

Outpatient Management of Crystal Methamphetamine Dependence Among Gay and Bisexual Men: *How Can it Be Done?*

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ABSTRACT

The rise in methamphetamine use among gay and bisexual men in urban centers over the past 10 years has resulted in a greater understanding of the biologic, psychologic, and cultural dimensions of the problem, as well as the development of specific treatments for this patient population. Culturally informed individual counseling and group psychotherapy, based on the principles of motivational interviewing and organized around the Matrix Model, appear to be most effective in the outpatient management of this difficult illness. Pharmacotherapy is limited to the treatment of co-occurring psychiatric disorders.

INTRODUCTION

The rise in methamphetamine use in the United States has caused a great concern for many clinicians and health-care professionals. In recent years, the Drug Abuse Warning Network has noted an increase in the number of emergency room visits due to methamphetamine use from 10,447 in 1999 to 17,696 in 2002¹; this increase corresponds with the rise of methamphetamine use in cities such as Los Angeles, Baltimore, Miami, and San Diego. The proportion of

FOCUS POINTS

- Crystal methamphetamine use is increasingly spreading to the gay communities of urban centers.
- Gay-affirmative group psychotherapy and contingency management have been proved effective in the treatment of gay and bisexual men who suffer from methamphetamine dependence.
- There are no Food and Drug Administration-approved medications for methamphetamine dependence.

methamphetamine admissions to substance abuse treatment has also risen in the past 10 years, as has the number of methamphetamine-related arrests in the US.² Worldwide, methamphetamine use is more prevalent than heroin or cocaine. Alcohol and marijuana are the only substances more commonly used than methamphetamine.³

Methamphetamine use has been documented among truck drivers, World War II pilots, and soldiers, with the goal of increasing mental alertness. More recently, there has been significant rise in methamphetamine use among adolescents.⁴ In many urban areas, such as New York City, methamphetamine use among gay and bisexual men has risen as well.⁵

The management of this emerging medical problem in the gay community requires a multifaceted approach with clinician knowledge and competence in a variety of biologic, psychologic, and cultural domains.

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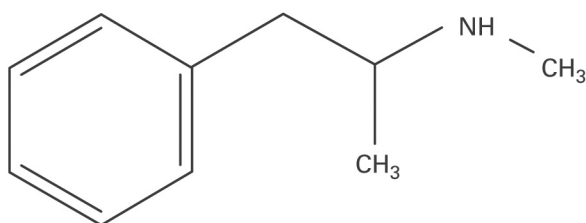
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THE BIOLOGY OF METHAMPHETAMINE

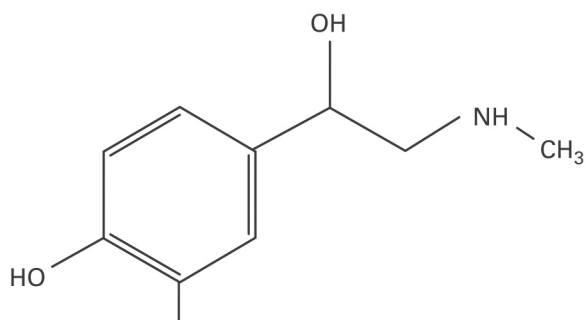
Methamphetamine belongs in the stimulant family of drugs of abuse. It is a sympathomimetic drug, a phenyl-ethyl-amine, and its chemical structure closely resembles epinephrine and pseudoephedrine (Figure 1). Methamphetamine is easily manufactured from pseudoephedrine-containing over-the-counter medications and common household sol-

