HIV-Positive Gay and Bisexual Men

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INTRODUCTION

Behavioral research focused on people living with HIV has shown that the minority report sexual practices that would place their partners at high risk of HIV infection. Reviews of the literature have found that about 70% of heterosexual HIV-positive persons remain sexually active after seroconversion, whereas only a third of these individuals report vaginal intercourse without the use of a condom (Crepaz and Marks, 2002; Kalichman, 2000). Similar rates of unprotected anal intercourse have been documented among HIV-positive gay and bisexual men (Kalichman et al., 2002a; Parsons et al., 2003).

Recent studies have reported increases in sexual risk behaviors among gay and bisexual men in the US, Europe, and Australia (Chen et al., 2002; Ekstrand et al., 1999; Kalichman et al., 2002b; Stolte et al., 2001; Van de Ven et al., 2000). In addition, young gay and bisexual men, and particularly men of color, remain at considerable risk of HIV infection as a result of unprotected anal sex (CDC, 2002; Koblin et al., 2000). In New York City, 33% of young African American gay and bisexual men are estimated to be HIV positive and rates among Latinos are also quite high (Valleroy et al., 2000). Other studies have shown increases in HIV incidence (Calzavara et al., 2002) and sexually transmitted infection (STI) rates among young men who have sex with men (Fox et al., 2001). The number of syphilis cases in San Francisco increased from six in 1998 to 115 in 2001, and cases of rectal gonorrhea among gay and bisexual men increased from 162 in

1999 to 237 in 2002 (Chen et al., 2002; Katz et al., 2002). In New York City, cases of primary and secondary syphilis doubled in 2001, predominately among gay and bisexual men (CDC, 2002). Nearly half of these new cases of syphilis were among HIV-positive men. This is of great concern, as syphilis is more likely to facilitate the sexual transmission of HIV than other STIs (Wheater et al., 2003).

These findings underscore the need to more fully understand the safer sexual behaviors of HIV-positive gay and bisexual men. Clearly most men living with HIV neither want to nor intend to transmit HIV (Wolitski et al., 2003). However new infections continue to grow, and in some areas of the US, rates of HIV infection among gay and bisexual men have shown a continued upward trend (Valdisseri, 2003). Gay and bisexual men remain the largest subgroup of persons living with HIV/AIDS in the US; with 14% to 25% of these men living with HIV, a prevalence rate equivalent to that in some sub-Saharan African countries (Catania et al., 2001).

HIV-positive gay and bisexual men can transmit HIV to sexual partners, primarily through unprotected anal sex (Vittinghoff et al., 1999). Placing a partner at risk of HIV infection is particularly dangerous in cases in which HIV-positive men have developed drug resistance, as medication resistant HIV can be transmitted to HIV-negative sexual partners (Hecht et al., 1998). HIV-positive men who engage in unprotected sex, regardless of the HIV status of their sexual partners, risk rapid loss of CD4 cells (Wiley et al., 2000), acquiring pathogens which may lead to opportunistic infections (Renwick et al., 1998), co-infection with Hepatitis C (Spengler and Rockstroth, 1998), and contracting STIs which can lead to further immune system deterioration (Bonnell et al., 2000).

SEXUAL RISK BEHAVIORS OF GAY AND BISEXUAL MEN IN THE THIRD DECADE OF HIV/AIDS

The prevalence of unprotected anal intercourse differs by whether the HIV-positive gay or bisexual man is the insertive or receptive partner (Parsons et al., 2003). Studies have shown that many HIV-positive men intentionally position themselves as the receptive partner for unprotected anal sex, as a method of "strategic positioning" perceived to result in sexual risk reduction (Parsons et al., in press; Van de Ven et al., 2002). It is unclear to what degree such harm reduction efforts actually decrease the likelihood of HIV transmission, although such notions of strategic positioning to reduce the risk of HIV infection are supported somewhat by epidemiological evidence (Vittinghoff et al., 1999).

Other men make efforts to "serosort" their sexual partners, where they limit the risk of HIV transmission by engaging in sexual activity with only men of seroconcordant status (Parsons et al., in press; Suarez and Miller, 2001). Thus, some men who are HIV-positive limit their sexual activity to other HIV-positive men in order to have condomless sex without fear of transmitting HIV to a sexual partner. Inherently problematic in serosorting, however, is the potential for this approach to fail. First, serosorting assumes that HIV status disclosure has occurred. A recent study of HIV-positive gay and bisexual men found that 42% reported sex without disclosing their status, demonstrating considerable inconsistency in disclosure (Ciccarone et al., 2003). Second, serosorting strategies assume that individuals actually know their HIV status in the first place, which is not always the case. Third, the notion of serosorting assumes that gay and bisexual men are fully honest and accurate regarding the disclosure of their status, an assumption that is not fully supported by the literature (Wolitski et al., 1998).

Seropositive and seronegative gay and bisexual men have been shown to make assumptions regarding the HIV status of their sexual partners, typically assuming their partner's HIV status is concordant with theirs when engaging in unprotected sex (Suarez and Miller, 2001). One study of HIV-positive gay and bisexual men in New York City and San Francisco identified comparable rates of HIV sexual risk practices with HIV-positive and HIV status unknown casual sex partners (Parsons, et al., 2003). Qualitative interviews with these same men indicated that in many cases it was assumed that unknown status partners were also HIV-positive (Parsons and Vicioso, in press). However, the strong possibility exists that at least some of these HIV status unknown partners were, in fact, HIV-negative, and thus at risk of HIV infection. As such, serosorting may reduce the risk of HIV transmission in some encounters when seroconcordant sex actually occurs between two HIV-positive men, but questions remain about the effectiveness of this strategy in light of serostatus disclosure, the potential for inaccurate assumptions of serostatus, and accurate knowledge of one's own HIV status.

It is possible that increases in new HIV infections are resulting, in part, from faulty harm reduction techniques utilized by HIV-positive gay and bisexual men, as noted above. It is also important to consider the manner in which HIV treatment advances of the past decade have impacted perceptions regarding the relative risk of unsafe sexual practices. The availability and success of Highly Active Antiretroviral Therapy (HAART) in improving and prolonging the lives of those with HIV has led to increased optimism and reduced concerns, at least in the US, regarding potential HIV infection (Kalichman et al., 1998; Vanable et al., 2002). For some gay and

bisexual men, optimism regarding the severity of HIV disease has led to increased complacency in terms of sexual risk behaviors and may be fueling increasing HIV infections among this population (Catania et al., 2001; Wolitski et al., 2001).

It is doubtful, however, that optimism resulting from medical advances in treating HIV is the only reason for continued unprotected sex behaviors among HIV-positive gay and bisexual men and the corresponding increases in new cases of HIV infection. It is more likely that a complex set of interconnected contextual factors is responsible for unsafe sex behaviors among these men. Disentangling these contextual factors, and recognizing the critical importance of the varied social environments in which sexual interactions between men occur, could help to shed light on the current situation of the sexual risk behaviors of HIV-positive gay and bisexual men. To fully understand the sexual lives and sexual risk practices of these men, one must consider the ways in which sexually charged venues and environments that men frequent to look for potential sexual partners may shape their behaviors, the sociological impact of the Internet in facilitating sexual encounters between men, the ways in which the increase in the prevalence and acceptance of "barebacking" (intentional anal sex without condoms) in the gay community may exacerbate sexual risk taking, and the potential for illicit drug use to derail even the most committed intentions to practice safer sex. This chapter examines the ways in which these contextual factors may be hindering the ability of HIV-positive gay and bisexual men to protect their sexual partners from HIV infection. Clearly, the sexual lives of these men and the very nature of their sexual interactions transcend the simplistic messages of "no glove, no love" and other prevention messages of the past two decades that implied the need for consistent condom use in all circumstances.

SEXUALLY CHARGED ENVIRONMENTS

The particular venues in which HIV-positive gay and bisexual men seek and meet their sexual partners directly impact their safer sex decisions. Two such venues that are commonly frequented are commercial and public sex environments. HIV-positive men are more likely than their HIV-negative counterparts to use these venues (Binson et al., 2001). Recent research has shown that nearly half of HIV-positive gay and bisexual men from New York City and San Francisco reported frequenting either commercial or public sex venues, with a substantial number attending both (Parsons and Halkitis, 2003).

Commercial Sex Environments

"A bathhouse is a place—they have like a lot of little rooms that you go in. You pay like twenty dollars and you have your room for like eight hours. It's got a little twin bed. And they also sell booze and drugs in there. And it actually has showers and has a sauna and it has a steam room and it has all that stuff. And it has a work out room and an exercise room and a lounge and a movie room and stuff. So you can walk around there and do what you want. But most people go there for sex." [34-year-old White gay man from New York City]

Commercial sex environments include all business establishments where men go with the intention of finding other men for sex (e.g., bathhouses, saunas, sex clubs, adult movie houses and pornography shops that allow the use of "buddy booths" for previewing movies). Right up to the beginning of the AIDS epidemic, the overt sexuality of these businesses was a source of liberation because here men could publicly display and act on sexual desires that could place them in legal and physical danger in other settings. These venues have served as a place to escape from a hostile society and revel in the very sexuality that made them targets for hostility.

Bathhouses, in particular, came under intense scrutiny early in the first wave of the HIV/AIDS epidemic as sites where gay and bisexual men were engaging in unsafe sex practices (Elwood and Williams, 1998). Mainstream health research began to view bathhouses as sexual venues devoid of any social import and detrimental to the well being of both individual men and the gay community at large because they contributed to unsafe sex, leading to the continued spread of HIV. While these venues may no longer be the target of major government surveillance, their role in the HIV epidemic is still a major topic of scientific investigation and political debate, both outside of and within various gay communities.

Commercial sex venues experienced a major renaissance since 1990 and, as of 2003, there were 4,685 bathhouses and sex clubs known to exist across the US and Canada (Woods et al., 2003). Many HIV-positive gay and bisexual men identify these venues as facilitating escape from thoughts of their HIV status (Elwood and Williams, 1998; Parsons and Vicioso, in press). Since verbal communication is so limited in these venues, discussion of HIV status does not occur, but many men make the assumption that most men frequenting bathhouses and sex clubs are HIV-positive (Haubrich et al., 2004; Parsons and Vicioso, in press). Drug use, particularly club drugs such as methamphetamine, ecstasy, and nitrate inhalants, commonly occurs within these venues, which can substantially impede safer sex decisions (Binson et al., 2001; Haubrich et al., 2004; Parsons and Halkitis, 2002).

