

Relationship between slamsex and psychological problems?: A Systematic Review

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ABSTRACT

Sexualized drug use (SDU), also known as chemsex, refers to the use of psychoactive substances for sexual purposes among men who have sex with men (MSM), which has been associated with mental health problems. The objective of this review is to systematically analyze the available evidence on psychological adjustment problems in MSM who use sexualized drugs. To prepare this systematic review, search strategies were developed and applied to the Web of Science, Science Direct, PubMed, and Scopus databases. A total of 117 articles were found, of which 13 were selected for the final review. Those MSM who used sexualized drugs were more likely to suffer from depression, anxiety, or a substance or drug dependence. Among those who practiced the administration of intravenous drugs (referred to as slamsex), the consequences for mental health were more severe. The problems in psychological adjustment not only depended on the type of substances consumed, but also on the frequency, quantity, and level of dependence. This systematic review contributes to a fuller understanding of the psychological alterations present in MSM who consume drugs for sexualized use.

METHODS

Protocol and Research Question

This review was carried out according to the Preferred Reporting Items for Systematic Reviews (PRISMA) (Liberati et al., 2009). To determine the research question, the population, intervention, and outcome (PIO) components proposed by the Joanna Briggs Institute (Munn et al., 2014) for systematic reviews of etiology and risk studies were used. These components are P (men who have sex with men), E (chemsex/sexualized drug use), and O (worse mental health). Therefore, the question for the systematic review was as follows: what is the existing scientific evidence on mental health problems present in MSM who practice chemsex/sexualized drug use?

Eligibility criteria

- ▶ Research among MSM participants ≥ 16 years old.
- ▶ Articles that described some relationship between mental health outcomes and SDU.
- ▶ Studies published in indexed journals between 2010 and 2020.
- ▶ Publications without restriction of language or country of origin.

Information Sources and Search Strategy

A systematic search of scientific literature was carried out through electronic databases (Web of Science, Science Direct, PubMed, and Scopus), and the bibliographic references lists of the included articles were examined as a manual search strategy to prevent any loss of relevant information.

RESULTS

Study selection

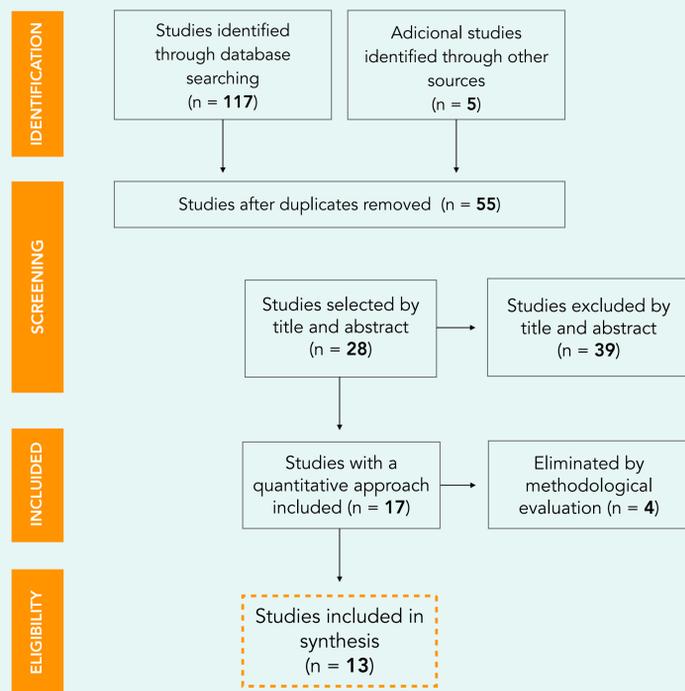


Figure 1. Study selection process according to the PRISMA Diagram.

REFERENCES:

