SUBSTANCE USE BEHAVIOURS AMONG SEXUAL AND GENDER MINORITIES WITH A HISTORY OF ADVERSE CHILDHOOD EXPERIENCES: A SYSTEMATIC REVIEW AND NARRATIVE-SYNTHESIS

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BACKGROUND

- Substance use is one of the key drivers of enhanced susceptibility of key populations, such as sexual gender minorities (SGM) to HIV and other sexual transmitted infections (STI).
- Adverse childhood experiences (ACEs) impact behavioural and mental health outcomes.
- SGM face disproportionately higher rates of ACEs and substance use compared to heterosexual and cisgender individuals.

Objectives

- To identify associations between ACEs and substance use outcomes in SGM adults
- Identify other risk factors of substance use and and how these intersect with ACEs

METHODS

- Systematic review conducted per PRSIMA-P guidelines: double-screened, double-extracted. Protocol registered with PROSPEPRO (CRD42024493936).
- Six databases searched: PubMed, EMBASE, CINAHL, Scopus, PscyINFO and Web of Science from inception to 13 April 2025.
- Inclusion criteria: Peer-reviewed epidemiological and qualitative studies on SGM adults (population), ACEs (exposure) and substance use (outcome).
- Quality assessment using MMAT, with all studies meeting acceptable quality threshold.
- Synthesis: Narrative and thematic synthesis due to heterogeneity of studies.

RESULTS

- Total studies: 26 (23 quantitative, 3 qualitative)
 Participants N=33,039 from 5 countries, United States (n=19), South Africa (n=4), Canada (n=1), Cambodia (n=1), Lebanon (n=1).
- SGM sub-group breakdown: 17(65%) GBMSM, 5(20%) LBQ women, and 4(15%) transgender persons.
- Of the 23 quantitative studies:
 - ACEs examined were childhood sexual abuse (CSA) (95%), childhood physical abuse (CPA) (43%), emotional/psychological abuse (26%), emotional and physical neglect (13%) and household dysfunction (17%).
 - **15**(65%) reported **drug-related** outcomes, **16**(70%) reported alcohol-related outcomes, and 2(9%) reported tobacco-smoking outcomes.
- Of the 3 qualitative studies:
 - All reported CSA, and included other ACEs associated with early awareness of sexual orientation such as childhood heterosexism, abusive family relationships, bullying and mistreatment by non-relatives.
 - Substance use outcomes included both drug and alcohol use.

Identification of studies via databases and registers Records identified from Records removed before Databases (n = 9,424) CINAHL (n = 1,525) Embase (n = 2,565) PsycINFO (n = 2,231) Duplicate records removed (n = 3,121) Duplicate records removed by Endnote (n = 2,501) Duplicate records removed PubMed (n = 924) Scopus (n = 1.298) Web of Science (n = 881) manually (n = 620) Records screened (n = 6,303) Records excluded** (n = 6,150) Reports sought for retrieval Reports not retrieved (n = 153) Reports excluded: Population included under 18 Reports assessed for eligibility (n = 153) years old (n = 41) Population included non-SGM (n = 8) Exposure included experiences above 18 years old (n = 17) Relationship between exposure and outcome not measured (n = 61) Studies included in review Quantitative (n = 23) Qualitative (n = 3)

KEY FINDINGS

- Consistent strong associations between ACEs, especially CSA to negative substance use outcomes in SGM adults.
- While CSA most frequently studied, emotional abuse, household dysfunction, and cumulative ACE exposure is associated with increased substance use.
- Intersectional influences on substance use outcomes: age, race, financial status, education, psychological factors, environment, SGM-identity specific stigma, interpersonal relationships, engaging in transactional sex.
- Qualitative data supported and expanded on quantitative findings.
 - Social factors such as relationships with partners also led to substance use outcomes.
 - Marginalization due to SGM identities in childhood from family, peers, and broader communities were stressors and lead to coping through substance use.
 - This oppression was also experienced in treatment seeking, and services failed them as sexual and racial minorities.

CONCLUSIONS

Our findings highlight three critical areas for intervention:

- 1) the need for early intervention on SGM persons experiencing ACEs before the age of 18,
- 2) the need for trauma-informed care addressing ACEs in substance use treatment, and
- 3) person-centred care models addressing intersectional challenges.

This emphasizes the importance of developing targeted prevention and interventions that address both the psychosocial and substance and sexual health needs of young SGM individuals.