This article was downloaded by: [Christopher W. Blackwell]

On: 06 July 2011, At: 22:30

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House,

37-41 Mortimer Street, London W1T 3JH, UK

### Journal of Social Service Research

Publication details, including instructions for authors and subscription information: <a href="http://www.tandfonline.com/loi/wssr20">http://www.tandfonline.com/loi/wssr20</a>

## Using the Internet to Meet Sexual Partners: Research and Practice Implications

Christopher W. Blackwell <sup>a</sup> & Sophia F. Dziegielewski <sup>b</sup>

<sup>a</sup> University of Central Florida, College of Nursing, Orlando, FL

Available online: 27 Jun 2011

**To cite this article:** Christopher W. Blackwell & Sophia F. Dziegielewski (2011): Using the Internet to Meet Sexual Partners: Research and Practice Implications, Journal of Social Service Research, DOI:10.1080/01488376.2011.583842

To link to this article: http://dx.doi.org/10.1080/01488376.2011.583842



#### PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <a href="http://www.tandfonline.com/page/terms-and-conditions">http://www.tandfonline.com/page/terms-and-conditions</a>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan, sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

<sup>&</sup>lt;sup>b</sup> University of Cincinnati, School of Social Work, Cincinnati, OH

ISSN: 0148-8376 print / 1540-7314 online DOI: 10.1080/01488376.2011.583842



### Using the Internet to Meet Sexual Partners: Research and **Practice Implications**

Christopher W. Blackwell Sophia F. Dziegielewski

**ABSTRACT.** Recent research studies suggest increasingly widespread use of Internet sexual networking sites to initiate sexual relationships among men who have sex with men. Concerns are growing in regard to use of such sites in promoting participation in higher-risk sexual activities by providing easier access to partners who are willing to participate. One such activity surrounds substance abuse including using crystal methamphetamine and is commonly termed "party and play" (PNP) during sexual encounters, particularly unprotected anal sex. Current studies indicate conflicting results on PNP and the meeting of sexual partners from the Internet. A critical examination of these studies is presented along with recommendations designed to support future scholarly inquiry.

**KEYWORDS.** Crystal methamphetamine, drugs, gay, homosexual, homosexuality, Internet, MSM, party and play, sex, substance use

#### INTRODUCTION

HIV rates are rising, with indicators of rising transmission incidence in some subgroups (Altman, 2008; Centers for Disease Control and Prevention [CDC], 2008). The CDC estimates that the rise in transmission is primarily occurring among young gay and bisexual males and African Americans. This recent epidemiologic data continue to show an increasing number of sexually transmitted infections (STIs) among men who have sex with men (MSM). For cities with greater-sized populations of MSM, such as San Francisco, Boston, Miami/Ft. Lauderdale, and Atlanta, there also appears to be higher rates of infection with HIV, syphilis, and rectal

Chlamydia (CDC, 2002; Fernandez et al., 2005; Mimiaga, Reisner, et. al., 2008; San Francisco Department of Public Health, 2007). These data strongly suggest that MSM are not consistently maintaining safer sex practices, including strict use of condoms during anal intercourse, which carries the most significant risk for HIV transmission (Wolitski, 2005). In terms of prevention, most professionals agree that consistent condom use has been identified as the best way to prevent HIV transmission in MSM engaging in anal sexual intercourse.

Several etiologic factors related to this increase have been suggested. First is the misperception that HIV is nonterminal and chronically managed with antiretroviral medication.

Christopher W. Blackwell, PhD, ARNP, ANP-BC, CNE, is an Assistant Professor at the University of Central Florida, College of Nursing, Orlando, FL.

Sophia F. Dziegielewski, PhD, LISW, is a Professor at the University of Cincinnati, School of Social Work, Cincinnati, OH.

Address correspondence to: Christopher W. Blackwell, PhD, ARNP, ANP-BC, CNE, University of Central Florida, College of Nursing, PO Box 162210, Orlando, FL 32816-2210 (E-mail: cwblackw@mail.ucf.edu).

This relaxed sense of the controlled seriousness of this unprotected behavior may lessen concerns for the negative consequences. Simply believing treatment is available may create a false sense of security.

