

9. Exploring the Intersection: New Psychoactive Substances, Gay, Bisexual and other Men who have sex with men, and Chemsex in Central Asia

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1. Introduction

1.1 Definition of Chemsex

Humanity and substance use have been intertwined throughout history, with various substances playing a critical role in cultural, religious, and medical practices. From ancient Mesopotamia and Egypt to the indigenous tribes of the Americas, psychoactive substances have been used for spiritual enlightenment, religious ceremonies, medicinal treatments, and recreational enjoyment. Substances such as alcohol, cannabis, and opium have facilitated connections with the divine and communal bonding, as seen in Vedic rituals and Native American ceremonies. Medicinally, ancient texts such as the Ebers Papyrus and Ayurveda document the use of plants and compounds to treat disease, influencing modern pharmacology. The recreational use of drugs for altered states of consciousness has left its mark socially, culturally, and economically, from trade routes to legal systems. This history demonstrates the impact of substance use on human civilisation.

Not surprisingly, the GBMSM community (referring to gay, bisexual and other men who have sex with men) has a long and well-documented history of substance use, including recreational drug use (Buckland, 2002; Garratt, 1998). Substance use patterns among GBMSM populations are shaped by complex social determinants, including systematic discrimination, social exclusion, and the need for community belonging (Hatzenbuehler et al. 2011; Race et al. 2016). Historically, gay venues and nightlife spaces have served as crucial sites for community formation and identity expression, where recreational substance use often becomes intertwined with socializing practices (Buckland 2002). The consumption of various substances, particularly stimulants and club drugs, functions both as a coping strategy and a means of enhancing social and sexual experiences (Buckland 2002;

Waltz 2011). Moreover, minority stress theory provides a theoretical framework for understanding how chronic exposure to stigma and internalized homonegativity (negative attitudes towards one's identity) may contribute to elevated rates of substance use within GBMSM communities (Meyer 1995). Minority stress manifests in three distinct ways among marginalized populations. At its most basic level, it appears as environmental stress - the everyday challenges that anyone might face, from job loss to relationship difficulties. The second layer runs deeper: the direct experiences of prejudice and discrimination that minority individuals encounter in their daily lives. The third and perhaps most insidious form is internal - the negative self-perceptions that develop from living in a hostile social environment (Meyer 1995; Meyer & Frost 2013). For GBMSM, this stress takes concrete forms: family members who cut off contact due to sexual identity, workplace discrimination, social isolation, and systematic exclusion from support systems. These experiences can create a persistent state of hypervigilance and stress that reverberates through their health and well-being (Flentje et al. 2020; Pachankis et al. 2020). The impact extends beyond immediate psychological distress, increasing vulnerability to HIV infection, other sexually transmitted infections and compromising emotional regulation, often leading individuals to seek relief through illicit substance use (Flentje et al. 2020; Hakim 2019). In their search for connection and coping mechanisms, some GBMSM turn to multiple sexual partnerships or substance use - behaviours that, while potentially providing temporary relief, can further complicate their health challenges (Mowlabocus 2021).

1.2 Historical Context of Chemsex

The digital age has fundamentally reshaped human connection, intimacy and the pursuit of pleasure. Within this transformed landscape, the relationship between technology and substance use has become increasingly complex, particularly in sexual contexts. What once required face-to-face interactions and established social networks can now be initiated by a simple swipe or tap on a smartphone screen. Mobile applications and digital platforms have become more than just tools for communication - they've become key drivers of behavioural change, catalysing the emergence of what is now known as chemsex (Stuart 2013, 2019). This technological transformation is particularly evident in the GBMSM community, where apps such as Hornet, Grindr and Scruff have revolutionised social and

sexual networking. These platforms have developed their own coded language - seemingly innocent emojis such as diamonds, pills, snowflakes, cats or clouds in user profiles often signal interest in chemsex, creating an underground system of communication hidden in plain sight. Platforms are moving beyond simple matchmaking to become sophisticated ecosystems where users navigate both sexual encounters and substance use through these subtle signals (Stuart 2016, 2019). The integration of geolocation technology has dramatically simplified the process of finding nearby partners interested in chemsex, effectively removing traditional barriers to these encounters (Holloway 2015). What once required knowledge of specific venues or social circles can now be arranged with a few taps on a screen, contributing to the gradual normalisation of chemsex within certain communities (Alarcón-Gutiérrez et al. 2022; Holloway 2015). In parallel to these dating platforms, a broader virtual ecosystem has emerged through online forums and social networks. These virtual spaces function as knowledge repositories where participants share experiences, exchange harm reduction strategies and discuss substance effects in remarkable detail. Protected by anonymity, users freely discuss practices that may carry significant stigma in their daily lives (Patten et al. 2020). This intersection of technology, sexuality and substance use presents a complex challenge for researchers: how can we fully understand and define chemsex in this rapidly evolving digital landscape?

Chemsex is the use of illicit drugs before or during sexual intercourse to increase arousal, facilitate and enhance the sexual experience, and increase pleasure (Bourne et al., 2015; Stuart, 2013). Chemsex is a specific practice exclusive to GBMSM, although sexualised drug use can be observed among heterosexual individuals (Miltz et al., 2021). The difference between chemsex and sexualised drug use is described by Davide Stuart as a result of the uniqueness of gay sex and gay culture (Stuart, 2013). It is this uniqueness that defines the chemsex phenomenon that has emerged in recent decades. Some of this uniqueness relates to cultural factors that have affected the enjoyment of sex between men (Stuart, 2013, 2016, 2019). For example, societal attitudes toward homosexuality—especially those that express disgust with the gay sex act—can seriously inhibit the enjoyment of gay sex (Stuart, 2019). Cultural and religious attitudes toward homosexuality can also seriously inhibit enjoyment. Another factor described above is the technological revolution that has occurred with the advent of hook-up apps and smartphone technology. Finally, a gay-specific culture of rejection associated with tribes, body shape, race, sexual performance expectations, and

the ability to ‘market’ oneself to be successful within that culture seriously impacts the experience and enjoyment of gay sex (Stuart, 2013, 2016, 2019). In this context, chemsex is a tool for coping with stressors that inhibit pleasure and confidence, as well as a tool to help individuals build social and sexual networks (Stuart 2013).

2. Relevance and Rising Trends Globally and in Central Asia

The global prevalence of chemsex varies widely by region, influenced by cultural, social, and economic factors (Coronado-Muñoz et al., 2024; Maxwell et al., 2019; Wang et al., 2023). While comprehensive data is limited, several studies and reports provide insight into the patterns and prevalence of chemsex in different parts of the world. In Europe, chemsex is particularly prevalent among GBMSM in urban areas (Schmidt et al., 2016). Cities such as London, Berlin, and Amsterdam have reported high rates of chemsex, often associated with the use of drugs such as methamphetamine, gamma hydroxybutyrate/gamma butyrolactone (GHB/GBL), and mephedrone (Blomaard et al., 2023; Schmidt et al., 2016; Sewell et al., 2018; Sewell et al., 2019). Surveys and studies have shown that a significant proportion of GBMSM engage in chemsex, with varying frequencies. For example, a study in London found that approximately 30% of GBMSM attending sexual health clinics had engaged in chemsex in the past year (Sewell et al., 2018). In Asia, the prevalence of chemsex is less documented but is emerging as a public health concern in countries such as Thailand, China, and Malaysia (Maviglia et al., 2022; Piyaraj et al., 2018; Wang et al., 2023). The cultural stigma associated with both homosexuality and drug use makes it difficult to accurately assess prevalence. However, anecdotal evidence and smaller studies suggest that chemsex is present and may be increasing among GBMSM populations in large urban centres (Guadamuz & Boonmongkon, 2018; Lasco & Yu, 2024; Piyaraj et al., 2018; Tan et al., 2018). By contrast, Central Asia is a region with a lack of research on substance use, with almost no data on substance use among GBMSM (Lee et al., 2022). Only a few studies conducted in the last decade have attempted to better understand substance use behaviours among GBMSM, and most, if not all, of the studies were conducted in Kazakhstan (Berry et al., 2012; Lee et al., 2022; Paine et al., 2021). The most recent study found that approximately 60% of GBMSM study participants smoked marijuana, and 20% and 11% reported using stimulants and club drugs, respectively (Lee et

al., 2022). Nearly half of them (45%) reported polydrug use, meaning that they typically use two or more substances (Lee et al., 2022).

