Published in final edited form as: Sex Health. 2008 September; 5(3): 243–250.

HIV risk practices sought by men who have sex with other men, and who use internet websites to identify potential sexual partners

Hugh Klein^{A,B,C}

^AKensington Research Institute, Silver Spring, MD 20910, USA.

^BDrug Abuse Research Program and the Center for the Study and Prevention of Drug Use, Morgan State University, Baltimore, MD 21251, USA.

Abstract

Men who have sex with men (MSM) account for the largest number of persons diagnosed with AIDS in the USA, with higher than average rates of drug use and unprotected sex being cited as the principal reasons underlying their high rates of HIV infection. Recent evidence has suggested that the use of websites specifically designed to promote unsafe sexual practices may be particularly common among MSM, thereby fostering their risky behaviours. In light of these findings, the present study is based on a content analysis of 1316 ads/profiles posted on one of the most popular MSM websites that specifically fosters unprotected sex. Ads/profiles were selected randomly based on the American ZIP code of residence. Data were collected between September 2006 and January 2007. Rates of advertised for high-risk sexual behaviours were very high, particularly for oral sex involving ejaculation into the mouth (88.0% for receptive oral sex, 77.4% for insertive oral sex), anal sex involving ejaculation into the anus (79.7% for insertive anal sex, 69.4% for receptive anal sex), multiple partner sex (77.9%) and felching (16.5%). A multivariate analysis of the correlates of sexual risk preferences identified seven factors that were related to a propensity towards enhanced sexual risk: younger age ($\beta = 0.12$, P = 0.0001), not being African American ($\beta = 0.05$, P = 0.0341), self-identification as a sexual 'bottom' ($\beta = 0.20$, P = 0.0001), not caring about one's potential sex partners' HIV serostatus ($\beta = 0.15$, P = 0.0001), preferring to have sex while under the influence of drugs ($\beta = 0.08$, P = 0.0022), a greater involvement in and commitment to the use of the website to locate potential unprotected sex partners ($\beta = 0.16$, P =(0.0001) and not being HIV-negative ($\beta = 0.08$, P = 0.0081). The HIV intervention-related implications of these findings are discussed.

Key	wo	rds
-----	----	-----

content analysis; sexual risk practices	

^CCorresponding author. hughk@aol.com. Conflicts of interest None declared.

To date, approximately 1 million Americans have been diagnosed with AIDS and estimates suggest that nearly one-quarter million more are living with HIV that has not developed into AIDS.¹ Men who have sex with other men (MSM) account for 57% of all reported cases of AIDS with a known source of transmission and 53% of all HIV-positive persons who knew how they became HIV-infected.¹ Despite changes in the proportions of persons of various population subgroups that are more (or less) affected by HIV now than in previous years, these percentages for MSM have declined very little during the past 10 years.^{2,3}

In light of this, numerous studies have been conducted to identify why, 25 years into the HIV/AIDS epidemic, so many men continue to place themselves at risk for HIV. Many factors have been identified, including the belief that engaging in unprotected sex is an expression of individual choice, ^{4,5} the belief that engaging in unprotected sex is an expression of masculinity, ^{6–8} the perception that AIDS antiretroviral drugs have made HIV/AIDS less of a health concern now than in previous years, ^{9,10} a fear of being rejected sexually by partners who dislike condoms, ¹⁰ the belief that sex is more pleasurable when condoms are not used, ^{5,11,12} feeling 'burned out' by worrying about becoming HIV-infected, ^{9,11} and feeling a greater emotional connectedness to sexual partners with whom one has unprotected sex. ^{12,13}

Howmenwhowishtohavehigh-risksexwithothermenlocate potential sex partners has been the subject of relatively little research, however. For many men, 'traditional' avenues of meeting other men – e.g. gay bars, gay/bisexual-oriented social activities, personalads – remainpopularwaysofmeetingpotential sex partners. But these 'traditional' avenues often result in thwarted attempts at sex when, after investing the time in a getting-to-know-you process, the person who is seeking sex partners with whom he can have unprotected sex discovers that the person he has met is unwilling to engage in such behaviours. Another common way for men to locate potential partners is by frequenting public venues (e.g. parks, rest areas, rest rooms) wheremale-to-male cruising is knowntotake place. Theselocales often offer MSM seeking unprotected sex the opportunity to find willing partners, but they have inherent drawbacks as well. Police enforcement efforts often disrupt sex-seeking behaviours in known male-to-male cruising spots, and it is not uncommon for non-cruising people to show up in these public venues to utilise them for their intended purposes.

In recent years, many men who wish to find other men specifically for engaging in unprotected sex appear to be turning to MSM-oriented websites for this purpose. For example, in a sample of gay men who were recruited into a health promotion study via gay-oriented internet websites, ¹⁴ Bolding and colleagues found that the amount of risky sex in which men engaged was a significant predictor of their use of internet websites to locate sex partners. Bolding *et al.* also reported that 47% of the men in their sample said that they preferred using websites to frequenting bars or other 'offline' venues to identify potential sex partners. In another study, ¹⁵ among men using the internet to locate potential sex partners, 97% reported actually having met someone online for sex, and 86% said that they used internet MSM sex sites at least once a week to identify partners. Halkitis *et al.* cited internet websites and chat rooms as being partly responsible for the upsurge of unprotected sexual activities that they have observed among gay and bisexual men in the New York City area. ⁹

With mounting evidence of the important role that the internet may play in fostering sexual encounters between men who specifically wish to have unprotected sex with other men, it becomes important to understand male-sexual-content website usage in this population. A variety of important questions emerge. First, what specific types of risky behaviours are these men seeking? Second, what beliefs and attitudes do they have vis-a-vis HIV and risk taking? Third, what characteristics are being sought in potential partners? For example, are HIV-negative men frequenting these websites seeking to have sex only with other HIV-negative men? Fourth, what characteristics differentiate site usage and the types of risky sex desired? For example, are men who use these sites a great deal to meet potential sex partners older/younger, more likely to be HIV-positive/HIV-negative, more likely to be seeking higher/lower rates of risky sexual practices, etc. compared with men who use these sites less frequently? Obtaining the answers to all of these questions is crucial if one wishes to develop an informed prevention and/or intervention effort targeting the risk behaviours of men who use the internet to locate other men with whom they can engage in risky sex.

