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Discrepancies between HIV prevention communication attitudes and actual conversations about HIV testing within social and sexual networks of African American men who have sex with men

Karin Elizabeth Tobin, PhD,
Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health

Cui Yang, PhD,
Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health

Christina Sun, MPH,
Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health

Pilgrim Spikes, PhD,
Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention – Prevention Research Branch

Jocelyn Patterson, MPH, and
Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention – Prevention Research Branch

Carl Asher Latkin, PhD
Department of Health, Behavior and Society, Johns Hopkins Bloomberg School of Public Health

Abstract

Background—Promoting communication among African American men who have sex with men (AA MSM) and their social networks about HIV testing is an avenue for altering HIV prevention social norms. This study examined attitudes of AA MSM on talking with peers about HIV testing and characteristics of their network members with whom they have these conversations.

Methods—Data came from a cross-sectional survey of n=226 AA MSM who were aged >=18 years and self-reported sex with another male in the prior 90 days. Participants completed an inventory to characterize network members with whom they had conversations about HIV testing and HIV status.

Results—The majority of the sample reported that it was important/very important to talk to male friends about HIV (85%) and that they were comfortable/very comfortable talking with their

(corresponding author) 2213 McElderry Street, Second floor, Baltimore, Maryland 21205, 410-502-5368, 410-502-5385 (fax), ktobin@jhsph.edu.

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friends about sexual behaviors (84%). However, a small proportion of the social network had been talked to by the participant about HIV testing (14%). Among sexual networks, 58% had been talked to about their HIV status and this was positively associated with main and casual partner type compared to partners with whom money or drugs were exchanged.

Conclusion—Findings suggest that positive attitudes about communication may be necessary but not sufficient for actual conversations to occur. Designing interventions that increase communication with social networks is warranted.

Keywords

MSM; social networks; communication; HIV testing

Introduction

HIV-related communication between partners is an important behavioral target in interventions to decrease the spread of HIV [1-3]. Communication includes ascertaining sexual histories, risk assessment [4], disclosure of HIV status [5], and condom use negotiation [6,7]. A number of studies have found a positive association between communication and increased condom use and HIV testing [8-13]. Correlates of partner-specific HIV prevention communication include higher rated relationship quality and positive outcome expectancies of the conversation [14,15]. Barriers include concerns about negative consequences such as rejection or potential for violence [16,17].

Social networks provide an avenue for communication about HIV-related topics which can influence the formation or alteration of social norms around testing and condom use [13,14]. Social networks also serve as a source of health information and resources [18,19]. HIV prevention communication among network members may be a critical mechanism for diffusing information and messages about testing for HIV and other sexually transmitted infections.

Peer-based interventions focused on training individuals to promote HIV risk reduction within personal networks have shown efficacy [20-22]. Little attention has been given to characteristics of social network members being targeted with prevention messages. This line of research can inform the development of intervention content to build skills for increasing conversations specifically with higher-risk social network members and those with whom conversations are not occurring. African American men who have sex with men (AA MSM) are disproportionately affected by HIV. However, stigma associated with MSM behavior or HIV, particularly in African American communities, may be a barrier to communication. While recent studies have described the structure and function of social networks of AA MSM [23-26], a gap exists in the literature concerning the social network characteristics and quality of communication with social network members about HIV.

The purpose of this study was to 1) examine attitudes of AA MSM on talking with peers about HIV testing, 2) to examine associations between having conversations about HIV/STI testing and characteristics of the social network members, and 3) to examine associations

between having conversations about HIV status and testing together and characteristics of sexual partners.