FIGURE 1
CHEMICAL STRUCTURE OF METHAMPHETAMINE, PSEUDOEPHEDRINE, AND EPINEPHRINE

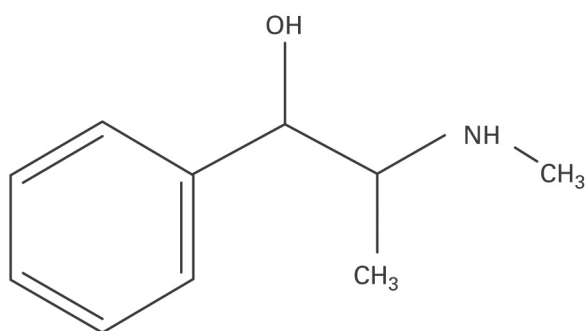
A. Methamphetamine



B. Pseudoephedrine



C. Epinephrine



Levounis P, Ruggiero JS. *Primary Psychiatry*. Vol 13, No 2. 2006.

vents. Crystal methamphetamine, also called “crystal meth”, “ice”, or “glass” on the street, is produced by recrystallizing powder methamphetamine and is then smoked like crack cocaine. Crystal meth typically sells for \$120–\$500/gram and \$350–\$2,300/ounce.¹

Pharmacologically, methamphetamine inhibits the reuptake of synaptic dopamine, which is similar to the effect of cocaine on the dopamine system. However, methamphetamine also directly promotes dopamine release, which may be implicated in the unique neurotoxic effects of the amphetamines on dopamine and serotonin neurons. Clinically, the effects of methamphetamine are qualitatively similar to those of cocaine, but quantitatively larger. Intoxication is more intense and lasts several hours, while withdrawal is deeper and lasts several days compared to the shorter effects of cocaine (Table 1). Severe intoxication with crystal meth can lead to paranoid delusions; visual, auditory, and/or tactile hallucinations; and a clinical presentation virtually indistinguishable from an acute exacerbation of schizophrenia.

CRYSTAL METHAMPHETAMINE IN THE GAY COMMUNITY

Until recently, methamphetamine was not a significant medical problem on the East Coast. Now, methamphetamine use is becoming a prevalent problem within the New York City gay and bisexual community, thus allowing it to be defined as a country-wide epidemic.³ In 1998, a telephone survey conducted by Stall and colleagues⁶ found that 7.4% of men who had sex with men in New York City used methamphetamine. In 1999, Halkitis and colleagues⁷ found that 10.4% of gay men with the human immunodeficiency virus (HIV) and gay/bisexual HIV-negative men, who had been recruited from gay mainstream venues, had used methamphetamine.

In January 2004, the *New York Times*⁸ named crystal meth “the beast in the bathhouse,” and reported on a campaign by Peter Staley, a recovering addict whose provocative advertisements warned the gay community about crystal meth’s deadly connection to HIV. More recently, there has been great concern about a gay man who seroconverted with a virulent HIV strain resistant to medications while using methamphetamine. The time from infection to acquired immune deficiency syndrome (AIDS) diagnosis was very short, which alarmed the media and the healthcare community.⁹

Gay men and lesbians seem to be at higher risk for drug and alcohol disorders than the general population,¹⁰ and the treatment of gay and bisexual patients who suffer

from addictive disorders often focuses on sexual behaviors related to substance use. In individual and group psychotherapy, gay men frequently address issues of gay identity, internalized homophobia, heterosexism, and sometimes a perceived inevitability of becoming infected with HIV. The clinical experience of the authors of this article, which matches recent reports,^{11,12} has encountered men who shared their relief when “it” actually happened; the diagnosis of HIV was a way to feel connected and less alienated in the gay community.

UNDERSTANDING THE PSYCHOLOGY AND CULTURE OF CRYSTAL METHAMPHETAMINE

Crystal meth is often seen as a drug for white, gay, and bisexual men from higher socioeconomic backgrounds. However, recent studies suggest that significant percentages of African-American and Latin-American men are also using methamphetamine and that the drug is not as related to social class as originally thought.^{13,14} Furthermore, meth-

amphetamine is often used with other substances, such as γ -hydroxybutyrate and alcohol, which is of great medical concern as most methamphetamine-related deaths are associated with multi-drug use.^{13,15} Crystal meth use often occurs in certain recreational contexts, such as bathhouses, circuit parties, and clubs. Most patients have also used the Internet as a way to connect with other men who are using crystal meth. Some of them attend “marathon” sex parties organized on the Internet, where they have sex for hours; prostitution may also play a role in these events.