Methods

The present research relied on content analysis as the principal analytical tool. The data were collected between September 2006 and January 2007 using one of the largest MSM-oriented websites currently available on the internet. The website was chosen because it is free to the public, findable by virtually any internet search utilising common keywords such as 'bareback,' and because it boasts a large and steadily growing membership. Currently, the site has tens of thousands of registered users (the large majority of whom reside in the USA) and it is growing at a rate of ~500–1000 persons per month. This website allows members to post profiles (including photographs) describing themselves, and there are no length restrictions placed on profiles posted. A In addition, there are specific places in their profiles where members are instructed to indicate the type(s) of relationships they are seeking (longterm relationships, one-on-one sexual encounters, three-way sexual encounters, and so forth), specific sexual acts that they would like to practice with a willing partner, and a freefor all field that can be used to provide supplemental information about one's most-soughtafter traits or behaviours. Essentially, the large, stable, and growing membership of this website, coupled with members' ability to describe themselves as fully as they choose, made this particular website an ideal candidate for the present content analysis research.

The content analysis was based on a random sample of users' profiles, randomly selected by ZIP code, which is a searchable feature on the site. The author was the coder for all data, and all profiles were double-coded (initially, upon selection and then a second time a few months later, after the completion of all first-time codings) for the purposes of computing reliability coefficients. Because the large majority of the items coded in conjunction with this study were coded as 'present' or 'absent' based on the check-box and chart-feature nature of the website under study, code-recode reliability coefficients were very high, with Cohen's Kappas ranging from 0.90 to 1.00. Men residing outside of the USA were excluded from this research, so as to keep it an America-focussed study. Also excluded from analysis (n =

AIn contrast, most other MSM-oriented websites impose fairly-stringent limitations on the length of members' postings, thereby precluding people from describing themselves and/or their sexual 'want list' as completely as they might wish to do.

6) were profiles that had not been filled out completely (i.e. with the user not providing at least one piece of the required information on each profile page on the website). In order to be included in the analyses conducted in the present paper, a user's profile had to remain active at the conclusion of the data collection period, to guard against 'experimenters' or one-time-only visitors to the site being included in the study. This led to the exclusion of 67 cases (4.8%). In all, 1316 valid profiles comprise the study sample.

Data collected

For each profile, the following information was collected: B age; race/ethnicity (Caucasian, African American, Latino, Asian, Native American, or biracial/multiracial); selfidentification as being a 'top,' a versatile top, versatile, a versatile 'bottom,' or a bottom;^C self-reported HIV serostatus (negative, positive, or unknown); desired HIV serostatus in sex partners (must be negative, may be negative, must be positive, may be positive, do not care); self-identified sexual orientation (gay, bisexual, 'curious,' heterosexual); willingness to give and receive ejaculatory fluid in the mouth and anus; type(s) of 'relationships' sought (oneon-one sexual encounter, long-term relationship, three-person sexual encounter, multiple partner sexual encounter, activities partner); the number and type of self-photographs posted by the user's ZIP code (which was also used to compute population density as a macro-level analytical variable); whether or not the user had opted for an expanded, paid membership on the site; whether or not the user was a paid (presumably sexual) escort; and whether or not the user's profile was one of the most commonly searched profiles on the site on any day during the data collection period. D In addition, data collection also entailed coding for a wide variety of specific sexual behaviours, including among others felching (eating ejaculatory fluid that has been inserted into one person's anus and then feeding it back to that individual by mouth, usually with a kiss), rimming (oral stimulation of the anus), bukkake (ejaculating directly onto another person's mouth and face), and double penetration (forcing two penises into the same anus simultaneously). Finally, a variety of risk-enhancing practices and attitudes were also coded, including a stated preference for engaging in rough sex, having sexual relations while high (known in the target community as PNP, or 'partying and playing'), overtly stating that they will not use condoms and/or that they will not permit their partners to use condoms, actively trying to become HIV-infected (known in the target community as 'bug chasing'), actively trying to infect partners with HIV (known as 'gift giving'), refusing to withdraw the penis before ejaculation and/or refusing to allow a sex partner to withdraw his penis before ejaculation, an overt preference for anonymous sex (i.e. sexual encounters in which the name and/or face of the sexual partner(s) is/are unknown), a stated preference for having long-lasting sexual encounters, an

BMost of this information was provided in different check-box formats on the website's various pages. To make sure that errors of omission were minimised, only profiles containing at least some of the required information on each profile page were included in this research. This enables the researcher to have confidence that each person's profile content is as true a reflection of his self-description and sexual wants/preferences as possible.

and sexual wants/preferences as possible.