Public Sex Environments

"I enjoy group sex. And in a park, if I walk up on a couple of guys who are having sex, and then they notice me, and then they stop having sex but I haven't left the area where they're from, and, in fact, I move closer toward them and provoke some kind of response to my presence from them, to either join them or—or "Back off, you're in my space and don't come any closer." And over the course of whatever, almost three hours, I had sex with one, two, three, four, five, six individuals—six individuals, three of them separately, or respectively, and then three others together." [34-year-old Latino gay man from San Francisco]

Another type of sex venue frequented by HIV-positive men is the public sex environment. Unlike commercial establishments, men can seek sex partners in public venues without having to pay a fee. Public sex venues are not specifically designated sites for sexual interaction; rather they are generally public spaces that men have appropriated for sexual encounters. These areas are open and therefore accessible to the general public (e.g., wooded areas in parks, alleyways in urban areas, bathrooms in department stores, highway rest stops). In most states, sexual activity in public places is illegal and there can be serious consequences for public sex, including arrest and prosecution.

Often, sex in public happens intentionally, with men specifically going to outdoor locations that have a reputation as being a place to have sex with other men. There are directories available on the Internet that provide up-to-date information on thousands of public places for gay and bisexual men to have sex and public places to avoid, organized into a searchable database. Alternatively, sex in these venues can be more spontaneous or unexpected. The spontaneity of a sex encounter can be dictated by the layered structure of public sex environments, in which men can meet one another along the perimeter or deeper within the location, typically where the more intense sexual activities take place (Somlai et al., 2001). Qualitative research has shown that some HIV-positive men report that sex in a public venue "just happens," such as while walking their dog, riding a bike, or trying to clear their head (Parsons and Vicioso, in press). The potential for spontaneous sex, or at least sex that appears to be spontaneous, can be particularly appealing for men who are heterosexually identified, as these men can justify to themselves that they were not seeking out sex with another man. The need to disown such a sexual encounter may be especially important for men who are conflicted about seeking out these experiences due to struggles with one's sexual orientation, internalized homophobia, being in a monogamous relationship, or being HIVpositive.

Commercial and Public Sex Environments and Unsafe Sex

"HIV, it's like a helicopter hovering around me. And, that doesn't stop me. I just go and do it, you know. I just finish what I went there for because that was the purpose of my visit to [the bathhouse]. And what happens sexually? I don't really care." [41-year-old Latino gay man from New York City]

Both commercial and public sex environments have been described as sites of liberation where gay and bisexual men could seek each other out and freely express their sexuality. On the other hand, they have been described as sources of risk where unsafe sex contributes to HIV transmission. The ecological qualities of these venues, both in terms of physical properties and the social norms that guide behaviors, have been shown to directly impact safer sexual practices (Flowers et al., 1999; Parsons and Vicioso, in press).

Studies have documented a relationship between frequenting commercial sex venues and sexual risk behaviors (Binson, et al., 2001; Haubrich et al., 2004; Parsons and Halkitis, 2002). The desire to escape feelings and thoughts about being HIV-positive, as well as the opportunity to be in a place where most men are assumed to be HIV-positive no doubt has an impact. As such, some men in these venues may feel that they are effectively serosorting, and are willing to engage in unprotected sex with limited concern of infecting partners with HIV. Others may shift their own personal sense of responsibility to that of their sexual partners, by adopting the attitude "everyone here knows what they are getting into." The lack of verbal communication, and the resultant inability to disclose HIV status, however, makes it likely that inaccurate assumptions regarding the serostatus of partners in these venues are common. Even if serosorting were effective, and all unprotected sexual activity in sex clubs and bathhouses occurred between seroconcordant men, concerns regarding reinfection and STI infection and transmission remain.

Like commercial sex establishments, public sex environments may promote sexual risk behaviors, particularly among members of racial and ethnic minority groups (Diaz et al., 1996; Somlai et al., 2001). Such men may lack the financial resources to pay the admission fee to commercial venues, which can often cost \$20 to \$30, or they may feel that bathhouses and sex clubs are dominated by white men (Parsons and Vicioso, in press). The use of public venues for sexual purposes is a particular concern for young men of color, due in part to rising rates of HIV infection among these men, but also because sex in such venues may constitute their first same-gendered sexual experiences.

Some studies, however, have found that gay and bisexual men, and HIV-positive men in particular, who frequent public sex venues report less unprotected sex than those frequenting commercial venues (Binson et al., 2001; Parsons and Halkitis, 2002). For example, some HIV-positive men who frequent public areas for sexual activity explain that anal intercourse is not possible due to the constant need to be ready at a moment's notice to run from police (Parsons and Vicioso, in press). Similar issues in terms of limited verbal communication, the short-term duration of sexual partnering, and assumptions regarding serostatus that exist in commercial venues exist in public ones, such that it is likely that HIV-positive men who do choose to engage in unprotected sex are not necessarily doing so with HIV concordant partners.

Although quantitative studies have suggested that frequenting commercial and public sex environments is associated with unprotected sexual activity (Diaz et al., 1996; Parsons and Halkitis, 2002), qualitative data reveals a more complicated relationship. Some HIV-positive gay and bisexual men who frequent sexually charged venues are perfectly capable of and committed to safer sex practices in these venues (Parsons and Vicioso, in press). Other men, however, clearly indicate that the spontaneity, anonymity, and lack of verbal communication associated with sex in these sex environments contributes to their engagement in unprotected sexual activity with partners of unknown serostatus. Thus, as is commonly the case, a consistent pattern fails to emerge, and we are left with the understanding that commercial and public sex venues may play an important role in HIV transmission.

Prevention in Commercial and Public Sex Environments

"I think we should have more sex clubs, and I think that that's a good place to have education. I really think that sex clubs are a good thing. They always have these outreach people there, who are really easy to talk to, and they're funny, and they're informative, and the environment there is really relaxed and safe. I know it influences what I do there." [32-year-old gay man of mixed race/ethnicity from San Francisco]

It's clear that these venues may serve as locations for HIV infections to occur among gay and bisexual men. What is not clear is the full potential to take advantage of commercial and public sex venues for HIV prevention interventions. Two evaluations of HIV prevention interventions delivered in public sex environments have been published (French et al., 2000; Hospers et al., 1999). In one, peer volunteers distributed condoms and safer sex

literature to men frequenting a park in the United Kingdom (French et al., 2000). Considerable efforts were made to not intrude by remaining on the periphery of the inner areas in which sexual activity occurred, thereby gaining the trust and acceptance of the men. Evaluation data revealed that condoms were reaching the target population and were being used, and that the intervention was both feasible and acceptable to the participants. A study in the Netherlands compared men who had conversed with HIV prevention volunteers regarding safer sex and those who had not (Hospers et al., 1999). Men who reported interacting with the prevention volunteers reported using condoms more consistently for insertive and receptive anal sex than men who had not. Recognizing the methodological limitations of both studies, including that neither assessed HIV status of respondents, these finding suggest that interventions in public sex venues are feasible and may reduce HIV infections.

No published evaluations of interventions delivered in commercial sex venues could be identified. Although many commercial sex venues display posters related to safer sex and/or provide condoms and lubricant for patrons, few other systematic interventions are offered in these settings. In some cities, efforts have been made to integrate HIV and STI counseling and testing in bathhouses and sex clubs to gay and bisexual men, however these activities exist in only 40% of commercial sex environments (Woods et al., 2001). Rapid HIV testing in these venues may reach men at high risk who fail to access HIV testing in traditional settings. It is important to recognize the ways in which policies may affect the ability to deliver prevention interventions in commercial settings. For example, in San Francisco, closed rooms for purposes of private sex in bathhouses and sex clubs is not permitted, but in New York City, sex is permitted only in closed rooms in these venues.

Intervention efforts need to recognize the unique structural aspects of commercial versus public sex environments. While these venues may set men up for similar HIV risk behavior, there are inherent differences in the venues and the types of men who frequent them. Moreover, the different conditions (public versus private, covertly sexual versus overtly sexual) of these venues provide distinct avenues of arriving at similar risk behaviors. Thus interventions aimed at commercial venues might be built on their overtly sexual nature and it would make the most sense to implement educational campaigns and programs directly in these venues so that you are intervening with men in the heat of the moment. Some have argued that commercial sex venues continue to provide important opportunities for socialization, and as such present outreach workers with a valuable opportunity to provide HIV prevention messages (Binson et al., 2001; Parsons and Vicioso, in press).

Interventions aimed at public sex venues need to take into account the logistics of using condoms in public settings not typically used for sexual activity, as well as the fact that sexual acts often occur in the dark, when the participants are contending with the risk of being caught by police or unsuspecting persons who frequent the venue for non-sexual purposes. Men may benefit from learning how to use condoms more effectively in these settings, as well as how to negotiate safer sex behaviors quickly. The presence of HIV outreach workers in public sex venues may be useful in creating a climate in which safer sex becomes the norm. However, it is likely that the men who frequent these venues due to the anonymity afforded by them will be reluctant to engage in prevention activities. Such efforts need to be persistent in order to become acceptable (French et al., 2000). The limited published work on interventions targeting men who frequent these sexually charged venues represent a missed opportunity, particularly considering the number of HIV-positive men who utilize these venues as well as the potential for the rapid transmission of HIV and STIs resulting from the group sex and multiple partnering common in these environments.

THE INTERNET

"It's hard to remember what we did before the Internet. I guess we actually went to porn shops to get our needs met! I can come home from work, get online, find a streaming video and get off right then and there. You can't browse through porn magazines with your dick in your hand at Border's like you can at home on the net." [40-year-old White bisexual man from Fort Lauderdale]

Utilizing commercial and public sex environments to find other men for sex has been augmented by the opportunity to find sexual partners via the Internet. Most adults in America now have at least some access to the Internet, either through home, work/school, or both. Neilsen/NetRatings, a company that compiles data on Internet usage around the world, estimates that in 2003, 63.2% of Americans were using the Internet, representing an increase of 93.4% from 2000 to 2003. Further data revealed that consumers in the US spent \$18.5 billion via online shopping during the 2003 holiday season, an increase of 35% from 2002.

Originally, with regard to sexual activity, the primary use of the Internet was to find pornography and sexually explicit material. Although the Internet is now commonly used for email, trading stocks and mutual funds, purchasing online music, and obtaining the latest news and weather, a significant amount of Internet traffic is aimed at adult content or entertainment. While Amazon.com struggled for years to turn a profit, Internet

porn currently generates revenue from \$1–2.5 billion annually and is expected to grow into a \$5–7 billion business in the next five years. In 2003, the National Research Council estimated that pornographic websites had grown 18-fold in the last six years, with approximately 1.3 million pornographic websites, representing 12% of all websites. Internet Filter Review estimates that 25% of all search engine requests are porn-related. In addition to pornography, one can easily obtain Viagra, sex workers, or sex toys from the privacy of your home computer. It is also important to realize that, in addition to pornography, the Internet has enabled people to purchase condoms, lubricants, and other safer sex products online.