- Batisse, A., Peyrière, H., Eiden, C., Courné, M.-A., Djeddar, S., & Réseau français des centres d'addictovigilance. (2016). [Use of psychostimulants in a sexual context: Analysis of cases reported to the French network of Addictovigilance Centers]. *Thérapie*, 71(6), 447-455. <https://doi.org/10.1016/j.therap.2016.04.003>
- Brogan, N., Paquette, D. M., Lachowsky, N. J., Blais, M., Brennan, D. J., Hart, T. A., & Adam, B. (2019). Canadian results from the European Men-who-have-sex-with-men Internet survey (EMIS-2017). *Canada Communicable Disease Report = Releve Des Maladies Transmissibles Au Canada*, 45(11), 271-282.
- Dolengevich-Segal, H., Gonzalez-Baeza, A., Valencia, J., Valencia-Ortega, E., Cabello, A., Tellez-Molina, M. J., Perez-Elias, M. J., Serrano, R., Perez-Latorre, L., Martin-Carbonero, L., Arponen, S., Sanz-Moreno, J., De la Fuente, S., Bisbal, O., Santos, I., Casado, J. L., Troya, J., Cervero-Jimenez, M., Nistal, S., ... U-SEX GESIDA 9416 Study. (2019). Drug-related and psychopathological symptoms in HIV-positive men who have sex with men who inject drugs during sex (slamsex): Data from the U-SEX GESIDA 9416 Study. *PLoS One*, 14(12), e0220272. <https://doi.org/10.1371/journal.pone.0220272>
- Hibbert, M. P., Brett, C. E., Porcellato, L. A., & Hope, V. D. (2019). Psychosocial and sexual characteristics associated with sexualized drug use and chemsex among men who have sex with men (MSM) in the UK. *Sexually Transmitted Infections*, 95(6), 342-350. <https://doi.org/10.1136/sextrans-2018-053933>
- Nöstlinger, C., Reyniers, T., Smekens, T., Apers, H., Laga, M., Wouters, K., & Vuystek, B. (2020). Drug use, depression and sexual risk behaviour: A syndemic among early pre-exposure prophylaxis (PrEP) adopters in Belgium? *AIDS Care*, 32(sup2), 57-64. <https://doi.org/10.1080/09540121.2020.1739218>
- Schecke, H., Lea, T., Bohn, A., Köhler, T., Sander, D., Scherbaum, N., & Deimel, D. (2019). Crystal Methamphetamine Use in Sexual Settings Among German Men Who Have Sex With Men. *Frontiers in Psychiatry*, 10, 886. <https://doi.org/10.3389/fpsy.2019.00886>
- 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., & 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. *The International Journal on Drug Policy*, 43, 33-43. <https://doi.org/10.1016/j.drugpo.2017.01.001>
- Trouiller, P., Velter, A., Saboni, L., Sommen, C., Sauvage, C., Vaux, S., Barin, F., Chevalier, S., Lot, F., & Jauffret-Roustide, M. (2020). Injecting drug use during sex (known as "slamming") among men who have sex with men: Results from a time-location sampling survey conducted in five cities, France. *International Journal of Drug Policy*, 79, 102703. <https://doi.org/10.1016/j.drugpo.2020.102703>
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gotzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: Explanation and elaboration. *BMJ (Clinical Research Ed.)*, 339, b2700. <https://doi.org/10.1136/bmj.b2700>
- Munn, Z., Tufanaru, C., & Aromataris, E. (2014). JBI's systematic reviews: Data extraction and synthesis. *The American Journal of Nursing*, 114(7), 49-54. <https://doi.org/10.1097/01.NAJ.0000451683.66447.89>

Table 1

Mental health in included studies

	Dependence	Psychiatric history	Anxiety	Depression	Suicidal ideation	Self-reported psychiatric disorder	Psychotic symptoms	Negative impact on your life	No major associations
Batisse et al., 2016	*	*	*		*		*		
Brogan et al., 2019			*	*	*				
Card et al., 2019			*						
Demant & Oviedo-Trespalacios, 2019									*
Dolengevich-Segal et al., 2019	*		*	*	*	*	*		
Hammoud et al., 2017									*
Hibbert et al., 2019								*	
Nöstlinger et al., 2020				*					
Prestage et al., 2018									*
Schecke et al., 2019				*					
Sewell et al., 2017				*					
Trouiller et al., 2020				*					
Vaccher et al., 2020									*

*: Psychological alteration in the study.

According to the data obtained, nine of the studies analyzed (69%) indicated there was a relationship between SDU and mental health problems (Batisse et al., 2016; Brogan et al., 2019; Card et al., 2019; Dolengevich-Segal et al., 2019; Hibbert et al., 2019; Nöstlinger et al., 2020; Schecke et al., 2019; Sewell et al., 2017; Trouiller et al., 2020). Depression was the most frequent disorder among the studies, with six (46.15%) finding a positive association between SDU and depression symptoms (Brogan et al., 2019; Dolengevich-Segal et al., 2019; Nöstlinger et al., 2020; Schecke et al., 2019; Sewell et al., 2017; Trouiller et al., 2020). Further, four studies (30.46%) found a positive relationship between chemsex practice and anxiety symptoms among the participants (Batisse et al., 2016; Brogan et al., 2019; Card et al., 2019; Dolengevich-Segal et al., 2019).

Regarding the psychological problems associated with the practice of slamsex, Dolengevich-Segal et al. (2019) noted that people who had participated in slamsex were more likely to report current self-reported psychiatric disorders than those who participated in non-intravenous SDU. Compared to participants who had participated in non-intravenous SDU, those who participated in slamsex reported some depressive disorders (61.8% versus 28%), anxiety disorders (47.1% versus 23.1%), and addictive disorders (38.2% versus 15.4%). Similarly, Batisse et al. (2016) revealed an association between slamsex practice and different psychiatric problems in 50% of the cases (psychotic symptoms, agitation, anxiety, ideas, or autolytic attempts), acute intoxication in 25% (with three deaths), dependence and abuse in 17%, and seroconversion in 8% of cases. On the other hand, Trouiller et al. (2020) found that slamming participants demonstrated poorer mental health and higher antidepressant use over the previous 12 months. The mental health score (mean, 0 to 100; 100 = best possible state) among those who had never slammed was 66.5 versus 51.8 who slammed.

CONCLUSIONS

- ▶ The relationship between mental health and sexualized drug use continues to be poorly addressed and there is a great heterogeneity in terms of the type of substances analyzed (substances for sexualized use or chemsex substances).
- ▶ The main mental health problems of people who practice chemsex are depression and anxiety, although other disorders have also been described with less evidence.
- ▶ People who choose slamsex as a route of administration exhibit more acute mental health problems.