CThese terms refer to the sexual acts that the men typically prefer doing with their partners. For example, 'top' men typically prefer to engage in insertive anal sex and to receive oral sex from their partners, whereas 'bottom' men typically prefer to engage in receptive anal sex and to perform oral sex on their partners. These same 'top' and 'bottom' labels also may be applied to other sexual acts. Men who self-identify as 'versatile' are usually willing to engage in sexual activities on a relatively even give-and-take basis.

DEach day, the site reports the 20 members whose profiles were the most searched-for on the site the previous day. These 'most active

DEach day, the site reports the 20 members whose profiles were the most searched-for on the site the previous day. These 'most active profiles' are posted in a prominent place on the website, encouraging site users to visit these particular profiles and see for themselves what makes these profiles engaging for other site users.

expression of seeking sexual encounters that are 'uninhibited' or 'no holds barred,' and eroticising ejaculation fluid (known in the target community as being a 'cum whore' or a 'cum freak' or a 'cum lover').

Research questions and analysis

Research question #1 is 'What specific risky sexual practices are being sought by men who use the internet to identify potential sex partners?' This can be answered with simple descriptive statistics.

Research question #2 is 'What factors are associated with a greater (versus a lesser) preference for engaging in practices that enhance HIV risk among men who use the internet to identify potential sex partners?' Here, the analysis begins by conducting several bivariate analyses, examining whether individual predictor variables are related to overall preference for engaging in sexual risk. Overall risk preference (or preferences for engaging in riskenhancing practices) is a scale measure (Kuder-Richardson₂₀ = 0.63), constructed as the sum of several items, including three-way sex, multiple-partner sex, desiring rough sex, refusal to withdraw the penis from the mouth or anus before ejaculation, desiring anonymous sexual encounters, seeking to have anal sex with someone who has already received unprotected anal sex from another person, overtly stating a distaste for or an unwillingness to use condoms, wanting to find partners with whom one could have 'uninhibited' or 'wild' sex, and eroticising ejaculatory fluids. This is a continuous scale measure, so these bivariate analyses entailed the use of t-tests whenever the predictor measure was dichotomous (e.g. 'top'/not a 'top'), simple regression whenever the independent variable was continuous (e.g. age), or analysis of variance whenever the independent variable is categorical (e.g. race). Then, items found to be related significantly (P < 0.05) or marginally (0.10 > P > 0.05) with overall sexual risk were entered into a multivariate equation, so as to determine which ones were associated with overall levels of risk preferences when the effects of others were taken into account. Only items found to be statistically-significant (P < 0.05) were retained in the final equation.

Results

Sample

Men ranged in age from 18 to 63 (mean = 35.8, median = 36, s.d. = 8.8). The sample approximates the American population fairly well in terms of its racial composition, with 76.9% of the men being Caucasian, 8.1% African American, 7.8% Latino, 2.7% Asian, 0.2% Native American, and 4.3% biracial/multiracial. The large majority (88.7%) considered themselves to be gay, with most of the remainder (10.0%) self-identifying as bisexual. A small number of men said that they were heterosexual (0.5%) or 'curious' (0.8%). One-third of the men (33.9%) self-identified as being 'top' or 'versatile top'; one-quarter (22.4%) self-identified as being 'versatile'; and the remainder (43.7%) self-identified as being a 'bottom' or a 'versatile bottom.' Most (59.6%) said that they were HIV-negative, although sizeable proportions of the men whose ads were coded said that they knew that they were HIV-positive (17.3%) or that they did not know what their HIV serostatus was (23.1%). The sample, like the American population in general, tended to be skewed towards

people residing in more-densely-populated areas. One-fifth of the men (20.0%) lived in an area with fewer than 250 persons per square mile. At the other end of the spectrum, 37.8% of the men resided in an area with more than 5000 persons per square mile, and half of *these* men (19.8% of the total sample) lived in an area with more than 10 000 persons per square mile.

Risk practices sought

Not surprisingly, the men in this sample sought a wide variety of high-risk sexual practices in the online profiles they posted. Substantial majorities of the men indicated in their profiles that they wanted to find partners who would: perform oral sex on them and swallow their semen (88.0%), receive anal sex from them and allow them to ejaculate into their anus (79.7%), allow them to perform oral sex and then swallow their partner's semen (77.4%), and/or perform anal sex on them and ejaculate into their anus (69.4%). Nearly half of the men (49.1%) said that they wanted partners with whom they could engage in all four of these activities. In addition, a sizeable number of the men were advertising for partners with whom they could engage in three-person sex (77.9%) or group sex involving more than three persons (75.4%). More than half of the men in this sample (55.3%) preferred finding partners with whom they could have sexual relations while under the influence of drugs. Other risky practices were reported noticeably less frequently, but some were advertised for by not-inconsequential numbers of men. These included felching (16.5%), rough sex (11.6%), and oral-anal contact (i.e. rimming) (11.4%). Advertising for extremely high-risk practices was less common among the men in this sample, but still occurred occasionally. For example, anonymous sexual encounters were sought by 3.3% of the men. Having unprotected anal sex with someone who had already had unprotected anal sex with another partner that day was sought by 2.4% of the men. Finding partners who would not withdraw their penis before ejaculation or who would not want the ad placer to withdraw his penis before ejaculation was mentioned in 1.9% of the ads coded. Double anal penetration was mentioned in 1.1% of the men's ads.