Another complicating reason is substance use that leads to inappropriate decision making and possible risk taking. Substance abuse, including alcohol, greatly increases the risk for HIV transmission, AIDS, STIs, blood-borne pathogens, and hepatitis A, B, C, and D (CDC, 2005b). High-risk sexual behavior is often associated with the sharing of needles, thereby increasing the likelihood of transmission of HIV/ AIDS in the MSM community (University of California San Francisco & Center for AIDS Prevention Studies, 2000). Recreational use of substances such as methamphetamine, cocaine, lysergic acid diethylamide (or LSD), methylenedioxemethamphetamine (MDMA or Ecstasy), gamma hydroxybutyrate (or GHP), and Special K (ketamine), are frequently used with alcohol and decrease social inhibitions. In the last decade, the use of methamphetamine (N-Methamphetamineyl-amphetamine), which is also commonly known as crank, ice, and crystal. has become increasingly popular in segments of the gay community and has created addiction and health risks for this community (Halkitis, Parsons, & Wilton, 2003; Moore, 2004).

Methamphetamine is referred to as the "party and play" (PNP) drug, and its prevalence within the MSM population is seen as a primary risk factor. Many methamphetamine users have reported intense pleasure during sex while under the influence, and frequent drug use combined with sex can create a strong psychological association between the men (Semple, Patterson, & Grant, 2002). It is believed that in some groups, the use of drugs helps create a sense of community, creating feelings of closeness and partnership among peers. Although statistical results vary, they do indicate an alarming correlation between methamphetamine use and HIV/AIDS. Because of this increasing correlation between methamphetamine use and HIV/AIDS transmission, health officials and AIDS activists nationwide are becoming alarmingly concerned, and this is being reviewed as an area in need of further clarification for treatment and outreach prevention efforts.

Other partial reasons for condomless sex among MSM include: increased complex sexual decision making and safer-sex fatigue (Carballo-Dieguez & Bauermeister, 2004; Wolitski, 2005). Sexual decision making is becoming more complex, as evidenced by the increasingly diverse manners in which MSM are able to initiate sexual activity. In addition, as the access to sexual activity initiation becomes more numerous, opportunities for negotiations for certain types of sexual activities, including those considered to be higher risk (e.g., condomless anal intercourse) and lower risk (e.g., oral sexual activity), become greater. As the complexity of sexual decision making has increased, the public health message for safer sex is becoming less effective. The traditional campaigns encouraging condom use, disease screening, and early treatment are no longer reversing the epidemiologic trends of STIs in MSM. Also implicated is the increasing use of the Internet to initiate sexual relationships (Blackwell, 2008, 2009, 2010; Davis, Hart, Bolding, Sherr, & Elford, 2006; Engler, Frigault, Leobon, & Levy, 2005; Halkitis, Wilton, & Drescher, 2005; Liau, Millett, & Marks, 2006; Shernoff, 2006; Wolitski, 2005).

### LITERATURE REVIEW

### Risks Associated With Meeting Sexual Partners in Online Environments

Public health officials have been able to trace specific Internet-initiated sexual encounters to cases of both syphilis and HIV (Klausner, Wolf, Fisher-Ponce, & Zolt, 2000; Tashima, Alt, Harwell, Fiebich-Perez, & Flanigan, 2003); and some sexual networking sites specifically recruit MSM who are actively looking for condomless sex (Dowsett, Williams, Ventuneac, & Carballo-Dieguez, 2008). Some of the promotional text used on such sites is slanted with hypermasculine tones and suggests MSM who do not have condomless anal sex are more feminine and less masculine than those who do (Dowsett et al., 2008). However, Internet sites that are not specifically designed to attract MSM looking for

condomless anal sex may also carry some risk, particularly when MSM use them to find sexual partners who are also wishing to participate in unsafe sexual behaviors (Blackwell, 2008, 2009, 2010).

Up to 43% of MSM have reported meeting sexual partners through the Internet (Bolding, Davis, Sherr, Hart, & Elford, 2004; Benostch, Kalichman, & Cage, 2002; Hospers, Harterink, van den Hoek, & Veenstra, 2002; Liau et al., 2006). The literature review conducted by Natale (2008) supported that MSM are much more likely than heterosexual men to meet their sexual partners through the Internet. Fernandez et al. (2007) reported the Internet provides a medium through which MSM can screen potential sex partners and is increasing men's risk for acquiring STIs and HIV, particularly in geographic regions with already high HIV prevalence rates. This is of particular concern to public health officials and health care professionals, as MSM continue to represent the largest proportion of new HIV diagnoses (CDC, 2005a).

In a study conducted by Hospers et al. (2002), 30% of the MSM who engaged in sexual activity with other MSM that they met through Internet networking sites reported inconsistent safer sexual behaviors. Another study showed 43% of MSM who engaged in anal sex without condoms with men they met over the Internet did so without knowledge of that individual's HIV serostatus (Halkitis & Parsons, 2003). More recent inquires suggest the rates of unprotected sex in MSM initiating sexual relationships through the Internet are higher than older data, particularly among ethnic minorities. Tsui and Lau (2010) indicated 53% of the Chinese MSM in their study who met their sexual partner online engaged in unprotected anal intercourse (compared with 34% of encounters initiated through other venues). Fernandez et al. (2005) found 46% of their Hispanic participants who used the Internet to meet sexual partners had six or more sexual partners in the past 6 months. Twentythree percent of their sample reported a positive HIV serostatus, and 44% reported "never using condoms or used them inconsistently" (Fernandez et al., 2005, p. 83).