Use of drugs among gay and bisexual men has been found to be linked to sexual activities with multiple partners, higher rates of HIV-risky sexual practices, such as decrease in use of condoms and unprotected receptive anal intercourse (URAI), and more exposure to other men who might be HIV positive.¹⁵⁻¹⁷ Erectile dysfunction is a common side effect of crystal meth; therefore, some chronic users can only have receptive anal sex. Halkitis and colleagues¹⁵ found that in a sample of 192 methamphetamine users who engaged in URAI, men reported more occasions of engaging in URAI when high than not high. All seroconversions in this study were related to this pattern. Thus, substance abuse counseling must also address HIV risk, as well as risk of other sexually transmitted infections.¹⁸

Based on a survey of 63 gay men, Reback¹⁹ reported that gay men might use crystal meth for two reasons. Some men use it to enhance their sexual performance, while others use it to address negative feelings about having sex with other men. The fact that crystal meth use is so strongly connected to gay identity, sexuality, and internalized homophobia clearly speaks to the power and possible longevity of this drug problem.

Another group of gay men use crystal meth as a way to feel more confident and to also increase their sexual experiences. Gay men may grow up with feelings of shame around their behaviors and may need a substance to relieve these feelings when having sex. While high on crystal meth, some patients report feeling more confident in their appearance and freer to approach other men. HIV positive clients reported that the drug made them feel better emotionally and more comfortable about having sex.¹⁷ On a societal level, Malpas¹¹ hypothesized that crystal meth may be the gay community’s way to deal with grief due to AIDS.

Denning²⁰ discussed the necessity of understanding a client’s internal experience of the drug they are taking and the setting where the drug is used. For example, a client who struggles with a demanding job, whose parents always pressure him to succeed (possibly to compensate for his father’s lack of financial success), uses crystal meth while participating

TABLE 1
SIMILARITIES AND DIFFERENCES BETWEEN COCAINE AND METHAMPHETAMINE

COCAINE	METHAMPHETAMINE
<u>BIOLOGIC FACTORS</u>	
Inhibits the reuptake of synaptic dopamine	Inhibits the reuptake of synaptic dopamine and promotes direct dopamine release
Metabolizes rapidly	Metabolizes slowly
Effects last 1–2 hours	Effects last 8–12 hours
Withdrawal can last 1–2 days	Withdrawal can last several days
Stroke risk without neurotoxicity	Stroke risk and neurotoxicity
Increased HIV risk behaviors	Increased HIV risk behaviors
<u>PSYCHOLOGIC FACTORS</u>	
Psychosis during intoxication	More intense psychosis during intoxication
Depression during withdrawal	Greater depression during withdrawal
<u>SOCIAL FACTORS</u>	
Primarily urban use	Primarily rural use (now extending to urban centers)

HIV=human immunodeficiency virus.

Adapted from Obert JL, McCann MJ, Marinelli-Casey P, et al. *A Clinician’s Guide to Methamphetamine*. Center City, Minn: Hazelden; 2005:10.

Levounis P, Ruggiero JS. *Primary Psychiatry*. Vol 13, No 2. 2006.

in sex that involves bondage in a submissive role. He feels that this is the only way to allow himself to let go of the pressures (internal and external) in his life. Another patient was raised in an environment where he needed to take on a great deal of responsibility at a young age due to his father's death and his being the oldest child. He suffered from significant anxiety throughout his life. When he used crystal meth, he was able to be a dominant figure who was unafraid of facing gay men and who was able to be in control. Dynamically, he was able to do things that he did not feel was possible without drugs. Unfortunately, when he withdrew and crashed from the drug, he re-experienced more intense emotions of the frightened little child he used to be.