Methods

Data for this study came from the baseline survey from the Unity in Diversity Study (2007-2008), a pilot behavioral HIV intervention conducted in Baltimore, Maryland. Details about recruitment are described elsewhere [27]. In brief, two types of participants were enrolled: primary and secondary. Primary participants were AA MSM recruited using a variety of methods including street-based outreach, advertising in area newspapers, and word-of-mouth referrals. Inclusion criteria were being at least 18 years of age, self-report of two or more sex partners and at least one male sex partner in the prior 90 days, unprotected anal sex with a male partner in the prior 90 days, and willingness to take an HIV test. Primary participants who met criteria and provided written informed consent completed a baseline study visit which lasted an average of 90 minutes and entailed an audio computer assisted self-interview (ACASI) assessment of HIV risks and an interviewer administered social network inventory. The social network inventory consisted of two sections: 1) name generator and 2) network characteristics. During the name generator section a participant is asked to list the first names and/or initials of individuals who provide emotional, material or health related support; those with whom the individual socializes; and drug or sexual network members. Once the total network was listed, information was collected about each network member such as their age, sex, type of relationship (i.e., kin, non-kin, sexual partner), sexual risks, and communication quality. From these responses, the total size of the network was calculated as well as the size of the sexual network, defined as individuals with whom the participant had sex in the prior 90 days. Participants received $50 for completing the baseline visit. At the end of the visit, primary participants were asked to recruit both male and female individuals from their social network (i.e., secondary participants) into the study and received $10 for each member recruited. Recruited secondary participants (n=73 total) provided written informed consent and completed the same survey on HIV risk behaviors and social network inventory as the primary participants. The sample for the present study consists of n=187 primary and n=39 secondary participants who were AA MSM .

Measures

Demographics and HIV status—Participants reported age and current employment status (working, unemployed, receiving disability). Sexual identity was assessed with the question “Do you consider yourself to be: heterosexual or straight; bisexual; queer, homosexual, gay, same-gender loving; or not sure/questioning?” One nominal variable was created where 0=queer/gay/homosexual/same-gender loving; 1= bisexual/not sure/ questioning; 2=heterosexual or straight. HIV status was determined by testing participants who self-reported HIV-negative or unknown status using Oraquick technologies. Preliminary positive results were confirmed using Western blot assays. Participants who self-reported HIV-positive status were asked to provide documentation such as medications or lab results to validate their self-report. Participants who indicated they were HIV-positive but did not provide documentation were tested.

Questions were developed to assess attitudes on talking about HIV-related topics using two separate questions and a five-point Likert scale with the following responses: Strongly disagree, Disagree, Neither agree nor disagree, Agree, and Strongly agree: “It is important for me to talk to my male friends about HIV prevention” and “There is not much I can do to change the risky behaviors of my friends”. Responses were not normally distributed, therefore; we created a dichotomous variable such that Strongly disagree, Disagree, and Neither agree nor disagree were set equal to “0” and Strongly Agree and Agree were set equal to “1”. Level of comfort talking with friends about their sexual behavior was assessed using a five-point Likert scale ranging from very comfortable to very uncomfortable. A similar dichotomous variable was created where very uncomfortable, uncomfortable, and neither comfortable nor uncomfortable were set equal to “0” and very comfortable and comfortable were set equal to “1”.

Characteristics of the social network members—The second part of the network survey obtained information about characteristics of each network member listed such as their age, sex, and nature of relationship (e.g., kin, non-kin). HIV status of the network member was assessed by asking the participant, “Who on this list has HIV?” Participants indicated which network members knew that the participant had sex with other men (yes/no), frequency of contact (at least once a week or daily versus a few times a month or less often), and length of relationship (in years). As a proxy measure of network member risk behavior, we also asked participants to indicate which network members use the internet to seek sex partners. Conflict between participant and network member was measured by asking, “Are you often not on good terms with or arguing and fighting with this person?” To assess levels of trust between the participant and each listed network member, the participant was asked to choose a number on a scale from 1 to 10 with 1 meaning you do not trust them at all to 10 meaning you trust them with your life.

Sexual Networks and Risk—Specific to sex networks, the participant was asked to choose a number between 1- 5 where 1 means he is not dependent on partners for food, money or a place to stay and 5 being very dependent on this person. Participants reported their current condom use with each sex partner (never use, used at first but presently do not, use now and then, and always use) and which of these partners had other sex partners (besides the participant) in the past 3 months.

Communication—Participants were asked, “In the past 3 months, who [on this list] have you had a conversation about getting tested for HIV /STIs?” In addition, participants rated their overall communication with each sex partner (excellent, good, fair or poor). A dichotomous variable was created for communication quality where 0=poor/fair and 1=good/excellent. They were also asked which of these sex partners they talked to about the partner’s HIV status and getting tested together.

