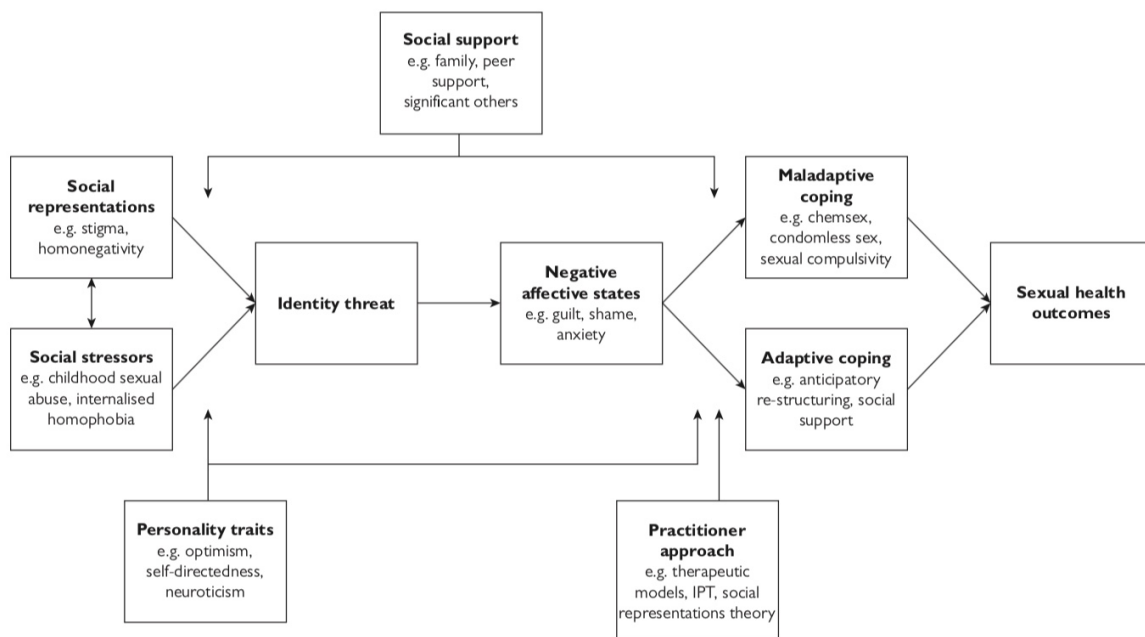


Figure 1: A framework for understanding self-identity, wellbeing and sexual health among MSM (from Jaspal, 2018)

Healthcare practitioners can use this model to help make sense of why some MSM participate in chemsex, and why some continue to do so even when engagement in it is causing considerable harm. The model is applied in light of what the evidence base tells us about the kind of issues and events that many MSM experience.

A vulnerable starting point

Unfortunately, human beings all experience what can be loosely described as ‘adverse events’. These are essentially social representations, events and situations that can cause psychological stress. MSM have been, and continue to be, exposed to negative social representations of their sexual identity. On the one hand, this is as a result of their socialisation in heteronormative contexts, whereby heterosexuality is considered ‘normal’ - the implicit message being the homosexuality is ‘abnormal’ - thereby creating the conditions for a negative self view. On the other hand, a more explicit negative message comes from the

experience of overt homophobia (Jaspal, 2019). Some come to internalise the homophobia that they encounter (create an internal negative view of the self, based on the messages they have received), leading to self-stigma. In addition to these negative social representations of their identity, there is a higher prevalence of particular social stressors among gay men, such as childhood sexual abuse, homophobia and increased HIV risk. Some of these stressors are evident in the two case studies presented at the beginning of this chapter.

