GHB and methamphetamine use in a single session among a sample of people who regularly use illicit stimulants in Australia, 2023

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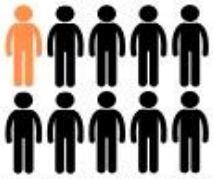
Introduction

Gamma hydroxybutyrate (GHB) and its precursors (GBL and 1,4-BD) are central nervous system depressants associated with high risk of overdose, dependence, and withdrawal (1). In Australia, GHB use and related harms appear to be increasing, including GHB-related hospitalisations which disproportionately require intensive care (2, 3, 4, 5). As part of the Emerging Drugs Network of Australia (EDNA), emergency department (ED) patients suspected of illicit drug intoxication undergo blood sampling (6), and methamphetamine has been co-detected in 80-90% of cases involving GHB (4, 7). To help inform responses, there is a need to better understand patterns of use relating to GHB and methamphetamine.

Results

Among a sentinel sample of people who regularly use ecstasy and/or other illicit stimulants in Australia (n=708), recruited from capital cities as part of the 2023 Ecstasy and Related Drugs Reporting System (EDRS) interviews:



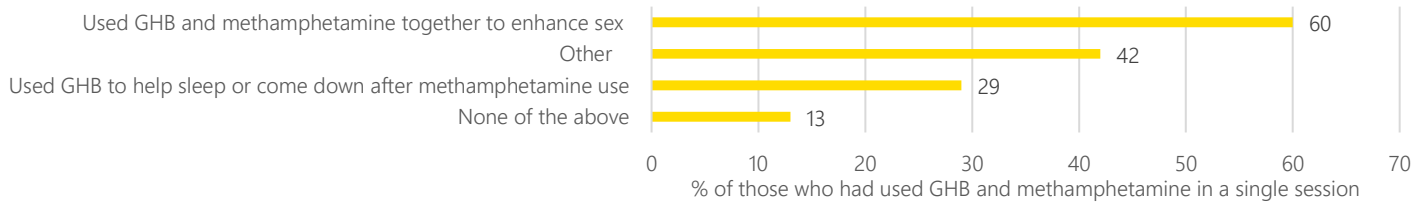
One in ten participants (9%; n=64) reported use of both methamphetamine and GHB in the preceding six months.

Of these, 75% (7% of entire sample) reported using both in a single session (a continuous period without sleep).

The most common reason for co-use of these substances was to enhance sex, followed by to come down or sleep (Figure 1).

Among the entire sample, 3% reported unintentional GHB use in the past six months. Notably, 53% (n=10) of those individuals indicated that they had not engaged in any recent intentional use.

Figure 1: Reasons for using GHB and methamphetamine in a single session, National EDRS, 2023 (n=48)



Note. X axis reduced to 70% to improve visibility. Multiple responses allowed so totals exceed 100%. Common 'other' responses related to interaction effects, such as to relax while using methamphetamine, or conversely stay awake while using GHB.

Discussion

The frequency of GHB and methamphetamine use in a single session was low among the overall EDRS sample (7%, n=48), but high (75%) among those recently using both substances. While chemsex was the most commonly reported reason for co-use, a substantial minority reported using GHB to help come down or sleep. These findings support expanding recognition of GHB use beyond party and chemsex contexts (4). There were also indications of possible unwitting GHB use, although 'unintentional' use may have referred to misdosing among those also using GHB intentionally (47%). Misdosing is common given GHB's steep dose-response curve and has contributed to recent overdoses (4). Future research would benefit from defining 'unintentional use', investigating GHB and methamphetamine co-use among larger samples, and specifically investigating patterns preceding overdose (beyond retrospective analyses of hospital records). Further, insight into how different intentions (e.g. chemsex, to help sleep) may affect the risk of overdose would also be useful.

References

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