

Reasons for Unsafe Sex Among a Community Sample of People with HIV/AIDS

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ABSTRACT. In a sample of 117 HIV positive men and women, 34 (29%) were identified as engaging in risky sexual behavior in the past six months and were asked for reasons they did so. Analysis using broad categories revealed that partner-related reasons and hedonistic reasons were the most frequent reasons overall (71%). More male (87%) than female (60%) responses were captured by those two categories. Differences by partner status, viral load and age were not as pronounced. Specific interventions and intervention frameworks are suggested. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. Email address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2005 by The Haworth Press, Inc. All rights reserved.]*

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The number of people living with HIV and AIDS in the United States rose 26 percent between 1998 and 2001 primarily due to declining death rates (CDC, 1998; CDC, 2001). Longer lives for persons with HIV/AIDS is desirable; however, this trend extends the interval in which infected individuals may transmit the virus. Studies indicate that one-quarter to well over one-third of HIV positive individuals have recently engaged in unprotected anal or vaginal intercourse (see, e.g., Bingham, Marks, & Crepez, 2001; Darrow et al., 1998; Kalichman, 1999). When only sexually active HIV positive persons are considered, rates climb to over 50% (Heckman, Kelly, & Somlai, 1998; Simoni, Walters, & Nero, 2000). The Centers for Disease Control and Prevention's strategic HIV prevention plan emphasizes averting future infections by providing services for already infected persons (CDC, 2003).

Among risk factors identified that may help target services are younger age (Clark, Kissinger, Bedimo, Dunn, & Albersin, 1997; Heckman et al., 1998; Kalichman, 1999; Semple, Patterson, & Grant, 2000; Reilly & Woo, 2001; Rompa, DiFrancisco, & Kelly, 1998; Rosser, Gobby, & Carr, 1999) lower socio-economic status (Clark et al., 1997; Darrow et al., 1998; Heckman et al., 1998; Reilly & Woo, 2001), a greater number of sex partners recently or since sexual debut (Darrow et al., 1998; Heckman et al., 1998; Kalichman, 1999; Reilly & Woo, 2001), knowing that one's sex partner is HIV positive (Fisher, Willcuts, Misovich, & Weinstein, 1998; Moore et al., 2001; Reilly & Woo, 2001), and drug and/or alcohol use, in general or prior to sexual activity (Clark et al., 1997; Kelly et al., 1993; Kennedy et al., 1993; Reilly & Woo, 2001; Robins et al., 1994; Simoni et al., 2000). Better health status is associated with higher levels of risk (Heckman et al., 1998) but viral load level is not (Van der Straten et al., 2000) and the effect of starting protease inhibitors is limited (Miller et al., 2000). Males and females appear to have similar rates of unprotected sex (Heckman et al., 1998; Kalichman, 1999; Reilly & Woo, 2001).

Among correlates of unsafe sex among HIV positive people that suggest directions for clinical interventions are sexual compulsivity and impulsivity (Benotsch, Kalichman, & Pinkerton, 2003; Kalichman & Rompa, 2001; Ostrow, McKirnan, Klein, & DiFrancisco, 1999; Semple et al., 2000), lack of skill in risk reducing behaviors (Carey & Lewis, 1999; Reilly & Woo, 2001), not disclosing one's HIV status to a sex partner (Rosser et al., 1999), deficits in coping and safer sex negotiations (Avants, Warburton, Hawkins, & Margolin, 2000; Fisher et al., 1998; Robins et al., 1994; Semple et al., 2000), and social support factors (Heckman et al., 1998; Kimberly & Serovich, 1999; Reilly & Woo,

2004). Kelly et al. (1993), Kennedy et al. (1993), Rosser et al. (1999), Semple et al. (2000), and Thompson, Nanni, and Levine (1996) found negative emotional states (depression, low self-esteem, stress, hostility) were associated with unprotected sex among HIV positive persons but de Vroome et al. (1998), Robins et al. (1994), and Reilly and Woo (2001) did not, and Kalichman (1999) found an association only for hostility.