The GBMSM community in Central Asia is a diverse and heterogeneous group that includes individuals from a wide range of backgrounds and experiences. In the Central Asian countries of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan, accurately estimating the size of the GBMSM communities is challenging due to the pervasive stigma and discrimination directed at these individuals. Although there is limited evidence to accurately estimate the size of the GBMSM population, some studies have demonstrated not only the existence of this social group, but also a significant number of individuals who are stigmatised and discriminated against because of their behaviour (Wu et al., 2017). This stigma often forces members of the GBMSM community to hide their identities, further complicating efforts to accurately measure their population.

Despite facing significant social and legal barriers, GBMSM communities in these countries persist and actively engage in various forms of activism and mutual support. These communities often come together to address common issues, advocate for their rights, and provide essential support to each other in an environment where they often face ostracism and legal persecution. Activism within these communities can take many forms, including grassroots organising, advocacy for legal reform, health education, and the creation of safe spaces for social interaction and support. Mutual support networks are particularly important to the well-being of GBMSM persons in Central Asia. These networks provide emotional support, share vital health and safety information (regarding substance use or sexual health), and offer a sense of belonging and solidarity in the face of widespread societal rejection.

3. Influence of Tradition and Religious Beliefs on Substance Use Behaviour, Chemsex, and Health Outcomes

Historically, Kazakhs and other Central Asian ethnic groups and nations have identified as predominantly Muslim. With Kazakhstan's independence, religious restrictions imposed by the Soviets were largely lifted, and as a result, interest in Islam has grown (Akiner, 2003). Islam is an important part of Central Asian culture and tradition, influencing individual and collective identity, gender norms, sexuality, and sexual behaviour (Ro'i & Wainer, 2009). Decades of Soviet rule, as well as pre-Soviet nomadic

traditions, have shaped current forms of Islamic practice in Central Asia (El-Bassel et al., 2015; Shaw et al., 2017).

There are some traditions that are specific to Central Asia. For example, '*uyat*', or the so-called culture of shame. *Uyat* is a powerful regulatory mechanism in Central Asia, defined by Shelekpayev as 'a set of repressive practices related to individuals or groups and their reactions to certain events, including condemnation of apparent or perceived misconduct, guilt and imposition of guilt, body shaming, victimization and victim blaming, invention of (false) morality—which can be manifested through emotional and physical abuse' (Shelekpayev, 2020).

Several studies have found that *uyat* is detrimental to health outcomes (Caron & Orlov, 2022). It has been shown elsewhere (Caron & Orlov, 2022) that the fear of being labelled '*uyat*' played a detrimental role during the COVID-19 pandemic. For example, many people in Kazakhstan refused to comply with government orders to avoid large gatherings (family dinners, weddings, or funerals) in order to prevent the spread of the coronavirus and avoid overwhelming the healthcare system. One of the reasons identified by Caron and Orlov was the fear of being shamed for declining an invitation from family, relatives, or friends (Caron & Orlov, 2022). This emphasises that social image and public opinion about an individual's behaviour can be far more important than physical well-being and safety. Thus, a sick person cannot be freed from the social expectations and norms that exist in society without running the risk of being ostracised. Surprisingly, this view of health and illness, as well as the role of the sick person in society and the obligations expected of them, is quite different from Parsons' 'sick role' model, which is widely accepted in the West. According to Parsons' model, the sick person can expect to be granted two rights (Parsons, 2013). The first right states that the sick person is temporarily excused from performing 'normal' social roles (such as going to work or participating in community activities). The more severe the illness, the greater the exemption (Parsons, 2013). The second right is that the sick person should not be blamed for his or her illness and should be cared for by others until he or she can resume his or her normal social role (Parsons, 2013). Separately, Karlygash Kabatova, an independent researcher and advocate for youth sexuality education, described the results of her qualitative study aimed at exploring the demand for sexuality education among Kazakh youth and parents. She found that *uyat* still discourages parents from taking a more active role in educating their children about

safer sex, contraception, HIV, and sexually transmitted infections (STIs) (Kabatova, 2022).

The role of religion and tradition in HIV dynamics remains unclear. A substantial body of literature shows that lower levels of HIV prevalence are associated with Islamic sociocultural influences and religious participation among Muslims (Adamczyk & Hayes, 2012). In particular, circumcision and lower levels of alcohol consumption have been associated with reduced sexual HIV risk (Kamarulzaman & Saifuddeen, 2010; Obermeyer, 2006). However, some other studies have reported mixed results or an association between religion and increased sexual behaviours associated with increased risk for HIV, particularly among GBMSM (Nelson et al., 2017; Pan et al., 2016). Results from a study conducted in Kazakhstan to examine the association between religious practices and sexual behaviour among male participants showed that higher levels of religiosity were associated with lower levels of sexual HIV risk (Shaw et al., 2020). Spiritual practices such as weekly attendance were associated with a lower likelihood of having anal sex with a male partner, but a higher likelihood of having multiple male partners (Shaw et al., 2020). The authors describe the limitations of their study, noting that structural pathways such as religious climate, social conditions, and institutional policies that influence sexual behaviour remain unclear (Shaw et al., 2020). As we can see, there is a clear lack of information on the impact of both religious and nomadic traditions such as *uyat* on the transmission of HIV and other STIs, and it is difficult, or almost impossible, to describe their role in the context of sexual behaviour.

Finally, it is very important to mention the role of patriarchal societies, which have traditional notions of masculinity that strongly influence behaviours, including substance use and sexual practices such as chemsex. Masculinity often emphasises traits such as dominance, emotional suppression, and risk-taking, which can lead men to engage in chemsex as a means of asserting their identity and proving their masculinity (Mowlabocus, 2021; Pienaar et al., 2020). The pressure to conform to these masculine ideals can lead to the pursuit of increased sexual experiences and the use of drugs to enhance and sustain performance, increase arousal, and prolong sexual encounters.

Patriarchal norms also contribute to the stigmatisation and marginalisation of non-conforming sexualities and behaviours, driving practices like chemsex underground. The fear of judgment and ostracism within these societies can prevent individuals from seeking help or openly discussing their behaviours (Fleming et al., 2016). This clandestine nature of chemsex

increases the potential risks associated with it, including unsafe sexual practices, higher rates of HIV transmission, and other health complications (El-Bassel et al., 2015; Fleming et al., 2016; Jacques-Aviñó et al., 2019). The lack of open dialogue and accessible support services exacerbates these risks, as individuals are less likely to receive accurate information and harm reduction resources.