Correlates of risk-enhancing preferences sought in potential partners

Overall, there was a mean score of 2.57 (s.d. = 1.54, range = 0–9) on the risk preferences scale, indicating what is probably best described as a low-to-moderate level of risk-enhancing preferences among the men in the sample. Table 1 presents a summary of the multivariate analysis findings pertaining to the prediction of the overall preference for desiring in risk-enhancing practices. In all, seven variables were found to be statistically-significant multivariate correlates of the overall level of risk preferences sought. First, an inverse association was found between age and risk-enhancing preferences (P= 0.0001), with younger men expressing an interest in greater sexual adventurousness than their older counterparts. A closer analysis of the data showed that men aged 18–29 in particular differed from their counterparts aged 30 and older. Second, as a group, African Americans advertised for lower rates of risk-enhancing preferences than their non-Black counterparts did (P= 0.0341), by approximately a 19% differential. Third, men who self-identified as 'bottoms' or 'versatile bottoms' tended to have greater preferences for risk-enhancing sexual behaviours than did men who were self-described 'versatile,' 'versatile tops,' or 'tops' (P= 0.0001), with an intergroup difference of ~29%. Fourth, overall levels of sexual adventurousness

were greater among men who said that they did not care what their potential partner's HIV serostatus was than they were among men who specified a serostatus preference of HIVpositive or HIV-negative for their partners (P = 0.0001). Once again, the differential in the overall risk level in the preferred sexual behaviours between the two groups was ~29%. Fifth, men who like to have sex while under the influence of drugs - the PNP crowd - were more likely to express a preference for risky practices than their peers who preferred not to have sex while high (P = 0.0022). Sixth, the more seriously the men used the site to identify potential sex partners, the greater their overall risk-enhancing preferences were (P = 0.0001). That is, the more pictures of themselves that they posted on the site and/or the greater their financial investment in paying for the site's upgradable features – i.e. the greater their time and monetary investments in the use of the site – the greater their sexual adventurousness levels were. Seventh, men who were HIV-negative expressed overall lower levels of desire for engaging in risky behaviours than men who were HIV-positive or those who did not know what their HIV serostatus was (P = 0.0081). The differential between the two groups was ~22%. Combined, these seven factors accounted for 13.8% of the variance in men's advertised-for levels of sexual risk preference or sexual adventurousness.

Discussion

Potential limitations of this research

This content analysis research was conducted using one specific website and, therefore, there is no way to know whether users of this particular site are similar to or different from those who frequent other sites instead. Other sites were excluded from consideration in this research because of the fees that they charge in order for would-be users to partake of their services and because of the significant limitations they placed on members' ad/profile content. As a website specifically designed to foster contacts between men who wish to locate sexual partners with whom they can have unprotected sex, rather than being a website designed to foster male-to-male contacts of a more general nature (e.g. dating, friendships, activities partners), the website chosen as the focus of this research represents an excellent sampling of men who are using the internet specifically to locate other men with whom they can have unprotected sex.

Another potential limitation of this research is that virtually all of the ads/profiles appearing on the website studied are written in English. Even though the website has a substantial Latino and multiracial membership (11.9% in total), fewer than 0.5% of the ads/profiles used a language other than English. This may prevent non-English speakers from using the website, and this may limit the generalisability of the findings somewhat. Along the same line of thought, the present study is based on an analysis of Americans' profiles. This, too, may limit the generalisability of the findings, at least somewhat, to American MSM. The extent to which men residing in the USA do or do not represent those living elsewhere when it comes to their usage of internet websites to identify other men with whom they can engage

EThis would have limited the generalisability of findings derived from studying their ad/profile content greatly, because socioeconomic factors such as the ability to afford site membership would have influenced site membership. With the site used in this research, membership is free to all who wish to utilise the website, and additional membership features are available for purchase for persons wishing to upgrade their usage of the site.

in unprotected sex is unknown. This would be an interesting and worthwhile topic for future research endeavours to examine.

Finally, as a content analysis project, this research is unable to assess the extent to which the behaviours advertised for in the ads do or do not represent the behaviours practiced when people meet in person. For example, suppose someone has posted a profile stating that he does not care what his potential sex partner's HIV serostatus is, and he meets an HIVpositive person who contacted him as a result of his profile. It is impossible to know whether the person would engage in all of the same sexual behaviours with a partner who is known to be HIV-positive versus a partner who is not HIV-positive or a partner with whom there is no discussion of HIV serostatus. As another example, it is not possible without interview data from the men themselves who place the profiles to know whether their profiles are a true reflection of their sexual behaviours and risk preferences or, alternatively, whether their profiles are more of an expression of sexual fantasy (that is, actual preferences versus symbolic preferences). In point of fact, the extent to which the risky behaviours advertised for and/or listed as preferences in the ads do or do not reflect actual behaviours practiced when people meet in person is, by necessity, the subject of a different study, following on the heels of the current project. Published studies (cited earlier in this paper) showing that men who use the internet to locate sexual partners are very likely to meet up with such individuals for sex (i.e. their ads/profiles are, far more often than not, not posted purely for fun, but rather with sexual hook-ups in mind) suggest that there may not be a great disconnect between ad/profile content and behavioural practices. That is to say, previous research findings suggest that the profiles appear likely to reflect actual preferences more than they do symbolic preferences. Nevertheless, this needs to be established more concretely with additional research. The present author recently received funding to examine this very issue, and the data collection for that aspect of the research is currently underway. By the time this article has been published, such information will be available, at least in preliminary form. Consequently, interested readers are encouraged to contact the author for information about the findings and preliminary results of the newly-funded follow-on study.