The complex relationship between harm and coping

Both these negative social representations and the adverse stressors have the potential (when adequate support was not available) to undermine the principles of self-esteem, continuity, self-efficacy and so on, leading to identity threat. When thinking about chemsex, for some MSM, engagement in itself may be construed as an adverse event because of the stigma associated with it. Chemsex may also give rise to other adverse/traumatic events and situations, which cause threats to identity. For instance, some chemsex users report difficulties in maintaining friendships, relationships and their employment, all of which can challenge their sense of continuity, self-efficacy and self-esteem (e.g. Bourne et al., 2014). However, not everyone exposed to negative social representations or social stressors will necessarily experience identity threat. The relationship between the adverse event and identity threat is likely to be mediated by personal history and personality traits, on the one hand, and by the availability of social support, on the other hand. For instance, an individual with high levels of neuroticism might be more prone to identity threat than an individual who has high levels of optimism. However, it is important to acknowledge that personality traits can shift depending on context. Moreover, MSM who possess a high-quality social support network are able to draw on that network in order to minimise the negative psychological consequences of the adverse event, thereby initiating effective coping before its onset.

Understanding distress responses

If the adverse event does threaten identity, the individual may experience negative psychological and emotional states, such as guilt, shame, or anxiety. As a rough rule of thumb, negative psychological and emotional responses are likely to be accentuated if the adverse event challenges more than one principle. Indeed, as demonstrated in this chapter, an HIV diagnosis can pose ‘hyper-threats’ to identity because it simultaneously undermines various, if not all of, the identity principles which underpin how a person makes sense of and values themselves. Furthermore, people tend to favour some identity principles over others and this is related partly to what they value generally. An adverse event that threatens a favoured identity principle, understandably, may induce a more marked distress response. For instance, an individual who values conservation (such as tradition and conformity) may place greater importance on the continuity principle of identity than somebody who values openness to change (such as self-directedness and stimulation) who may, conversely, be more concerned about maintaining a sense of distinctiveness.

The impact of coping strategies

As a theory of identity threat and coping, identity process theory predicts that the threatened individual reacts to the threat by deploying coping strategies. Coping can be thought of as occurring at three distinct levels: intrapsychic, interpersonal and intergroup. The ways of coping can also be meaningfully differentiated into adaptive and maladaptive strategies, based on the outcomes of each approach. Examples of adaptive coping include thinking about the situation differently and accessing social support that allows the person to feel understood and to make sense of what has happened. Examples of maladaptive coping can include denial, sexual compulsivity and indeed chemsex. MSM may engage in chemsex in order to

cope with social and psychological stressors, such as rejection from sexual partners on the basis of HIV status, poor body image, low self-esteem and so on. Therefore, it is recognised that, although some coping responses can have unwanted outcomes, the initial intent is one of self-protection.

Reflective point

Some people can unintentionally use coping strategies that could be considered maladaptive in the longer term. How might you support someone to think about the impact of the strategies used, and to explore alternative options?

What would be important about your approach, given that the person may be experiencing psychological issues, such as shame, low self-esteem etc?

How can we help reduce the risk of harm?

One way to address problematic chemsex participation is to consider how clinicians may help service users think about different ways of coping. There are several factors that will influence coping and the (sometimes unconscious) choice of strategy, which include personality/personal history, the availability of social support and the healthcare practitioner:

- First, personality traits will predispose an individual to cope in particular ways. For instance, the individual who values the ‘status quo’ (conservation) may be less inclined to elect a coping strategy such as anticipatory re-structuring (e.g. changing their view of a situation) due to their desire to maintain a sense of continuity between past, present and future. They may not wish to entertain the idea of change because they strive to hold onto the past. On the other hand, the individual with a personality

profile that favours sensation-seeking and hedonism may react to threat by engaging in risk behaviours, such as chemsex.

- Second, the availability of social support is a significant determinant of coping strategy. Put simply, only those who actually possess a social support network can make use of it. The socially supported person is more likely to engage in potentially helpful strategies, such as discussing sensitive issues (which may include HIV diagnosis) and to make use of the support offered by others. However, support is a complex arena in itself, and the nature and quality of the support are likely to influence its helpfulness. A person who lacks a social support network does not have the option of making sense of their problems. Being unable to gather alternative perspectives, they will have only their own, which may be a negative framework if they have a history of difficult experiences (Refer to Chapter 4: HIV Diagnosis: The impact on mental health and wellbeing and Chapter :6 Attachment and trauma) This can then exacerbate any psychological/emotional issues. MSM who face social and psychological adversity may then benefit from accessing social support to minimise the risk of selecting chemsex as a coping strategy. Neither James nor Juan appear to have access to social support, which seems to have led to them to engage in chemsex to fill the gap relating to unmet needs.
- Third, practitioners working with MSM at risk of poor sexual health outcomes have the potential to help service users explore alternative coping strategies. Tenets of social psychological theory, such as identity process theory, can enable the practitioner to gauge their patients' awareness, understanding and potential behaviour in any given context. This can also allow the practitioner to work alongside service