Also relevant to designing clinical interventions are the few studies that have asked persons who engaged in unprotected sex for the reason they did so. In Darrow et al.'s (1998) study of HIV positive men who have sex with men, three categories emerged. One category was "rational," encompassing reasons such as an assessment that risk transmission was low because their partner was also HIV positive. The second was "hedonistic," reasons related to experiencing pleasure. The third was "empathetic," reasons indicating a desire to please a partner. Semple et al.'s (2000) study of HIV positive men who have sex with men noted five primary reasons for unprotected sex: a partner did not suggest using a condom; condoms reduce sexual pleasure; they were overcome by sexual pleasure; a partner did not want to use a condom; and withdrawal was used. When Clark et al. (1997) asked HIV positive women why they engaged in risk behavior, mutual decision and partner influence were the most common reasons. Moore et al. (2001) reported the most frequent reasons HIV positive women in their study gave for unprotected sex with uninfected partners were that their partner was not worried about transmission and the partner refused to use a condom. Although methodologies were different in these four studies, women appear to be more focused on partner-related reasons to the exclusion of reasons related to sexual pleasure.

In sum, studies have identified troubling rates of unprotected sex among HIV infected persons, identified higher risk groups (e.g., younger, substance users, lower-income) and identified factors that may suggest directions for interventions (e.g., sexual compulsiveness, safer sex skill deficits, partner disclosure). Fewer studies have focused on the thought processes that accompany an HIV positive person's decision to engage in unprotected sex. Existing studies suggest that there may be gender differences; however, no study has compared the reasons of males and females within a single sample using the same method and questions. No study has examined other variables that may affect thinking about unprotected sex, such as whether one's partner is a regular or a casual partner.

The current study begins to address gaps in existing knowledge with exploratory research on the reasons that persons with HIV/AIDS en-

gage in unprotected sex. Using qualitative analysis, it examines overall patterns as well as differences by gender, partner status (casual or regular partner), and other variables that may influence reasons for risky behavior. The purpose of the study is to examine the main reasons given for risky sex and whether reasons differ by gender, partner status, viral load, age, or sexual orientation. A greater understanding of the reasons that HIV positive people have for engaging in risky sexual activity will assist practitioners and program planners as emphasis turns to building theoretical models and designing and testing interventions (Kalichman, 1999).

METHOD

HIV positive participants were recruited with the cooperation of medical staff from public and private health care sites in the Las Vegas area August through December 2000. An estimated 75 percent of all people under care for HIV/AIDS in the Las Vegas area receive their health care services at these sites (Reilly & Woo, 2001). Convenience sampling was used to select 120 participants. The sample was balanced by gender (60 females, 60 males) and by ethnic group (40 Latinos, 40 African Americans, 40 Whites). Face-to-face interviews were arranged at the participant's convenience in a private office within the medical site. Trained interviewers that matched the participant's gender and ethnicity conducted the interviews. Respondent confidentiality was protected by omitting names from data collection instruments and reporting only aggregate results. A Spanish version of the survey and a Spanish-speaking interviewer were available if participants preferred to communicate in Spanish. Seven interviews were conducted in Spanish. Respondents were paid \$40 for participating. The research protocol, including the data collection instrument, was reviewed and approved by a university institutional review board.

Measures

The survey instrument was comprised of closed and open-ended questions and included standard items (e.g., demographics) as well as scales used in prior research. Content areas included demographics, health status, viral load, sexual orientation, relationships status and sexual behaviors.

Demographic Factors. Standard demographic information (age, gender, ethnicity, income, education, marital status, employment status) was gathered as well as information on sexual orientation and relationship status.

Viral Load. Respondents were asked if they had ever had their viral load measured, and if so, had they ever been told that their viral load was undetectable.