Finally, the intersection of masculinity and patriarchal expectations can create an environment where vulnerability and emotional expression are discouraged. This can lead men to use drugs as a coping mechanism for underlying mental health issues such as depression, anxiety, and internalised homophobia (Nimbi et al., 2021; Weatherburn et al., 2017). In these contexts, chemsex becomes a way to escape emotional distress and conform to societal expectations of strength and stoicism. While the global understanding of and connection between patriarchal norms and chemsex is well documented, there is limited research on this relationship in the Central Asian context (Deimel et al., 2016; Leyva-Moral et al., 2023; Lunchenkov, Rinne-Wolf, et al., 2024; Palmer et al., 2023; Tan et al., 2018; Weatherburn et al., 2017). The only study from the region to explore the motivations and perceived risks of chemsex among GBMSM was conducted in Almaty, Kazakhstan, and published in 2024 Lunchenkov, Cherchenko, et al. (2024). Through in-depth interviews with 21 participants, the researchers found that chemsex served multiple purposes - as a coping mechanism for minority stress, a source of sexual liberation, and a way to build social connections - while also posing significant health and safety risks. The study revealed how chemsex in Kazakhstan is shaped by social stigma and homophobia, with participants seeing it as both an escape from social constraints and a risky but meaningful way to explore their sexuality and find community.

Nevertheless, it is reasonable to hypothesise that similar dynamics exist in other Central Asian countries. The influence of patriarchal norms likely plays a comparable role in shaping chemsex behaviours, driven by societal pressures, stigma, and traditional notions of masculinity, where gay sex is perceived as something forbidden and highly stigmatised.

4. Popular Substances and Their Prevalence

The following substances are popular among GBMSM communities in Central Asia.

Mephedrone: mephedrone, a synthetic stimulant belonging to the cathinone class, has become a prominent substance in the chemsex scene, especially among GBMSM communities (Schifano et al., 2011). Known for its euphoric and stimulating effects, mephedrone is often used to enhance sexual experiences, increase sociability, and prolong sexual activity (Schifano et al., 2011). However, its use is associated with significant health risks, including cardiovascular problems, mental disorders, and a high potential for addiction (Winstock et al., 2011; Wood & Dargan, 2012). In the context of chemsex, the stimulant properties of mephedrone can lead to sexual behaviour with increased likelihood of HIV transmission and other sexually transmitted infections.

Alpha-PHP: alpha-PHP, also known as alpha-pyrrolidinohexiophenone, is a synthetic stimulant of the cathinone class, structurally similar to substances such as alpha-pyrrolidinopentiophenone (alpha-PVP) and methamphetamine (Dinis et al., 2024). Within the context of chemsex, alpha-PHP has gained attention for its potent psychoactive effects, which include heightened arousal, increased energy, and a prolonged sense of euphoria (Malandain & Thibaut, 2023). These properties make it attractive to individuals seeking to enhance their sexual experience and engage in prolonged sexual sessions.

Gamma-hydroxybutyrate (GHB) and gamma-butyrolactone (GBL): this substance has also been described as a drug of choice in chemsex. Several studies have shown that GHB/GBL is a drug that is relatively easy to dose and set up in terms of when users want to feel the effects of this substance (Brennan & Van Hout, 2014). It is well known as a depressant, and some users reported using GHB/GBL as a ‘way to relax’ and ‘calm down’ from various stimulants (Palamar & Halkitis, 2006). GHB/GBL is often reported in connection with chemsex parties for sexual enhancement and in combination with other drugs (Brennan & Van Hout, 2014; Palamar & Halkitis, 2006). It is important to note that in most cases, GHB/GBL is consumed as an additional substance intended to lubricate the acute and severe effects of crystal methamphetamine or other stimulants.

Methamphetamine: crystal methamphetamine is a drug that causes a very rapid release of several neurotransmitters, such as dopamine and serotonin (Kish, 2008). This substance can cause various positive emotions such as euphoria, happiness, and benevolence towards others. Interestingly, crystal methamphetamine releases a much higher amount of dopamine than other drugs and is likely to affect an individual’s perception of reality (Kish, 2008). Crystal methamphetamine remains the perfect drug for gay

and bisexual men (Fawcett, 2016). When combined with a state of sexual arousal and a selective inhibition of feelings a person might have about themselves or the sex they want, it creates an extremely powerful disinhibition. It opens access to hidden emotions, feelings, fantasies, and desires. Simply put, where there is little self-confidence, crystal methamphetamine creates feelings of power. Where there is fear of one's self-identity (sexual or gender), crystal can create more assertiveness and increase self-confidence. (Stuart, 2013, 2015) explained that most of his clients reported crystal methamphetamine use as opening a Pandora's box of sexual fantasies, and some other clients described it as removing the inner boundaries created by society and considered 'normal'.

As we can see, all of the drugs typically used for chemsex have certain similarities. Substances such as methamphetamine, GHB/GBL, mephedrone, and alpha-PHP are chosen for their ability to enhance the sexual experience by increasing arousal, reducing inhibitions, and prolonging sexual activity. They induce intense euphoria, increased energy, and a sense of connection, making them particularly appealing to individuals seeking to enhance their sexual encounters. These drugs pose significant health risks due to their stimulant effects, which can lead to cardiovascular problems such as increased heart rate and hypertension. Their euphoric and disinhibiting properties often lead to sexual behaviour, such as condomless sex and multiple partners, which in some cases might increase the risk of HIV transmission and other STIs, highlighting the importance of harm reduction strategies.

5. Accessibility for Harm Reduction Programmes

The GBMSM community's access to harm reduction programmes varies widely across countries in the region. In Kazakhstan, Kyrgyzstan, and Tajikistan, active NGOs and community groups promote GBMSM rights and provide prevention and psychological support. These countries are more open to international cooperation and have a relatively more developed infrastructure for harm reduction programmes.

The situation in Turkmenistan and Uzbekistan is more complex. These states are characterised by strict repressive laws that restrict the activities of GBMSM organisations and create an unfavourable environment for harm reduction programmes. Nevertheless, there are underground initiatives that

seek to provide assistance and support to GBMSM communities, although their activities are often high-risk.

In order to effectively address the problem of new psychoactive substances (NPS) use in the GBMSM community in Central Asia, the following measures should be taken:

1. Harm reduction programmes for the GBMSM community in Central Asia require comprehensive development and implementation. These initiatives must address several key areas: providing education about the risks associated with the use of NPS and chemsex practices, establishing measures to prevent the transmission of sexually transmitted infections, and ensuring access to both counselling services and addiction treatment. Programmes should be designed with cultural competence specifically for the Central Asian GBMSM community, ensuring both accessibility and relevance to their particular needs and circumstances.
2. Supporting non-governmental organisations (NGOs) and activist groups working on the rights and welfare of GBMSM in Central Asia requires a multi-faceted approach. These organisations need sustained financial support, capacity building through training programmes and strategic advice. They also need practical support in organising public awareness campaigns and community events. This comprehensive support enables these organisations to effectively advocate for the rights of GBMSM and provide essential services to their communities.
3. Public awareness campaigns and education programmes serve a dual purpose in addressing substance use within the GBMSM community. First, they educate the public about new psychoactive substances and chemsex practices, while also working to reduce stigma and discrimination against GBMSM people. These initiatives require diverse, targeted messaging strategies for different demographic groups, using a variety of educational materials and communication channels. Programmes should provide comprehensive information on health and social consequences, while maintaining cultural sensitivity and scientific accuracy.