users to think about, and perhaps predict, patterns of behaviour, allowing them to identify and alter unhelpful patterns of coping. For instance, a newly diagnosed gay man who has not spoken about his sexual identity to others due to anticipated homophobia is also likely to conceal his HIV status from others, precluding access to social support. The practitioner may intervene by introducing other options regarding social support networks, for example, LGBT and/or HIV community support services. In short, the choice of coping strategy plays a fundamental role in sexual health outcomes among MSM facing identity threat.

Important aspects of a healthcare clinician's approach

The discussion above has considered in detail how belonging to one, or several marginalised groups (e.g. MSM, HIV) can have an adverse impact on psychological and emotional wellbeing. As a result of this, MSM can engage in coping strategies that aim to redress the unmet needs that come with this experience. However, this can inadvertently lead to participation in risky activities, such as chemsex, which can lead to further distress and increase feelings of shame. Feelings of shame and low self-esteem may already exist for MSM who have experienced homophobia and have received negative messages relating to their sexuality, which are embedded in heteronormative, or indeed homophobic, societal attitudes. Therefore, the manner in which healthcare clinician's offer support is important if it is to benefit the service user and minimise further distress.

Perhaps most importantly, a non-judgemental approach is essential, to avoid any exacerbation of shame that a person may already be experiencing. Some stories about chemsex can be shocking to healthcare practitioners, as it may be far from anything they have experienced or spoken of in their personal world. However, it is important for practitioners to manage their

responses, as outright expressions of shock may imply negative judgement. For example, the service user may worry that the practitioner perceives them to be ‘abnormal’ or ‘disgusting’. As well as emotional expression/non-verbal communication, the choice of language when exploring the person’s experiences must be sensitive. One example might be that, although we have understood some coping strategies to be ‘maladaptive’ from a theoretical point of view, it would not be helpful to use this language when working with someone. It may insinuate that they are a ‘maladaptive copier’, which may (unintentionally) communicate a message that they are somehow inherently wrong or damaged, thus exacerbating shame. Healthcare workers will therefore need to practice with self-awareness in order to ensure that service user feel able to communicate openly, which is essential for effective healthcare intervention (Please refer to chapter 2, 4,5 and 6).

Delivering care to people participating in chemsex is complex, particularly as we are still learning about what makes an effective healthcare approach. However, in general, it will be helpful to avoid questions or statements that make assumptions or that may appear to come from a critical or blaming stance. Adopting a curious perspective to gather information and responses from the service user, while expressing understanding of their situation, is likely to be validating for the person. A validating experience is then more likely to lead to the development of a trusting healthcare relationship, through which high-quality support can be offered and alternative coping options explored. A collaborative approach with the service user is best placed to increase their sense of self-efficacy as it allows a sense of agency in the process.

Care delivery for chemsex users

Given the level of harms and the rise in chemsex-related deaths, there have been calls for it to become a public healthcare priority (McCall et al., 2015). As a relatively new area of health need, sexual health and addiction services are responding reactively as best they can, although neither, on its own, can be expected to be equipped to manage the complexity of the issue. Researchers in the field are advocating the need for integrated, person-centred and holistic multi/interdisciplinary team approaches, given inter-related nature of sexual, psychological and substance use needs (e.g. Glynn et al., 2018; Pollard et al., 2018; Pufall et al., 2018; Sewell et al., 2018). It seems clear that professionals with expertise that relate to these areas will be better positioned to support chemsex users if they work together, and alongside the person. This will help gain a full understanding of the often mutually exacerbating issues and how they relate to the person in their individual and social context. Establishing relationships between NHS and community services is likely to be essential as partnership working has the potential to meet even broader needs. Overall, there is a requirement for multidimensional approaches that involve mental health screening and support, substance use interventions, goal-focused approaches and conversations around prevention of adverse outcomes and harm minimisation. Additionally, community led projects that include health promotion through creative outlets (e.g. films, theatre, online education projects) have the promise to address the complexities of chemsex on a wider scale (Stardust et al 2018).