While widespread intentional transmission of HIV among HIV-positive individuals to HIV-

negative partners is probably not occurring (Tewksbury, 2003), findings from the few studies assessing risks among MSM using the Internet to initiate sexual activity highlight the need for critical inquiries that examine specific sexual behaviors and the possible role these behaviors can play in the transmission of STIs, especially HIV.

Recent research has shown a significant relationship between drug use and high-risk sexual activity, particularly unprotected anal intercourse. Although threatened by its small sample size (n = 100), a study conducted by Wilson, Cook, McGaskey, Rowe, and Dennis (2008) indicated an even stronger likelihood of unprotected anal sex among drug-using HIV-positive men with drug-using unknown or serodiscordant partners when they initiated their sexual relationships through use of the Internet. Another important risk factor gaining focus of national health authorities is the potential relationship between unsafe sexual behaviors and the concomitant use of crystal methamphetamine among MSM. This behavior, commonly referred to as PNP has been implicated in the transmission of HIV (Balan, Carballo-Dieguez, Ventuneac, & Remein, 2009; Fernandez et al., 2007; Grov, Parsons, & Bimbi, 2008; Rawstorne, Digiusto, Worth, & Zablotska, 2007).

## The Relationship Between PNP, HIV Transmission, and the Potential Role of the Internet

The physiologic and psychological influences of crystal methamphetamine make it a substance that potentially can promote transmission of STIs and HIV. The drug has been shown to reduce a person's inhibitions and increase sexual drive (Blank, 2006; Grov et al., 2008). Unprotected anal sex among MSM who are using crystal methamphetamine at the time of the encounter has been associated with higher-risk behaviors, particularly among ethnic minority MSM.

Hirshfield, Remien, Walavalkar, and Chiasson (2004) found that crystal methamphetamine use was a significant predictor of unprotected anal intercourse and of having six or more sexual partners during their study period. Their study had a very large sample size (n = 2,643)

and consisted primarily (85%) of MSM who had met their sex partners online. Furthermore, a study conducted by Fernandez et al. (2007) found significant differences in unprotected receptive anal intercourse among Hispanic MSM who reported using crystal methamphetamine during the sexual encounter (n = 566). The researchers' earlier (Fernandez et al., 2005) study (n = 177) found statistically significant relationships between unprotected anal/insertive intercourse, higher number of sexual partners, and higher degrees of social isolation among Hispanic MSM engaged in an online chat environment with club-drug use (including crystal methamphetamine) during data collection. This phenomenon has also been supported in the work of Balan et al. (2009). These researchers found crystal methamphetamine use to be prevalent among the HIV-positive participants in their relatively small sample (n = 31). In addition, use of crystal methamphetamine was related to "very high HIV risk behavior" (Balan et al., 2009, p. 14).

Although their sample (n=7,354) consisted of Australian MSM, Rawstorne et al. (2007) found the prevalence of crystal methamphetamine use was as high as 39% in MSM. A study conducted by Rhodes et al. (2007) showed crystal methamphetamine users had a higher incidence of inconsistent condom use during anal sex within the past 3 months (n=1,189). A few studies have also suggested Internet-based sexual networking sites provide easier access for MSM who use crystal methamphetamine to find partners who will also use the drug during sex (Balan et al., 2009; Mimiaga, Fair, et al., 2008; Rhodes et al., 2007; Shernoff, 2006).

Balan et al. (2009) found those MSM who used crystal methamphetamine while having sex with other MSM met through sexual networking sites were much more likely to be HIV-positive. In addition, these participants reported multiple sexual partners and a "voracious sexual appetite" (Balan et al., 2009, p. 20). Mimiaga, Fair, et al. (2008) had similar findings in their work. Participants (n = 20) in their sample felt strongly that MSM sexual partner-meeting Web sites were a major starting point for crystal methamphetamine-driven sexual encounters. Shernoff (2006) echoed this

assertion in his work, finding there is some evidence that sexual encounters involving anal sex without condoms in MSM are linked to the rise of crystal methamphetamine use, and the use of the Internet to meet sexual partners is a contributing factor (Shernoff, 2006).