In order to effectively reduce the potential risks associated with NPS use and support the health of the GBMSM community in Central Asia, a number of measures need to be taken. First, it is important to have a seamless syringe exchange programme that provides access to clean injecting equipment for GBMSM who start using NPS and move to injecting salts, as well as to include NPS dependence in opioid substitution treatment programmes. This will help to reduce the risk of transmission of infec-

tions such as HIV and hepatitis and keep community members healthy. Second, non-discriminatory access to pre-exposure prophylaxis (PrEP) for GBMSM people and antiretroviral therapy (ART) for people living with HIV must be guaranteed. Ensuring access to treatment will not only improve people's health but will also help prevent the further spread of HIV in the community. A third important step is to conduct educational programmes about the risks associated with NPS use and the importance of safer sex. These programmes should provide information about ways to protect against infections, as well as the harms that can be caused by NPS, and the resources available for help and support.

In addition, it is necessary to actively support the work of LGBTQ+ NGOs and initiative groups that are engaged in protecting the rights of GBMSM and providing them with support. This includes financial support, as well as cooperation with governmental and non-governmental organisations to develop and implement harm reduction and health support programmes.

Finally, it is important to ensure that the GBMSM community has access to quality and trusted health services, including psychological and mental health care for those experiencing mental health problems due to stigmatisation or use of NPS.

Combining these efforts will help create a more supportive environment for GBMSM in Central Asia, reduce health risks, and improve their quality of life.

5.1 Psychological and Social Support

Psychological and social support is critical to the well-being and health of the GBMSM community in the context of NPS use in Central Asia. Access to counselling, prevention, and therapy is essential for the treatment of addictions and co-occurring mental health disorders that can result from NPS use. Psychological interventions help GBMSM develop strategies for mutual support, improve self-esteem, and regulate emotions.

Support groups also play an important role in ensuring that GBMSM can share experiences, receive peer support, and feel understood and accepted. These groups help individuals to cope with the social pressures and isolation that can result from stigmatisation and discrimination.

Psychosocial rehabilitation programmes that include psychological and social support are essential for successful recovery from addiction and

mental health disorders. They may include individual counselling, group therapy, social coping skills, and stress management training.

Ensuring access to these types of support helps to improve the quality of life of GBMSM, reduce depression and anxiety, and facilitate their successful rehabilitation and social inclusion.

5.2 Legal and Social Measures

Ensuring legal protection and combating discrimination are important for creating equal opportunities and improving the social status of GBMSM. Adopting laws prohibiting discrimination on the basis of sexual orientation and gender identity, as well as ensuring their effective implementation, are integral steps towards creating a more inclusive society.

NGOs play a key role in providing support and protection to the GBMSM community. The support and development of these organisations enables them to provide valuable services such as counselling, psychological support, and legal support, which contribute to improving the living conditions of GBMSM.

Cooperation with international organisations and donors is important for sharing experiences and resources in the field of GBMSM rights and harm reduction. This allows Central Asia to learn from the experience of other countries and receive additional resources to support GBMSM and harm reduction in their communities.

Effective implementation of these measures requires efforts by governments, international organisations, and the public to create a more inclusive and safer environment for all members of society, including GBMSM.

5.3 Medical Interventions

Access to quality, non-discriminatory health services is a critical foundation for the physical and mental health outcomes of GBMSM. Health systems must provide comprehensive services that include prevention, diagnosis and treatment, while actively working to eliminate discriminatory practices. This requires creating health care environments in which GBMSM patients can safely disclose relevant health information and seek care without fear of prejudice or stigma. Healthcare providers need cultural competency training specific to the health needs of GBMSM, while medical facilities need

to establish and enforce non-discrimination policies. Patient confidentiality and respectful communication are essential to building the trust necessary for effective health care.

Training healthcare providers on the health characteristics of GBMSM patients and the specific needs related to GBMSM substance use will help to create a more inclusive healthcare environment. This includes training on sexual orientation and gender identity, as well as on safe drug use practices.

Regular research to monitor the situation of NPS use and chemsex in the GBMSM community will allow for a better understanding of the issues and needs of this group. This will enable the development of more effective prevention, intervention, and health support strategies.

The implementation of these health measures requires collaborative efforts by governmental and non-governmental organisations, health facilities and the public to ensure access to quality and inclusive health services for all members of society.

6. Prevention and Support

6.1 Proposing Strategies and Programmes to Prevent NPS Use and Chemsex Practices in the GBMSM Community

Effective prevention of NPS use and chemsex practices in the GBMSM community in Central Asia requires a comprehensive approach that includes a variety of strategies and programmes aimed at education, medical support, and social inclusion. Key strategies include:

6.2 Education and Outreach Programmes

Public health education for Central Asian GBMSM communities requires a comprehensive, multi-channel strategy. Risk communication campaigns need to clearly communicate the potential dangers associated with new psychoactive substances and chemsex practices, addressing physical and mental health effects, legal implications and social consequences.

Harm reduction education initiatives require detailed instruction in safe practices, particularly in relation to sexual health and substance use. Key components include the correct use of condoms, needle exchange programmes and other preventive measures to reduce disease transmission.

Integrating GBMSM health issues into educational institutions is another key strategy. School and university curricula should include comprehensive sexuality education, substance use prevention and diversity awareness. This educational framework helps to develop critical thinking skills about health choices, while promoting an environment of acceptance and understanding.

The success of these initiatives depends on several factors: cultural appropriateness for different age groups, adequate resource allocation and strong partnerships between local authorities, educational institutions and non-governmental organisations.

6.3 Harm Reduction Programmes

Making PrEP available to GBMSM people is critical for improving their health and reducing the risk of HIV transmission to others. This includes the provision of free or affordable medication, regular medical follow-up, and support from social services.

Providing access to condoms and lubricants: distribution of condoms and lubricants to GBMSM communities helps reduce the risk of transmission of sexually transmitted infections such as HIV, gonorrhoea, and chlamydia. These programmes should be available in places where GBMSM people often congregate, such as support centres, nightclubs, and community events.

It is important that these programmes are regularly evaluated and adapted according to the needs and demands of the GBMSM community. In addition, they should be part of a broad range of harm reduction measures, including HIV testing programmes, health counselling, and psychological support.

6.4 Psychological and Social Support

Psychological and social support are important aspects when it comes to ensuring the well-being and improving the quality of life of GBMSM in Central Asia. Providing GBMSM people with access to psychological counselling and therapy is a critical step in helping them cope with the various stresses, depression, anxiety, and addictions they may face. Such counselling allows them to receive not only professional help, but also

to find understanding and support in dealing with their personal and emotional problems.

An important element is also the establishment of support groups where GBMSM can share their experiences and receive emotional support from other community members and professionals. This helps them to feel less isolated and more included in society and provides practical help in different areas of their lives.

Such measures aim to create a more supportive and caring environment where GBMSM people can feel safe, secure, and respected. This contributes to improving their well-being as well as fostering a more inclusive society where everyone has the right to a happy and healthy life.

6.5 Legal and Policy Measures

In the Central Asian context, legal and policy measures play a key role in ensuring the protection of rights and support for GBMSM persons. Strengthening legal protection for GBMSM persons is a necessary step to combat discrimination at all levels of society. This includes the adoption of laws and regulations aimed at preventing discrimination on the basis of sexual orientation and gender identity, as well as guaranteeing equal rights for all citizens regardless of their sexual orientation.

However, the effective implementation of such legal provisions also requires the support of NGOs that advocate for and assist GBMSM persons. Funding and support for the activities of these NGOs enables them to carry out legal advocacy activities, conduct educational campaigns, provide advice and assistance on various issues, and act as the voice of the GBMSM community to state structures and society at large.

Such legal and policy measures contribute to a more just and inclusive society where GBMSM people can feel protected and respected, and where their rights and interests are recognised and respected by the law.

