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REPORT

Stress and Coping Among HIV-Positive Barebackers

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Abstract HIV-positive MSM may report high-risk behaviors—including drug use and intentional unprotected anal sex—as a means of coping. We recruited a diverse sample of HIV-positive men ($n = 66$) at gay community events. One third of these men self-identified as barebackers. Barebackers were more likely to report drug use and sex under the influence of drugs (i.e., PnP). Beyond this, those who identified as barebackers also tended to report greater stigma, gay-related stress, self-blame-related coping, and substance abuse coping. Providers must attend to issues of stress and coping to engage men who may not respond to traditional risk reduction efforts.

Keywords HIV · Barebacking · Stress · Coping · Drug use

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Introduction

Episodes of unprotected anal sex among gay/bisexual men have been seen as an inability to consistently apply safer sex behaviors or as "relapse." Yet, acts of intentional unprotected sex have emerged as a social and cultural phenomenon among gay and bisexual men [1]. Over time, this phenomenon of intentional unprotected anal sex became known as "barebacking." Wolitski provides a comprehensive definition of barebacking as "intentional anal sex without a condom except when practiced by HIV negative primary partners who maintain a mutually monogamous or negotiated safety relationship with each other" ([2], p. 14). While for some men "barebacking" may be considered an activity carried out in specific instances, for others, "barebacker" has now become a label or an identity [3]. In this regard, barebacking can be conceptualized as an *oppositional identity*, where men who have intentional unprotected anal sex developed behaviors contrasting those characteristic not only of the larger culture but the gay community as well [3].

The advent of the Internet has helped to facilitate both barebacking behavior and the emergence of a barebacker identity. With virtually unrestricted and easily accessible electronic communications such as e-mail, blogs, message boards, Instant Messenger, and networking websites, men can more easily seek out others who share similar sexual interests and want to engage in unprotected anal sex [4]. The Internet also provides a forum for men to express their barebacking identities in various ways, often on websites catering to the practice [5]. Subsequently, the barebacking phenomenon has gone against some earlier predictions "that safe-sex concerns would lead to more virtual sex through the recent advances in computer technology" ([4], p. 96). Rather, the Internet has enabled opportunities for

transgressing these norms. For these reasons, a significant proportion of the barebacking literature has focused upon MSM on the Internet [6].

The literature suggests a wide range of reasons for engaging in barebacking. Many who practice this form of unprotected anal sex see it as a way of having a more intimate connection to a sexual partner, while others pursue it specifically for greater physical stimulation [2]. Others treat it as form of resistance; a chance to do something subversive or taboo. Barebacking may allow such men to regain a sense of freedom of choice over sexual behavior in light of medical messages urging them to always use a condom during sex [2]. Yet to others, barebacking is a response to emotional fatigue with HIV, an aspect of diminishing returns for HIV prevention campaigns [7]. Others suggest that improved drug treatments and a proliferating sense of AIDS optimism may have also given a false sense of security, leading men to engage in barebacking [8]. Still others contend that barebacking is a new manifestation of continuously present elements of transgression and resistance in the lives of gay men throughout the pre-AIDS, AIDS, and post-AIDS periods [9]. Many of these factors are likely influences of barebacking for some men. In other circumstances, barebacking may be a mechanism of coping with stress encountered in life. During such instances, these behaviors may be augmented with drugs to cope with stressors related to HIV as well as stressors related to their experiences of being gay, including problems of alienation from families and society, homophobia, and other feelings of isolation and loneliness [10].

While there are certainly social and demographic variations among barebackers, upon a review of empirical literature, one could assemble a general set of attributes characteristic of a typical barebacker. By an earlier stated definition, it would be a man who engages in intentional unprotected anal intercourse with other men. He would tend to be younger, HIV-positive, and self-identified as a barebacker [1]. Within the general group of barebackers, HIV-positive men have shown more sexual adventurism and tended to engage in more unprotected anal sex than HIV-negative men [3, 11]. In addition to frequenting typical 'cruising' venues such as gay bars and bathhouses, a barebacker would typically search for and locate his sexual partners on the Internet. Finally, his barebacking behavior would be often accompanied or facilitated by the use of drugs, sometimes referred to as "Party-and-Play" (PnP) [3].