Risk Behavior. Respondents were asked how many sexual partners they had since sexual debut, number of partners in the last six months, and about specific sexual acts with regular and casual partners in the last six months. Prior research has established a six month time frame as both broad enough to sample behavior patterns and proximal enough to provide a reliable measure of sexual behavior (Catania et al., 1992). Women were asked about vaginal or anal intercourse with men while men were asked about vaginal or anal intercourse with males and females. For any sexual activity reported in the last six months, the participant was asked if they used a condom. If a participant reported no sexual activity of any kind in the past six months, they were coded as "no sex." If for every incident of vaginal or anal sex they used a condom, they were coded as "safer sex." If any unprotected vaginal or anal sex occurred in the last six months, the participant was coded as "risky."

Reasons for Unprotected Sex. For any instance of unprotected sex (vaginal or anal) in the last six months, participants were asked to provide a reason (i.e., "if you have engaged in unprotected vaginal or anal sex, why did you do so?"). If a respondent gave multiple reasons for engaging in unprotected sex, or if they had responses pertaining to both regular and casual partners, each reason was entered into the data base and coded separately.

Responses were recorded by interviewers and entered verbatim into the data set. Responses ranged from short phrases to several sentences in length. The process of open coding (Strauss & Corbin, 1990) was used by the principal investigators to identify and code themes in the responses. The data was initially finely coded, grouping responses only with others that were very similar conceptually. For this reason, the number of responses per category in this stage of coding are often small. The coding was repeated by a research assistant with no knowledge of the codes assigned by the principal investigators. The kappa statistic for agreement between raters was .85, indicating a high degree of reliability. A second stage of coding re-grouped the first set of categories into broader categories using themes found in earlier research as a guide.

RESULTS

Demographic Characteristics

As shown in Table 1, half (60) of the study participants were male and half were female; one-third (40) were Latino, one-third were African American and one-third were White. One-quarter of the participants were not born in the U.S. The mean age of the participants was 40 years old. The majority (80%) had incomes of less than \$25,000 and over one-third (38.3%) had incomes of below \$7,500 per year. Most of the participants (60.8%) had a high school education or less and a minority (39.2%) were living with a partner. About two-thirds of the sample population rated their health as excellent or good while the other third rated their health as fair or poor. About one-fifth (21.7%) indicated they did not have any medical insurance.

For comparison, the demographic characteristics of the group later identified as having engaged in risky sex are also displayed in Table 1. As previous research would suggest, the risky group appears to be younger, lower income, and in better health.

Risk Status

Among 117 respondents who gave information on risk behavior in the last six months with regular and casual partners, almost one-third ($N = 34$, 29.1%) were categorized as "risky" because they had engaged in unprotected vaginal or anal sex. Almost as many ($N = 32$, 27.4%) were categorized as "safer" because they used a condom for each event of vaginal or anal intercourse. The remaining 43.6% (51) of the sample was categorized as "no sex" because they had not engaged in vaginal or anal sexual activity in the last six months.

Reasons for Unsafe Sex

Among the 34 people who reported unsafe sex, 41 reasons for unprotected sex were identified and analyzed (including one instance when the respondent did not give a reason). When the data were coded using themes from past research as a guide (Clark et al., 1997; Darrow et al., 1998; Semple et al., 2000), five main categories were created: partner-related reasons which included mild and strong partner influence, mutual agreement and a desire for intimacy; hedonistic reasons which included impulse, sexual pleasure, risk taking and being irresponsible;

TABLE 1. Demographic Characteristics

	Total		Risky Group	
	N	%	N	%
Gender				
Male	60	50	16	47.1
Female	60	50	18	52.9
Ethnicity				
Latino	40	33.3	11	32.4
African American	40	33.3	14	41.2
White	40	33.3	9	26.5
Not born in U.S.A.	30	25.4	9	26.5
Annual income less than \$25,000	96	80	30	88.2
High school education or less	73	60.8	20	58.8
Living with spouse, significant other or sexual partner	47	39.2	19	55.9
Health excellent or good	77	64.7	27	79.4
No medical insurance	26	21.7	10	29.4
Mean age in years	40		36.5	

rational reasons which included thinking the risk of transmission was low or that one's partner was also HIV positive; and practical reasons which included inexperience with condoms and condom unavailability. A fifth category of "other" was established for people who gave no response, said they were under the influence of alcohol, or said they did not like to use condoms (reason for dislike not stated).