7. Experience of Project Activities in This Area

This section explores the practical implementation and outcomes of key projects focused on health interventions within the MSM community across Kazakhstan. We highlight the most distinctive initiatives. Each project employs unique strategies to address the health challenges faced by

MSM, from enhancing HIV self-testing accessibility to offering comprehensive support systems, thereby significantly impacting public health outcomes in the region.

GHRCCA (Global Health Research Center of Central Asia) Project in Almaty, Astana, and Shymkent: this research project, conducted in collaboration with Columbia University of New York, aims to study the health of MSM in the three largest cities of Kazakhstan. The project involves collecting data on the prevalence of NPS use and chemsex practices among MSM, as well as assessing factors that influence their health and behaviour. The results of the study are being used to develop more targeted and effective prevention and support programmes (Global Health Research Center in Central Asia 2021).

Amanbol Project on Self-Testing among MSM throughout Kazakhstan: this project aims to increase the accessibility and convenience of HIV testing for MSM throughout the country. Amanbol Project provides free self-testing kits that can be ordered anonymously and received by mail. The project also offers counselling and support for testing and follow-up in the event of a positive result. This initiative helps increase testing coverage among MSM and promotes early detection and treatment of HIV (Amanbol 2024).

CAAP Project in Almaty, from the Elton John Foundation: this project introduces a model of comprehensive assistance for MSM, including case management. The model provides individualised services ranging from medical and psychological care to social support and legal advice. Case managers work with MSM to develop personalised plans to reduce harm, improve access to health services, and enhance quality of life. This model helps MSM cope with a variety of challenges, including NPS use and chemsex (Central Asian Association of People Living with HIV 2024).

These examples of successful projects demonstrate the importance of a comprehensive approach to addressing issues related to NPS use and chemsex among GBMSM communities in Central Asia. They include research, awareness-raising campaigns, provision of medical services to the GBMSM community, and provision of support to NGOs, which allows for the creation of effective prevention and support strategies.

Many NGOs are active and provide information and health and social services for GBMSM people. These organisations conduct campaigns to inform people about the risks facing GBMSM people, offer health consultations, train healthcare providers, and conduct awareness-raising campaigns.

UNAIDS and the Global Fund: these international organisations support projects in Central Asia aimed at combating HIV among GBMSM communities, including harm reduction programmes and educational initiatives.

8 The Role of Education and Social Support

8.1 Education

Education is a powerful tool to combat the problem of substance use and chemsex in the GBMSM community. Increasing awareness among GBMSM people about the risks associated with substance use and chemsex is a primary goal of education programmes. Providing information about safe sexual practices and GBMSM rights helps create informed and responsible behaviour.

Furthermore, inclusive education that includes GBMSM and drug use topics in the curricula of schools and universities plays an important role in reducing stigma and prejudice. It contributes to a tolerant and more informed society where everyone, regardless of their sexual orientation or gender identity, feels recognised and respected.

Such educational and inclusive interventions promote healthy and safe behavioural practices among GBMSM people, as well as create an enabling environment to prevent the use of NPS and chemsex.

8.2 Social Support

Social support plays a key role in improving the well-being and health of GBMSM people, especially in the context of substance use and chemsex issues. The establishment of support groups and peer support networks provides a valuable space for GBMSM people to share experiences, get emotional support, and problem-solve together. These groups help to reduce social isolation, which is often the main reason for drug use as a coping mechanism for stress and discrimination.

Social support also promotes the inclusion of GBMSM people in society, which is important for their physical and mental health. By supporting participation in social activities and providing opportunities to socialise and interact with others, social programmes help to create a supportive

environment for GBMSM people where they can feel accepted and respected. This in turn reduces their vulnerability to drug use and other negative behaviours, such as chemsex, and promotes healthy alternative strategies for adaptation and self-actualisation.

8.3 Interagency Cooperation

Inter-agency cooperation is an important aspect of developing and implementing support and prevention programmes in health and social services for GBMSM persons. Partnerships between governmental organisations, NGOs, and international organisations play a key role in gathering resources, sharing expertise, and coordinating actions for effective problem-solving.

State organisations have significant resources and access to various areas such as healthcare, education, and legal protection. At the same time, NGOs often have specialised expertise and are closer to the community, which allows them to effectively reach vulnerable populations, including GBMSM people. Collaboration between these entities allows them to combine their efforts to create more integrated and tailored support and prevention programmes.

In addition, international cooperation plays an important role in sharing best practices and resources. Cooperation with international organisations and donors allows institutions and organisations in the region to use best practices and innovations from other countries, as well as to receive financial support for the implementation of their programmes. This contributes to improving the quality and effectiveness of support and prevention activities in the GBMSM community in Central Asia.

9. *Prospects for Further Research*

Filling the gaps in research on the use of NPS and chemsex practices among the GBMSM community in Central Asia is a complex task that requires a comprehensive approach and joint efforts by researchers, governmental structures, non-governmental organisations, and community activists. Here is a closer look at the challenges and gaps faced by research in this area:

1. **Data Deficiency:** one of the main challenges is the limited data on the GBMSM community at large in the Central Asian region. There is a lack of quality information on the extent, trends, and patterns of NPS use and chemsex practices among GBMSM subgroups. This is due to the high degree of stigmatisation that prevents open discussion of such topics, as well as limited access to state data sources due to legal and political restrictions.
2. **Qualitative Research:** an important aspect of filling research gaps is to conduct qualitative research that can help identify the deep motivations, circumstances, and contexts of NPS use and chemsex practices among the GBMSM community. A qualitative approach allows us to understand the sociocultural factors that shape these practices and identify needs for support and prevention interventions.
3. **Social Determinants of Health:** one key aspect that requires further research is to examine the impact of social and economic factors on the use of NPS and chemsex among GBMSM subgroups. This includes analysis of discrimination, stigmatisation, inequalities in access to healthcare, and social support and affiliation factors.
4. **Medical and Psychosocial Consequences:** it is important to investigate the long-term medical and psychosocial consequences of NPS use and chemsex practices among the GBMSM community. This will be helpful in assessing the scope of the problem, identifying the most vulnerable groups, and developing targeted support and treatment programmes.
5. **Effectiveness of Interventions:** the lack of evidence on the effectiveness of various harm reduction and health support programmes and interventions for GBMSM subgroups is another challenge. Systematic evaluation of programme effectiveness will help identify best practices and methods of work, as well as identify needs for further research and programme development.

10. Conclusion

Research on the use of NPS and chemsex practices in the GBMSM community in Central Asia has revealed many significant aspects that require attention and action. A central problem is the high degree of stigmatisation and discrimination of GBMSM people, which hinders access to medical and social assistance. Despite some initiatives and projects aimed at sup-

porting GBMSM communities, significant gaps in data and research efforts remain.

Key findings indicate that GBMSM people in Central Asia often face social and legal pressures that increase their vulnerability to NPS use and chemsex practices. Limited research makes it difficult to understand the true extent of the problem and to develop effective interventions. NPS use and chemsex significantly increase physical and mental health risks for GBMSM people, including the risk of transmission of HIV and other sexually transmitted infections, as well as the development of addiction and mental health disorders. Effective prevention and support programmes should include educational initiatives and medical and psychological care, as well as harm reduction measures and legal protection.

Effective management of the problem of NPS and chemsex use in the GBMSM community in Central Asia requires the coordination of the efforts of various stakeholders, including government agencies, NGOs, international organisations, and representatives of GBMSM communities themselves. It is important to increase the quantity and quality of research to obtain accurate data on the prevalence and consequences of NPS and chemsex use, and to conduct both quantitative and qualitative research. It is necessary to develop and implement educational programmes aimed at raising awareness about the potential risks of NPS use and safe practices, including them in educational institutions and community organisations. It is also important to establish and support harm reduction programmes, organise syringe exchange points, provide access to antiretroviral therapy, and provide condoms and sterile instruments to reduce the risks of transmission of infections and other medical complications.