As noted by Carballo-Dieguez and colleagues, although barebacking has received increased attention from researchers, the concept of barebacking has non-uniform parameters, both among public health professionals and within the gay community [5]. Thus, ambiguity persists with the barebacking phenomenon. Nonetheless, related to the rise of the barebacking phenomenon, other forms of unprotected anal intercourse have remained problematic in the lives of gay men. In some respects, there are some parallels between barebacking and unintentional forms of unprotected anal intercourse. Depression and personal turmoil continue to lead to unintentional unprotected anal sex among gay and bisexual men [12]. These same mental health and emotional factors may similarly facilitate barebacking behaviors [13]. In addition, drug use continues to play a persistent role in relapses of unprotected anal sex among MSM [14], much like the elevated rates of drug use found among barebackers [3, 6]. The abuse of drugs and mental health issues remain overarching factors in unprotected sex, whether intentional or relapsing.

Yet, other elements of barebacking are distinct from unintentional unprotected anal sex. Many HIV-positive men, showing fatigue with years of HIV-phobia and discrimination, find intentional unprotected anal sex not only enjoyable but also liberating and empowering [9]. At the same time, some HIV-positive men may engage in serosorting, the intentional selection of sexual partners who share one's own serostatus, as a form of risk reduction [7, 11]. In such instances where both sexual partners were HIV-positive, the need to practice safe sex was perceived by these men to be minimal as both parties were already infected, though concerns about re-infection or "superinfection" remain among health professionals. It is perhaps fair to say that there are factors operating in the experiences of barebackers that do not influence those who merely relapse into unsafe sex behaviors, particularly for HIV-positive men.

With the reports of increased rates of HIV/STD transmission among MSM in the first decade of the twenty-first century, barebacking remains a significant risk phenomenon beyond the epidemiological burden imposed by relapse. Further explorations into the underlying mechanisms that distinguish barebackers from other men are warranted. The literature provides a number of explanations for the existence of barebacking (e.g., condom fatigue, desire for greater intimacy, improved sexual experience). Among various reasons offered to explain barebacking, stress and coping remain among the least well explored, particularly as they relate to how barebacking intersects with drug use. This paper helps to fill some of this gap by examining differences in stress and coping among HIV-positive gay/bisexual barebackers and non-barebackers.

Methods

Participants and Procedure

A cross-sectional street-intercept survey method was used to sample 669 men attending two large LGB

community events held in New York City in the fall of 2003 and spring of 2004, through the Sex and Love Project. This approach to collecting data has been used in numerous studies, including those focused on LGB persons and has been shown to provide data that are comparable to those obtained from methodologically rigorous approaches [7]. The study had Institutional Review Board approval.

The brief paper and pencil survey took ~10–15 min to complete. Entrance to the event required paid admission, however, discount passes were widely available and free admission passes were provided to gay/lesbian and HIV related community organizations. Individuals attending the events were approached and invited to complete the "Sex and Love Survey" by a member of the research team. Those who agreed to participate were given a survey on a clipboard and a pencil, and were encouraged to move to nearby seating areas for privacy. The first page of the survey served as the assent form. The response rate was high, with ~82.9% of individuals approached consenting to participate. A movie pass was provided as an incentive for completing the survey.

The sample included in these analyses are taken from a larger sample of 669 gay and bisexual men over the age of 18. In this broader sample, 72 men disclosed their positive HIV-status (10.8%). We included 66 HIV-positive men with complete data on barebacking identity and other psychosocial variables in the subsample for the present analyses. The subsample reported an average age of 40.29 (SD = 10.1), just over half were men of color (54.2%) and most were gay identified (93.1%).

Measures

The following is a description of the measures included in our survey that were utilized for these analyses. The scales are reliable and validated measures developed by other researchers and utilized to measure key factors pertinent to our research subject.

Demographics. Research staff recorded the gender, age, and race of a participant on the survey before handing it over to them for completion. Other demographic data, such as sexual identity, were self-reported by the participants on the survey.

Coping. The Brief COPE was used to measure coping strategies employed by the participants. The Brief COPE is a 28-item scale with a four-point Likert structure and contains several sub-scales. The sub-scales—such as acceptance coping, active coping, denial coping, emotional support coping, instrumental support coping, positive reframing, self-blame coping, self-distraction coping, and substance use coping—were scored according to the standard protocols.

Gay Related Stigma. This is a 10-item Likert-type scale (1 = strongly disagree, 4 = strongly agree) assessing stigma and negative consequences resulting from disclosure of one's sexual identity, $\alpha = .90$ (e.g., "People who know I'm gay/bi tend to ignore my good points," "I have lost friends by telling them I'm gay/bi," "People I care about stopped calling after learning that I'm gay/bi"). The scale is a modification of an HIV related stigma scale.

Gay-Related Stress. The Gay Related Stress measure is a 12-item scale that captures the experience of stress specific to having a gay identity. The participants were given a list of individuals, e.g., boss, coworker and asked to indicate (yes/no) if there were stresses with this individual because of the respondent's sexual identity.