Analysis

For all outcomes of interest, bivariate associations were examined using t-test and chi-square statistics. To assess independent associations between outcomes and social network characteristics, all variables that were statistically significant in bivariate analysis were

entered into backward selection ($p<0.10$) logistic regression model with generalized estimating equations (GEE) using network member as the unit of analysis [28]. GEE were used to account for the fact that individuals had multiple network partners that contributed to the analysis. For example, if the participant listed 10 network members, each of these network members was treated as an observation within a cluster of ten. Robust standard errors were used for estimation of the 95% confidence intervals. Final logistic regression models of network variables associated with discussing sex partner HIV status and discussing getting an HIV test together were retained in the backwards selection in the multivariate model. One variable was created to indicate that discussion occurred with sex partners about partner HIV status and/or getting a test together and logistic regression was conducted to examine variables independently associated with this outcome. All analyses were performed using Stata Version 12.0.

Results

The sample included 226 AA MSM whose mean age was 37.9 years (SD=10.6 years) (Table 1). More than half of the sample identified as gay (59%), 34% as bisexual or not sure, and 8% as heterosexual. Nearly half were HIV-seropositive (49%) and not working (43%). The majority of the sample reported that it was important/very important to talk to male friends about HIV (85%) and that they were comfortable/very comfortable talking with their friends about sexual behaviors (84%). Over half (51%) reported beliefs that they could change the risky behaviors of their friends.

Associations between talking about HIV and STI testing and characteristics of social network members

Data were collected on 1,884 network members. The mean size of the social network was 8.34 (SD=4.23) members (Table1). Participants discussed getting tested for HIV/STI with 13.7% (n=259/1,884) of network members. Participants reported talking with a mean number of 1.15 (SD=1.98) network members about getting tested. In bivariate analysis (Table 2), characteristics of network members associated with having discussed getting tested for HIV/STIs were: being transgendered, being a sexual partner, having contact frequency of at least once a week or more, knowing the participant is an MSM, and using the internet to seek sexual partners. Adjusting for participant age and HIV status, characteristics of network members that remained independently associated with talking about HIV/STI testing were: network age, trust, transgender sex, sex partner relationship, contact at least weekly, and network use of the internet to seek sex partners (Table 2).

Associations between talking about HIV status and testing together and characteristics of sexual network members

Six-hundred and eighty-four network members were listed as sexual partners. The mean size of the sexual network was 3.05 (Table 1). Participants reported talking with a mean number of 1.77 sexual network members about their HIV status and 0.60 sexual network members about getting an HIV test together. Participants discussed HIV status with a little over 58% (n=399) of their sexual partners, getting an HIV test together with nearly 20% (n=135)

(Table 3). Eighteen percent (n=124) of participants reported talking about both topics and 59% (n=410) talked about either topic.

In bivariate analysis (Table 3), characteristics of members of the sexual network significantly associated with discussing partner HIV status included main partner status, higher mean level of dependency on partner, good to excellent quality of communication with partner, and partner having other sex partners in the past 90 days. Identical findings were associated with discussion of getting an HIV test together. In the multivariate analysis (Table 3), variables independently associated with talking to a sex partner about HIV status and/or getting an HIV test were main and casual partners (versus exchange partners) and excellent quality of communication (versus fair) with a partner.

Discussion

There is scant research on the communication patterns of AA MSM with their social and sexual networks. This study first sought to describe attitudes of AA MSM towards HIV communication and then identify characteristics of members of the social and sexual network associated with talking about HIV-related topics. Our findings highlight that despite high levels of positive attitudes towards talking about HIV topics with peers, a very small proportion of social network members were actually talked to by the participant about HIV/STI testing (14%). This suggests that positive attitudes about communication may be necessary but not sufficient for actual conversations to occur. Consideration of the social context of the communication, namely the social network, can offer insight about factors that should be included in intervention design.

We report that the characteristics of network members associated with talking about HIV testing were younger age, transgender sex, more frequent contact, greater trust of the network member, and network member behavioral risk (e.g. using the internet to seek sex partners). Conversations with these network members may be associated with their being perceived as being more open and receptive to discussing HIV/STI and testing. Talking about HIV is a sensitive topic. As a result, conversations pertaining to the topic may be limited to individuals with whom there is a certain level of comfort, frequent contact, and opportunities to discuss the issue. This is consistent with other studies that have shown that positive communication outcome expectancies are associated with having actual conversations [15]. This also underscores the value of activities, such as role-plays, that focus on increasing positive outcome expectancies. In developing interventions that focus on increasing conversations about HIV prevention with peers, these results suggests that optimal communication would be with individuals with whom participants trust and see often. One approach is to incorporate activities in programs that enable a participant to assess the social network members with whom they do trust and see often and then personalize communication practice with these network members in mind. Moreover, further research is warranted to determine how to increase communication with other network members with whom there is less trust.