Cooper (1999) proposed that the Internet is used to enhance one's sexual life because of the three A's—access, affordability, and anonymity. The Internet, through the use of gay chat rooms, websites, and listservs, can be easily accessed from individuals with home computers, from computers at work or school, or from Kinko's, Internet cafes, or public libraries. Although some Internet service providers (e.g., America OnLine, Earthlink) and some gay-oriented websites (e.g., M4M4SEX, Gay.com) charge a fee for full membership, others are free to use. The use of email addresses and screen names, as well as the ability to sign-up for certain websites and chat rooms without revealing any contact information, results in a fairly anonymous world with which to initiate sexual contact.

Gay and Bisexual Men Online

"The Internet is like the bathhouse of the millennium! It's like a great big department store online. You can log on and find anything or anybody you want. Tall, short, muscled, thin, hairy, smooth, poz, neg, safe, unsafe, oral, anal—I mean anything you want you can get. And so fast. Sometimes I can go online, go to a chat room, and get a man to come over to my place faster than it takes me to get a pizza delivered." [24-year-old Latino gay man from New York City]

It has been argued that gay and bisexual men comprise one of the largest online communities and these men are significantly more likely to have sex with partners that they meet on the Internet than heterosexual men and women (Bull et al., 2001; Kim et al., 2001; McFarlane et al., 2000). Most studies show no difference between HIV-positive and HIV-negative gay and bisexual men regarding their use of the Internet for finding sexual partners (Benotsch et al., 2002; Elford et al., 2001; Kim et al., 2001; Tikkanen and Ross, 2003). A study of gay and bisexual men in the United Kingdom found that in 2001, two-thirds of gay men reported using the Internet in any given month and over half the men living in London reported use in the past 48 hours (Weatherburn et al., 2003). From 1999

to 2002, use of the Internet to find sex partners among gay and bisexual men in the United Kingdom significantly increased from 28% to 66%. Further analyses of this survey indicated that as the proportion of men using the Internet for sex increased, the proportion of those using public sex venues decreased. In late 2003, a Labour MP in the United Kingdom was exposed for his use of a popular gay Internet dating service. The public, however, was not upset over his sexual orientation, his use of the website, or even his web profile which said how he much enjoyed a "good long fuck." Instead, the public was upset that the photo he posted on the website showed him in briefs rather than boxers, suggesting that public attitudes concerning the use of the Internet to find sexual partners have become quite accepting.

Recent studies have focused on the role that the Internet plays in finding sex partners for gay and bisexual men, as well as the role of this technological advancement in unprotected sex and potential risk of HIV and STIs. Men can utilize the Internet for instant access to identify and eventually meet with a large number of anonymous sexual partners they might not meet otherwise (Ashton et al., 2003; Bull and McFarlane, 2000; Klausner et al., 2000; Tashima et al., 2003). Users can establish member profiles which include information about their sexual likes and dislikes, HIV serostatus, what they are looking for (or not looking for) in a sexual partner, and geographical location. Unlike public and commercial sex venues, where subtle gestures and non-verbal forms are used to communicate information regarding sexual interests and behaviors desired, the Internet permits men to communicate explicitly through written text or even through the use of photos or streaming video.

The relative anonymity afforded by the Internet, as well as the ability to conduct searches of online member profiles, simplifies the process of identifying and interacting with potential sexual partners who meet particular characteristics—in terms of physical characteristics, preferred sexual practices, interest in condom use or non-use, and HIV status and interest in serosorting. Internet terminology and acronyms have developed as a means to convey detailed information regarding interest in combining drug use with sexual activity in more subtle ways. The most common of these, "party and play" (PnP) conveys an interest in combining drug use (typically "party" or "club" drugs, which will be discussed later) with sexual activity. Other commonly used terms include "420 OK" (420 is police code for marijuana), "chem friendly" or "chem sex OK", and "D&D free" or drug and disease free.

The research conducted on gay and bisexual men who seek sex partners using the Internet has some consistent findings. Compared to others, men with online sexual partners or who utilize chat rooms to find sexual

partners have been found to be younger (Benotsch et al., 2002; Kim et al., 2001; Tikkanen and Ross, 2003; Weatherburn et al., 2003), more likely to have a previous STI (Elford et al., 2001; McFarlane et al., 2000), to frequent public and commercial sex environments (Mettey et al., 2003; Tikkanen and Ross, 2003), and to identify as non-gay and report also having sex with women (Tikkanen and Ross, 2003; Weatherburn et al., 2003).

Some contradictory findings, however, occur in comparing gay and bisexual men who do and do not use the Internet for finding sex partners. Although some studies have found increased illicit drug use among Internet-using men, specifically poppers, ecstasy, methamphetamine, and Viagra (Benotsch et al., 2002; Mettey et al., 2003), others find no differences in the use of these drugs (Elford et al., 2001). With regard to sociodemographic characteristics, it has been reported that men using the Internet for sex are more likely to be white (Benotsch et al., 2002; Weatherburn et al., 2003) and have less education (Tikkanen and Ross, 2003); however other studies have found no differences in race/ethnicity (Elford et al., 2001) or education (Kim et al., 2001).

Unprotected Sex and the Internet

"I found out about a sex party online one night. So, I went. It was the hottest group of guys I had ever seen, and everyone was going at it. I started in as soon as I walked in the door and could get undressed. I must have had sex with 7 or 8 of them, as a top, as a bottom, oral, anal, three-ways, four-ways—it was amazing. I brought condoms with me, but just sort of got caught up in the whole experience. I didn't really think about it until I got home the next morning. I'm pretty sure most of the guys were poz. Why would someone [who is HIV] negative put themselves at risk like that?" [31-year-old Latino gay man from Los Angeles]

Although HIV-positive gay and bisexual men do report serosorting using the Internet to find other HIV-positive men to have unprotected sex (Elford et al., 2001), other men who use the Internet engage in unprotected sex regardless of HIV status (Halkitis and Parsons, 2003). One study identified two cases of acute HIV infection in men following sexual encounters initiated in gay Internet chat rooms (Tashima et al., 2003). In 1999, a syphilis outbreak among men in San Francisco was traced to users of a gay chat room (Klausner et al., 2000). Similar results have been reported in the United Kingdom, where increasing numbers of men testing positive for syphilis, the majority of whom were co-infected with HIV, reported meeting partners online (Ashton et al., 2003).

The findings regarding sexual risk behaviors among gay and bisexual men who do and do not seek partners via the Internet have revealed

contradictory results. Some have found that men using the Internet to find sex partners report a higher number of sexual partners (Benotsch, et al., 2002; McFarlane et al., 2000), are more likely to have had sex with casual partners (Kim et al., 2001; Tikkanen and Ross, 2003), and report more unprotected sex (Benotsch et al., 2002). Other studies, however, have found men using the Internet were more likely to report having used a condom for their most recent sexual encounter (McFarlane et al., 2000), and some have found no differences in the rates of condom use (Kim et al., 2001; Mettey et al., 2003).

A study of men using gay chat rooms in the Netherlands found that the vast majority of these men did engage in sex with men they met through chatting and 30% reported unsafe sex; those reporting a higher number of partners met via the Internet were more likely to report unprotected sex (Hospers et al., 2002). Common reasons for using gay chat rooms in this sample included "to find sex partners," "it turns me on," and "am addicted to it." These researchers also found that the most sexually risky men were those who tended to meet their sexual partners exclusively through the Internet, perhaps indicative of these men receiving less exposure to HIV prevention messages typically disseminated through gay bars, clubs, and other venues. This study, however, did not assess HIV status of respondents, so they were unable to examine potential differences between HIV-positive and HIV-negative men.

When data are analyzed by serostatus, some additional interesting findings emerge. HIV-positive men who report online sexual partners are more likely to have unsafe anal sex with other positive men and report previous gonorrhea (Elford et al., 2001). Among gay and bisexual men in the United Kingdom, HIV-positive men who met partners via the Internet were twice as likely to report unprotected anal sex with a serodiscordant partner, compared to positive men who did not use the Internet to find sex partners (Weatherburn et al., 2003). HIV-negative men with online partners are more likely to report having HIV-positive partners (Kim et al., 2001), more likely to report unsafe anal sex with non-concordant partners (Elford et al., 2001), more likely to report receiving money or drugs for sex (Kim et al., 2001), and report feeling less worry about HIV due to improved HIV treatments (Elford et al., 2001). These findings are particularly a source of concern in terms of increasing the potential for HIV infection among HIV-negative men who utilize the Internet to find sexual partners. Although many commercial sex environments were closed in the 1980s when HIV first affected gay communities, closing virtual venues or shutting down chat rooms or sexually-oriented websites due to the potential for the spread of HIV is not possible (Toomey and Rothenberg, 2000).

HIV Prevention Online

"When I first tested HIV positive a year ago, I didn't know anything. I wasn't really out to many people, and it took me a while to get hooked up with a good doctor. So I did my research using the net. I learned about the meds, the side effects, everything. It took me a few months, but I finally started talking to other positive guys online. They really helped me work through my issues, and even helped me find my doctor. I kind of feel like the Internet kept me sane during all of this hell I was going through." [27-year-old White gay man from Las Vegas]

When the syphilis outbreak occurred in San Francisco in 1999, the Department of Health electronically contacted hundreds of gay chat room users to educate them regarding the outbreak and to provide information on seeking medical evaluation (Klausner et al., 2000). Further, email addresses were used for partner notification purposes regarding possible exposure. Men surveyed after this intervention took place reported that such outreach was helpful and appropriate. The Netherlands study asked men about their preferences for HIV prevention activities on the Internet and found that a safer sex website, an email-based question and answer program, and a safer sex chatroom were the most preferred programs (Hospers et al., 2002). HIV-positive men in London were more likely than other men to have used the Internet to obtain information about HIV and sexual health services and HIV treatments, as well as to get information regarding recreational drugs and Viagra (Elford et al., 2001). Many HIVpositive men utilize the Internet to access health information and such use is associated with more active coping, empowerment, and social support (Kalichman et al., 2003).

It has been argued that men who seek sex on the Internet tend to be well-educated and insured compared to others, and as a result they may be less likely to access prevention messages via traditional methods delivered through the public sector and particularly in need of Internet-based education and prevention (Bull et al., 2001). Further, since many HIV-positive men who use the Internet for sex are engaged in risk practices, delivering HIV prevention messages through this medium targets those most at risk of transmitting HIV to their partners. The Internet could be used to encourage gay and bisexual men to have regular medical check-ups, and to promote HIV and STI testing through the use of emails, banner ads, or other mechanisms, at a cost significantly less than in-person outreach. Interventions delivered via the Internet have great potential to be both cost-effective and reach those at greatest risk. The Internet may provide a prime opportunity to access men who would be resistant to in person prevention efforts. To date, few systematic interventions, aside from using chat rooms to talk to gay men about

HIV and safer sex, have been developed and implemented using the Internet.