SETTING UP AN OUTPATIENT PROGRAM

Outpatient treatment of crystal meth includes daily, intensive programs 3 hours/day, and less intensive, mostly evening programs, 3 times/week. Substance abuse treatment has often incorporated group therapy as a way to minimize isolation. This treatment modality may be especially useful to patients who experience internalized homophobia and shame. Though group psychotherapy is the primary treatment modality, individual counseling is also essential for patients who have difficulties with engagement and treatment retention. All patients are assessed for co-occurring psychiatric and other medical conditions, including HIV counseling and testing. Patients are then referred to specialists for further evaluation and treatment either in one of their own clinics or in an affiliate program, as needed.

The intensive program used by the authors of this article consists of a daily core psychotherapy group supplemented by skills training, such as stress management and assertiveness exercises in the context of a strong community component. One of the treatment models that has been particularly helpful is "front-loading" treatment. Patients initially participate in the intensive day program and then transition to the evening program when they build more inner resources and outside support systems. These patients can then further transition to less intensive continuing care groups.

While managed care companies advocate short-term (20 session) models, Rawson and colleagues²¹ have argued that methamphetamine users need both intensive initial treatment and extensive long-term treatment because of the dysphoria that may accompany the addiction for up to 1 year following discontinuation of the drug.

TREATING THE PATIENT

Psychotherapy

The outpatient treatment of crystal meth is structured around the Matrix Model (Table 2). The Matrix Model is an empirically-based, cognitive-behavioral protocol, validated in the treatment of crystal meth users. The model encourages self-help involvement and is greatly influenced by the principles of motivational interviewing.²² Rawson and colleagues²¹ looked at the status of heterosexual and homosexual methamphetamine users 2–5 years after treatment with the Matrix Model. They documented a significant reduction in use based on self-report and urine toxicology data. In addition, significant reductions in the use of other substances, such as cocaine and benzodiazepines, were noted. The patients treated with the Matrix Model made significant progress in their vocational goals and experienced less paranoia, but not less depression, than the control group.

In 1998, the Friends Research Institute in Los Angeles developed a version of the Matrix Model specifically for gay and bisexual men who suffer from methamphetamine dependence.²³ The manualized treatment protocol includes relapse-prevention techniques, such as identifying triggers and relapse justifications, but also addresses sexual behaviors and the gay identity. For example, the protocol includes a session that discusses HIV and asks the client to identify what he considers as risky behaviors. The manual uses language that is familiar to the gay community calling crystal meth "Tina" (from Christina, which is another street name for crystal methamphetamine) (Figure 2). The text also incorporates and openly discusses gay establishments, such as sex clubs and bars, and events, such as Gay Pride and circuit parties.

Patients who suffer from stimulant dependence often have higher drop-out rates. Contingency management has been recommended as an intervention to reduce recidivism.²¹ Since the majority of patients have social networks that are exclusively drug related, contingency rewards, such as

TABLE 2
COMPONENTS OF THE MATRIX MODEL OF TREATMENT

Group psychotherapy	Contingency management
Individual psychotherapy	Crystal Methamphetamine Anonymous
Family therapy	Pharmacologic treatment (if indicated)

Levounis P, Ruggiero JS. *Primary Psychiatry*. Vol 13, No 2. 2006.

vouchers for negative urine toxicology results or program attendance, can be used to encourage healthy social activities (eg, movie attendance, shopping) and structure time outside treatment. Studies by Higgins and colleagues^{24,25} noted that patients with cocaine dependence were more likely to complete the treatment protocol when receiving behavioral treatment with contingency management as compared with traditional counseling based on the disease model. The contingency management group was more likely to have continuous periods of cocaine abstinence. In a sample of 162 gay and bisexual methamphetamine users, Reback and colleagues¹⁶ found that contingency management and cognitive-behavioral therapy (CBT) both helped to decrease risky sexual behaviors (eg, reductions in both receptive and insertive anal intercourse, fewer partners) and to sustain these behaviors after treatment.