There may also be a potential for generational differences in willingness to engage in HIV-related communication. This may in part be due to issues related to disclosure of HIV status,

where older AA MSM have been reported to be less likely to disclose HIV status[25] or high levels of MSM-related stigma in older generations.

We report that a majority of the participants (58%) discussed partner HIV status with their sexual network members. Our finding contrasts with a study of white, Asian Pacific Islanders, AA and Latino MSM in San Francisco where authors report that one-third of men discussed status with partners [29] and that AA MSM were less likely to know the HIV-status of their sexual partners than other racial/ethnic groups of MSM. In the current study, asking HIV status was positively associated with main and casual partner type compared to partners with whom money or drugs were exchanged for sex. One explanation for this may be that inquiring about HIV-status is related to the level of commitment in a relationship. Alternatively, the context of exchange sex does not facilitate communication of personal information such as status. Interventions that include opportunities to practice skills of asking about HIV status should provide scenarios that vary based on partner/relationship type. It is not clear from this study whether there are norms about asking status in any of these relationships. Specifically, in cases of exchange partnerships, there may be perceived sanctions or risks associated with asking status, such as risks to housing, food or money. Therefore, developing interventions that provide alternative strategies to asking about HIV status is important for risk reduction.

Our results demonstrate that good/excellent quality of communication in the relationship remained significantly associated with having conversations with sex partners. This may be due to the cross-sectional nature of the survey. We cannot know whether the perceptions of the communication quality caused or resulted from the conversations about HIV status and testing. Programs can offer communication strategies to use based on the perceived quality of communication. For example, in cases where an individual perceives the communication as excellent or good, programs can emphasize choosing the appropriate time for raising the conversation and using direct statements about testing as a couple.

There are some limitations of this study. First, this was a convenience sample of AA MSM and not necessarily generalizable to all AA MSM in Baltimore, especially to younger AA MSM, or to AA MSM in other urban settings, especially where the HIV prevalence may not be as high. Data were based on self-report; we did not confirm or validate with the network members whether these conversations had actually occurred. The cross-sectional design of the study limits our ability to draw causal inferences about network characteristics and communication. We did not include questions to assess contextual factors, such as the social or physical setting where conversations occurred or the exact nature of the conversations. Additionally, while we report statistically significant differences in the trust scores between social networks with whom the Index had talked about testing, it is not clear whether this is a meaningful difference in terms of trust in the relationship.

These limitations aside, this study provides insights into specific characteristics of members of the social network associated with greater odds of having conversations about HIV testing among AA MSM. Promoting communication about HIV/STI testing and condom use between sexual partners and peers is a central component in HIV prevention programs. Designing interventions that increase communication while utilizing natural social processes

to alter social norms about testing can serve as one component of HIV risk reduction to address the epidemic among AA MSM.