BAREBACKING

Traditionally, unprotected anal sex among gay and bisexual men was considered in the context of relapse or the inability to consistently use condoms in sexual encounters. The basic idea was that men were intending to have protected sex, but encountered situations in which they were unable to maintain their commitment to use condoms. Inherent in this view was the idea that all gay and bisexual men were already, or through intervention could learn to be, committed to practicing safer sex. While unsafe sex due to relapse from intentions to use condoms continues, "unintentional" unprotected sex behavior must be differentiated from the increasingly popular unsafe anal practices, which are "intentional" (Goodroad et al., 2000).

Intentional acts of unprotected sex have become colloquially known as "barebacking," a phenomenon that has grown in gay and bisexual male communities across the US (Gauthier and Forsyth, 1999; Goodroad et al., 2000). While the term barebacking was originally applied solely to the sexual behavior of HIV-positive gay and bisexual men, it is now equally applied to the behaviors of HIV-negative men and men who do not know their HIV status (Parsons, in press). Barebacking implies the intention on the part of the individual to seek out and engage in unprotected anal sex. Colloquially, gay and bisexual men also refer to bareback sex as "BB," "raw sex," "riding raw," or "skin to skin." Some men who engage in barebacking have integrated this into their sexual identity in that they will refer to themselves as barebackers (Parsons and Bimbi, 2004).

A review of the published literature in this area reveals only a few empirical studies. Although these studies have provided some insights into barebacking, they only begin to help us understand the phenomenon and the potential effects on the HIV epidemic.

Prevalence of Barebacking

"As long as all the people involved are taking responsibility for themselves, I don't see what the big deal is. It's not like anyone is stupid enough to think fucking without a condom is safe. So if some guy wants to bareback with me, I assume he knows what he's getting himself into. Usually, I assume he's positive too. I just can't get all worried about reinfection or any of that. And when you've lived with HIV for 20 years, the idea of a STD isn't very disturbing—you just take a few more pills or get a shot and it's gone." [45-year-old White gay man from Austin]

Halkitis et al. (2003a) examined barebacking in a large sample of gay and bisexual men surveyed through a brief street-intercept survey in New York City in 2002. Most of the participants (86%) indicated that they were familiar with the term barebacking as it relates to the sexual practices of gay and bisexual men, and of those 46% reported barebacking with at least one sexual partner in the past three months. Barebacking did not differ by race/ethnicity or sexual identity. Serostatus, however, played a major role in barebacking. HIV-positive men were more than twice as likely to report barebacking (61% versus 42%) and reported a significantly greater number of bareback sex partners, compared to HIV-negative men. Serosorting was evident, with positive men reporting barebacking more often with other positive partners. Similarly, HIV-negative men were more likely to bareback with what were perceived to be seroconcordant sex partners. Nonconcordant bareback sex, however, was reported by both HIV-positive and HIV-negative participants. Of those reporting barebacking, 29% reported attending a bareback sex party that they had learned about on the Internet; HIV-positive men were more likely to have attended such a party. The majority of men felt that the Internet facilitated finding sex partners interested in barebacking. Although this study contributes much to our understanding of barebacking, and particularly barebacking among HIV-positive gay and bisexual men, it is limited by the researchers not providing a common definition of "barebacking" to participants, which may have led to some misinterpretation on the part of the respondents.

Mansergh et al. (2002) conducted an assessment of barebacking, which they specifically defined for participants as having "intentionally set out to have unprotected anal sex with someone other than a primary partner (a primary partner is someone who you live with or have seen a lot and to whom you feel a special emotional commitment)." Interview data were collected from gay and bisexual men in San Francisco recruited from a variety of venues in 2000–2001. Similar to Halkitis et al. (2003a), the majority of participants (70%) reported familiarity with the term barebacking; sociodemographic differences were noted, with white, gay-identified, and participants with higher levels of education and income more likely to be aware of the term. Among those familiar with the term, 14% reported barebacking in the previous two years and differences by serostatus were apparent; 22% of HIV-positive men had barebacked versus 10% of HIV-negative men. Specific information was obtained regarding the last barebacking experience. Like the men in New York, men in San Francisco reported some degree of serosorting, in that many of the most recent barebacking episodes involved seroconcordant partnering. However, a sizeable minority of men reported that their last barebacking experience involved unprotected insertive or receptive anal sex with partners of discordant or unknown serostatus. Barebacking under the influence of alcohol or other drugs was reported by

more than half of the men, although crystal methamphetamine was the only individual drug that was more commonly reported among barebackers. Bars, dance clubs, and through friends were the most commonly cited methods of meeting bareback sex partners.

Halkitis and Parsons (2003) examined barebacking among a sample of HIV-positive gay and bisexual men seeking sex partners via the Internet. Participants from around the US and Canada were recruited and surveyed online and via email. The term barebacking was only used in the actual survey and not used in the materials used to recruit participants or to describe the study so as not to skew the sample with regard to those with strong feelings one way or the other regarding this behavior. The vast majority (84%) reported at least one episode of barebacking in the past three months; of greatest concern for HIV transmission is that 43% of these HIV-positive men reported barebacking with a known HIV-negative sex partner.

A lower proportion of men overall, and HIV-positive men specifically, in the Mansergh et al. (2002) study reported barebacking compared to those in the Halkitis et al. (2003a) study. This is particularly striking considering that in New York 61% of HIV-positive men reported barebacking in the past three months, whereas in San Francisco only 22% of HIV-positive men reported barebacking in the past two years. This substantial difference may be due to city differences, or due to the fact that data from New York was collected a year later than in San Francisco. More likely, however, these differences resulted from the nature of the assessments. In New York, men completed anonymous brief street-intercept surveys, and in San Francisco men completed interviewer-administered surveys. It is quite possible that men in New York were more comfortable reporting what has become a controversial behavior within gay communities. It is likely that the Halkitis and Parsons (2003) study of HIV-positive men recruited via the Internet documented higher rates of barebacking, compared to Halkitis et al. (2003a) and Mansergh et al. (2002) due to the methodology used. Clearly, the threat of HIV transmission or infection resulting from barebacking behavior is evident in all three studies.

Barebacking and HIV Transmission

"Barebacking feels better than having sex with a condom. Using a condom can take—I mean it's a procedure. It takes some of the excitement out of the sex. Having sex bareback makes you feel closer to the person because it's skin on skin contact. [I'd bareback] when I was feeling down and when I really wanted to try and do something exciting or have an interesting night. It's

basically how well they can sell themselves. Like "Oh, I don't do this all the time" or, you know, "I'm negative and you should be too and so we should both be OK," a lot of that". [24-year-old African American gay man from New York City who recently tested HIV-positive talking about when he used to bareback]

Suarez and Miller (2001) have defined a number of neutralization techniques used by gay and bisexual HIV-positive men to justify barebacking with casual and anonymous partners. One technique involves serosorting, where HIV status is discussed prior to sexual activity and the HIV-positive man chooses to only engage in unprotected sex with other positive men. Again, as discussed previously, although this prevents the transmission of HIV to uninfected partners, concerns regarding HIV reinfection or STI coinfection persist. Another technique is to engage in "rational" risk taking, which is similar to strategic positioning described earlier in this chapter. The idea is that men will justify barebacking by engaging in the behaviors perceived to be less risky. That is, HIV-positive men will justify having anal sex without condoms provided they are the receptive rather than the insertive partner. HIV-negative men, in contrast, will justify unprotected anal sex if they are the insertive rather than the receptive partner. As has been discussed before, such "rational" risk taking makes a number of assumptions, most critical of which that both parties involved in the sexual encounter are aware of one another's HIV serostatus. HIV-positive men may also engage in some "rational" risk-taking by believing that it is acceptable to engage in barebacking when their viral loads are undetectable (Kalichman et al., 1998; Vanable et al., 2002). However, one study of positive gay men in the US found that, despite the perception that undetectable viral load results in less infectiousness, men with undetectable viral loads were actually less likely than other men to report engaging in unprotected anal sex (Vanable et al., 2003), as is the case in the UK and other places outside the US (see Chapter 9).

Then, there are individuals who use "irrational" justifications for their barebacking behaviors. For example, HIV-negative men may deny being at risk or have other irrational thoughts, such as the notion that spiritual forces or an especially strong immune system will protect them from infection if they engage in unprotected sex (Des Jarlais *et al.*, 1997). Others think that they have inherited a genetic resistance to becoming infected with HIV, despite research showing that resistance to HIV from the homozygous CCR5 Delta-32 mutation exists in less than 1% of the Caucasian population and not at all in African-American or Asian populations (Halkitis *et al.*, in press). Some HIV-positive men may have also developed the belief that they can not transmit the virus to their sexual partners through some similar perceptions of genetic resistance.

Such irrational beliefs may have been reinforced by multiple HIV-negative test results despite previous unprotected sex acts. HIV-positive men may have had serodiscordant relationships in which unprotected sex was practiced and the negative partner does not seroconvert, and thus they too have reinforced irrational beliefs of being unable to infect their sex partners. Suarez and Miller (2001) also point to the likelihood of irrational justifications for barebacking among gay and bisexual youth. Young men are likely to have limited experience with HIV, have not witnessed the devastating effects of AIDS, or hold generally pessimistic attitudes regarding their future, and as such will engage in barebacking with little concern.

There are, however, other justifications for barebacking made by both those involved in public health and those involved in barebacking. The risk in barebacking could be a response to burnout from safer sex messages of the past 20 years (Parsons, in press; Wolitski et al., 2001). Halkitis et al. (2003a) found that half of gay and bisexual men believed that barebacking had emerged as a result of "boring" safer sex campaigns and 46% attributed it to fatigue about the AIDS epidemic. As mentioned earlier, optimism about the effectiveness of HIV treatments may permit some men to be less concerned about HIV transmission and infection, and thus facilitate their decision to bareback. For some men, sex without a condom has become an increasingly important behavior, as it enhances intimacy, wholeness, and connectedness. The most common reasons given for barebacking in the Mansergh et al. (2002) study were to have greater physical stimulation and to feel emotionally closer or connected more; a minority of HIV-positive (10%) and HIV-negative men (17%) reported doing something "taboo" or "racy" as a primary reason for barebacking. Like most risky behaviors, the more benefits one perceives regarding the behavior, the more likely one is to bareback (Halkitis et al., 2003a). The positive effects of barebacking, including enjoyment, feeling closer to your partner, and increased stimulation during sex may overshadow the potential risks.