Conclusions

Despite these potential – and the present author would contend, minimal – limitations, the present research has much to offer in terms of helping to understand the content of ads posted on websites designed to foster unprotected sexual encounters among men seeking to have sex with other men. First, this research has shown that users of these websites are looking for partners with whom they can engage in a variety of high-risk sexual practices. Two-thirds or more of the men placing ads were looking for partners with whom they could have oral or anal sex with one or both partners receiving ejaculatory fluid internally. Three-quarters of the men were seeking partners who were willing to have multiple-partner sex. More than half of the men mentioned that they like to have sex while high, and consider themselves to be part of the 'PNP' or 'party and play' crowd. Clearly, these findings indicate a great need for interventionists and HIV prevention workers to develop creative, effective campaigns to reduce risk practices among men frequenting these websites. Finding ways to convince men such as these, who as a group are probably extremely knowledgeable about the behaviours that place people at risk for contracting and spreading HIV, ^{16–18} to use

condoms and/or to negotiate for lower-risk sexual behaviours than they currently practice is likely to prove extremely challenging.

Second, this research identified several factors that were found to be related to a greater propensity towards engaging in sexual risk, and some of these merit particular discussion here. One of these was age, with younger men's profiles containing more risk-enhancing tendencies than did those of older men. Other researchers have found that younger MSM report higher rates of risky practices than their older counterparts, ^{19–21} and the present research is consistent with their findings. Considering younger men a high-risk group seems appropriate and providing them with targeted intervention is likely to be a wise idea. Helping such individuals to personalise HIV – something that is often much less necessary with older adults, who have lost more friends to AIDS than the current, younger generation of MSM have – may be one crucial part of this strategy. Instructing young men about the reality of HIV/AIDS medications and about what it means to live with HIV disease namely, that these medicines do not cure HIV or AIDS, and that even in 2008 living with HIV or AIDS still means living with recurrent illnesses- may prove to be another important component of this strategy. Increasing young adults' sense of vulnerability to HIV/AIDS may very well be a key to helping to bring about reduced risk levels in this subpopulation. Previous research has shown that increasing perceived vulnerability to HIV/AIDS can be effective at helping people to reduce their risk for HIV.^{22–24}

The current study also revealed that men who self-identify as 'bottoms' or 'versatile bottoms' are more apt to adhere to a variety of preferences that are associated with greater HIV risk than their counterparts who self-identify as 'versatile,' 'versatile tops,' or 'tops.' As with the previous discussion about young men, 'bottom'-oriented men also appear to be in need of targeted efforts at education and intervention. Since most experts working in the HIV/AIDS field believe that performing oral sex is riskier than receiving it and that receiving anal sex is riskier than performing it (both of which activities are consistent with self-identity as a 'bottom' man), it may be necessary to provide some basic HIV/AIDS education to these individuals to make sure that they are, indeed, fully aware of the risks that are inherent in their favourite sexual acts. Moreover, educating them about other, safer ways to engage in these activities or in other sexual activities that are less risky but that provide them with many of the same sexual sensations could also prove useful. For example, although performing oral sex on a man who is not wearing a condom is considered a low-tomoderate risk behaviour by most, perhaps 'bottom'-oriented men could be encouraged not to swallow the semen when their partner is prepared to ejaculate. While this behaviour still carries with it a measure of HIV risk, it is a lower level of risk than the same behaviour that entails performing the oral sex to the point of completion and internal ejaculation. The same approach could be taken to receiving anal sex, with the same relative reduction in risk applying. As another example, men who like to receive anal sex from their partners might be talked into having their partners use sex toys (e.g. dildos) on them instead of unprotected penises. The sexual sensations for the 'bottom' man would be at least somewhat similar, and this switch-off could help to reduce the person's level of risk, even if done only some of the time when anal sex would be occurring. The key, the present author believes, is to find ways of eliminating risk whenever possible (through education and increased knowledge, for example) and other ways of reducing risk whenever complete extinction of risk is unrealistic

to expect. This is, in the purest sense, an advocacy for the implementation of a harm reduction approach²⁵ to dealing with the problem of actively seeking unprotected sex among men who have sex with other men.

One of the intriguing findings to emanate from the broader study from which the present research findings were derived pertains to the number of men who state that they do not care what their potential partner's HIV serostatus is. Sixty percent of the men whose ads were coded in conjunction with this study said that they do not care if their partners are HIVpositive, HIV-negative, or of an unknown HIV serostatus. Not surprisingly, not caring about one's partner's HIV serostatus was found to be a strong, direct predictor of one's own level of risk-enhancing preferences. Many factors appear to be at play here. One of them may be anxiety pertaining to contracting HIV, and the belief that it would be better to contract HIV and 'get it over with' rather than waiting for what is perceived as the inevitable to happen.²⁶ For such men, not discriminating among potential sexual partners on the basis of their HIV serostatus is one way of reducing the anxiety associated with contracting HIV, by simply not thinking or worrying about whether or not potential partners can cause one to become infected with the virus. Another factor that has been suggested as relevant here is the desire to be extemporaneous and to live for the moment.²⁶ If one lives in the 'here and now' and simply focuses on enjoying whatever is happening in the present, then there is no reason to question one's sexual partners about their HIV serostatus, because such a consideration would be irrelevant or potentially injurious to one's ability to enjoy the 'here and now.' Low self-esteem has also been suggested as a factor underlying the lack of concern about sex partners' HIV serostatus.²⁶ People who feel good about themselves typically take the steps necessary to take proper care of themselves; people who think poorly about themselves do not. Numerous studies have linked low self-esteem to greater involvement in HIV risk practices, ^{27–29} so this explanation has support in the published literature. From an intervention perspective, it is important to find ways to get men who say that they do not care about the HIV serostatus of their partners to have an interest in this and to ask about this before having sex with new partners. Once again, this may prove to be easier said than done, but it is a worthwhile HIV intervention goal nonetheless.