Ensuring access to psychological and social support through counselling services, support groups, and rehabilitation programmes for GBMSM people is a key step. It is necessary to strengthen legal protection for GBMSM people and to combat discrimination and stigmatisation at all levels of society. International cooperation, including collaboration with international organisations to share experiences and obtain resources, is also important for the implementation of support and prevention programmes. Implementing these steps will require coordinated efforts and sustainable funding but can significantly improve the health and well-being of GBMSM people in Central Asia. It is necessary to continue discussing this issue at all levels and actively involve all stakeholders in the development and implementation of effective strategies and programmes.

Bibliography

- Adamczyk, Amy/Hayes, Brittany E. (2012). Religion and sexual behaviors: Understanding the influence of Islamic cultures and religious affiliation for explaining sex outside of marriage. *American Sociological Review*, 77(5), 723-746. DOI:10.1177/00031224124586.
- Akiner, Shirin (2003). The politicisation of Islam in postsoviet Central Asia. *Religion, State & Society*, 31(2), 97-122. DOI:10.1080/09637490308282
- Alarcón-Gutiérrez, Miguel/Díaz, David Palma/Lasagabaster, Maider Arando/García De Olalla Rizo, Patricia (2022). Prevalence of dating app usage in gay, bisexual, and other men who have sex with men (GBMSM). *Enfermedades Emergentes*, 21(2), 73-80. www.enfermedadesemergentes.com/articulos/a817/3_original_alarcon.pdf. 08.06.2024
- AmanBol (2024). About the project. <https://amanbol.kz/o-proekte>. 07.06.2024.
- Berry, Mark/Wirtz, Andrea L./Janayeva, Assel/Ragoza, Valentina/Terlikbayeva, Assel/Amirov, Bauyrzhan/Baral, Stefan/Beyrer, Chris (2012). Risk factors for HIV and unprotected anal intercourse among men who have sex with men (MSM) in Almaty, Kazakhstan. DOI:10.1371/journal.pone.0043071
- Blomaard, Carien M/Jongen, Vita W/Achterbergh, Roel Ch/van der Loeff, Maarten F Schim/de Vries, Henry Jc (2023). Sexualized drug use and STD and HIV incidence among men who have sex with men in Amsterdam, the Netherlands. *International journal of STD & AIDS*, 34(11), 795-802. DOI: 10.1177/09564624231180781
- Brennan, Rebekah/Van Hout, Marie Claire (2014). Gamma-hydroxybutyrate (GHB): a scoping review of pharmacology, toxicology, motives for use, and user groups. *Journal of psychoactive drugs*, 46(3), 243-251. DOI: 10.1080/02791072.2014.921746
- Buckland, Fiona (2002). *Impossible dance: Club culture and queer world-making*. Wesleyan University Press.
- Caron, Jean-François/Orlov, David (2022). Uyat or the culture of shame as a vector of Covid-19 contamination in Kazakhstan. In *Central Asia and the Covid-19 pandemic* (pp. 7-34). Springer. DOI: 10.1007/978-981-16-7586-7_2
- Central Asian Association of People Living with HIV (2024). About the AMES project. www.jojoq.kz/. 08.06.2024.
- Deimel, Daniel/Stöver, Heino/Höfelbarth, Susann/Dichtl, Anna/Graf, Niels/Gebhardt, Viola (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, 1-11. DOI: 10.1186/s12954-016-0125-y
- Dinis, Pedro/Franco, João/Margalho, Cláudia (2024). α -Pyrrolidinohexanophenone (α -PHP) and α -Pyrrolidinoisohexanophenone (α -PiHP): A Review. *Life*, 14(4), 429. DOI: 10.3390/life14040429
- El-Bassel, Nabila/Shaw, Stacey/Mergenova, Gaukhar/Ismayilova, Leyla/McCrimmon, Tara/Terlikbayeva, Assel/Gilbert, Louisa (2015). Masculinities and social contexts of HIV risk practices among Central Asian male migrant workers. *Journal of AIDS and Clinical Research*, 6(7). DOI: 10.4172/2155-6113.1000486

- Fawcett, David (2016). *Lust, Men, and Meth: A Gay Man's Guide to Sex and Recovery*. Healing Path Press.
- Fleming, Paul J./DiClemente, Ralph J./Barrington, Clare (2016). Masculinity and HIV: Dimensions of masculine norms that contribute to men's HIV-related sexual behaviors. *AIDS and Behavior*, 20, 788-798. DOI: 10.1007/s10461-015-1264-y
- Flentje, Annesa/Heck, Nicholas C/Brennan, James Michael/Meyer, Ian H (2020). The relationship between minority stress and biological outcomes: A systematic review. *Journal of Behavioral Medicine*, 43(5), 673-694. DOI: 10.1007/s10865-019-00120-6
- Garratt, Sheryl (1998). *Adventures in Wonderland: A decade of club culture*. HEADLINE BOOK PUBLISHING; First Edition. 346 pp.
- Global Health Research Center in Central Asia (2021). *UNI Project – At risk men's involvement in HIV treatment continuum in the Republic of Kazakhstan (2017 – 2021)*. www.ghrcca.org/?page_id=217&lang=en. 07.06.2024.
- Guadamuz, Thomas E/Boonmongkon, Pimpawun (2018). Ice parties among young men who have sex with men in Thailand: Pleasures, secrecy and risks. *International Journal of Drug Policy*, 55, 249-255. DOI: 10.1016/j.drugpo.2018.04.005
- Hatzenbuehler, Mark L/O'cleirigh, Conall/Mayer, Kenneth H/Mimiaga, Matthew J/Safren, Steven A (2011). Prospective Associations Between HIV-Related Stigma, Transmission Risk Behaviors, and Adverse Mental Health Outcomes in Men Who Have Sex with Men *Annals of Behavioral Medicine*, 42(2), 227-234. DOI: 10.1007/s12160-011-9275-z
- Holloway, Ian W (2015). Substance Use Homophily Among Geosocial Networking Application Using Gay, Bisexual, and Other Men Who Have Sex With Men. *Archives of sexual behavior*, 44(7), 1799-1811. DOI: 10.1007/s10508-015-0581-6.
- Jacques-Aviñó, Constanza/Garcia de Olalla, Patricia/Gonzalez Antelo, Alicia/Fernandez Quevedo, Manuel/Romaní, Oriol/Caylà, Joan A (2019). The theory of masculinity in studies on HIV. A systematic review. *Global public health*, 14(5), 601-620. DOI: 10.1080/17441692.2018.1493133
- Kabatova, Karlygash (2022). Purity vs. Safety: How Uyat Undermines Youth's Sexual Literacy in Kazakhstan. In J.-F. Caron (Ed.), *The Steppe and Beyond: Studies on Central Asia*. DOI: 10.1007/978-981-19-4328-7_3
- Kamarulzaman, Adeeba/Saifuddeen, Shaikh Mohd (2010). Islam and harm reduction. *International Journal of Drug Policy*, 21(2), 115-118. DOI: 10.1016/j.drugpo.2009.11.003
- Kish, Stephen J (2008). Pharmacologic mechanisms of crystal meth. *Canadian Medical Association Journal*, 178(13), 1679-1682. DOI: 10.1503/cmaj.071675
- Lasco, Gideon/Yu, Vincen Gregory (2024). Pampalibog: chemsex, desire and pleasure in the Philippines. *Culture, Health & Sexuality*, 26(2), 143-158. DOI: 10.1080/13691058.2023.2192256
- Lee, Yong Gun/Zhakupova, Gulnara/Vinogradov, Vitaliy/Paine, Emily Allen/Laughney, Caitlin I/Reeder, Kelsey/Davis, Alissa/Hunt, Timothy/Mergenova, Gaukhar/Primbetova, Sholpan/ Terlikbayeva, Assel /Wu, Elwin (2022). Polydrug use, sexual risk, and HIV testing among cisgender gay, bisexual, and other men and transgender and nonbinary individuals who have sex with men in Kazakhstan. *AIDS Education and Prevention*, 34(5), 413-426. DOI: 10.1521/aeap.2022.34.5.413