Barebacking and HIV Prevention

"In order to reach barebackers, prevention workers must become culturally competent and knowledgeable enough to understand why some men have created social identities based on their unprotected sex. What we need is a set of non-condom guidelines for barebackers to reduce the potential harm associated with their sex. This model of harm minimization, neither romanticizing nor vilifying barebackers, would be tailored to men who have made firm decisions to forgo condom use. In the same vain as needle exchange, perhaps we can

reduce the potential for damaging consequences associated with barebacking in spite of a refusal to use condoms." [Michael Scarce, gay activist and author, in a 1998 article in the New York Blade]

Existing HIV prevention interventions are aimed at changing behavior in motivated individuals. HIV-positive gay and bisexual men who identify as barebackers are unlikely to be interested in such interventions. As such, an intervention approach that could be utilized with gay and bisexual men who bareback, as well as other less motivated persons, is urgently needed as we move into the next era of the AIDS prevention. Such an approach will have to be sensitive to the developing cultural norms regarding barebacking. Both HIV-positive and HIV-negative men who perceive that their peers are more accepting of unprotected sex are more likely to identify themselves as a barebacker (Parsons and Bimbi, 2004). Additionally, interventions must target the yet unidentified factors that are contributing to barebacking ambivalence. Many gay and bisexual men, regardless of serostatus, report that although they do not purposely seek out unprotected sex, they accept that it may happen (Parsons and Bimbi, 2004). That is, although they do not intentionally look for bareback sex or identify themselves as a barebacker, they will engage in sex without condoms.

A brief counseling approach that incorporates a style that is clientcentered, and non-judgmental, such as Motivational Interviewing (Miller and Rollnick, 2002), may hold great promise for working with HIV-positive men who engage in barebacking. The idea behind Motivational Interviewing is that the provider helps to create discrepancy between the client's goals and their actual behavior, or what the client is doing versus what the client wants to be doing. Contrasting the feelings that HIV-positive gay and bisexual men have about not wanting to infect others, with desires for a quick sexual release while escaping thoughts of HIV, may help to motivate men to use strategies to reduce HIV transmission (Parsons, in press). Targeting men who bareback for this type of intervention while they are in sexually charged environments, such as public and commercial sex venues, circuit parties, or Internet chat rooms, seems particularly appropriate, as this may be an ideal time to explore discrepancy and issues of ambivalence regarding condom use among HIV-positive gay and bisexual men.

Microbicides for use in anal sex would be a potential alternative to condoms for men who engage in barebacking but who do have some concerns regarding HIV or STI transmission or infection. These chemical compounds have been shown to protect against HIV in animal models, and two microbicides are under investigation in large effectiveness trials (Tabet *et al.*, 2003). A number of trials with gay and bisexual men have

evaluated the acceptability and feasibility of rectal microbicides for HIV and STI prevention. Overall, the majority of gay HIV-negative men in six US cities reported a willingness to participate in rectal microbicide studies, particularly those men reporting higher frequencies of receptive anal sex acts (Gross *et al.*, 1998). Other studies have shown that rectal microbicides would be acceptable and desirable to Latino men who have sex with men in New York City (Carballo-Dieguez *et al.*, 2000) and ethnically diverse gay and bisexual men in Los Angeles (Rader *et al.*, 2001). Men with more negative attitudes about condoms are more likely to use a rectal microbicide (Marks *et al.*, 2000), suggesting that men who bareback may be willing to consider this prevention alternative.

Gay communities have been divided, to some degree, over barebacking with those who support and those who condemn such behavior. In March of 2001, following a year of heated and emotional debate pro and con, Gay.com removed bareback chat rooms from their popular online service. Some communities are responding to barebacking with increased outreach efforts, while others remain ambivalent about barebacking or resist taking sides. Washington DC is enhancing their free condom distribution program, and expects to dispense half a million condoms in 2004. In West Hollywood, however, condoms are available in only about half the gay bars, and in New York City outreach workers handing out condoms have been asked to leave gay bars and clubs. Bowls of free condoms, which used to be a given in most gay bars in metropolitan areas, are either gone completely or placed in less conspicuous locations than on the bar. Some gay community leaders do not seem to want to get involved as involvement may hurt business; others may fear being accused of "blaming the victim" as characterized by the beginning of the epidemic when prevention programs targeting HIV-positive persons were non-existent. Efforts should be made to involve community leaders in addressing barebacking and how such behavior has the potential to facilitate a new wave of HIV cases in gay communities. It is interesting to note that barebacking has resulted in a unique subculture of men who would not have been accepted by the gay communities at the time before effective HIV treatments when HIV was perceived as a death sentence and when men were spending more time attending funerals than looking for sex partners in bareback chat rooms.

CLUB DRUGS

"Well, I think that if it's like a major party, I probably would do Tina. I would start with it because it gives you a lot of energy. Or maybe no, actually no, I

wouldn't do Tina. I would do it later when I'm like really getting tired or like when everybody's going but you don't want to miss the party, so that would be the right time to do it. I'll probably start with one or a couple hits of ecstasy and a few bumps of K all the way throughout the whole night. And then later on I'd probably do Tina and then come home and do the after hours with K. That would be like a long party weekend." [25-year-old Latino man from New York City]

A number of studies have confirmed the explosion in club drug use in the US, particularly among gay and bisexual men in large urban areas. The term "Club Drugs" refers to a diverse group of drugs with the commonality that they are frequently used at dance clubs, sex clubs, circuit parties, and raves, and they are frequently used in combination with one another. Club drugs facilitate social disinhibition and are used to heighten sexual experiences (Romanelli *et al.*, 2003). Typically, the following drugs are considered in this capacity: Cocaine hydrochloride (Cocaine or coke), gamma-hydroxybutyrate (GHB or G), Ketamine (K or "Special K"), Methamphetamine (speed, crystal, or Tina), methylene-dioxymethamphetamine (MDMA or "Ecstasy"), and nitrate inhalants ("poppers").

Ron Stall and his colleagues (2001) documented the early emergence of some club drugs in a probability telephone sample of gay and bisexual men from New York City, San Francisco, Los Angeles, and Chicago conducted in 1996–1998. Nitrate inhalants were the most commonly used club drugs (20% reporting use in the past six months), followed by cocaine (15%), ecstasy (12%), and methamphetamines (9%). Neither ketamine nor GHB were specifically assessed in this study, showing how rapidly new drugs can come on the scene. Geographical differences were identified, with methamphetamines more commonly used in Los Angeles and San Francisco, cocaine more commonly used in New York City, and the use of multiple drugs more common among men residing in San Francisco and New York. Use of multiple drugs and more frequent drug use were significantly more likely to be reported by HIV-positive men, and more frequent attendance at public and commercial sex venues were associated with multiple drug use.

At present there is very little data to fully evaluate the social, psychological or physical harm associated from using club drugs in combination, yet we know that patterns of use often include combining two or more drugs to achieve the desired effects. "Trail Mix" is a popular term that grew out of the urban gay circuit party and dance club scene, and refers to the use of more than one club drug at a time. The term itself conveys the casualty with which these drugs are used and the perception of them as having few consequences.

Club Drug Use and Unprotected Sex

"[Using these club drugs] definitely for me reduces my inhibitions and kind of reduces my want and need to be protected and have safe sex, and makes me kind of not think about it. I'm only in it for the action. I'm only in it for the dick. And it's like, if I get it protected, if I get it unprotected, it's fine. Whatever I get, I want it. And that's a bad thing." [30-year-old African American man from New York]

Club drugs may influence the sexual behaviors of users because they are commonly used in environments in which sex is the primary objective of participation, such as sex clubs or bathhouses. Halkitis and Parsons (2003) found that frequenting dance clubs and bathhouses were both significantly associated with increased club drug use, and particularly polydrug use among gay and bisexual men in New York City. Polydrug using men report significantly more acts of unprotected oral and anal sex, and use of inhalant nitrates in particular is associated with more frequent sex without condoms. A study of recent HIV seroconverters demonstrated a specific relationship between club drug use and HIV transmission: HIV seroconverters were consistently more likely to report the use of club drugs such as methamphetamine, cocaine, and nitrate inhalants than were nonseroconverters (Chesney et al., 1998). Recreational drug use places gay and bisexual men at greater risk for HIV seroconversion by increasing the likelihood of unprotected anal intercourse. This is particularly true for ecstasy and methamphetamine.

Ecstasy has been shown to be significantly related to unprotected anal sex, as well as increased frequency of one night stands, more male sexual partners, and increased visits to commercial sex venues (Klitzman et al., 2002). Klitzman et al. (2000) surveyed gay and bisexual men as they were entering gay dance clubs in New York City and found that, in the past year, ecstasy was the most commonly used drug (52%), followed by ketamine (38%), cocaine (32%), methamphetamine (20%), and nitrate inhalants (22%). Of all the drugs assessed, however, only ecstasy was significantly associated with unprotected anal sex.

Methamphetamine, in particular, has risen among club drugs in terms of its association with unprotected sex and concerns about the role it has played in the increasing HIV infections among gay and bisexual men (Semple *et al.*, 2003; Parsons and Vicioso, in press; Romanelli *et al.*, 2003). A recent study of methamphetamine using HIV-positive and HIV-negative gay and bisexual men in New York City found that 61% reported use during all or most of their sexual encounters (Halkitis *et al.*, 2003b). Further, the social context of the drug was an important factor, as men who reported using methamphetamine in commercial sex venues reported more frequent overall use. HIV-positive men were more likely than negative men to report

use at sex parties. If methamphetamine is inserted anally, as it was among 35% of these users in New York City, additional problems can emerge. The substance wears away at the lining of the rectum and increases the possibility of HIV transmission and infection because of damage to the rectal tissue.

Circuit Parties, Club Drugs, and Sex

"I was actually just talking about this last night with a friend of mine. They just got back from Gay Disney [an annual circuit party] and they were saying about all the fun they were having. And the first question out of my mouth was "Were you safe?" And he was like "Of course I was safe." And I was like "Yeah but you know, when you're partying like that you kind of lose track of what's really happening." A lot of times you're just so fucked up that responsibility doesn't come into the picture at all. It's the very scary reality of using drugs and using them frequently because your reality is so warped that in the heat of the moment you don't think about those things." [28-year-old White man from New York City]

The use of club drugs is substantially higher among gay and bisexual men who attend large dance clubs or circuit parties. Circuit parties attract thousands of gay and bisexual men for dancing, drug use, and sexual activity, typically over the course of an entire weekend with multiple events scheduled. Although these parties tend to attract relatively well-educated men with disposable income (admission for these parties typically costs over \$100), there is much we can learn about the ways in which club drug use affects safer sex practices. Several studies have examined the men who frequent circuit parties, and have documented a consistent association between club drug use and unprotected sex.

Mattison et al. (2001; Ross *et al.*, 2003) collected data at three major circuit parties assessing club drug use at circuit parties in the past year. Ecstasy was the most common (used by 72% of the sample), followed by ketamine (60%), cocaine and nitrate inhalants (39% for each), methamphetamine (36%), and GHB (28%). Unsafe sex reported at the circuit parties was significantly related to frequent use of ecstasy, ketamine, and nitrate inhalants. The greater the number of individual drugs used, the greater the likelihood of unprotected sex. Only nitrate inhalant use, however, was significantly associated with unsafe sex over the past year (Mattison *et al.*, 2001). Men most commonly reported frequenting circuit parties to be "wild and uninhibited" (68%), to use drugs (58%), and to have sex (43%). Additional analyses revealed a significant relationship between attending circuit parties for these "sensation-seeking" oriented reasons and ecstasy, ketamine, GHB, and nitrate inhalant use, as well as with unsafe sex in the past year.