Frequencies and percentages were calculated using these categories for all responses and by gender, partner status, viral load level, and age (Table 2 displays percentages). Partner-related reasons constituted the largest category overall (39%). Second most frequent overall were hedonistic reasons which accounted for 32% of all reasons. When combined, partner-related and hedonistic reasons accounted for 71% of all reasons. However, within two sub-groups, the magnitude of this effect differed substantially. While partner-related and hedonistic reasons accounted for 87% of all male reasons, they accounted for 60% of all female reasons. Similarly, these two groups of reasons accounted for 84% of all reasons among older participants compared to 53% of younger participants. Examining the remaining categories, rational reasons represented 12% of the reasons overall and this ranged from 6% (males) to 16% (females). Practical reasons (condom not available, condom inexperience) accounted for 10% of the reasons overall and ranged from 0% (males) to 18% (younger people).

TABLE 2. Reasons for Unsafe Sex: Totals and by Gender, Partner Status, Viral Load and Age (N = 41)

	Partner-Related		Hedonistic		Rational		Practical		Other		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
All Reasons	6	39	13	32	5	12	4	10	3	12	41	100
Gender												
Male	7	44	5	31	1	6	0	0	3	19	16	100
Female	8	32	7	28	4	16	4	16	2	8	25	100
Partner Status												
Regular Partner	12	38	10	31	4	13	3	9	3	9	32	100
Casual Partner	3	33	4	44	1	11	1	11	0	0	9	99
Viral Load												
Detectable Viral Load	8	40	6	30	2	10	3	15	1	5	20	100
Non-detectable Viral Load	7	35	7	35	3	15	1	5	2	10	20	100
Age												
< 35 years old	4	24	5	29	2	12	3	18	3	18	17	101
≥ 35 years old	11	45	9	38	3	13	1	4	0	0	24	101

Note: Total percentages are not always 100% due to rounding.

DISCUSSION

The use of a single methodology in a sample inclusive of males and females both validates patterns observed in prior research (Clark et al., 1997; Darrow et al., 1998; Moore et al., 2001; Semple et al., 2000) and suggests some amplifications relevant to interventions and intervention frameworks. When coded into larger themes, the majority (71%) of all reasons for unsafe sex fell into the previously recognized categories of partner-related reasons and hedonistic reasons. Although this was true overall and for all of the sub-groups (males, females, regular partners, casual partners, etc.), among females and younger participants, the magnitude of the majority was reduced, indicating that rational, practical and "other" reasons were more prevalent among those two groups.

Altogether, the findings suggest that interventions for partner-related risk must be offered to HIV positive people and must incorporate the complex relational and gender role contexts in which HIV risk behavior occurs. For example, interventions that address gender roles and relationship power dynamics appear to be needed for some women. Simoni et al. (2000) assert that relational theory can be used to examine cultural constructions of unsafe sex, sexuality, and gender roles that may affect

condom use and the successful use of risk-avoidance strategies for women. However, males also appear to need interventions that address the relational context of risky behavior because they too cite partner influence as a reason for unsafe sex. Also, when males named mutual agreement as a reason, it was most often with a regular partner, indicating that couples-based interventions (whether partners are of the same or opposite sex) are needed. Although studies, including this one, find similar rates of unsafe sex for HIV positive males and females, and that both genders are influenced by partners, these data suggest that there are gender differences in the dynamics of partner influence.

