Sexualised drug use among cisgender heterosexual and LGBTQ+ people who regularly use illicit stimulants in Australia

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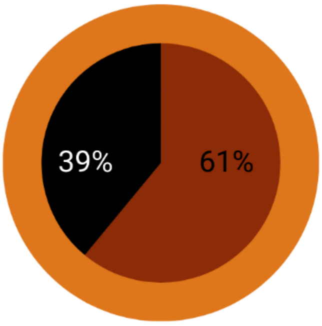
Key Findings



61.0% of EDRS participants reported using drugs or alcohol before or during sexual activity with another person in the last 4 weeks.

26.8% of EDRS participants reported engaging in sexualised drug use (use to enhance a sexual activity or pleasure with another person).

Past month engagement in, and frequency of, sexualised drug use was **similar across cisheterosexual and LGBTQ+ participants**.

More frequent alcohol use was associated with general substance use before or during sexual activity with another person.

More frequent use of cannabis, ecstasy and related illicit drugs was associated with sexualised substance use.

Based on 740 people who regularly use ecstasy and/or other illicit stimulants in Australia and were interviewed as part of the 2024 Ecstasy and related Drug Reporting System (EDRS).

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Introduction

Sexualised drug use (SDU) refers to the intentional use of substances to enhance sexual activity (1). SDU is practiced for a variety of reasons by people who use drugs, including to enhance sexual pleasure, reduce anxiety related to sexual activity and performance, and for sexual coercion (1). SDU encapsulates a variety of subcultures, including chemsex, which involves the use of specific drugs, such as methamphetamine, gamma-hydroxybutyrate (GHB) and mephedrone, by men who have sex with men (MSM) (1-3).

Previous Australian and international research examining SDU and chemsex has largely examined the experiences of MSM (2-5). A recent literature review (1) found that most of the literature examines SDU among MSM or non-consensual substance use experiences, such as drug-facilitated sexual assault (6). Critically, while previous research argues that SDU is more common among lesbian, gay, bisexual, transgender, queer, and other sexual and gender minority (LGBTQ+[1]) people (7-9), there has been limited attention to SDU experiences among transgender people, people with emerging queer identities (10) and cisgender heterosexual people. Additionally, limited research has focused on the SDU experiences of women who have sex with women (WSW) (7).

Improving understanding of the prevalence of, and engagement in, SDU among people of various gender and sexual identities is critical to tailoring health promotional messages to all those engaged in SDU, beyond MSM populations. In this bulletin, we aim to examine the prevalence, frequency and factors associated with SDU among cisgender heterosexual and LGBTQ+ people who regularly use ecstasy and other illicit stimulants in Australia.

Methods

Data were collected in 2024 as part of the Ecstasy and Related Drugs Reporting System (EDRS). Annual interviews were conducted with people residing in capital city areas of Australia who used ecstasy and/or other illicit stimulants on a monthly or more frequent basis and were aged 18 or older (n = 740). Further information about the National EDRS sample can be found elsewhere (11).

Data relating to sexual activity rely on self-reports of sexual activity over the past 4 weeks. Measures include the total number of days participants (a) engaged in sexual activity with another person, (b) used alcohol or drugs before or during engaging in sexual activity with another person (general substance use), and (c) used drugs or alcohol to enhance sexual activity or pleasure with another person (sexualised drug use). This allowed us to explore differences in factors associated with general substance use versus SDU during sexual activity.

We coded participants' reports of at least one day of both general substance use and SDU to measure prevalence (0 = no, 1 = yes). We also coded the proportion of participants' sexual activity that involved substance use, dividing the total number of days participants reported engaging in general substance use and SDU during sexual activity by the total number of days they reported sexual activity with another person.

To examine sexual activity, general substance use during sexual activity, and SDU across different gender and sexuality groups, we coded and combined participants' sex, gender and sexual orientation (e.g., heterosexual cisgender women, bisexual cisgender men). Due to sample size constraints, we grouped (a) LGBQ+ transgender, non-binary, and gender-diverse participants, and (b) participants who reported queer and other