Unsafe sex was not related to more social reasons for attending (Ross *et al.*, 2003).

Mansergh et al. (2001) used multiple methods to sample gay and bisexual men residing in San Francisco who had attended a circuit party in the past year. The vast majority (95%) reported using at least one psychoactive drug during their most recent circuit party weekend, with 61% reporting the use of three or more drugs. In terms of individual drug use, ecstasy was the most common (75%), followed by ketamine (58%), methamphetamine (36%), GHB (25%), and cocaine (19%). Most of the men (84%) reported using these drugs on the dance floor and 63% reported use in the bathrooms at the event. One in four men reported a "drug overuse incident" in the past year, typically as a result of using GHB or ketamine. The majority of participants (67%) reported engaging in oral or anal sex during the most recent circuit party weekend, and 28% of the sample reported unprotected anal sex. Unprotected anal sex was significantly related to the number of drugs used. Additional analyses found that men who reported unprotected anal sex with serodiscordant or partners of unknown serostatus were more likely to be users of methamphetamine, nitrate inhalants and Viagra (Mansergh et al., 2001). Further, unprotected sex with partners of serodiscordant or unknown status was more likely to occur at circuit parties held outside of San Francisco, suggesting that gay and bisexual men may be more inclined to engage in sexual risks when they travel to attend a circuit party in another city. Comparable to the previous study (Mattison et al., 2001; Ross et al., 2003), many men in the San Francisco cohort reported going to circuit parties in order to use drugs, escape everyday life, and have sex.

Men were surveyed at a circuit party outside of New York City and similar results again were obtained (Lee *et al.*, 2003). The majority (86%) reported alcohol or drug use on the day of the event, and polydrug use was common. Again, ecstasy was the most commonly used club drug (71%), followed by ketamine (53%), methamphetamine (31%), cocaine (19%), and GHB (12%). Ecstasy use was significantly related to unprotected anal sex among these men.

Clearly gay and bisexual men who frequent circuit parties report higher rates of lifetime and recent club drug use than men who do not. It is interesting though, that the rates of use for each individual club drug in these studies are remarkably similar. These circuit party attending gay and bisexual men, however, represent a somewhat unique subsample in that they are well-educated and able to afford the costs of attending these expensive events. The participants in these studies were overwhelmingly Caucasian (70–83%) and most self-reported being HIV-negative (70–83%). It is also possible that the rates of use are common across these studies, despite the geographical diversity of where the studies were each conducted,

because it is essentially the same group of men attending each party. Lee and his colleagues (2003) found that although half of the participants were from the local New York City area, the average participant had traveled 802 miles to get to the party and that men reported attending an average of 3.8 circuit parties over the past year. As such, it is possible that the association between club drug use and risky sex among these men is unique to those who more frequently attend such parties. Nonetheless, it is clear that the unprotected sex that occurs at these events under the influence of club drugs has the potential to result in HIV transmission and infection. It is possible that the nature of these parties, combined with drug use creates a disinhibitory effect among men who might otherwise choose to use condoms for anal sex. The use of these drugs may lead to problems with judgment, in that men make even more errors in serosorting, by making more incorrect assumptions about the HIV status of their partners or through the diminished capacity to discuss HIV or disclose serostatus in drug-related sexual encounters. Some of these gay and bisexual men are using club drugs as a way to escape from thoughts and feelings about HIV (Romanelli et al., 2003). Gay and bisexual men who hold strong expectancies that drugs will facilitate sex and cognitive escape from thoughts about HIV risk are more likely to report sexual risk behaviors (McKirnan et al., 2001). Rather than use club drugs and then experience risky sex as a result, some men may be intentionally using these club drugs as a way to justify or reduce feelings of anxiety or distress about their decisions to engage in sex without condoms.

Prevention Issues for Club Drug Users

"What I feel about most of these workshops is that they're educational. You know what club drugs do to you—everybody knows what they do. Nobody wants to go to another workshop to know what they do. It's more about motivation. So I think maybe the workshops need to be about motivating people. We're already too educated. It's really about following what we know." [23-year-old Asian-Pacific Islander man from New York City]

While many inpatient and outpatient substance abuse programs are familiar with cocaine and methamphetamine abuse, treatment programs have less familiarity with other club drugs like GHB and ketamine. Furthermore, few treatment programs are informed about the special needs of gay and bisexual men, let alone HIV-positive gay and bisexual men. Nor do many existing drug treatment programs fully understand the social and sexual contexts in which club drugs are used. Many of these programs require abstinence in order to participate in treatment, which may not be

attractive to gay and bisexual men for whom some level of drug use is such an important part of their socialization with other men. Most programs cater primarily to those with the most severe problems or those who meet criteria for drug dependence, and are unable to offer a harm reduction approach or address the different needs of those engaged in sustained recreational abuse or those meeting criteria for abuse.

While community based organizations and agencies serving HIV-positive gay and bisexual men may have a better understanding of the phenomenon of club drug use in their communities, most often their substance use programs are oriented towards a 12-step model that may be inappropriate for those experimenting with club drugs. HIV clinics may have sufficient resources to provide medical care to men living with HIV, but many lack the necessary resources to provide substance abuse treatment, and instead must rely on the use of referrals to programs outside of the clinic, many of which may have limited understanding of HIV-related issues, including the HIV risk reduction needs of HIV-positive men in order to prevent the transmission of HIV to their sexual partners. As such, the HIV-positive client is unable to obtain medical and substance abuse treatment in the same facility. Consequently, many HIV-positive gay and bisexual men may not seek help, despite the potentially life threatening consequences associated with both club drug use and unsafe sexual behaviors.

Intensive treatments for substance use may not be seen as beneficial by a large percentage of HIV-positive gay and bisexual men, for a variety of reasons. This has certainly been the case in a number of the interventions that I have been involved with. Harm-reduction strategies, on the other hand, provided in a non-judgmental environment that is sensitive to gay and bisexual issues and knowledgeable of the needs of HIV-positive men, are likely to be much more appealing, and result in better recruitment success. Retention across multiple sessions of more intensive treatments is also problematic. These issues suggest clearly the need for less intensive, brief interventions to provide harm reduction for club drug use and HIV risk behaviors among HIV-positive gay and bisexual men. This is another situation in which interventions based on principles of Motivational Interviewing could be particularly useful. Such an approach would address the needs of HIV-positive men at a variety of points of readiness to change, from those looking to abstain entirely from club drug use, to those simply looking to reduce their own health-related risks from using club drugs through harm reduction techniques. In addition, brief interventions using Motivational Interviewing to reduce the harm associated from club drug use have the potential to be integrated into HIV clinic and primary care facilities as part of comprehensive treatment of those living with HIV, because they would not require substantial resources.

CONCLUSIONS

It is critical to consider the interconnections among the contextual factors discussed in this chapter. An HIV-positive gay man may begin the evening using ecstasy, get sexually aroused and interested in sex, head to a bathhouse and engage in unsafe anal sex with several partners assuming that other gay men who frequent such venues know the risks they are taking and are there to forget about HIV and condoms anyway. An HIV-positive bisexual man may go to a park known for sexual activity in order to have anonymous sex with men without his wife finding out, and then engage in unprotected sex as a bottom thinking there is little risk to his partners because he is taking the receptive role and because his viral load is undetectable. And yet a third young HIV-positive man coming to terms with his sexual identity may get on the Internet, go into a barebacking chatroom to find someone interested in PnP, meet up with a group of men using crystal methamphetamine and engage in drug use and unsafe sex all night assuming that his partners must be HIV-positive too.

HIV-positive gay and bisexual men may turn to sexually charged venues, the use of the Internet to find sex partners, barebacking, and the use of club drugs to escape thoughts about HIV infection and the social norms and societal pressures to protect partners from HIV. It is through these experiences that HIV-positive men have an opportunity to feel liberated from the constraints of condom use, responsibility, or the need to disclose serostatus. Clearly, prevention efforts need to continue to better understand the interconnections between these contextual factors, and particularly the ways in which they can operate within the same HIV-positive gay or bisexual man. As this chapter has described, intervention approaches need to take into consideration the unique features of the venues, including bathhouses, sex clubs, public parks, and the Internet in which HIV-positive men find their sex partners. Interventions should be tailored to the unique needs of men who identify as barebackers, recognizing they are likely to lack motivation to use condoms and not be interested in traditional HIV prevention programs. The ways in which polydrug use negatively impacts the ability of HIV-positive gay and bisexual men to engage in safer sex practices needs to be considered and HIV prevention and substance use programs need to be combined to address the needs of these men.

Perhaps in direct contrast to the emerging trends of risky sex in public and commercial sex venues, the use of the Internet to find sex partners, the barebacking movement, and the accessibility of club drugs, there has been a recent emphasis on asking gay and bisexual men to protect themselves. Popular actor, writer, and gay activist Harvey Fierstein has been helping to promote gay community forums in New York City to address the recent

increases in HIV infection and crystal methamphetamine use among gay men. In Seattle, gay community activists developed and published a "community manifesto" in an effort to promote new community norms geared at prevention, including urging HIV-positive men to take increased responsibility to both disclose their status to all sex partners and to not knowingly transmit HIV. In response to the number of Internet websites focused on barebacking, a new website called safesexcity.com has recently been created as a place for gay and bisexual men to meet other men committed to condom use and safer sex. Although such endeavors are not without controversy and debate, and there is a clear need to ensure that prevention efforts do not shift all the responsibility to reducing HIV infections to those living with HIV, these new efforts suggest that community-level interventions are possible.

Individual members of gay and bisexual communities are becoming increasingly involved and joining in a dialogue on how a new wave of the HIV epidemic can be addressed. Further, professionals involved in the development and implementation of HIV prevention interventions for gay and bisexual men should consider alternative harm reduction strategie that are non-judgmental in their orientation, such as Motivational Interviewing. In addition, it is time to think outside the box of traditional individual and group-level interventions, as well as to be more creative in our approach to working with HIV-positive and HIV-negative gay and bisexual men. Partnerships, even seemingly unorthodox ones are essential. In New York City, the Department of Health sponsored a program called "Hot Shots." HIV and STI testing, Hepatitis A and B vaccinations, and other health promotion efforts are provided in gay bars. The Department of Health provides the staff to conduct the testing and vaccinations. The program is hosted and sponsored by a gay porn star, working in conjunction with bar/club owners and managers. Men are encouraged to be tested and get education and information by the DIVAs (the Drag Initiative to Vanquish AIDS), a group of gay male HIV researchers and social science graduate students in matching wigs and costumes. An odd mixture, perhaps, but it works, as evidenced by the large number of men at each event who get tested for HIV and other STIs. Although such a colorful and unique initiative may not work in all communities, it effectively illustrates what is possible when prevention experts and community leaders come together to develop new approaches for HIV prevention.