Depression. The Center for Epidemiologic Studies-Depression is a 20-item measures of symptoms associated with depression with a frequency response format (0 = never to 3 = all of the time). In the current sample the scale demonstrated a Cronbach's $\alpha = .86$.

Substance Use. Participants were presented with a list of substances often characterized as "club drugs" or "party drugs" (e.g., crystal meth, ketamine, cocaine, nitrate inhalants (poppers), GHB, and ecstasy) and asked to indicate a *yes* or *no* response for the question "have you ever used this substance." If "yes," participants were asked to report if they used this drug in the past 3 months. These were collapsed to a global measure of recent "party drug" use.

Party-n-Play (PnP; Sexually Related Substance Use). Sexual activity while using substances was measured with a *yes* or *no* response for the question "have you used this substance while having sex in the last 3 months." The substances assessed included "party drugs" such as crystal meth, ketamine, cocaine, nitrate inhalants (poppers), GHB, and ecstasy.

Bareback Identity. Participants were asked to indicate *yes* or *no* to the question "I consider myself a barebacker" as part of a series of questions about barebacking.

Data Analysis

Chi-square analyses were computed to assess differences in bareback identity by race/ethnicity. In addition, chi-square analyses were computed to assess differences in drug use and "PnP" between barebackers and non-barebackers. Analysis of Variance was computed to assess differences in coping styles, depression, stigma and gay-related stress between barebackers and non-barebackers.

Results

In the subsample of men who reported HIV-positive status, 24 men identified themselves as barebackers. There were

Table 1 Drug use, stress, and coping among HIV-positive men

	Barebackers (n = 24)	Non-barebackers (n = 42)	χ^2	
Substance use*	47.4%	15.0%	8.195	
PnP*	42.1%	10.0%	7.118	
Factor	Mean	Mean	F	df
Depression	48.82	44.60	.217	64
Gay stigma*	20.87	17.30	4.895	65
Gay stress*	1.74	.58	6.283	64
Acceptance coping	6.33	5.74	1.814	62
Active coping	5.86	5.81	.020	64
Denial coping	3.96	3.55	.893	64
Emotional support coping	5.70	5.71	.002	64
Instrumental support coping	6.04	5.67	.714	64
Positive reframing coping	6.09	5.52	1.412	64
Self blame coping*	5.43	4.05	7.714	64
Self distraction coping	5.57	5.10	1.140	63
Substance use coping*	4.61	3.45	4.093	64

* $P < .05$

no significant differences in bareback identity by various demographic factors such as race/ethnicity, income, education, and employment status. The patterns of substance abuse found among these HIV-positive men mirror those of broader samples [3, 6]. Almost half of these self-identified barebackers (47.4%) reported using club drugs within the past 3 months in contrast to only 15% of non-barebackers, a significant difference. Also, a significantly larger proportion of barebackers (42.1%) reported "PnP" compared to 10% of non-barebackers (Table 1).

Analyses of psychosocial factors related to mental health and well-being suggested some differences between the men who identified themselves as barebackers and those who did not. Univariate analyses between barebackers and non-barebackers revealed no differences in depression as well as several coping styles. However, barebackers reported higher levels of gay related stigma ($F = 4.895$; $P < .05$), gay stress ($F = 6.283$; $P < .05$), self-blame coping ($F = 7.714$; $P < .01$) and substance use coping ($F = 4.093$; $P < .05$). These significant results, while from a small sample, had medium-large effect sizes (range: .503–.705) suggesting that these are meaningful differences. Thus, HIV-positive men who consider themselves barebackers expressed more problems with mental health and well-being.

Discussion

The data presented here confirm elevated rates of substance use among barebackers within a sample of HIV-positive men as well as highlight some mental health correlates of barebacking among positive men. This is an important group to study as HIV-positive men are more likely to identify themselves as barebackers [3, 5]. However, it is important to note that the emerging identity of barebacker remains a complicated one with many facets. Ultimately, these data suggest the need for a closer examination of the ways in which mental health factors and substance use intersect with barebacking among men who have sex with men.

The dangerous mixing of drugs and sex is not a new phenomenon. Both the popular and academic literatures are saturated with instances describing acts of risky sexual behavior related to substance use—notably, among heterosexuals as well. In popular discussions of barebacking behavior, drugs are often mentioned as a key element. Similar to other studies, our findings indicate that HIV-positive barebackers report higher incidence of drug use as well as PnP than non-barebackers. Yet, it remains important to move beyond an oversimplified interconnection of drug use and sexual risk. Our sample of HIV-positive barebackers indicated greater degrees of gay related stigma and stress as well as maladaptive coping behaviors like substance abuse coping and self-blame coping. Thus, these data suggest a potential relationship between stress, coping behaviors, substance use and barebacker identity.