All present research studies, however, do not suggest there is a clear positive relationship between meeting sexual partners online and using crystal methamphetamine. For example, Blackwell's (2009) study found only one man actively requesting PNP within a fairly large sample size (n = 489) of Floridian MSM using a popular Internet sexual networking site to find sexual partners. The personal profiles contained on the Web site used in Blackwell's (2009) analysis included PNP as a specific sexual behavior choice when a user completes his profile. Therefore, active requests for PNP were certainly possible yet almost nonexistent within this data set (Blackwell, 2009, 2010). Although Tsui and Lau (2010) found statistically higher levels of high-risk behaviors among Chinese MSM (n = 566) who initiated their sexual relationships through the Internet, this was not found to be true of abuse of psychoactive substances. The comparison analysis of psychoactive drug use during sex was found to be 7.1% for those initiating their relationships online versus 15.6% for those meeting in traditional venues (bars, clubs, bathhouses, and public locations).

While Mimiaga, Reisner, et al. (2008) did not recruit their sample from MSM meeting in online environments, crystal methamphetamine use was only found to be at 5% within their sample (n = 214) of MSM. In addition, use of crystal methamphetamine alone (outside of the context of polysubstance abuse) was not significantly related to unprotected anal intercourse. Although the overall sample of the study of Balan et al. (2009) was much smaller (n = 31), the vast majority (81%) did not report PNP during their sexual encounters initiated through Internet sexual networking sites.

While a larger study (n = 738) conducted by Grov et al. (2008) found unsafe sex behaviors, particularly anal insertive and/or receptive anal intercourse, to be higher among MSM who reported recent use (<90 days) of crystal methamphetamine, only 10.2% of participants

reported recent use. Similar findings were also discovered by Rhodes et al. (2007). Their sample was also quite large (n = 1,189). While MSM who reported recent use (<30 days) of crystal methamphetamine were significantly more likely to report anal sex without a condom in the past 90 days, only 6% of the sample reported recent use of the drug.

Summarizing these previous studies related to substance use, the findings suggest a relatively low number of MSM reporting the use of crystal methamphetamine and/or participating in PNP. Furthermore, these studies suggest the overall number of users or requests for PNP over the Internet also appears low. At minimum, these newer studies provide some contrast to other studies that indicated higher prevalence crystal methamphetamine-driven sexual encounters that were often initiated in online environments. Also of importance, some studies have failed to demonstrate significant interactive effects between use of crystal methamphetamine and unsafe sexual behaviors. Rawstorne et al. (2007) found the prevalence of unprotected anal intercourse in their sample to be relatively stable; many variables extraneous of crystal methamphetamine correlated with the behavior. This prompted the research team to conclude: "Crystal use does not necessarily drive unsafe sexual behavior" (Rawstorne et al., 2007, p. 646).

The findings of the work by Fernandez et al. (2007) were also mixed. MSM who reported recent use of crystal methamphetamine did not have a statistically significant higher number of sexual partners. They also believed analysis of the precise role of crystal methamphetamine in transmission of HIV and STIs among MSM is intricate because it is difficult to disentangle crystal methamphetamine use from the use of other recreational drugs (Fernandez et al., 2007). In conclusion, there are conflicting data questioning the relationship between crystal methamphetamine use and higher-risk sexual behaviors in MSM. In addition, some research shows overall low prevalence rates of reported use and/or requests for its use during sex. In terms of future research, the existing information remains inconclusive and strengthens the need for largescale national-based studies with strong rigor to

provide more evidence about this phenomenon and its importance in HIV/STI prevention. Using the existing literature, recommendations for clinical practice remain important to discuss because clinicians could encounter this activity among their MSM population.

### BEST PRACTICE RECOMMENDATIONS

For MSM who meet males on the Internet and desire sobriety from substance-influenced interactions such as the use of methamphetamine, as well as the prevention of HIV, a combination of education, outreach, and counseling is recommended. Some important factors to consider include:

- limitations of information technology and truthfulness;
- gathering a complete sexual history;
- engaging in education on safe-sex practices and prevention;
- identifying and problem-solving the dangers of substance abuse and subsequent sexual activity;
- using a situational community-based approach; and
- encouraging and problem-solving safe-sex discussions.

### Limitations of Information Technology and Truthfulness

The use of the Internet has created new challenges regarding high-risk behavior (Ricks, Chang-Arratia, Lansinger, & Dziegielewski, 2010). Because this method of meeting has increased, the benefits and dangers of using this media need to be addressed early in the intervention process. Men can now seek out and engage in risky unsafe sexual behaviors with a minimal threat of rejection, and this is especially relevant when an individual has low self-esteem and lacks assertiveness and uses the Internet to assert himself (CDC, 2005a). In the past, gay bars were used as the primary means for socialization and provided one of the few places where men could safely meet (Stall & Purcell, 2000). Although

the bars continue to be popular meeting places, the Internet has become a primary method used by MSM to meet other men. They are able to engage in "cyber talk" where they can arrange to meet and finally come together to have sex.