AcknowledgeMents The author would like to acknowledge David S. Bimbi, David Frost, Jeremy Eggleston, and Chris Hietikko for their helpful comments and assistance in the preparation of this chapter.

REFERENCES

- Ashton, M., Sopwith, W., Clark, P., McKelvey, D., Lighton, L. and Mandal, D. (2003). An outbreak no longer: factors contributing to the return of syphilis in Greater Manchester. *Sex. Transm. Infect.* 79:291–293.
- Benotsch, E., Kalichman, S., and Cage, M. (2002). Men who have met sex partners via the internet: prevalence, predictors, and implications for HIV prevention. *Arch. Sex. Behav.* 3(2):177–183.
- Binson, D., Woods, W., Pollack, L., Paul, J., Stall, R., and Catania, J. (2001). Differential HIV risk in bathhouses and public cruising areas. *Am. J. Public Health* 91:1482–1486.
- Bonnel, C., Weatherburn, P., and Hickson, F. (2000). Sexually transmitted infection as a risk factor for homosexual HIV transmission: A systematic review of epidemiological studies. *Int. J. STD AIDS* 11:697–700.
- Bull, S., and McFarlane, M. (2000). Soliciting sex on the internet: what are the risks for sexually transmitted diseases and HIV? Sex. Transm. Dis. 27(9):545–550.
- Bull, S., McFarlane, M. and Rietmeijer, C. (2001). HIV/STD risk behaviors among men seeking sex with men online. *Am. J. Public Health* 91(6):988–989.
- Calzavara, L., Burchell, A. N., Major, C., Remis, R. S., Corey, P., Myers, T., Millson, P., Wallace, E., and Polaris Study Team. (2002). Increases in HIV incidence among men who have sex with men undergoing repeat diagnostic HIV testing in Ontario, Canada. AIDS 16:1655– 1661.
- Carballo-Dieguez, A., Stein, Z., Saez, H., Dolezal, C., Nieves-Rosa, L., and Diaz, F. (2000). Frequent use of lubricants for anal sex among men who have sex with men: the HIV prevention potential of a microbicidal gel. *Am. J. Public Health* 90(7):1117–1120.
- Catania, J., Osmond, D., Stall, R., Pollack, L., Paul, J., Blower, S., Binson, D., Canchola, J., Mills, T., Fisher, L., Choi, K., Porco, T., Turner, C., Blair, J., Henne, J., Bye, L., and Coates, T. (2001). The continuing HIV epidemic among men who have sex with men. Am. J. Public Health 91:907–914.
- Centers for Disease Control and Prevention. (2002). Unrecognized HIV infection, risk behaviors, and perceptions of risk among young black men who have sex with men–Six U.S. cities, 1994–1998. MMWR 51:733–736.
- Chen, S. Y., Gibson, S., Katz, M. H., Klausner, J. D., Dilley, J. W., Schwarcz, S. K., Kellogg, T. A., and McFarland, W. (2002). Continuing increases in sexual risk behavior and sexually transmitted diseases among men who have sex with men: San Francisco, Calif, 1999–2001. *Am. J. Public Health* 92:1387–1388.
- Chesney, M. A., Barrett, D. C., and Stall, R. (1998). Histories of substance use and risk behavior: Precursors to HIV seroconversion in homosexual men. *Am. J. Public Health* 88(1):113–116.
- Ciccarone, D. H., Kanouse, D. E., Collins, R. L., Miu, A., Chen, J. L., Morton, S. C., and Stall, R. (2003). Sex without disclosure of positive HIV serostatus in a US probability sample of persons receiving medical care for HIV infection. Am. J. Public Health 93:949– 954.
- Cooper, A., Scherer, C., Boies, S., and Gordon, B. (1999). Sexuality on the Internet: From sexual exploration to pathological expression. *Prof Psych Res Pract*. 30:154–164.
- Crepaz, N., and Marks, G. (2002). Towards an understanding of sexual risk behavior in people living with HIV: A Review of social, psychological, and medical findings. AIDS 16:135– 149.
- Des Jarlais, D. C., Vanichseni, S., Marmor, M., Buavirat, A., Titus, S., Raktham, S., Friedmann, P., Kitayaporn, D., Wolfe, H., Friedman, S. R., and Mastro, T. D. (1997). "Why I am not infected with HIV": Implications for Long-Term Risk Reduction and HIV Vaccine Trials. J. Acquir. Immune Defic. Syndr. Hum. Retrovirol. 16:393–399.

Diaz, R. M., Stall, R. D., Hoff, C., Daigle, D., and Coates, T. J. (1996). HIV risk among Latino gay men in the Southwestern United States. *AIDS Educ. Prev.* 8:415–429.

- Ekstrand, M. L., Stall, R. D., Paul, J. P., Osmond, D. H., and Coates, T. J. (1999). Gay men report high rates of unprotected anal sex with partners of unknown or discordant HIV status. *AIDS* 13:1525–1533.
- Elford, J., Bolding, G., and Sherr L. (2001). Seeking sex on the internet and sexual risk behaviour among gay men using London gyms. *AIDS* 15:1409–1415.
- Elwood, W. N. and Williams, M. L. (1998). Sex, drugs, and situation: attitudes, drug use, and sexual risk behaviors among men who frequent bathhouses. *J. Psychol. Human Sex*. 10:23–44.
- Flowers, P., Hart, G., and Marriott, C. (1999). Constructing sexual health: Gay men and "risk" in the context of a public sex environment. *J. Health Psychol*. 4:483–495.
- Fox, K. K., del Rio, C., Holmes, K. K., Hook, E. W. III, Judson, F. N., Knapp, J. S., Procop, G. W., Wang, S. A., Whittington, W. L. H., and Levine, W. C. (2001). Gonorrhea in the HIV era: A reversal in trends among men who have sex with men. Am. J. Public Health 91:959–964.
- French, R., Power, R., and Mitchell, S. (2000). An evaluation of peer-led STD/HIV prevention work in a public sex environment. *AIDS Care* 12:225–234.
- Gauthier, D., and Forsyth, C. (1999). Bareback sex, bug chasers, and the gift of death. *Deviant Behavior* 20:85–100.
- Goodroad, B., Kirksey, K., and Butensky, E. (2000). Bareback sex and gay men: an HIV prevention failure. *J. Assoc. Nurses AIDS Care* 11:29–36.
- Gross, M., Buchbinder, S., Celum, C., Heagerty, P., and Seage, G. (1998). Rectal Microbicides for U.S. gay men: are clinical trials needed? Are they feasible? Sex. Transm. Dis. 25(6): 296–302.
- Halkitis, P. N., and Parsons, J. T. (2003). Intentional unsafe sex (barebacking) among HIV seropositive gay men who seek sexual partners on the internet. *AIDS Care* 15: 367–378.
- Halkitis, P. N., Parsons, J. T., and Wilton, L. (2003a). Barebacking among gay and bisexual men in New York City: Explanations for the emergence of intentional unsafe behavior. *Arch. Sex. Behav.* 32:351–358.
- Halkitis, P. N., Parsons, J., and Wilton, L. (2003b). An Exploratory study of contextual and situational factors related to methamphetamine use among gay and bisexual men in New York City. J. Drug Issues 38:413–432.
- Haubrich, D., Myers, T., Calzavara, L., Ryder, K. and Medved, W. (2004). Gay and bisexual men's experiences of bathhouse culture and sex: "looking for love in all the wrong places" *Culture, Health and Sexuality* 6(1):19–29.
- Halkitis, P. N., Zade, D. D., Shrem, M., and Marmor, M. (in press). Beliefs about HIV non-infection and risky sexual behavior among MSM. *AIDS Educ. Prev*.
- Hecht, F. M., Grant, R., Petropoulos, C., Dillon, B., Chesney, M. A., Tian, H., Hellmann, N. S., Bandrapalli, N. I., Digilio, L., Branson, B., and Kahn, J. O. (1998). Sexual transmission of HIV-1 variant resistant to multiple reverse-transcriptase and protease inhibitors. N. Engl. J. Med. 339:307–343.
- Hospers, H. J., Debets, W., Ross, M. W., and Kok, G. (1999). Evaluation of an HIV prevention intervention for men who have sex with men at cruising areas in the Netherlands. *AIDS Behav.* 3:359–366.
- Hospers, H. J., Harterink, P., Van Den Hoek, K., and Veenstra, J. (2002). Chatters on the Internet: a special target group for HIV prevention. *AIDS Care* 4(4):539–544.
- Kalichman, S. C. (2000). HIV transmission risk behaviors of men and women living with HIV/AIDS: Prevalence, predictors, and emerging clinical interventions. Clinical Psychology: Science and Practice 7:32–47.