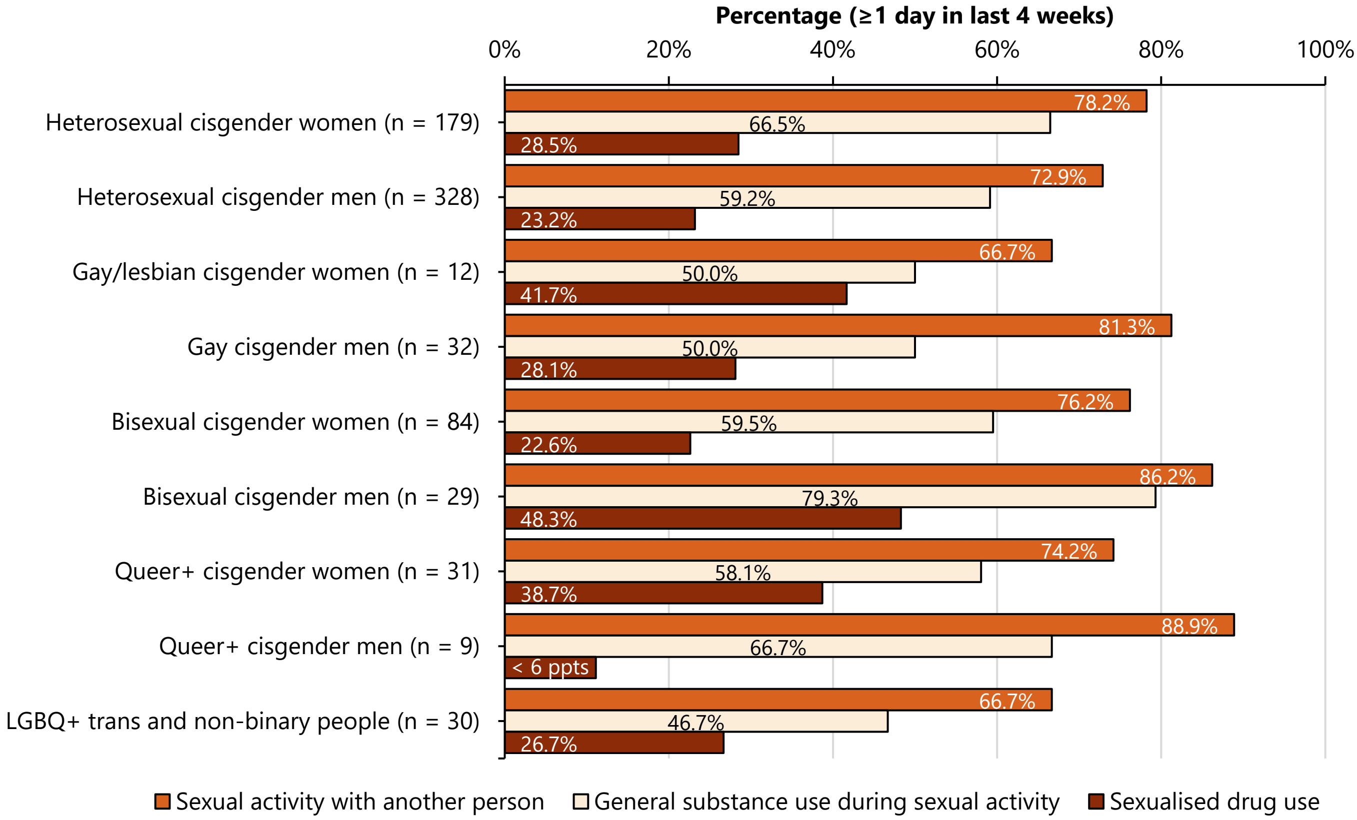
[1] We use this acronym given the focus on lesbian, gay, bisexual, transgender, and queer people and our limited ability to generalise the results to intersex and other sexual and gender minorities who use drugs in Australia.

sexual minority identities (e.g., pansexual). Our multivariate analyses treated gender and sexuality as independent factors.

Multivariate models focused solely on EDRS participants who reported at least one day of sexual activity. We used logistic regressions to examine factors associated with the percentage of general and SDU, negative binomial logistic regressions to examine factors associated with the frequency of general and SDU, and linear regressions to examine factors associated with the proportion of sexual activity that involved general substance use or SDU.

Results

Figure 1. Substance use during sexual activity among cisgender heterosexual and LGBTQ+ participants, EDRS 2024



Note. Heterosexual transgender and non-binary people are excluded from the figure due to low sample size (<6 people); Values involving less than 6 participants are suppressed; Ppts = participants.