Many individuals can be vulnerable when they believe that what they read on the Internet is the truth. Among MSM, clients need to be reminded that not all information listed in an individual's profile on an Internet sexual networking site is necessarily factual and accurate. Requesting specific sexual activities in a person's profile does not necessarily indicate such behavior will occur during sexual encounters. In addition, because drug use can be a stigmatized activity, it is possible requests for PNP were not captured in some of the studies reviewed because interaction with those using the site did not occur (e.g., Blackwell, 2009, 2010). It is possible requests for PNP are more likely to occur through e-mail conversation and not solely through its inclusion in a profile's narrative description. For clinicians, stressing the importance of the limitations of meeting someone on the Internet and the dangers and misrepresentations should always be outlined.

#### Gather a Complete Sexual History

An article authored by Blank in 2006, which appeared in the Journal of Gay & Lesbian Psychotherapy, provides clinical recommendations for screening MSM for potential use of crystal methamphetamine in the context of high-risk sexual behavior. Blank discusses the need for a thorough sexual health history that focuses on sexual activities among MSM, which place them at higher and unique risk compared with their heterosexual counterparts. It is important clinicians never assume sexuality and sexual activity among clients; up to 10% of clients will identify their sexual orientation as something other than heterosexual (Seidel et. al, 2010). The stigma of having same-sex intercourse or being identified openly with homosexuality can create inhibition and as a result may cause males to hide and not identify themselves as gay or bisexual (CDC, 2005a). Silence about sexual preference and the dangers related to having unprotected sex pose serious threats to males who are not openly gay or honest about their sexual activities. This makes an individualized sexual history critical to understanding any intervention or practice strategy that involves modification of unsafe behaviors.

### Education on Safe-Sex Practices and Prevention

Most clinicians realize the importance of stressing education and prevention for noninfected individuals. Yet, the importance of safesex education should never be underestimated for the individual who is already positive for HIV/AIDS. It remains essential to educate HIVpositive clients about safer sex practices and to emphasize the importance related to individual and partner protection that comes with the consistent use of condoms during anal intercourse. Safe sex practices should always be maintained regardless of the positive or negative status of the client and his partner(s). The importance of safer sexual behaviors should be emphasized regardless of whether the partner was previously infected. All clinicians need to stress that if clients use unsafe sexual behaviors, it could play a role in the development of resistant strains of HIV. Clients need to be educated on the dangers regarding exposures to other individuals' HIV viral particles through semen and/or blood, which could potentially increase viral load and expedite progression to AIDS (Ramos et al., 1999).

# Identify and Problem-Solve the Dangers of Substance Abuse and Subsequent Sexual Activity

Clinicians need to emphasize the significance of substance abuse, particularly the use of substances during sexual activities that may affect sexual behavior. While data are conflicting about the relationship between transmission of HIV and STIs while having sex under the influence of crystal methamphetamine, clients should know that although not conclusive the dangers do exist. Data suggest the drug can lower inhibitions and might increase the likelihood for unprotected receptive and insertive anal intercourse (Blank, 2006). When working with MSM, the clinician should help the client examine this potential

danger openly and honestly. If substance use and abuse could cloud judgment, special attention is needed to outline the triggers that could lead to such behavior and identify the risk factors before it happens. If substance abuse problems are significant, repeated, and appear beyond the rational control of the client, he should be referred to appropriate mental health treatment specialists trained to address abuse, dependence, intoxication, and the consequences of potential substance withdrawal.

## Using a Community or Situation-Based Approach

Evidence from evaluation studies suggest gay and lesbian substance abusers have better outcomes when immersed in treatment environments sensitive to their individual living situation. It is also important that the environment includes his or her own community support systems. Simply treating an individual in an office while remaining unaware of the individual's social system can fall short in application regardless of how well high-risk behaviors have been identified and problem-solved. Social networks are not the same for all individuals, and sensitivity and awareness of the client's cultural environment is essential for comprehensive and inclusive care. Research conducted in the early 1990s that examined substance abuse treatment facilities indicated staff members were not trained in gay-specific treatment and had few or no gay staff members (Hellman, 1991). This lack of sensitivity could lead to isolation on the part of the client. Research occurring at that same time suggested gay clients were more likely to participate in treatment programs that address gay issues (O'Hanlan, Cabaj, Lock, & Nemrow, 1997; Paul, Stall, & Bloomfield, 1991). Creating an environment that is comprehensive and inclusive of gay-specific treatment will allow for greater connection between the treatment information and application to the client situation.