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References

1. El-Bassel N, Witte SS, Gilbert L, et al. The efficacy of a relationship-based HIV/STD prevention program for heterosexual couples. Am J Public Health. 2003; 93(6):963–969. [PubMed: 12773363]
2. Wilton L, Herbst JH, Coury-Doniger P, et al. Efficacy of an HIV/STI prevention intervention for black men who have sex with men: Findings from the many men, many voices (3MV) project. AIDS Behav. 2009; 13(3):532–544. [PubMed: 19267264]
3. DiClemente RJ, Wingood GM. A randomized controlled trial of an HIV sexual risk-reduction intervention for young african-american women. JAMA. 1995; 274(16):1271–1276. [PubMed: 7563531]
4. Stoner BP, Whittington WL, Aral SO, Hughes JP, et al. Avoiding risky sex partners: Perception of partners' risks v partners' self reported risks. Sex Transm Infect. 2003; 79(3):197–201. [PubMed: 12794201]
5. Sullivan KM. Male self-disclosure of HIV-positive serostatus to sex partners: A review of the literature. J Assoc Nurses AIDS Care. 2005; 16(6):33–47. [PubMed: 16536263]
6. Brown LK, DiClemente R, Crosby R, et al. Condom use among high-risk adolescents: Anticipation of partner disapproval and less pleasure associated with not using condoms. Public Health Rep. 2008; 123(5):601–607. [PubMed: 18828415]
7. Rickman RL, Lodico M, DiClemente RJ, et al. Sexual communication is associated with condom use by sexually active incarcerated adolescents. J Adolesc Health. 1994; 15(5):383–388. [PubMed: 7947852]
8. Sheeran P, Abraham C, Orbell S. Psychosocial correlates of heterosexual condom use: A meta-analysis. Psychol Bull. 1999; 125(1):90–132. [PubMed: 9990846]
9. Noar SM, Carlyle K, Cole C. Why communication is crucial: Meta-analysis of the relationship between safer sexual communication and condom use. J Health Commun. 2006; 11(4):365–390. [PubMed: 16720536]
10. Crosby RA, DiClemente RJ, Wingood GM, et al. Condom use and correlates of african american adolescent females' infrequent communication with sex partners about preventing sexually transmitted diseases and pregnancy. Health Educ Behav. 2002; 29(2):219–231. [PubMed: 11942716]
11. Zamboni BD, Crawford I, Williams PG. Examining communication and assertiveness as predictors of condom use: Implications for HIV prevention. AIDS Educ Prev. 2000; 12(6):492–504. [PubMed: 11220502]
12. Catania JA, Coates TJ, Stall R, et al. Prevalence of AIDS-related risk factors and condom use in the united states. Science. 1992; 258(5085):1101–1106. [PubMed: 1439818]
13. Chesney MA, Chambers DB, Taylor JM, et al. Social support, distress, and well-being in older men living with HIV infection. J Acquir Immune Defic Syndr. 2003; 33(Suppl 2):S185–93. [PubMed: 12853868]
14. Davey-Rothwell MA, Latkin CA. HIV-related communication and perceived norms: An analysis of the connection among injection drug users. AIDS Educ Prev. 2007; 19(4):298–309. [PubMed: 17685843]
15. Diiorio C, Dudley WN, Lehr S, et al. Correlates of safer sex communication among college students. J Adv Nurs. 2000; 32(3):658–665. [PubMed: 11012809]

16. Swan H, O'Connell DJ. The impact of intimate partner violence on women's condom negotiation efficacy. J Interpers Violence. 2012; 27(4):775–792. [PubMed: 21987514]
17. Campbell JC, Woods AB, Chouaf KL, et al. Reproductive health consequences of intimate partner violence. A nursing research review. Clin Nurs Res. 2000; 9(3):217–237. [PubMed: 11276617]
18. Plowden KO, Fletcher A, Miller JL. Factors influencing HIV-risk behaviors among HIV-positive urban african americans. J Assoc Nurses AIDS Care. 2005; 16(1):21–28. [PubMed: 15903275]
19. Wolitski RJ, Bensley L, Corby NH, et al. Sources of AIDS information among low-risk and at-risk populations in five U.S. cities. AIDS community demonstration projects. J Community Health. 1996; 21(4):293–310. [PubMed: 8842891]
20. Latkin CA, Sherman S, Knowlton A. HIV prevention among drug users: Outcome of a network-oriented peer outreach intervention. Health Psychol. 2003; 22(4):332–339. [PubMed: 12940388]
21. Tobin KE, Kuramoto SJ, Davey-Rothwell MA, et al. The STEP into action study: A peer-based, personal risk network-focused HIV prevention intervention with injection drug users in baltimore, maryland. Addiction. 2011; 106(2):366–75. [PubMed: 21054614]
22. Kelly JA, St Lawrence JS, Diaz YE, et al. HIV risk behavior reduction following intervention with key opinion leaders of population: An experimental analysis. Am J Public Health. 1991; 81(2): 168–171. [PubMed: 1990853]
23. Tobin KE, German D, Spikes P, et al. A comparison of the social and sexual networks of crack-using and non-crack using african american men who have sex with men. J Urban Health. 2011; 88(6):1052–1062. [PubMed: 21882072]
24. Tobin KE, Latkin CA. An examination of social network characteristics of men who have sex with men who use drugs. Sex Transm Infect. 2008; 84(6):420–424. [PubMed: 19028939]
25. Latkin CA, Yang C, Tobin K, et al. Social network predictors of disclosure of MSM behavior and HIV-positive serostatus among african american MSM in baltimore, maryland. AIDS and Behavior. 2011:1–8. [PubMed: 20683650]
26. Latkin CA, Yang C, Tobin K, et al. Differences in the social networks of african american men who have sex with men only and those who have sex with men and women. Am J Public Health. 2011; 101(10):e18–23. [PubMed: 21852650]
27. Tobin KE, Kuramoto SJ, German D, et al. Unity in diversity: Results of a randomized clinical culturally tailored pilot HIV prevention intervention trial in baltimore, MD, for african american men who have sex with men. Health Educ Behav. 2012
28. Liang K, Zeger SL, Qaqish B. Multivariate regression analyses for categorical data. Journal of the Royal Statistical Society.Series B (Methodological). 1992; 54(1):3–40.
29. Wei C, Raymond HF, Guadamuz TE, et al. Racial/Ethnic differences in seroadaptive and serodisclosure behaviors among men who have sex with men. AIDS Behav. 2011; 15(1):22–29. [PubMed: 20217468]