Another important finding obtained in the present research is that men who like to have sex while high – namely, those who like to 'party and play' – were more likely to post profiles expressing a desire to engage in behaviours that were likely to lead to enhanced risk than their peers whose profiles stated that they did not like to have sex while under the influence of drugs. Numerous studies in the published literature have linked drug use to greater HIV risk, ^{30,31} and this is a problem that seems to be particularly common among MSM. ^{32–34} Nowadays more than ever before, it appears to be a growing problem, largely due to the proliferation of 'club drugs' such as ecstasy and methamphetamine in the gay community. ^{35–37} These drugs lower inhibitions greatly, and some of their main drug effects entail causing increases in desire for physical and sexual contact and increased cravings for longlasting sexual sessions. ^{38,39} Without a doubt, drug education, drug treatment, and targeted HIV intervention are needed for drug-abusing men who have sex with other men. Numerous studies have shown that drug treatment can be effective at helping drug abusers to reduce their risk for HIV. ^{40–42} Nowhere is such a need greater than in the gay community, where

drug abuse rates are high and where the tendency to combine drug use with sexual encounters is also great.

Finally, the author would like to address the implications of one other finding from this research – namely, that pertaining to being HIV-negative. In the present study, HIV-negative men's profiles were significantly less likely to indicate a preference for engaging in riskenhancing behaviours than were their HIV-positive and serostatus-unknown counterparts. Perhaps one way that the HIV-negative men are remaining HIV-negative despite their use of unsafe sex-promoting websites to locate new sex partners is by wanting to engage in behaviours that, as a group, are less inclined towards HIV risk than those sought by their already-infected or serostatus-uncertain peers. It is possible that these men engage in a process of serosorting, by which they maximise their chances for remaining HIV-negative by trying to meet men who are HIV-negative and whose sexual behavioural preferences are comparatively low in risk. Recent studies have shown that serosorting is a common practice among MSM, particularly those who are engaging in risky sexual behaviours. 43,44 If this is, indeed, what helps to account for their lesser preferences for risk-enhancing sexual practices, then it also highlights an ongoing need to work with HIV-negative men who use the internet to locate partners with whom they can engage in unprotected sex. As members of a website that specifically promotes such unsafe behaviours, the HIV-negative men may have a false sense of safety regarding their sexual health. Intervention efforts working with this population would be wise to address issues of honesty, trust, disclosure, and partner communication with their HIV-negative constituents, so that these persons can make informed decisions about their sexual behaviours and health as they meet new partners online.

In summary, this research has shown that men who use the internet to locate other men with whom they can have unprotected sex tend to advertise for a wide variety of high-risk sexual activities, including unprotected anal sex, multiple-partner sex, felching, and a variety of risk-enhancing preferences, including (among others) desiring rough sex, wanting anonymous sexual encounters, and refusing to withdraw the penis before ejaculation. In all likelihood, the use of the internet to locate potential partners with whom they can engage in these activities is a way of shortcutting the 'getting to know you' process sothat they can find like-minded individuals who are as interested as they themselves are in practicing unprotected sex. This poses numerous challenges to HIV professionals in the education, prevention, and intervention fields. Certain groups of MSM (e.g. younger men, those who self-identify as'bottoms'or 'versatile bottoms,' thosewholiketo have sex while they are under the influence of drugs, among others) are at particularly great risk for contracting HIV and/or transmitting the virus to their partners, and individuals in these subgroups need to receive targeted interventions that can offer them strategies to reduce the overall riskiness of their sexual behaviours. If such interventions are to be effective, they will need to be acceptable/palatable to the target population, otherwise they will be unsustainable on a longterm basis.