### Encourage and Problem-Solve Safe-Sex Discussions

Many individuals feel uncomfortable discussing their own sexual act preferences and how to express this in words that all can understand. To assist MSM clients, clinicians need

to address the importance of all MSM to request safer sex and to be open in their discussions with potential partners about the importance of the use of condoms, particularly during anal receptive intercourse. Practicing how to be assertive on this topic and the best way to say it can be rehearsed to allow the individual more comfort when the situation arises. Because HIV antibodies can take up to 6 months to react with standard HIV screening tests (CDC, 2007), HIV serostatus is not an absolute certainty, and reporting of a negative HIV serostatus within an Internet profile does not necessarily mean an individual is HIV-negative. Education on the limits of testing and negative serostatus needs to be highlighted to prevent the assumption that a reported negative finding is indicative of just that. Discussion of the dangers of condomless sex and how to approach any sexual encounter with this expectation is a must. Behavioral rehearsal on what to say and how to say it can benefit all. Lastly, clinicians should provide positive reinforcement to clients who report safer sex practices and who report knowing how and when to request safer sex practices from potential partners. In these discussions, clients who have been successful in increasing this type of communication should highlight how and why it worked to allow for generalization of this type of behavior to other situations. These successful interactions can also be used to help others who are struggling in similar situations.

#### **CONCLUSION**

Recent research studies suggest an increasing use of Internet sexual networking sites to initiate sexual relationships among MSM. Public health officials have identified several trends regarding the use of such sites in promoting participation in higher-risk sexual activities by providing easier access to partners who are willing to participate. Use of crystal methamphetamine in combination with sexual activity has been suggested to be a major risk factor for unsafe sexual behaviors, particularly unprotected anal sex. This article has examined some of the studies that have indicated a relationship between PNP and the meeting of sexual partners from the Internet. Studies that indicated different results, showing

lower levels of prevalence of PNP and high-risk sexual activities, were also reviewed.

Although the private and public sectors of the United States are becoming more aware of the dangers of methamphetamine use and research and public awareness are growing, there needs to be more focus on these issues within the MSM population. Research needs to guide further community efforts and health policy initiatives that help to address ways in which methamphetamine addiction, when combined with HIV risk of transmission, can be decreased. With the escalating use of methamphetamine and the increase of HIV and STI incidence in the MSM community, it is clear that further research and education are needed, and a continued effort to develop innovative approaches must continue. More evidence-based recommendations derived from current research are needed to assist health care providers and community health practitioners to facilitate future scholarly inquiry on the topic.

#### REFERENCES

- Altman, L. K. (2008, August 3). HIV study finds 40% higher than estimated. *The New York Times*, p. A1.
- Balan, I. C., Carballo-Dieguez, A., Ventuneac, A., & Remein, R. H. (2009). Intentional condomless anal intercourse among Latino MSM who meet sexual partners on the Internet. AIDS Education and Prevention, 21(1), 14–24.
- Benostch, E. G., Kalichman, S., & Cage, M. (2002). Men who have met sex partners via the Internet: Prevalence, predictors, and implications for HIV infection. *Archives of Sexual Behavior*, 31(2), 177–183.
- Blackwell, C. W. (2008). Men who have sex with men and recruit bareback sex partners on the Internet: Implications for STI and HIV prevention and client education. *American Journal of Men's Health*, 2(4), 306–313.
- Blackwell, C. W. (2009). Requests for safer sex among men who have sex with men who use the Internet to initiate sexual relationships: Implications for health care providers. *Journal of Lesbian, Gay, Bisexual, and Transgender Health Research*, 5(1), 4–9.
- Blackwell, C. W. (2010). The relationship among population size, requests for bareback sex, and HIV serostatus among men who have sex with men using the Internet to meet sexual partners. *Journal of Human Behavior in the Social Environment*, 20(3), 349–360.
- Blank, S. (2006). Crystal methamphetamine use and sexually transmitted infection: The importance of sexual

