

Rapid Review Response – Impact of Methamphetamine and Poppers on Sexual Risk Taking

Question: Does using crystal methamphetamine and/or poppers affect sexual risk-taking amongst MSM youth and men in Toronto?

The issue and why it's important

Methamphetamine (meth) or crystal meth, an addictive stimulant, is a significant health issue among gay and bisexual men in North America, Europe, and Australia.^{2,4,10} Although meth use is widespread among a variety of populations, it is particularly prevalent among MSM.^{2,3} US data indicate annual prevalence rates of meth use in MSM ranging from 12% to 30%.² The popularity of meth among MSM seems to stem from its association with sexual activity and its strategic use by gay and bisexual men in negotiating sexual encounters, reducing inhibitions, increasing sexual pleasure, and intensifying emotions and sensations.^{3,5}

What We Found

- Meth use among MSM is as much as 10 times higher than among the general population.³
- United States surveillance data from 2007 showed HIV/AIDS incidence rates doubled or tripled for MSM who use meth.¹²
- During the past decade, adult MSM in multiple urban centers have reported meth use and risky sex, particularly within the context of highly charged sexual environments (e.g., the Internet, circuit parties, bathhouses, and sex clubs).²
- A strong association exists between meth use and high-risk sexual behaviors such as unprotected anal intercourse (UAI) and sex with multiple sexual partners, and accounts for increases in sexual compulsivity and incidence of HIV in MSM populations^{1,3,4,5,6,8,12}
- Although some literature discusses how impairment in judgement produced by substance use may lead to unsafe sexual practices that increase risk for HIV transmission among gay and bisexual men,^{4,10} additional information notes that we cannot determine whether sexual risk or psychological distress was a result of meth use, or whether MSM and young MSM who generally engage in high-risk behaviors or experience psychological distress use meth.²
- For adolescent and young MSM, meth use and HIV risk are of specific public health importance. Young MSM may use meth more frequently than older MSM; preliminary US national data show a 21% annual prevalence of meth use among young MSM (aged 18 to 24 years) compared with 12% in the adult MSM sample.² Risky sex continues to be observed in young MSM and is often associated with substance use.²

- Young MSM who used meth were also more likely than older MSM to report: UAI, multiple anal-sex partners, and sex in a bathhouse or sex club with a partner they met via the Internet or in exchange for resources or with older partners.²
- Reasons for initiating meth use includes: to get more energy, meet sex partners, and to cope with mood and individual psychological factors such as self-esteem, loneliness, isolation, and feelings of stigma and negative personal attributes.^{4,8,9,12}
- The typical study participant had very little knowledge about meth at initiation.⁸
- Some participants were accidentally initiated into meth (some thought it was cocaine) and admitted that had they known more about the drug, they may have been less likely to inadvertently use the drug.⁸
- Viagra use among meth-using MSM was two to three times higher than among non-meth users and its usage combined with other drugs increases significantly over time among HIV-negative MSM using meth.¹⁰
- In one study, HIV-positive men participated more frequently in UAI compared to HIV-negative men (mostly in seroconcordant relationships) and were less likely to inquire about a partner's serostatus while under the influence of meth.^{5,7,11}
- MSM who report drug use are more likely to use multiple drugs such as poppers and amphetamines, be younger, and have more sex with partners of unknown serostatus.^{6,9} Consistent use of poppers and amphetamines was linked to HIV seroconversion.^{6,8}
- Polydrug use can interfere with the effectiveness of antiretroviral medications and adherence among HIV-positive individuals.⁹
- Recent stigmatization of meth through media campaigns may be leading members of the gay community to seek out a drug that they may view as more socially acceptable and that has less severe negative impacts (i.e. cocaine).⁸

Implications

The literature has identified the following implications for policies and programs:

- Specialized behavioral interventions and treatment strategies for HIV-positive MSM may be advisable. Such strategies should address the understanding of HIV and its effects on health and social functioning, why individuals self-medicate, and the impulsivity associated with the use of meth among HIV-positive MSM.⁹

- Prevention efforts need to address social and psychological contexts of sexuality for young MSM.² Factors such as the Internet, older partners, commercial sex venues, exchanging sex for resources, and psychological distress and self-esteem have an important role in contributing to meth-related sexual risk.^{1,2}
- Prevention and education efforts should address the range of ways meth is used by gay and bisexual men, as well the different usage patterns in different age groups.
- HIV prevention programs for HIV-positive meth-using MSM should emphasize the risks associated with unprotected sex with seroconcordant partners.¹¹
- Prevention strategies should include culturally specific information on HIV risk and be integrated with effective substance use treatments.¹³
- It may not be beneficial, or cost-effective, to focus prevention strategies on meth use alone as some studies have shown that many men who engage in unsafe sex are not active meth users. Thus pigeonholing meth not only excludes non-meth using men who engage in UAI (a significant majority of MSM) but may also overlook the broader political, social, and psychological forces continuing to drive new HIV transmissions.³

Behavioral Therapy Models

The following behavioral models (from a US study on meth-using MSM) taken together and tailored specifically for MSM have been shown to suppress meth use and reduce URAI and UIAI.¹³

1. *Cognitive Behavioral Therapy (CBT)* – broad set of psychological and educational techniques that provide substance-dependent individuals with critical knowledge about drug dependence and trains them with skills to initiate abstinence and to return to abstinence should relapse occur.¹³
2. *Contingency Management (CM)* – contrasts with CBT in that it is a behavioral therapy that manipulates available reinforcers in the environment to shape the behaviors of substance dependent individuals to avoid drug use. Voucher-based reinforcement therapy provides increasingly valuable incentives (vouchers) for consecutive urine samples clean of meth.¹³

What We Did

McMaster University libraries databases were used as the source of information for this review. Key terms including “Gay,” “Bisexual,” “MSM,” “Youth,” “Crystal Methamphetamine,” “Meth,” “Poppers,” and “Sexual Risk,” and “Risk Behaviours,” were used to gather as much information on this topic as possible. From this, over 50 articles were reviewed, key points from 13 of which lead to this report back (those excluded were not relevant).

Few journal articles dealt with the relationship between meth use and high risk sex among young gay and bisexual men; therefore the majority of the information contained in this report is specific to adult MSM. The majority of articles were based on primary research studies. There were no reviews contained in the searches that were relevant and most of the articles are US-based, however a couple articles were written based on studies in Scotland, Australia, and Canada.

In addition, key Canadian researchers such as Dr. Barry Adam were consulted.

Limitations/Conclusions

We cannot draw conclusions about causality in any of these studies.² For example; we cannot determine whether sexual risk or psychological distress was a consequence of meth use or whether MSM and young MSM, who generally engage in high-risk behaviors or experience psychological distress, use meth. It is also possible that meth use in combination with other drugs or environmental and personal factors have led to an increase in sexual risk behaviours.

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