- Kalichman, S. C., Nachimson, D., Cherry, C., and Williams, E. (1998). AIDS treatment advances and behavioral prevention setbacks: preliminary assessment of reduced perceived threat of HIV-AIDS. *Health Psychol*. 17(6):546–550.
- Kalichman, S. C., Weinhardt, L., DiFonzo, K., Austin, J., and Luke, W. (2002a). Sensation seeking and alcohol use as markers of sexual transmission risk behavior in HIV-positive men. *Ann. Behav. Med.* 24:229–235.
- Kalichman, S. C., Rompa, D., Luke, W., and Austin, J. (2002b). HIV transmission risk behaviours among HIV-positive persons in serodiscordant relationships. *Int. J. STD AIDS* 13:677–682.
- Kalichman, S. C., Benotsch, E. G., Weinhardt, L., Austin, J., Luke, W., and Cherry, C. (2003). Health-related Internet use, coping, social support, and health indicators in people living with HIV/AIDS: preliminary results from a community survey. *Health Psychol*. 22(1):111–116.
- Katz, M. H., Schwarcz, S. K., Kellogg, T. A., Klausner, J. D., Dilley, J. W., Gibson, S., and McFarland, W. (2002). Impact of highly active antiretroviral treatment on HIV seroincidence among men who have sex with men: San Francisco. Am. J. Public Health 92(3):388– 394
- Kim, A., Kent, C., McFarland, W., and Klausner, J. (2001). Cruising on the internet highway. *JAIDS* 28:89–93.
- Klausner, J., Wolf, W., Fisher-Ponce, L., Zolt, I., and Katz, M. (2000). Tracing a syphilis outbreak through cyberspace. *JAMA* 284(4):447–449.
- Klitzman, R., Greenberg, J., Pollack, L., and Dolezal, C. (2002). MDMA ('ecstasy') use, and its association with high risk behaviors, mental health, and other factors among gay/bisexual men in New York City. *Drug Alcohol Depend*. 66:115–125.
- Klitzman, R., Pope, H.G., and Hudson, J. (2000). MDMA ("Ecstasy") abuse and high-risk sexual behaviors among 169 gay and bisexual men. *Am J Psychiatr*. 157:1162–1164.
- Koblin, B. A., Torian, L. V., Gulin, V., Ren, L., MacKellar, D. A., and Valleroy, L. A. (2000). High prevalence of HIV infection among young men who have sex with men in New York City. AIDS 14:1793–1800.
- Lee, S., Galanter, M., Dermatis, H., and McDowell. (2003). Circuit parties and patterns of drug use in a subset of gay men. *J. Addictive Diseases* 22(4):47–60.
- Mansergh, G., Colfax, G., Marks, G., Rader, M., Guzman, R., Buchbinder, S. (2001). The Circuit Party Men's Health Survey: Findings and implications for gay and bisexual men. Am J Pub Health. 91:953–958.
- Mansergh, G., Marks, G., Colfax, G., Guzman, R., Rader, M., and Buchbinder, S. (2002). Barebacking in a diverse sample of men who have sex with men. *AIDS* 16:653–659.
- Marks, G., Mansergh, G., Crepaz, N., Murphy, S., Miller, L. and Appleby, P. (2000). Future HIV prevention options for men who have sex with men: intention to use a potential microbicide during anal intercourse. *AIDS Behav.* 4(3):279–286.
- Mattison, A. M., Ross, M. W., Wolfson, T., Franklin, D., and the HNRC Group. (2001). Circuit party attendance, club drug use, and unsafe sex in gay men. *J. Subst. Abuse* 12:119–126
- McFarlane, M., Bull, S., and Rietmeijer, C. (2000). The internet as a newly emerging risk environment for sexually transmitted diseases. *JAMA* 284(4):443–446.
- McKirnan, D. J., Vanable, P. A., Ostrow, D. G., and Hope, B. (2001). Expectancies of sexual "escape" and sexual risk among drug and alcohol-involved gay and bisexual men. *J. Subst. Abuse.* 13(1–2):137–154.
- Mettey, A., Crosby, R., DiClemente, R., and Holtgrave, D. (2003). Associations between internet sex seeking and STI associated risk behaviours among men who have sex with men. *Sex. Transm. Infect.* 79:466–468.

Miller, W. R., and Rollnick, S. (2002). *Motivational interviewing: Preparing people for change*. 2nd ed. Guilford Press, New York.

- Parsons, J. T. (in press). Motivational interviewing with gay/bisexual men who engage in barebacking. Journal of Gay and Lesbian Psychotherapy.
- Parsons, J. T., and Bimbi, D. S. (2004, April). Barebacker identity and impact on risk behaviors of gay and bisexual men. Paper presented at the Western Region Conference of the Society for the Scientific Study of Sexuality: San Diego, CA.
- Parsons, J. T., and Halkitis, P. N. (2002). Sexual and drug using practices of HIV+ men who frequent commercial and public sex environments. *AIDS Care* 14:815–826.
- Parsons, J. T., and Vicioso, K. (in press). Brief encounters: Public and commercial sex environments. In: Halkitis, P., Gómez, C., and Wolitski, R. J., (eds.), Positive Living: The Sexual Lives of HIV-Seropositive Gay and Bisexual Men. American Psychological Association, Washington, D.C.
- Parsons, J. T., Halkitis, P. N., Wolitski, R. J., and Gomez, C. A. (2003). Correlates of sexual risk behaviors among HIV-positive men who have sex with men. *AIDS Educ. Prev.* 15:383–400.
- Parsons, J. T., Schrimshaw, E. W., Wolitski, R. J., Halkitis, P. N., Purcell, D. W., Hoff, C. C., and Gomez, C. (in press). Sexual practices of HIV seropositive gay and bisexual men: Use of harm reduction strategies in New York City and San Francisco. *AIDS*.
- Rader, M., Marks, G., Mansergh, G., Crepaz, N., Miller, L., Appleby, P. and Murphy, S. (2001).
 Preferences about the characteristics of future HIV prevention products among men who have sex with men. AIDS Educ. Prev. 13(2):149–159.
- Renwick, N., Halaby, T., and Weverling, G. J. (1998). Seroconversion for human herpes virus 8 during HIV infection is highly predictive of Kaposi's Sarcoma. *AIDS* 12:2481–2488.
- Romanelli, F., Smith, K., and Pomeroy, C. (2003). Use of club drugs by HIV-seropositive and HIV-seronegative gay and bisexual men. *Topics in HIV Medicine* 11(1):25–32.
- Ross, M., Mattison, A., and Franklin, D. (2003). Club drugs and sex on drugs are associated with different motivations for gay circuit party attendance in men. *Subst. Use Misuse* 38(8):1171–1179.
- Semple, S. J., Patterson, T. L., and Grant, I. (2003). Binge use of methamphetamine among HIV-positive men who have sex with men: pilot data and HIV prevention implications. *AIDS Educ. Prev.* 15(2):133–147.
- Somlai, A. M., Kalichman, S. C. and Bagnall, A. (2001). HIV risk behaviour among men who have sex with men in public sex environments: An ecological evaluation. *AIDS Care* 13:503–514.
- Spengler, U., and Rockstroth, J. (1998). Hepatitis C in the patient with human immunodeficiency virus infection. *J. Hepatol.* 29:1023–1030.
- Stall, R., Paul, J. P., Greenwood, G., Pollack, L. M., Bein, E., Crosby, G. M., Mills, T. C., Binson, D., Coates, T. J., and Catania, J. A. (2001). Alcohol use, drug use and alcohol-related problems among men who have sex with men: The Urban Men's Health Study. Addiction 96:1589–1601.
- Stolte, I. G., Dukers, N. H., de Wit, J. B., Fennema, J. S., and Countinho, R. A. (2001). Increases in sexually transmitted infections among homosexual men in Amsterdam in relation to HAART. *Sex. Transm. Dis.* 77:184–186.
- Suarez, T., and Miller, J. (2001). Negotiating risks in context: A perspective on unprotected anal intercourse and barebacking among men who have sex with men—where do we go from here? Arch. Sex. Behav. 30:287–300.
- Tabet, S., Callahan, M., Mauck, C., Gai, F., Coetti, A., Profy, A., Moench, T., Sotto-Torres, L., Poindexter III, A., Frezieres, R., Walsh, T., Kelly, C., Richardson, B., van Damme, L., and Celum, C. (2003). Safety and acceptability of penile application of 2 candidate topical microbicides: buffergel and PRO 2000 Gel. *JAIDS* 33:476–483.

- Tashima, K. T., Alt, E., Harwell, J., Fiebich-Perez, D. and Flanigan, T. P. (2003). Internet sex-seeking leads to acute HIV infection: a report of two cases. *Int. J. STD AIDS* 14:285–286.
- Tikkanen, R., and Ross, M. (2003). Technological tearoom trade: characteristics of swedish men visiting gay internet chat rooms. *AIDS Educ. Prev.* 15(2):122–132.
- Toomey, K., and Rothenberg, R. (2000). Sex and cyberspace—virtual networks leading to high-risk sex. *JAMA* 284(4) 485–487.
- Valdisseri, R. (2003, Feb). Preventing New HIV Infections in the U.S.: What Can We Hope to Achieve? Paper presented at the 10th Conference on Retroviruses and Opportunistic Infections: Boston, MA.
- Valleroy, L., MacKellar, D. A., Karon, J. M., Rosen, D. H., McFarland, W., Shehan, D. A., Stoyanoff, S. R., LaLota, M., Celentano, D. D., Koblin, B. A., Thiede, H., Katz, M. H., Torian, L. V., and Janssen, R. S. (2000). HIV prevalence and associated risks in young men who have sex with men. *JAMA* 282:198–204.
- Van de Ven, P., Prestage, G., Crawford, J., Grulich, A. and Kippax, S. (2000). Sexual risk behavior increases is associated with HIV optimism among HIV negative and HIV positive gay men in Sydney over the Four-year period to February 2000. AIDS 14:2951– 2953.
- Van de Ven, P., Kippax, S., Crawford, J., Rawstorne, P., Prestage, G., Grulich, A., and Murphy, D. (2002). In a minority of gay men, sexual risk practice indicates strategic positioning for perceived risk reduction rather than unbridled sex. AIDS Care 14:471–480.
- Vanable, P., Ostrow, D., McKirnan, D., Taywaditep, K., and Hope, B. (2002). Impact of combination therapies on HIV risk perceptions and sexual risk among HIV-positive and HIV-negative gay and bisexual men. *Health Psychol.* 19(2):134–145.
- Vanable, P., Ostrow, D., and McKirnan, D. (2003). Viral load and HIV treatment attitudes as correlates of sexual risk behavior among HIV-positive gay men. *J. Psychosom. Res.* 54:263–269.
- Vittinghoff, E., Douglas, J., Judson, F., McKirnan, D., MacQueen, K., and Buchbinder, S. P. (1999). Per-contact risk of human immunodeficiency virus transmission between male sexual partners. *Am. J. Epidemiol.* 150:306–311.
- Weatherburn, P., Hickson, F., and Reid. (2003). *Gay men's use of the internet and other settings where HIV preventions occurs.* SIGMA RESEARCH, London chapter, pp. 1–26.
- Wheater, C. P., Cook, P. A., Clark, P., Syed, Q., and Bellis, M. A. (2003). Re-emerging syphilis: a detrended correspondence analysis of the behaviour of HIV positive and negative gay men. BMC Public Health 3:34.
- Wiley, D. J., Visscher, B. R., Grosser, S. Hoover, D. R., Day, R., Gange, S., Chmiel, J. S., Mitsuyasu, R., and Detels, R. (2000). Evidence that anoreceptive intercourse with ejaculate exposure is associated with rapid CD4 loss. AIDS 14:707–715.
- Wolitski, R. J., Reitmeijer, C. A. M., Goldbaum, G. M., and Wilson, R. M. (1998). HIV serostatus disclosures among gay and bisexual men in four American cities: general pattern and relation to sexual practices. *AIDS Care* 10:599–610.
- Woltiski, R. J., Valdiserri, R. O., Denning, P. H., and Levine, W. C. (2001). Are we headed for a resurgence in the HIV epidemic among men who have sex with men? Am. J. Public Health 91:883–888.
- Wolitski, R. J., Bailey, C. J., O'Leary, A., Gomez, C. A., and Parsons, J. T. (2003). Self-perceived responsibility of seropositive MSM for preventing HIV transmission to sex partners. *AIDS Behav.* 7:363–372.
- Woods, W., Binson, D., Mayne, T., Gore, L. R, and Rebchook, G. (2001). Facilities and HIV prevention in bathhouse and sex club environments. *The Journal of Sex Research* 38(1):68–74.
- Woods, W., Tracy, D., and Binson, D. (2003). Number and distribution of gay bathhouses in the United States and Canada. *J. Homosex*. 44(3/4):55–70.