- history taking. *Journal of Gay & Lesbian Psychotherapy*, 10(3), 73–84.
- Bolding, G., Davis, M., Sherr, L., Hart, G., & Elford, J. (2004). Use of gay Internet sites and views about online health promotion among men who have sex with men. *AIDS Care*, *16*(8), 993–1001.
- Carballo-Dieguez, A., & Bauermeister, J. (2004). "Bare-backing": Intentional condomless anal sex and HIV-risk contexts. Reasons for and against it. *Journal of Homosexuality*, 47(1), 1–15.
- Centers for Disease Control and Prevention. (2002). Sexually transmitted diseases treatment guidelines, 2002. Morbidity and Mortality Monthly Report, 51, 6.
- Centers for Disease Control and Prevention. (2005a). HIV/AIDS among men who have sex with men [CDC HIV/AIDS fact sheet]. Retrieved from http://www.cdc.gov/hiv/pubs/facts/MSM.htm
- Centers for Disease Control and Prevention. (2005b). Reported AIDS cases, by age category, transmission category, and sex, 2005 and cumulative—United States and dependent areas (Table 17). Retrieved from http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2005 report/pdf/table17.pdf
- Centers for Disease Control and Prevention. (2007). HIV testing basics for consumers. Retrieved from http://www.cdc.gov/hiv/topics/testing/resources/qa/be\_tested.htm
- Centers for Disease Control and Prevention. (2008). HIV prevention in the third decade: Activities of the CDC's divisions of HIV/AIDS prevention. Retrieved from http://www.cdc.gov/hiv/resources/reports/hiv3rddecade/pdf/HIV3rdDecade.pdf
- Davis, M., Hart, M., Bolding, G., Sherr, L., & Elford, J. (2006). Sex and the Internet: Gay men, risk reduction, and serostatus. *Culture, Health, & Sexuality*, 8(2), 161–174.
- Dowsett, G. W., Williams, H., Ventuneac, A., & Carballo-Dieguez, A. (2008). Taking it like a man: Masculinity and barebacking online. *Sexualities*, 11(1/2), 121–141.
- Engler, K., Frigault, L. R., Leobon, A., & Levy, J. J. (2005). The sexual superhighway revisited: A qualitative analysis of gay men's perceived repercussions of connecting in cyberspace. *Journal of Gay & Lesbian Social Services*, 18(2), 3–37.
- Fernandez, M. I., Bowen, G. S., Warren, J. C., Ibanez, G. A., Hernandez, N., Harper, G. W., & Prado, G. (2007). Crystal methamphetamine: A source of added sexual risk for Hispanic men who have sex with men. *Drug and Alcohol Dependence*, 86, 245–252.
- Fernandez, M. I., Perrino, T., Collazo, J. B., Varga, L. M., Marsh, D., Hernandez, N.,... Gowen, G. S. (2005). Surfing new territory: Club-drug use and risky sex among Hispanic men who have sex with men recruited on the Internet. *Journal of Urban Health*, 82(Suppl. 1), 79–88.
- Grov, C., Parsons, J. T., & Bimbi, D. S. (2008). In the shadows of a prevention campaign: Sexual risk

- behavior in the absence of crystal methamphetamine. *AIDS Education and Prevention*, 20(1), 42–55.
- Halkitis, P. N., & Parsons, J. T. (2003). Intentional unsafe sex (barebacking) among HIV-positive gay men who seek sexual partners on the Internet. AIDS Care, 15(3), 367–368.
- Halkitis, P. N., Parsons, J. T., & Wilton, L. (2003). An exploratory study of contextual and situational factors related to methamphetamine use among gay and bisexual men in New York City. *Journal of Drug Issues*, 33(2), 413–432.
- Halkitis, P. N., Wilton, L., & Drescher, J. (2005). Introduction: Why barebacking? *Journal of Gay & Lesbian Psychotherapy*, 9(3/4), 1–8.
- Hellman, R. E. (1991). Treatment of homosexual alcoholics in government-funded agencies: Provider training and attitudes. *Hospital Community Psychiatry*, 40, 1163–1168.
- Hirshfield, S., Remien, R. H., Walavalkar, I., & Chiasson, M. A. (2004). Crystal methamphetamine use predicts incidence STD infection among men who have sex with men recruited online: A nested case-control study. *Journal of Medical Internet Research*, 6(4), e41.
- Hospers, H. J., Harterink, P., van den Hoek, K., & Veenstra, J. (2002). Chatters on the Internet: A special target group for HIV prevention. AIDS Care, 14(4), 539–544.
- Klausner, J. D., Wolf, W., Fisher-Ponce, L., & Zolt, I. (2000). Tracing a syphilis outbreak through cyberspace. *Journal of the American Medical Association*, 284, 447–449.
- Liau, A., Millett, G., & Marks, G. (2006). Meta-analytic examination of online sex seeking and sexual risk behavior among men who have sex with men. Sexually Transmitted Diseases, 33(9), 576–584.
- Mimiaga, M. J., Fair, A. D., Mayer, K. H., Koenen, K., Gortmaker, S., Tetu, A. M., . . . Safren, S. A. (2008). Experiences and sexual behaviors of HIV-infected MSM who acquired HIV in the context of crystal methamphetamine use. AIDS Education and Prevention, 20(1), 30–41.
- Mimiaga, M. J., Reisner, S. L., Vanderwarker, B. A., Gaucher, M. J., O'Connor, C. A., Medeiros, B. A., & Safren, S. A. (2008). Polysubstance abuse and HIV/STD risk behavior among Massachusetts men who have sex with men accessing department of public health mobile van services: Implications for intervention development. AIDS Patient Care and STDs, 22(9), 745– 751
- Moore, P. (2004, August 17). Keep the bathhouses, lose the shame: The problems of increasing HIV infection and rampant crystal use among gay men are intertwined. *The Advocate*, 40(920), 40–42.
- Natale, A. P. (2008). Sex and culture: A mixed methods study of Denver MSM in the third decade of AIDS. Retrieved from http://faculty-staff.ou.edu/N/Anthony.P.Natale-1/MSM%20Final%20Report.doc

