

Relationship Between Non-intravenous Sexualized Drug Use and Mental Health Problems in men who have sex with men (MSM): A Systematic Review

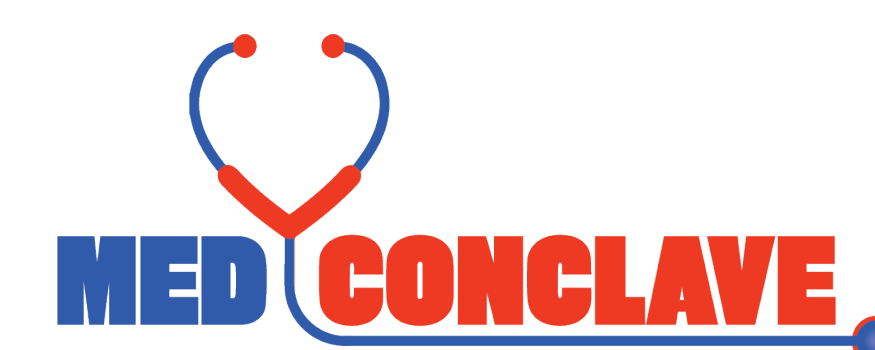
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ABSTRACT

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

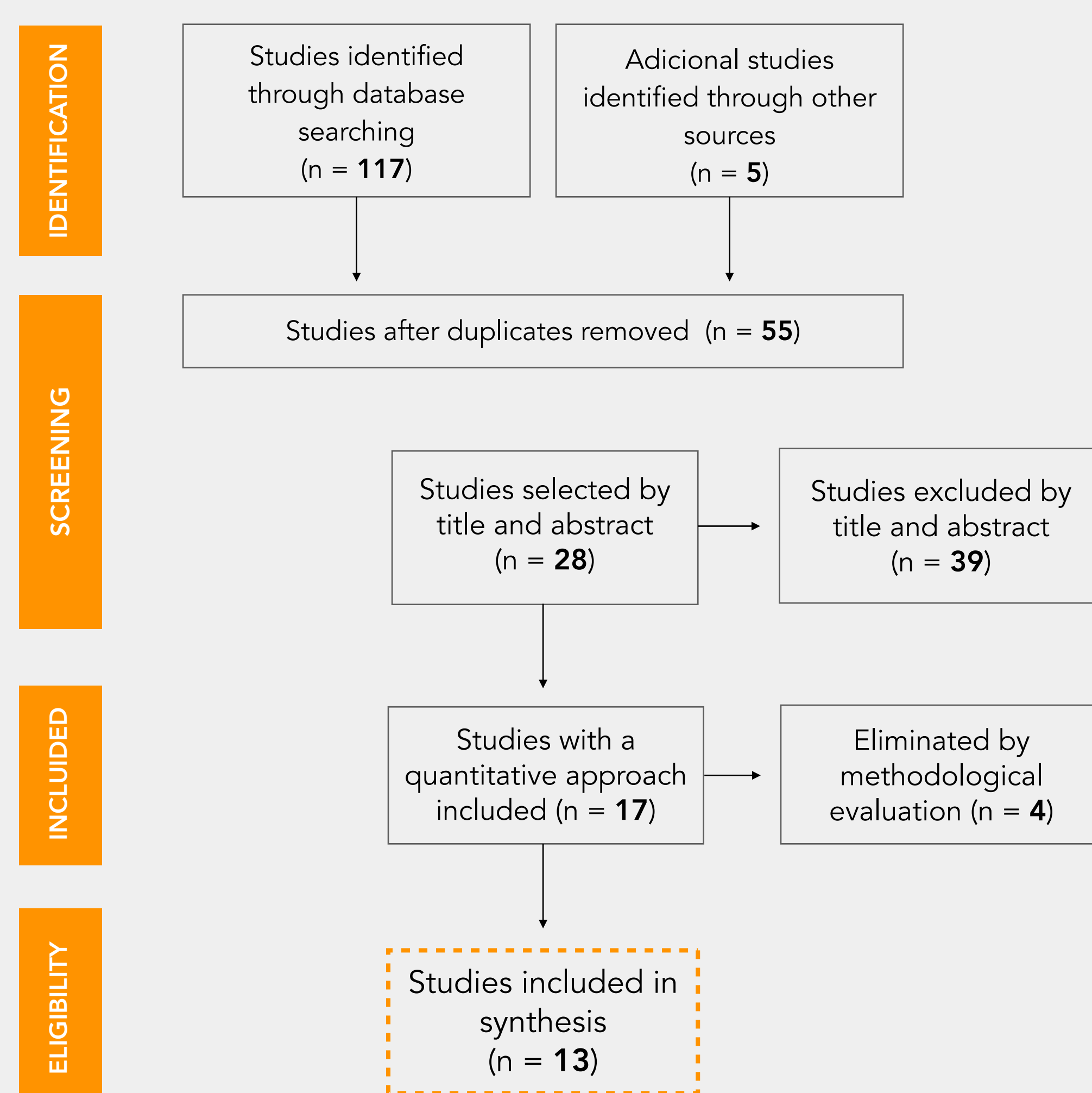


Figure 1. Study selection process according to the PRISMA Diagram.

REFERENCES:

- 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 = Relevé Des Maladies Transmissibles Au Canada*, 45(11), 271-282. <https://doi.org/10.14745/ccdr.v45i11a01>
- 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. <https://doi.org/10.1136/sextrans-2018-053933>
- 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>
- Nöstlinger, C., Reyniers, T., Smekens, T., Apers, H., Laga, M., Wouters, K., & Vuylsteke, 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>

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.

Among the studies that analyzed non-intravenous SDU, Brogan et al. (2019) found that 24% of participants exhibited moderate to severe levels of anxiety and depression, and 26% revealed suicidal thoughts (almost every day in the previous 2 weeks). In their longitudinal study, Nöstlinger et al. (2020) identified that 12% of participants exhibited moderate to severe levels of depression at baseline, which increased to 15% and 16% at 9 and 18 months, respectively. In addition, six serious adverse events related to psychiatric problems and/or drug use were documented throughout the study period: one study participant died due to a GHB overdose, one committed suicide after an alcohol and drug overdose, and four participants reported being diagnosed with some psychiatric disorder. Another study found that methamphetamine users exhibited significantly higher levels of depression compared to men who did not use drugs before or during sex (Schecke et al., 2019). Sewell et al. (2017) found that depressive symptoms were present in 33% of non-chemsex drug users and in 29.2% of chemsex drug users. This research also associated an increased risk of drinking alcohol among those who used chemsex drugs or recreational drugs compared to those who did not use any drugs. Depressive symptoms and an increased risk of alcohol use were associated with chemsex drug use and the use of three or more recreational drugs in the previous 3 months. Finally, Hibbert et al. (2019) noted that MSM who participated in SDU were more likely to report lower levels of life satisfaction. However, no significant differences were identified on this issue between those who used chemsex substances and those who used other types of SDU.

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.
- ▶ We cannot draw far-reaching conclusions linking sexualized drug use to poorer mental health, and more comprehensive evaluations of the psychological profiles of those who wish to practice chemsex should be established.
- ▶ In addition, the implementation of psychoeducation and psychological care strategies based on individual parameters is important as a measure to avoid the exacerbation of mental health problems among.