References

1. Centers for Disease Control and Prevention. HIV AIDS Surveill Rep 2006; 17, 1-54.

- 2. Centers for Disease Control and Prevention. HIV AIDS Surveill Rep 2001; 13(2), 1-44.
- 3. Centers for Disease Control and Prevention. HIV AIDS Surveill Rep 1996; 8(2), 1–40.
- Adam BD. Constructing the neoliberal sexual actor: responsibility and care of the self in the discourse of barebackers. Cult Health Sex 2005; 7: 333–46. doi: 10.1080/13691050500100773
 [PubMed: 16864207]
- Carballo-Dieguez A, Bauermeister J. 'Barebacking': Intentional condomless anal sex in HIV-risk contexts. Reasons for and against it. J Homosex 2004; 47: 1–16. doi: 10.1300/J082v47n01_01
- 6. Halkitis PN, Green KA, Wilton L. Masculinity, body image, and sexual behavior in HIV-seropositive gay men: a two-phase formative behavioral investigation using the internet. Int J Men's Health 2004; 3: 27–42. doi: 10.3149/jmh.0301.27
- Halkitis PN, Parsons JT. Intentional unsafe sex (barebacking) among HIV-positive gay men who seek sexual partners on the internet. AIDS Care 2003; 15: 367–78. doi: 10.1080/0954012031000105423 [PubMed: 12745400]
- Ridge DT. 'It was an incredible thrill': The social meanings and dynamics of younger gay men's experiences of barebacking in Melbourne. Sexualities 2004; 7: 259–79. doi: 10.1177/1363460704040138
- Halkitis PN, Parsons JT, Wilton L. Barebacking among gay and bisexual men in New York City: Explanations for the emergence of intentional unsafe behavior. Arch Sex Behav 2003; 32: 351–7. doi: 10.1023/A:1024095016181 [PubMed: 12856896]
- 10. Sheon N, Crosby GM. Ambivalent tales of HIV disclosure in San Francisco. Soc Sci Med 2004; 58: 2105–18. doi: 10.1016/j.socscimed.2003.08.026 [PubMed: 15047070]
- Dilley JW, McFarland W, Woods WJ, Sabatino J, Lihatsh T, Adler B, et al. Thoughts associated with unprotected anal intercourse among men at high risk in San Francisco 1997–1999. Psychol Health 2002; 17: 235–46. doi: 10.1080/08870440290013707
- 12. Mansergh G, Marks G, Colfax GN, Guzman R, Rader M, Buchbinder S. 'Barebacking' in a diverse sample of men who have sex with men. AIDS 2002; 16: 653–9. doi: 10.1097/00002030-200203080-00018 [PubMed: 11873010]
- Theodore PS, Duran REF, Antoni MH, Fernandez MI. Intimacy and sexual behavior among HIV-positive men who have sex with men in primary relationships. AIDS Behav 2004; 8: 321–31. doi: 10.1023/B:AIBE.0000044079.37158.a9 [PubMed: 15475679]
- Bolding G, Davis M, Sherr L, Hart G, Elford J. Use of gay internet sites and views about online health promotion among men who have sex with men. AIDS Care 2004; 16: 993–1001. doi: 10.1080/09540120412331292453 [PubMed: 15511731]
- Bull SS, McFarlane M, Lloyd L, Rietmeijer C. The process of seeking sex partners online and implications for STD/HIV prevention. AIDS Care 2004; 16: 1012–20. doi: 10.1080/09540120412331292426 [PubMed: 15511733]
- Kelly JA, Kalichman SC. Reinforcement value of unsafe sex as a predictor of condom use and continued HIV/AIDS risk behavior among gay and bisexual men. Health Psychol 1998; 17: 328– 35. doi: 10.1037/0278-6133.17.4.328 [PubMed: 9697942]
- Korner H, Hendry O, Kippax S. It's not just condoms: Social contexts of unsafe sex in gay men's narratives of post-exposure prophylaxis for HIV. Health Risk Soc 2005; 7: 47–62. doi: 10.1080/13698570500390218
- Mulry G, Kalichman SC, Kelly JA, Ostrow DG, Heckmann TG. Grouping gay men on dimensions reflecting sexual behavior preferences: Implications for HIV/AIDS prevention. Psychol Health 1997; 12: 405–15. doi: 10.1080/08870449708406716
- Chen SY, Weide D, McFarland W. Are there recent increases in sexual risk behavior among older or younger men who have sex with men? Answer: Both. AIDS 2003; 17: 942–3. doi: 10.1097/00002030-200304110-00031 [PubMed: 12660553]
- Halkitis PN, Wilton L, Wolitski RJ, Parsons JT, Hoff CC, Bimbi DS. Barebacking identity among HIV-positive gay and bisexual men: Demographic, psychological, and behavioral correlates. AIDS 2005; 19: s27–s35.
- 21. Xia Q, Osmond DH, Tholandi M, Pollack LM, Zhou W, Ruiz JD, et al. HIV prevalence and sexual risk behaviors among men who have sex with men: Results from a statewide population-based