Conclusions

In this chapter, it is suggested that, for some MSM, chemsex may constitute an unhelpful strategy for coping with psychological adversity, even though intentions may be rooted in attempts to address unmet needs and self-protection. However, it is acknowledged that many

MSM engage in chemsex transiently and are able to maintain a sense of self-efficacy, enabling them to disengage from the practice when they wish to do so. In the case studies outlined at the beginning of chapter, James and Juan clearly view chemsex as a potential means of enhancing their identity and wellbeing, although they acknowledge the secondary challenges that chemsex can induce in their lives. The empirical research summarised in this chapter supports the hypothesis that chemsex may provide temporary respite from identity threat but that it is likely to result in secondary threats associated with disruption to other aspects of one's life. Moreover, chemsex can result in harm to MSM's mental and sexual health outcomes. It is suggested that practitioners can intervene to help explore alternative coping to chemsex participation among MSM at risk, and to reduce the risk of negative health outcomes in those who do engage in chemsex. Chemsex is a complex practice with physiological, social and indeed psychological dimensions. Not all of these dimensions have been empirically examined. Yet, they must be understood by clinicians and practitioners working with MSM who engage in chemsex. It is hoped that this chapter will stimulate further empirical research into the social psychology of chemsex and enhance both prevention and treatment efforts in this context.

Useful resources

Antidote @London: LGBT Drug and Alcohol Support <http://londonfriend.org.uk/get-support/drugsandalcohol/#.XTMFbcrRbmo>

Chemsex First AIDS: A Community Booklet

<https://www.davidstuart.org/Chemsex%20First%20Aid%20action%20sheet.pdf>

Chemsex Support at 56 Dean St <http://dean.st/chemsex-support/>

Jaspal, R. (2018). Enhancing Sexual Health, Self-Identity and Wellbeing among Men Who Have Sex With Men: A Guide for Practitioners. London: Jessica Kingsley Publishers.

Understanding Chemsex, Terrence Higgins Trust

https://www.steveretsonproject.scot/media/1348/tht_chemsex_guide.pdf

References

Applebaum, A. J., Andres Bedoya, C., Hendriksen, E. S., Wilkinson, J. L., Safren, S. A., & O'Cleirigh, C. (2015). Future directions for interventions targeting PTSD in HIV-infected adults. *Journal of the association of nurses in AIDS care*, 26, 127-138.

Barrett, P., O'Donnell, K., Fitzgerald, M., Schmidt, A.J., Hickson, F., Quinlan, M., Keogh, P., O'Connor, L., McCartney, D. & Igoe, D. (2019). Drug use among men who have sex with men in Ireland: Prevalence and associated factors from a national online survey. *International Journal of Drug Policy*, 64, 5-12.

Bourne, A., Reid, D., Hickson, F., Torres Rueda, S. and Weatherburn, P. (2014) The Chemsex Study: Drug Use in Sexual Settings among Gay & Bisexual Men in Lambeth, Southwark & Lewisham. London: Sigma Research, London School of Hygiene & Tropical Medicine. Available at www.sigmaresearch.org.uk/chemsex Accessed 7 December 2016.

Bourne, A., Reid, D., Hickson, F., Torres-Rueda, S. & Weatherburn, P. (2015) “Chemsex” and harm reduction need among gay men in south London. *International Journal of Drug Policy*, 26(12), 1171-6

Daramilas, C. & Jaspal, R. (2016). HIV diagnosis and identity processes among men who have sex with men (MSM) in London, Athens and New York. *Social Psychological Review*, 18(2), 6-16.