- O'Hanlan, K., Cabaj, R. B., Lock, J., & Nemrow, P. A. (1997). A review of the medical consequences of homophobia with suggestions for resolution. *Journal of the Gay and Lesbian Medical Association*, 1, 25–40.
- Paul, J., Stall, R., & Bloomfield, K. (1991). Gay and alcoholic: Epidemiologic and clinical issues. *Alcohol Health Research World*, 15, 151–157.
- Ramos, A., Tanuri, A., Schechter, M., Rayfield, M. A., Hu, D. J., Cabral, M. C., & Pieniazek, D. (1999). Dual and recombinant infections: An integral part of the HIV-1 epidemic in Brazil. *Emerging Infectious Diseases*, 5(1), 65–74.
- Rawstorne, P., Digiusto, E., Worth, H., & Zablotska, I. (2007). Associations between crystal methamphetamine use and potentially unsafe sexual activity among gay men in Australia. Archives of Sexual Behavior, 36, 646–654.
- Rhodes, S. D., Hergenrather, K. C., Yee, L. J., Knipper, E., Wilkin, A. M., & Omli, M. R. (2007). Characteristics of a sample of men who have sex with men, recruited from gay bars and Internet chat rooms, who report methamphetamine use. AIDS Patient Care and STDs, 21, 575–583.
- Ricks, J. L., Chang-Arratia, C., Lansinger, D. L., & Dziegielewski, S. F. (2010). Men who have sex with men and methamphetamine use. *Social Work in Mental Health*, 8(2), 160–173.
- San Francisco Department of Public Health. (2007). San Francisco monthly STD report. Retrieved from http://www.dph.sf.ca.us/reports/STD/STDMONTH.pdf
- Seidel, H. M., Ball, J. W., Dains, J. E., Flynn, J. A., Solomon, B. S., & Stewart, R. W. (2010). Mosby's guide to physical examination (7th ed.). St. Louis, MO: Mosby.
- Semple, S., Patterson, T., & Grant, I. (2002). Motivations associated with methamphetamine use among HIV men who have sex with men. *Journal of Substance Abuse Treatment*, 22, 149–156.
- Shernoff, M. (2006). Condomless sex: Gay men, barebacking, and harm reduction. *Social Work*, *51*(2), 106–113.
- Stall, R., & Purcell, D. (2000). Intertwining epidemics: A review of research on substance abuse among men who have sex with men and its connection to the AIDS epidemic. AIDS and Behavior, 4, 181–192.
- Tashima, K. T., Alt, E. N., Harwell, J. I., Fiebich-Perez, D. K., & Flanigan, T. P. (2003). Internet sex seeking leads to acute HIV infection: A report of two cases. *International Journal of STDs and AIDS*, 14, 285–286.
- Tewksbury, R. (2003). Bareback sex and the quest for HIV: Assessing the relationship in Internet personal advertisements of men who have sex with men. *Deviant Behavior*, 24, 467–482.
- Tsui, H. Y., & Lau, J. T. F. (2010). Comparison of risk behaviors and socio-cultural profile of men who have sex with men survey respondents recruited via venues and the internet. *BMC Public Health*, 10(232), 1–11.

- University of California San Francisco & Center for AIDS Prevention Studies. (2000). What are men who have sex with men (MSM)'s prevention needs? Retrieved from http://www.caps.uscf.edu/factsheets/gay-men-msm/
- Wilson, P. A., Cook, S., McGaskey, J., Rowe, M., & Dennis, N. (2008). Situational predictors of sexual risk episodes
- among men with HIV who have sex with men. *Sexually Transmitted Infections*, 84, 506–508.
- Wolitski, R. J. (2005). The emergence of barebacking among gay and bisexual men in the United States: A public health perspective. *Journal of Gay & Lesbian Psychotherapy*, 9(3/4), 9–34.