- survey in California. J Acquir Immune Defic Syndr 2006; 41: 238–45. doi: 10.1097/01.qai. 0000185574.98472.36 [PubMed: 16394858]
- 22. Belcher L, Sternberg MR, Wilitski RJ, Halkitis P, Hoff C. Condom use and perceived risk of HIV transmission among sexually active HIV-positive men who have sex with men. AIDS Educ Prev 2005; 17: 79–89. doi: 10.1521/aeap.17.1.79.58690 [PubMed: 15843112]
- 23. Longshore D, Anglin MD, Hsieh SC. Intended sex with fewer partners: An empirical test of the AIDS risk reduction model among injection drug users. J Appl Soc Psychol 1997; 27: 187–208. doi: 10.1111/j.1559-1816.1997.tb00628.x
- Rosengard C, Anderson BJ, Stein MD. Correlates of condom use and reasons for condom non-use among drug users. Am J Drug Alcohol Abuse 2006; 32: 637–44. doi: 10.1080/00952990600919047 [PubMed: 17127552]
- Westermeyer RW. Reducing harm: A very good idea. Available at: http://www.habitsmart.com/ hrmtitle.html (accessed 17 May 2008).
- Johnson R Gay men and bareback sex. Available at: http://gaylife.about.com/cs/healthfitness/a/barebacking.htm (accessed 17 May 2008).
- 27. McNair LD, Carter JA, Williams MK. Self-esteem, gender, and alcohol use: Relationships with HIV risk perception and behaviors in college students. J Sex Marital Ther 1998; 24: 29–36. doi: 10.1080/00926239808414666 [PubMed: 9509378]
- Somlai AM, Kelly JA, Heckman TG, Hackl K, Runge L, Wright C. Life optimism, substance use, and AIDS-specific attitudes associated with HIV risk behavior among disadvantaged innercity women. J Women's Health Gend Based Med 2000; 9: 1101–11. doi: 10.1089/152460900446018 [PubMed: 11153106]
- 29. Sterk CE, Klein H, Elifson KW. Self-esteem and "at risk" women: Determinants and relevance to sexual and HIV-related risk behaviors. Women Health 2004; 40: 75–92. [PubMed: 15911511]
- 30. Hoffman JA, Klein H, Eber M, Crosby H. Frequency and intensity of crack use as predictors of women's involvement in HIV-related sexual risk behaviors. Drug Alcohol Depend 2000; 58: 227–36. doi: 10.1016/S0376-8716(99)00095-2 [PubMed: 10759033]
- 31. Rasch RFR, Weisen CA, MacDonald B, Wechsberg WM, Perritt R, Dennis ML. Patterns of HIV risk and alcohol use among African-American crack abusers. Drug Alcohol Depend 2000; 58: 259–66. doi: 10.1016/S0376-8716(99)00098-8 [PubMed: 10759036]
- 32. Koblin BA, Husnik MJ, Colfax G, Huang Y, Madison M, Mayer K, et al. Risk factors for HIV infection among men who have sex with men. AIDS 2006; 20: 731–9. doi: 10.1097/01.aids. 0000216374.61442.55 [PubMed: 16514304]
- 33. Morin SF, Steward WT, Charlebois ED, Remien RH, Pinkerton SD, Johnson MO, et al. Predicting HIV transmission risk among HIV-infected men who have sex with men: Findings from the Healthy Living Project. J Acquir Immune Defic Syndr 2005; 40: 226–35. doi: 10.1097/01.qai. 0000166375.16222.eb [PubMed: 16186742]
- 34. Rosario M, Schrimshaw EW, Hunter J. A model of sexual risk behaviors among young gay and bisexual men: Longitudinal associations of mental health, substance abuse, sexual abuse, and the coming-out process. AIDS Educ Prev 2006; 18: 444–60. doi: 10.1521/aeap.2006.18.5.444 [PubMed: 17067255]
- 35. Hirshfield S, Remien RH, Chiasson MA. Crystal methamphetamine use among men who have sex with men: Results from two national online studies. J Gay Lesbian Psychother 2006; 10: 85–93. doi: 10.1300/J236v10n03_08
- 36. Semple SJ, Zians J, Grant I, Patterson TL. Sexual compulsivity in a sample of HIV-positive methamphetamine-using gay and bisexual men. AIDS Behav 2006; 10: 587–98. doi: 10.1007/s10461-006-9127-1 [PubMed: 16755406]
- 37. Semple SJ, Zians J, Grant I, Patterson TL. Sexual risk behavior of HIV-positive methamphetamineusing men who have sex with men: The role of partner serostatus and partner type. Arch Sex Behav 2006; 35: 461–71. doi: 10.1007/s10508-006-9045-3 [PubMed: 16909320]
- 38. Theall KP, Elifson KW, Sterk CE. Sex, touch, and HIV risk among ecstasy users. AIDS Behav 2006; 10: 169–78. doi: 10.1007/s10461-005-9059-1 [PubMed: 16456728]

39. Zemishlany Z, Aizenberg D, Weizman A. Subjective effects of MDMA ("ecstasy") on human sexual function. Eur Psychiatry 2001; 16: 127–30. doi: 10.1016/S0924-9338(01)00550-8 [PubMed: 11311178]

- 40. Dushay RA, Singer M, Weeks MR, Rohena L, Gruber R. Lowering HIV risk among ethnic minority drug users: Comparing culturally targeted intervention to a standard intervention. Am J Drug Alcohol Abuse 2001; 27: 501–24. doi: 10.1081/ADA-100104515 [PubMed: 11506265]
- 41. Hoffman JA, Klein H, Clark DC, Boyd FT. The effect of entering drug treatment on involvement in HIV-related risk behaviors. Am J Drug Alcohol Abuse 1998; 24: 259–84. [PubMed: 9643465]
- 42. Woods WJ, Guydish JR, Sorensen JL, Coutts A, Bostrom A, Acampora A. Changes in HIV-related risk behaviors following drug abuse treatment. AIDS 1999; 13: 2151–5. doi: 10.1097/00002030-199910220-00019 [PubMed: 10546869]
- 43. Patel P, Taylor MM, Montoya JA, Hamburger ME, Kerndt PR, Holmberg SD. Circuit parties: Sexual behaviors and HIV disclosure practices among men who have sex with men at the white party, Palm Springs, California, 2003. AIDS Care 2006; 18: 1046–9. doi: 10.1080/09540120600580967 [PubMed: 17012098]
- 44. Xia Q, Molitor F, Osmond DH, Tholandi M, Pollack LM, Ruiz JD, et al. Knowledge of sexual partner's HIV serostatus and serosorting practices in a California population-based sample of men who have sex with men. AIDS 2006; 20: 2081–9. doi: 10.1097/01.aids.0000247566.57762.b2 [PubMed: 17053354]

Table 1.

Multivariate predictors of overall risk-enhancing preferences sought by men who placed ads seeking unprotected sex with other men

Predictor variable	b(β)	Statistical significance
Age	-0.02(0.12)	P = 0.0001
Race = African American	-0.31(0.05)	P = 0.0341
Self-identification as 'bottom' or 'versatile bottom'	0.60(0.20)	P = 0.0001
Does not care about potential partner's HIV serostatus	0.46(0.15)	P = 0.0001
Prefers having sex while under the influence of drugs	0.25(0.08)	P = 0.0022
HIV serostatus = HIV-negative	-0.25(0.08)	P = 0.0081
Level of seriousness of site usage	0.03(0.16)	P = 0.0001
R-squared	0.138	P = 0.0001