Sexual activity

Three-quarters of EDRS participants (75.4%) reported at least one day of sexual activity with another person in the past four weeks, on a median of six days (interquartile range [IQR] = 3-12). No significant differences in sexual activity emerged across different gender and sexuality groups ($\chi^2_{(9)}$ =7.63, p = 0.572), although Figure 1 suggests that sexual activity may be slightly lower among LGBQ+ trans and non-binary people and gay/lesbian cisgender women.

Table 1. Factors associated with substance use during sexual activity, EDRS 2024

Outcome	General substance use before or during sexual activity			Sexualised drug use		
Model	Logistic regression (percentage)	Negative binomial regression (frequency)	Linear regression (proportion of overall sexual activity)	Logistic regression (percentage)	Negative binomial regression (frequency)	Linear regression (proportion of overall sexual activity)
	AOR (CI_{95})	**B (CI_{95})**	**B (CI_{95})**	**AOR (CI_{95})**	**B (CI_{95})**	**B (CI_{95})**
Gender (reference: cisgender men)						
Cisgender women	1.06 (0.63, 1.78)	0.01 (-0.21, 0.23)	0.01 (-0.06, 0.08)	1.44 (0.94, 2.20)	0.22 (-0.12, 0.55)	0.04 (-0.02, 0.10)
Sexuality (reference: heterosexual)						
Bisexual	0.90 (0.45, 1.80)	-0.02 (-0.31, 0.27)	0.00 (-0.10, 0.09)	0.86 (0.49, 1.51)	-0.09 (-0.53, 0.35)	-0.02 (-0.11, 0.06)
Gay/lesbian	**0.43** (0.19, 0.96)	-0.21 (-0.66, 0.23)	-0.03 (-0.16, 0.11)	1.60 (0.74, 3.44)	0.29 (-0.29, 0.87)	0.10 (-0.01, 0.22)
Queer or other	0.62 (0.23, 1.64)	-0.10 (-0.56, 0.37)	-0.04 (-0.19, 0.11)	1.03 (0.44, 2.43)	0.02 (-0.64, 0.68)	-0.01 (-0.14, 0.12)
Age (years)	1.00 (0.97, 1.03)	0.00 (-0.01, 0.01)	0.00 (0.00, 0.01)	**1.03** (1.00, 1.05)	0.02 (-0.00, 0.03)	**0.01** (0.00, 0.01)
Stable housing	0.28 (0.04, 2.17)	-0.13 (-0.61, 0.36)	-0.16 (-0.34, 0.01)	0.87 (0.32, 2.39)	-0.06 (-0.81, 0.69)	0.00 (-0.15, 0.15)
Employed ≥ part-time/casual	0.99 (0.55, 1.77)	0.00 (-0.25, 0.25)	0.00 (-0.08, 0.08)	0.80 (0.50, 1.28)	-0.14 (-0.50, 0.22)	-0.03 (-0.10, 0.04)
Days using ERDs (past month)	1.12 (0.92, 1.37)	0.02 (-0.06, 0.10)	**0.03** (0.00, 0.06)	**1.19** (1.01, 1.39)	0.10 (-0.02, 0.22)	**0.03** (0.01, 0.06)
WOM$^{\tau}$ Cannabis	0.96 (0.59, 1.58)	-0.01 (-0.21, 0.20)	**0.08** (0.01, 0.14)	**1.74** (1.16, 2.60)	**0.34** (0.03, 0.66)	**0.10** (0.05, 0.16)
WOM Alcohol	**2.14** (1.29, 3.57)	0.16 (-0.08, 0.40)	**0.13** (0.05, 0.21)	0.84 (0.54, 1.33)	-0.11 (-0.46, 0.24)	-0.02 (-0.09, 0.05)
WOM Cocaine	0.60 (0.28, 1.29)	-0.09 (-0.43, 0.25)	0.07 (-0.04, 0.18)	1.36 (0.72, 2.58)	0.19 (-0.29, 0.67)	0.08 (-0.02, 0.18)
WOM Methamphetamine	1.14 (0.37, 3.50)	0.02 (-0.40, 0.44)	0.10 (-0.05, 0.24)	1.47 (0.66, 3.31)	0.16 (-0.41, 0.74)	0.10 (-0.02, 0.23)
WOM Ketamine	1.34 (0.44, 4.08)	0.05 (-0.36, 0.45)	0.02 (-0.12, 0.16)	0.82 (0.36, 1.87)	-0.11 (-0.76, 0.54)	-0.05 (-0.17, 0.07)
WOM Non-prescribed pharmaceutical stimulants	1.24 (0.57, 2.69)	0.04 (-0.27, 0.34)	-0.01 (-0.11, 0.09)	1.59 (0.89, 2.85)	0.28 (-0.16, 0.71)	**0.11** (0.02, 0.20)

Note. AOR: adjusted odds ratio. Models are adjusted for all factors shown; CI_{95} = 95% confidence interval; $^{\tau}$WOM = weekly or more substance use. Reference category for gender is cisgender men; Reference category for sexuality is heterosexual. Transgender and/or non-binary participants were excluded from analyses due to sample size constraints. Figures in bold indicate statistical significance.