Dolling, D. I., Desai, M., McOwan, A., Gilson, R., Clarke, A., Fisher, M., Schembri, G., Sullivan, A.K., Mackie, N., Reeves, I., Portman, M., Saunders, J., Fox, J., Bayley, J., Brady, M., Bowman, C., Lacey, C.J., Taylor, S., White, D., Antonucci, S., Gafos, M., McCormack, S., Gill, O.N., Dunn, D.T., Nardone, A. & PROUD Study Group.(2016). An analysis of baseline data from the PROUD study: an open-label randomised trial of pre-exposure prophylaxis. *Trials*, 17, 163. doi: 10.1186/s13063-016-1286-4.

Evers, Y.J., Van Liere, G.A.F.S., Hoebe, C.J.P.A. & Dukers-Muijers, N.H.T.M. (2019). Chemsex among men who have sex with men living outside major cities and associations with sexually transmitted infections: A cross-sectional study in the Netherlands. *PLoS ONE* 14(5), e0216732. <https://doi.org/10.1371/journal.pone.0216732>

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), 144-150.

Glynn, R.W., Byrne, N., O'Dea, S., Shanley, A., Codd, M., Keenan, E., Ward, M., Igoe, D. & 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.

Graf, N., Dichtl, A., Deimel, D., Sander, D. & Stöver, H. (2018). Chemsex among men who have sex with men in Germany: motives, consequences and the response of the support system. *Sexual Health*, 15(2), 151-156.

Hegazi, A., Lee, M.J., Whittaker, W., Green, S., Simms, R., Cutts, R., Nagington, M., Nathan, B. & Pakianathan, M.R. (2017). Chemsex and the city: sexualised substance use in gay bisexual and other men who have sex with men attending sexual health clinics. *International Journal of STDs and AIDS*, 28(4), 362-366.

Hibbert, M.P., Brett, C.E., Porcellato, L.A. & Hope, V.D. (2019). Psychosocial and sexual characteristics associated with sexualised drug use and chemsex among men who have sex with men (MSM) in the UK. *Sexually Transmitted Infections*, 95(5), 342-350.

Jaspal, R. (2018). *Enhancing Sexual Health, Self-Identity and Wellbeing among Men Who Have Sex With Men: A Guide for Practitioners*. London: Jessica Kingsley Publishers.

Jaspal, R. (2019). *The Social Psychology of Gay Men*. London: Palgrave.

Jaspal, R. & Breakwell, G.M. (eds.) (2014). *Identity Process Theory: Identity, Social Action and Social Change*. Cambridge: Cambridge University Press.

Kenyon, C., Wouters, K., Platteau, T., Buyze, J. & Florence, E. (2018). Increases in condomless chemsex associated with HIV acquisition in MSM but not heterosexuals attending a HIV testing center in Antwerp, Belgium. *AIDS Research & Therapy*, 15(14). <https://doi.org/10.1186/s12981-018-0201-3>

Kohli, M., Hickson, F., Free, C., Reid, D. & Weatherburn, P. (2019). Cross-sectional analysis of chemsex drug use and gonorrhoea diagnosis among men who have sex with men in the UK. *Sexual Health*. Online First. doi: 10.1071/SH18159.

Kwan, T.H. & Lee, S.S. (2019). Bridging Awareness and Acceptance of Pre-Exposure Prophylaxis Among Men Who Have Sex With Men and the Need for Targeting Chemsex and HIV Testing: Cross-Sectional Survey. *JMIR Public Health Surveillance*, 5(3), e13083. doi: 10.2196/13083.

Latini, A., Dona, M.G., Alei, L., Colafigli, M., Frasca, M., Orsini, D., Giuliani, M., Morrone, A., Cristaudo, A. & Zaccarelli, M. (2019). Recreational drugs and STI diagnoses among patients attending an STI/HIV reference clinic in Rome, Italy. *Sexually Transmitted Infections*. Online First. doi: 10.1136/sextrans-2019-054043.

Lawn, W., Aldridge, A., Xia, R. & Winstock, A.R. (2019). Substance-Linked Sex in Heterosexual, Homosexual, and Bisexual Men and Women: An Online, Cross-Sectional “Global Drug Survey”. *Journal of Sexual Medicine*, 16(5), 721-732.

Lea, T., Hammoud, M., Bourne, A., Maher, L., Jin, F., Haire, B., Bath, N., Grierson, J. & Prestage, G. (2019). Attitudes and Perceived Social Norms toward Drug Use among Gay and Bisexual Men in Australia. *Substance Use & Misuse*, 54(6), 944-954.