Hedonistic reasons for unsafe sex including impulse, sexual pleasure, risk-taking and being irresponsible emerged as the second most frequently cited reasons. Changing impulsive and pleasurable behaviors may be particularly difficult. Although behavioral or cognitive-behavioral interventions seem appropriate, they may be ineffective if motivation is lacking. Peer support groups and increased social support may be avenues to change behavioral norms. These avenues may provide individuals an opportunity to engage in safe and open dialogue on the difficulties and challenges of avoiding impulsive behavior. Reilly and Woo (2004) found that individuals who viewed their social support as helpful engaged in fewer risk transmission behaviors.

Rational reasons, including thinking the risk of transmission was low or that one's partner was also HIV positive, and practical reasons, such as inexperience with condoms and condom unavailability, were less frequently mentioned but are likely easier to address through psycho-educational methods and skill-based training. For example, knowledge about viral load and its relationship to the likelihood of HIV transmission and knowledge/concerns about reinfection are topics that need to be present in both community discussions and educational materials. Interventions also need to address practical aspects of using condoms, having condoms available and negotiating their use as well as acknowledging and validating strong rejection of condoms, especially among ethnic groups (Carballo-Diequez & Dolezal, 1996).

The findings from this study suggest that intervention frameworks to reduce risk behavior among people who are already infected must be broad enough to encompass a wide range of theories such as cognitive-behavioral theory, gender role theory, social support theory, relational theory, and theories related to changing norms of behavior. Two possible frameworks are the Information-Motivation-Behavioral skills (IMB) model (Fisher & Fisher, 1992) and the ecosystems perspective (Lynch, 2000). The IMB model is attractive because the information

component could address rational reasons for risky sex, the motivation component could address motivation to change impulsive or pleasure seeking behaviors, and the behavioral component could address a range of necessary practical skills, including those for interacting with partners. The IMB model has been successfully implemented with at-risk individuals, groups, and communities (Benotsch & Kalichman, 2002).

The ecosystems perspective is attractive because it incorporates both the psychosocial and person-in-environment perspectives and emphasizes the dynamic interaction between the person with HIV, their disease, and the external environment. This framework could tie together what is already known about demographic and psychosocial correlates of risk among people with HIV/AIDS with an understanding of the reasons they engage in high-risk sexual behaviors. Importantly, it is broad enough to consider the disadvantage and stigma in communities hard hit by HIV/AIDS that pre-date the epidemic.

Another important issue is who will deliver these interventions and how. The range of theories and interventions called for necessitates highly trained practitioners with the ability to accurately assess complex client needs, the skills to implement a range of interventions, and the organizational context in which to do so. Questions also arise about how such interventions can be delivered outside of large urban areas. The potential of the Internet to deliver health care information and support to people with HIV/AIDS (Kalichman, Weinburgh, Benotsch, & Cherry, 2002; Smith, 2003) suggests that Internet-based interventions might provide a means to reach people geographically remote from services.

A limitation of this study is that the data were based on recall and self-report. It is also possible that a social desirability bias resulted in under-reporting of unsafe sex. The reasons for unsafe sex among people who do not admit to it may indeed be different. Further, participants may have only been willing to divulge certain reasons or were unaware of their reasons. The near lack of drug or alcohol use-related reasons suggests that participants may be unaware of the effect of substance use on their risk behavior. Also, with a larger sample some responses not found in this study, such as males who cite intimacy as a reason for unsafe sex, might emerge. Further research in this area should include larger samples and more in-depth interviews to allow analysis of how reasons for unsafe sex vary by other factors such as a tendency for sensation seeking or sexual orientation. In-depth interviews could include follow-up questions on drug or alcohol use.

This exploratory study adds to the knowledge base needed to develop prevention interventions for people with HIV/AIDS. It suggests that interventions and intervention frameworks must encompass a wide range of human thought and behavior yet incorporate awareness of how gender, partner status and age may affect the reasons behind risk behavior. Despite the challenges, developing effective prevention interventions with people who are already HIV positive is a critical component in reaching the goal of reducing new infections.

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