General substance use before or during sexual activity

Three fifths of EDRS participants (61.0%) reported using substances before or during sexual activity at least once in the past four weeks, on a median of two days (IQR = 1-4). Figure 1 shows that general substance use before or during sexual activity was similar across gender and sexuality groups ($\chi^2_{(9)}$ = 13.22, p = 0.153).

Similarly, our multivariate models (Table 1) show that gender and sexuality were not significantly associated with the frequency of substance use before or during sexual activity, nor the proportion of sexual activity that involved substance use. However, gay/lesbian participants were less likely to report general substance use before or during sexual activity than heterosexual participants.

EDRS participants who reported weekly or more frequent alcohol use were more likely to report substance use before or during sexual activity, and a greater proportion of their sexual activity involved the use of substances. A greater proportion of sexual activity involved substance use among EDRS participants who reported weekly or more frequent cannabis use.

Sexualised drug use

One quarter (26.8%) of EDRS participants reported at least one day of SDU. Participants who engaged in SDU (n = 198) typically reported two days of SDU (Median = 2, IQR = 2-4). This proportion was similar across cisgender heterosexual and LGBTQ+ participant groups ($\chi^2_{(9)}$ = 15.38, p = 0.081; Figure 1), although descriptively Figure 1 suggests SDU may be more common among cisgender bisexual men (48.3%) compared to other groups (22.6-41.7%).

Our multivariate analyses (Table 1) show that gender and sexuality were not associated with the percentage of participants engaging in SDU, the frequency of SDU over a 4-week period, or the proportion of sexual activity that involved SDU.

Older EDRS participants were slightly more likely to report SDU, with a greater proportion of their sexual activity involving SDU (although these effects were very small).

EDRS participants who reported greater number of days using ecstasy or related illicit drugs in the past month were more likely to report SDU and a greater proportion of their sexual activity involved SDU. Additionally, participants who reported weekly or more frequent cannabis use were more likely to report SDU, reported a greater frequency of SDU, and SDU comprised a greater proportion of their sexual activity. Participants who reported weekly or more frequent use of non-prescribed pharmaceutical stimulants reported that a greater proportion of their sexual activity involved SDU.

Discussion

We found that three-fifths (61.0%) of the 2024 EDRS sample used drugs before or while engaging in sexual activity. Additionally, one in four (26.8%) participants reported at least one day of SDU in the four weeks prior to participating in the survey, during which drugs were purposely used to enhance their sexual activity or pleasure. Importantly, gender and sexual identity were not significantly associated with engagement in SDU, with cisgender heterosexual participants being equally as likely to engage in SDU as LGBTQ+ participants.

These findings are important as they conflict with commonly held perceptions and research which indicates that, among people who use illicit drugs, SDU is more common among LGBTQ+ individuals (12). Furthermore, these findings challenge the assumption that LGBTQ+ people engage in "risker" sexual practices when compared to their heterosexual peers (13). This highlights the importance of diversifying and tailoring sexual health messaging to the needs of heterogeneous groups among people who use drugs during sexual activity beyond the traditional sexual health messaging which has targeted the needs of MSM. Particularly, sexual health messaging related to SDU should also be tailored to heterosexual, gender diverse and WSW individuals to better meet the unique sexual health needs of these individuals.

Limitations

The findings of the study are limited by several factors. Firstly, due to the sample size constraints related to some sexual and gender identities, it is difficult to thoroughly explore patterns of SDU among different sexuality and gender groups. Additionally, the EDRS sample is not intended to be representative of the general population, LGBTQ+ people, people engaged in SDU or all people using illicit stimulant drugs. Therefore, findings may not be generalisable to these broader populations. Despite these limitations, the results of this study provide important insights into SDU among LGBTQ+ and cisgender heterosexual people who use drugs in Australia.

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