Shoptaw and colleagues⁵ studied 263 methamphetamine-dependent gay and bisexual men who were randomly placed in one of four conditions: a standard CBT group, a contingency management group, a combination CBT-plus-contingency management group, and a cognitive behavioral manual that was tailored toward the gay community (GCBT). Outcome measures were retention, urine toxicology results, and HIV-related sexual behaviors. The contingency management and the CBT-plus-contingency management groups retained patients for a significantly longer period of time when compared to the other groups. Maximal suppression of methamphetamine use was found in all treatment conditions that included contingency management. However, the GCBT condition produced the fastest reductions in unprotected anal receptive intercourse.

Individual psychotherapy with patients who struggle with crystal meth addiction is challenging for the therapist who is used to suggesting to patients that life (and sex) in sobriety will be as exciting as life (and sex) under the influence of drugs. In the case of crystal meth, this is an assertion that most patients find difficult to believe. Guss²⁶ cautions that:

There is pressure to show how life can be exciting in sobriety. Sobriety for the patient becomes a dreary foreign land, to which he feels exiled, sent away from the marvelous party by his own doing, and resenting the look of the new landscape. He wonders if the therapist's life is one worth identifying with.

Pharmacotherapy

Despite extensive research efforts and the investigation of >40 agents, at this point there are no proven psychopharmacologic treatments that reduce cravings associated with crystal meth or other stimulants. Some medications have shown preliminary evidence of efficacy, including disulfiram, naltrexone, baclofen, topiramate, and modafinil,²⁷ but none are approved by the Food and Drug Administration for the treatment of stimulant dependence.

The focus of psychopharmacologic interventions in the management of crystal meth continues to be limited to the treatment of co-occurring psychiatric disorders, primarily depression and anxiety. Given the significant anhedonia, fatigue, and depression associated with methamphetamine withdrawal; the long duration of the withdrawal syndrome; and the increased prevalence of depression in this population, the differential diagnosis of primary versus secondary depressive disorder is often difficult to establish.

FIGURE 2
FLYER OF THE CRYSTAL CLEAR PROJECT USING LANGUAGE THAT IS FAMILIAR TO THE GAY COMMUNITY

CRYSTAL CLEAR PROJECT

**Trouble with
"Tina?"**

**Are you concerned about your use of Crystal?
Do you have questions about Crystal and Sex?**

If so, we can help you find answers.

The Addiction Institute of New York
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Levounis P, Ruggiero JS. *Primary Psychiatry*. Vol 13, No 2. 2006.

EDUCATING THE CLINICAL AND NON-CLINICAL STAFF

Rawson and colleagues²⁸ have suggested the need for all clinicians to understand the biochemical nature and psychiatric manifestations of methamphetamine use as they differ from other drugs. Even though many addiction clinicians have been trained in the management of psychiatric comorbidity associated with other drugs, the psychotic, depressive, and anxiety symptomatology associated with crystal meth use requires specific training.

Special staff training can also be helpful in getting clinicians comfortable to talk with patients about sex—gay sex in particular. A critical part of crystal meth treatment is sharing experiences, ideas, feelings, and plans about sex, sex and drugs, sober sex, and safer sex. This requires a frank and open discussion of all kinds of sexual practices and desires that may be unfamiliar, distasteful, immoral, or altogether unacceptable to some clinicians. Furthermore, such training should be extended to the non-clinical office personnel who are the first ones to talk with the patient in distress, in despair, or in elation.

CONCLUSION

Addiction treatment of patients who suffer from crystal meth dependence requires specific expertise in both biomedical and psychosocial realms. The following goals can help organize a successful outpatient program for the management of the methamphetamine patient. First, clinicians should create an environment where gay and bisexual men can openly discuss issues of drug use, sexuality, and identity. Second, state-of-the-art addiction treatment for crystal meth should be provided, based on the principles of motivational interviewing²² and the structure of the Matrix Model.²³ Third, co-occurring psychiatric disorders should be treated. Fourth, staff should be trained in the medical and cultural aspects of crystal meth use in the gay community. Last, clinicians should network and collaborate with other agencies and colleagues to exchange ideas, share

resources, find new solutions to old problems, and provide much-needed mutual support and encouragement. **PP**

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