- Leyva-Moral, Juan M/Aguayo-González, Mariela/Mora, Rubén/Villegas, Luis/Gómez-Ibáñez, Rebeca/Mestres-Soler, Olga/Maldonado-Alia, Rubén/Lorente, Nicolas/Folch, Cinta (2023). Chemsex in Barcelona: A qualitative study of factors associated with the practice, the perception of the impact on health and prevention needs. *Adicciones*, 1790-1790. DOI: 10.20882/adicciones.1790
- Livingston, James D /Boyd, Jennifer E (2010). Correlates and consequences of internalized stigma for people living with mental illness: A systematic review and meta-analysis. *Social Science & Medicine*, 71(12), 2150-2161. DOI: 10.1016/j.socscimed.2010.09.030
- Lunchenkov, Nikolay/ Cherchenko, Nadezhda/ Altynbekov, Kuanysh/ Terlikbayeva, Assel/Primbetova, Sholpan/ Gryazev, Denis/German Elena/ Batyrgaliev, Uluk/Steinert, Janina Isabel (2024). A way to liberate myself": A qualitative study of perceived benefits and risks of chemsex among gay, bisexual, and other men who have sex with men in Almaty, Kazakhstan. *Drug and Alcohol Dependence*. 1 (264):112464. DOI:10.1016/j.drugalcdep.2024.112464
- Lunchenkov, Nikolay/Rinne-Wolf, Susanna/Hughes, Tom/Dwyer, Barrie (2024). The Experience of Chemsex and Accessing Medical Care for Gay, Bisexual and Other MSM in Russia: An Interpretive Phenomenological Analysis. *The Journal of Sex Research*, 1-7. DOI: 10.1080/00224499.2024.2314690
- Malandain, Leo/Thibaut, Florence (2023). Chemsex: review of the current literature and treatment guidelines. *Current Addiction Reports*, 10(3), 563-571. DOI: 10.1007/s40429-023-00488-1
- Maviglia, Francesca/Wickersham, Jeffrey A/Azwa, Iskandar/Copenhagen, Nicholas/Kennedy, Olivia/Kern, Monique/Khati, Antoine/Lim, Sin How/Gautam, Gautam/Shrestha, Roman (2022). Engagement in chemsex among men who have sex with men (MSM) in Malaysia: prevalence and associated factors from an Online National Survey. *International Journal of Environmental Research and Public Health*, 20(1), 294. DOI: 10.3390/ijerph20010294
- Maxwell, Steven/Shahmanesh, Maryam/Gafos, Mitzy (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
- Meyer, Ilan H (1995). Minority stress and mental health in gay men. *Journal of health and social behavior*, 38-56. www.jstor.org/stable/2137286
- Meyer, Ilan H/Frost, David M. (2013). Minority stress and the health of sexual minorities. In C. j. Patterson (Ed.), *Handbook of psychology and sexual orientation* (pp. 252-266). Oxford University Press. www.psycnet.apa.org/record/2012-32754-018
- Miltz, Ada R/Rodger, Alison J/Sewell, Janey/Gilson, Richard/Allan, Sris/Scott, Christopher/Sadiq, Tariq/Farazmand, Paymaneh/McDonnell, Jeffrey/Speakman, Andrew/Sherr, Lorraine/Phillips, Andrew N/Johnson, Anne M/ Collins, Simon/ Lampe, Fiona C (2021). Recreational drug use and use of drugs associated with chemsex among HIV-negative and HIV-positive heterosexual men and women attending sexual health and HIV clinics in England. *International Journal of Drug Policy*, 91, 103101. doi: 10.1016/j.drugpo.2020.103101
- Mowlabocus, Sharif (2021). Fucking with homonormativity: the ambiguous politics of chemsex. *Sexualities*, 1363460721999267 DOI: 10.1177/1363460721999267

- Nelson, LaRon E./Wilton, Leo/Zhang, Nanhua/Regan, Rotrease/Thach, Chia T./Dyer, Typhanye V./Kushwaha, Sameer/Sanders, Rev. Edwin C./Ndoye, Omar/Mayer, Kenneth H. (2017). Childhood exposure to religions with high prevalence of members who discourage homosexuality is associated with adult HIV risk behaviors and HIV infection in Black men who have sex with men. *American journal of men's health*, 11(5), 1309-1321. DOI: 10.1177/1557988315626264.
- Nimbi, Filippo Maria/Rosati, Fau/Esposito, Rita Maria/Stuart, David/Simonelli, Chiara/Tambelli, Renata (2021). Sex in chemsex: Sexual response, motivations, and sober sex in a group of Italian men who have sex with men with sexualized drug use. *The Journal of Sexual Medicine*, 18(12), 1955-1969. DOI: 10.1016/j.jsexm.2021.09.013
- Obermeyer, Carla Makhlof (2006). HIV in the Middle East. *BMJ*, 333(7573), 851-854. DOI: 10.1136/bmj.38994.400370.7C
- Paine, Emily Allen/Lee, Yong Gun/Vinogradov, Vitaliy/Zhakupova, Gulnara/Hunt, Timothy/Primbetova, Sholpan/Terlikbayeva, Assel/El-Bassel, Nabila/Wu, Elwin (2021). HIV stigma, homophobia, sexual and gender minority community connectedness and HIV testing among gay, bisexual, and other men and transgender people who have sex with men in Kazakhstan. *AIDS and Behavior*, 25, 2568-2577. DOI: 10.1007/s10461-021-03217-9
- Palamar, Joseph J/Halkitis, Perry N (2006). A qualitative analysis of GHB use among gay men: Reasons for use despite potential adverse outcomes. *International Journal of Drug Policy*, 17(1), 23-28. DOI: 10.1016/j.drugpo.2005.11.002
- Palmer, Lindsay/Maviglia, Francesca/Wickersham, Jeffrey A/Khati, Antoine/Kennedy, Olivia/Copenhaver, Nicholas M/Uyer, Christopher/Halim, Mohd Akbar Ab/Ikhtiaruddin, Wan Mohd/Azwa, Iskandar/ Gautam, Kamal /Shrestha, Roman (2023). Chemsex and Harm Reduction practices among men who have sex with men in Malaysia: Findings from a qualitative study. *Journal of psychoactive drugs*, 1-10. DOI: 10.1080/02791072.2023.2250342
- Pan, Stephen W/Zhang, Zheng/Li, Dongliang/Carpiano, Richard M/Schechter, Martin T/Ruan, Yuhua/Spittal, Patricia M (2016). Religion and HIV sexual risk among men who have sex with men in China. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 73(4), 463-474. DOI: 10.1097/QAI.0000000000001127
- Parsons, Talcott (2013). *The social system*. Routledge. www.voidnetwork.gr/wp-content/uploads/2016/10/The-Social-System-by-Talcott-Parsons.pdf
- Patten, San/Doria, Nicole/Joy, Phillip/Sinno, Jad/Spencer, Rebecca/Leblanc, Marc-Andre/Holmes, Dave/Numer, Matthew (2020). Sexualized drug use in virtual space: A scoping review of how gay, bisexual and other men who have sex with men interact online. *The Canadian Journal of Human Sexuality*, 29(1), 106-126. DOI: 10.3138/cjhs.2019-0052
- Pienaar, Kiran/Murphy, Dean Anthony/Race, Kane/Lea, Toby (2020). Drugs as technologies of the self: Enhancement and transformation in LGBTQ cultures. *International Journal of Drug Policy*, 78, 102673. DOI: 10.1016/j.drugpo.2020.102673