As best evidenced by numerous safe sex and risk prevention campaigns, there is a strong tendency to treat substance use as a simple cause of barebacking. While it is accurate to recognize that party drugs and other substances often accompany barebacking, not to mention other forms

of risk taking, the use of those substances alone cannot fully account for the occurrences of such a risky sexual practice. By definition, engaging in barebacking is intentional, thus the typical justifications often used to justify unintentional unprotected intercourse such as "I was too high to remember a condom," or "he wanted to do it without protection and I was too high to care" will not suffice in these instances. We argue that closer attention should be paid to the issues of stress and coping rather than primarily emphasizing the interconnection of drug use and sex behaviors when designing new preventative and risk reduction efforts. Drug use and barebacking may collectively represent a broader constellation of risk related to underlying stress and maladaptive coping mechanisms.

Many people, who find themselves entrenched in personal turmoil, may turn to various practices for quick, yet temporary relief. HIV-positive barebackers may feel and act similarly. Experiencing increased levels of stress and stigma may lead them to seek some form of intimacy and comfort through unprotected anal sex or drug use. While being HIV-positive no longer means an immediate "death sentence," living with HIV remains quite challenging. Before coming to terms with an illness, a person may experience many negative feelings including anger, depression, and self-blame. Fatigued by the years of treatment, HIV-related discrimination, and loss of friends to AIDS, one might feel as if there is "nothing else to lose," and engage in barebacking as a stress response. These may be coupled with homophobia and heterosexism, which produce stress and the experience of stigma. The higher levels of stress and stigma, coupled with greater adverse coping methods, may fuel both drug use and barebacking. As such, in some cases, there may be "deeper roots" behind the intentional practice of unsafe sex behaviors. In particular, sources of HIV stigma among HIV-positive barebackers merit exploration in future research.

In addition to these considerations, drug use may not only be limited to the times when men engage in barebacking. HIV-positive barebackers may feel discomfort *after* seeking intimacy through unprotected anal intercourse, and in order to cope with the stress associated with these feelings of discomfort, they may tend toward increased engagement in substance use. In other words, drug use may function as a response to managing guilt related to seeking unsafe sex driven by stress and stigma. The higher levels of substance abuse coping lend some support for this notion.

While informative, our study does have some limitations. The survey was conducted on a small sample of HIV-positive men recruited at gay community events in New York, which limits the reflection of the larger number of barebackers. Despite the small sample size, the results with statistically significant differences demonstrate medium-large effect sizes. Thus, these results suggest the reported differences are meaningful within the sample and of clinical concern. Another limitation is that, study participants had to complete the survey in a public environment, potentially leading to some response biases. Nonetheless, despite these limitations we believe it remains an important assessment of the intersection of barebacking, stress, and coping among HIV-positive men.

The findings of our research may be especially useful to those who design and organize preventative measures for the reduction of unsafe sex practices. Stress and stigma seem to be significant factors in the lives of HIV-positive men who consider themselves barebackers. These areas should be addressed in intervention efforts. For example, Motivational Interviewing may be useful to address ambivalence in barebacking and enable some men to recognize the role that stress and coping are playing in their behaviors. In addition, the data suggest that self-blaming men should be targeted for interventions. Such individuals may cope with a wide range of problems by blaming themselves and consequently such maladaptive coping must be addressed on an individual basis. Focusing on the underlying issues of stress and coping may be a solution to understanding some barebacking behaviors as opposed to simply emphasizing alterations of drug use behaviors to enable sexual behavior change. Underlying factors may be contributing to both. The HIV-positive barebackers in our study expressed higher levels of stigma, stress, and maladaptive coping behaviors, which may drive barebacking. Likewise, HIV-positive barebackers may use drugs not simply for pleasure, but because drugs may provide an ostensible remedy to personal troubles and negative affect resulting from stigma and gay related stress. In future research, it would be beneficial to further explore the specific mechanisms of coping among HIV-positive barebackers, particularly as they relate to stigma and stress generated by both a gay identity and a positive HIV status. In particular, future research should examine whether drug use is primarily a mediator between stress/stigma and barebacking. It also remains important to delineate the differences in coping strategies between those barebackers who perceive having unprotected anal sex as a form of resistance and transgression and those who bareback as a means of coping with stress. Different mechanisms may be driving these dissimilar motivations and may have varying implications for intervention efforts.

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