Lim, S.H., Akbar, M., Wickersham, J.A., Kamarulzaman, A. & Altice, F.L. (2018). The management of methamphetamine use in sexual settings among men who have sex with men in Malaysia. *International Journal of Drug Policy*, 55, 256-262.

Macfarlane, A. (2016). Sex, drugs and self-control: why chemsex is fast becoming a public health concern. *Journal of Family Planning and Reproductive Health Care*, 42, 291-294.

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.

McCall, H., Adams, N., Mason, D., & Willis, J. (2015). What is chemsex and why does it matter? *British medical journal*, 351:h5790. doi: 10.1136/bmj.h579

Morris, S. (2019). Yes, has no meaning if you can't say no: Consent and crime in the chemsex context. *Drugs and alcohol today*, 19, 23-28.

Pakianathan, M., Whittaker, W., Lee, M.J., Avery, J., Green, S., Nathan, B. & Hegazi, A. (2018). Chemsex and new HIV diagnosis in gay, bisexual and other men who have sex with men attending sexual health clinics. *HIV Medicine*. Online First. doi: 10.1111/hiv.12629.

Pollard, A., Nadarzynski, T. & Llewellyn, C. (2017) O13 'I was struggling to feel intimate, the drugs just helped. Chemsex and HIV-risk among men who have sex with men (MSM) in the uk: Syndemics of stigma, minority-stress, maladaptive coping and risk environments. *Sexually Transmitted Infections*, 93, A5. <http://dx.doi.org/10.1136/sextrans-2017-053232.13>

Pufall, E.L., Kall, M., Shahmanesh, M., Nardone, A., Gilson, R., Delpech, V., Ward, H. & Positive Voices study group. (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.

Roux, P., Fressard, L., Suzan-Monti, M., Chas, J., Sagaon-Teyssier, L., Capitant, C., Meyer, L., Tremblay, C., Rojas-Castro, D., Pialoux, G., Molina, J.M. & Spire, B. (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. *Journal of Acquired Immune Deficiency Syndromes*, 79(2), e69-e75. doi: 10.1097/QAI.0000000000001781.

Sewell, J., Miltz, A., Lampe, F.C., Cambiano, V., Speakman, A., Phillips, A.N., Stuart, D., Gilson, R., Asboe, D., Nwokolo, N., Clarke, A., Collins, S., Hart, G., Elford, J., Rodger, A.J. & the Attitudes to and Understanding of Risk of Acquisition of HIV (AURAH) Study Group. (2017). Poly drug use, chemsex drug use, and associations with sexual risk behaviour in HIV-negative men who have sex with men attending sexual health clinics. *International Journal of Drug Policy*, 43, 33-43.

Smith, V. & Tasker, F. (2018). Gay men's chemsex survival stories. *Sexual Health*, 15(2), 116-122.

Stardust Z, Kolstee J, Joksic S, Gray J, Hannan S (2018) A community- ked harm- reduction to chemsex: case study from Australia’s largest gay city , *Sexual Health*, 15,2, 179-181

Stevens, O., Moncrieff, M. & Gafos, M. (2019). Chemsex-related drug use and its association with health outcomes in men who have sex with men: a cross-sectional analysis of Antidote clinic service data. *Sexually Transmitted Infections*. Online First. doi: 10.1136/sextrans-2019-054040.

Tan, R.K.J., Wong, C.M., Chen, M.I., Chan, Y.Y., Bin Ibrahim, M.A., Lim, O.Z., Chio, M.T., Wong, C.S., Chan, R.K.W., Chua, L.J. & Choong, B.C.H. (2018). 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*, 61, 31-37.

Weatherburn, P., Hickson, F., Reid, D., Torres-Rueda, S. & Bourne, A. (2016). 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), 153-154.

Van Hout, M.C., Crowley, D., O’Dea, S. & Clarke, S. (2019) Chasing the rainbow: pleasure, sex-based sociality and consumerism in navigating and exiting the Irish Chemsex scene. *Culture, Health & Sexuality*, 21(9), 1074-1086.