- Piyaraj, P., van Griensven, F., Holtz, T. H., Mock, P. A., Varangrat, A., Wimonasate, W., Thienkrua, W., Tongtoyai, J., McNamara, A., & Chonwattana, W. (2018). The finding of casual sex partners on the internet, methamphetamine use for sexual pleasure, and incidence of HIV infection among men who have sex with men in Bangkok, Thailand: an observational cohort study. *The lancet HIV*, 5(7), e379-e389.
- Race, K., Lea, T., Murphy, D., & Pienaar, K. (2016). The future of drugs: recreational drug use and sexual health among gay and other men who have sex with men. *Sexual health*, 14(1), 42-50.
- Ro'i, Yaacov/Wainer, Alon (2009). Muslim identity and Islamic practice in post-Soviet Central Asia. *Central Asian Survey*, 28(3), 303-322. DOI: 10.1080/02634930903421863
- Schifano, Fabrizio/Albanese, Antonio/Fergus, Suzanne/Stair, Jackie L/Deluca, Paolo/Corazza, Ornella/Davey, Zoe/Corkery, John/Siemann, Holger/Scherbaum, Norbert/Farre', Magi/ Torrens, Marta/Demetrovics, Zsolt/Ghodse, A Hamid/ Psychonaut Web Mapping, & ReDNet Research Groups (2011). Mephedrone (4-methylmethcathinone; 'meow meow'): chemical, pharmacological and clinical issues. *Psychopharmacology*, 214, 593-602. DOI: 10.1007/s00213-010-2070-x
- Schmidt, Axel J/Bourne, Adam/Weatherburn, Peter/Reid, David/Marcus, Ulrich/Hickson, Ford/ EMIS Network (2016). Illicit drug use among gay and bisexual men in 44 cities: Findings from the European MSM Internet Survey (EMIS). *International Journal of Drug Policy*, 38, 4-12. DOI: 10.1016/j.drugpo.2016.09.007
- Sewell, Janey/Cambiano, Valentina/Miltz, Ada/Speakman, Andrew/Lampe, Fiona C/Phillips, Andrew/Stuart, David/Gilson, Richard/Asboe, David/Nwokolo, Nneka/Clarke, Amanda/ Hart, Graham/ Rodger, Alison (2018). Changes in recreational drug use, drug use associated with chemsex, and HIV-related behaviours, among HIV-negative men who have sex with men in London and Brighton, 2013–2016. *Sexually Transmitted Infections*, 94(7), 494-501. DOI: 10.1136/sextrans-2017-053439
- Sewell, Janey/Cambiano, Valentina/Speakman, Andrew/Lampe, Fiona C/Phillips, Andrew/Stuart, David/Gilson, Richard/Asboe, David/ Nwokolo, Nneka/ Clarke, Amanda/ Rodger, Alison J (2019). Changes in chemsex and sexual behaviour over time, among a cohort of MSM in London and Brighton: findings from the AURAH2 study. *International Journal of Drug Policy*, 68, 54-61. DOI: 10.1016/j.drugpo.2019.03.021
- Shaw, Stacey A/McCrimmon, Tara/Mergenova, Gaukhar/Sultangaliyeva, Alma/El-Bassel, Nabila (2017). Islamic influence on HIV risk and protection among Central Asian male migrant workers in Kazakhstan. *Qualitative Health Research*, 27(10), 1553-1561. DOI: 10.1177/1049732317697101
- Shaw, Stacey A/Mergenova, Gaukhar/El-Bassel, Nabila (2020). Religion and HIV Risk Among Male Market Vendors in Kazakhstan. *Journal of religion and health*, 59, 2019-2031. DOI: 10.1007/s10943-019-00929-0
- Shelekpayev, Nari (2020). Nari Shelekpayev. Speaking with clenched teeth? Shame, Power and Female Body in Contemporary Kazakhstan. *New Literary Review*, 161(1), 157-174. www.nlobooks.ru/magazines/novoe_literaturnoe_obozrenie/161_nlo_1_2020/article/21977/ 08.06.2024

- Stuart, David (2013). Sexualised drug use by MSM: background, current status and response. *HIV nursing*, 13(1), 6-10. www.researchgate.net/publication/285738167_Sexualised_drug_use_by_MSM_Background_current_status_and_response 08.06.2024
- Stuart, David (2015). ChemSex and care-planning: One year in practice. *HIV nursing*, 15(2), 24-28. www.hivnursing.net/index.php/hiv/article/view/10 08.06.2024
- Stuart, David (2016). A chemsex crucible: the context and the controversy. *Journal of Family Planning and Reproductive Health Care*, 42(4), 295-296. DOI: 10.1136/jfprhc-2016-101603
- Stuart, D. (2019). Chemsex: origins of the word, a history of the phenomenon and a respect to the culture. *Drugs and Alcohol Today*. Vol. 19 No. 1, pp. 3-10. DOI: 10.1108/DAT-10-2018-0058
- Tan, Rayner Kay Jin/Wong, Christina Misa/Mark, I-Cheng Chen/Chan, Yin Ying/Ibrahim, Muhamad Alif Bin/Lim, Oliver Zikai/Chio, Martin Tze-Wei/Wong, Chen Seong/Chan, Roy Kum Wah/ Chua, Lynette J/Choong, Bryan Chee Hong (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. DOI: 10.1016/j.drugpo.2018.10.002
- Waltz, Alexandria (2011). The Youth Rock and Roll Club Culture of 1970s and 1980s Los Angeles. *Utah Historical Review*, 1. www.epubs.utah.edu/index.php/historia/issue/view/46
- Wang, Haoyi/Jonas, Kai J/Guadamuz, Thomas E. (2023). Chemsex and chemsex associated substance use among men who have sex with men in Asia: A systematic review and meta-analysis. *Drug and alcohol dependence*, 243, 109741. DOI: 10.1016/j.drugalcdep.2022.109741
- Weatherburn, Peter/Hickson, Ford/Reid, David/Torres-Rueda, Sergio/Bourne, Adam (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
- Winstock, Adam/Mitcheson, Luke/Ramsey, John/Davies, Susannah/Puchnarewicz, Malgorzata/ Marsden, John (2011). Mephedrone: use, subjective effects and health risks. *Addiction*, 106(11), 1991-1996. DOI: 10.1111/j.1360-0443.2011.03502.x
- Wood, David M/Dargan, Paul I. (2012). Mephedrone (4-methylmethcathinone): what is new in our understanding of its use and toxicity. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 39(2), 227-233. DOI: 10.1016/j.pnpb.2012.04.020
- Wu, Elwin/Terlikbayeva, Assel/Hunt, Timothy/Primbetova, Sholpan/Gun Lee, Yong/Berry, Mark (2017). Preliminary population size estimation of men who have sex with men in Kazakhstan: implications for HIV testing and surveillance. *LGBT health*, 4(2), 164-167. DOI: 10.1089/lgbt.2015.0152