Table 1

Sample characteristics and attitudes of 226 African American MSM (AA MSM) about talking with peers about HIV prevention (Baltimore, Maryland August 2007-August 2008)

	N (%)
Mean age in years (SD)	37.9 (10.6)
Sexual identity	
Gay	133 (59)
Straight	17 (8)
Bisexual/Not sure	76 (34)
HIV status*	
Negative	115 (51)
Positive	110 (49)
Current employment status	
Not working	98 (43)
On disability	66 (29)
Employed full or part-time	62 (27)
It is important for me to talk to my male friends about HIV prevention (agree-strongly disagree)	160 (85)
Level of comfort talking with friends about their sexual behavior (comfortable-very comfortable)	157 (84)
There is not much I can do to change the risky behaviors of my friends (disagree-strongly disagree)	96 (51)
Social Network Data	
Mean total social network size (SD)	8.34 (4.23)
Mean number of networks talked to about getting tested for HIV (SD)	1.15 (1.98)
Sexual Network Data	
Mean total sexual network (SD)	3.05 (1.78)
Mean number of sex network talked to about HIV status (SD)	1.77 (1.64)
Mean number of sex networks talked to about getting tested together (SD)	0.60 (0.91)

*missing one case

Table 2

Bivariate comparisons and multivariate model of with discussing getting tested for HIV/STIs and characteristics of social networks (Baltimore, Maryland August 2007-August 2008)
N=1884 network members reported by 226 participants completing the network survey

	Discussed getting tested for HIV/STIs			AOR (95% CI)*
Social network member characteristics N (%)	**No N=1625 (86.2)**	**Yes N=259 (13.7)**	**p-value**	
Mean age (SD)	39.2 (14.1)	34.3 (13.1)	<0.001	0.98 (0.97-1.00)
Mean level of trust^ (SD)	7.06 (3.15)	7.72 (2.60)	0.001	1.09 (1.00-1.19)
Mean length of time known in years (SD)	12.5 (14.3)	9.89 (11.9)	<0.01	--
Gender of social network				
Male	1017 (62.6)	162 (62.6)		
Female	578 (35.6)	80 (30.9)		Ref
Transgender	30 (1.85)	17 (6.56)	<0.001	3.53 (1.70-7.33)
HIV status				
Negative	1382 (85.4)	227 (87.6)		
Positive	236 (14.6)	32 (12.4)	0.34	--
Type of relationship+				
Kin	429 (27.8)	50 (20.0)		
Non-kin	871 (56.4)	140 (56.0)		Ref
Sex Partners	244 (15.8)	60 (24.0)	0.001	1.64 (1.01)-2.64)
Frequency of contact				
A few times a month or less often	659 (40.6)	70 (27.0)		Ref
At least once a week or more often	966 (59.5)	189 (73.0)	<0.001	1.60 (1.04-2.45)
Network uses internet to seek sex partners				
No	1365 (84)	177 (68)		Ref
Yes	260 (16)	82 (32)	<0.001	2.10 (1.32-3.34)
Network member knows participant is MSM				
No	389 (23.9)	41 (15.8)		
Yes	1236 (76.1)	218 (84.2)	<0.01	--
Conflict				
No	1454 (89.5)	218 (84.2)		Ref
Yes	171 (10.5)	41 (15.8)	0.01	1.59 (0.96-2.63)

^ ranges from 1=doesn't trust at all to 10=trust with my life

+ excludes n=90 network members listed as professionals; categories are mutually exclusive

* backwards stepwise selection p<0.10, adjusting for Index age and HIV status

Table 3

Bivariate comparisons of sexual network characteristics associated with discussing HIV status and getting an HIV test with characteristics of sex partners. (Baltimore, Maryland August 2007-August 2008)
N=684 sex partners reported by 226 participants completing the survey

	Discussed sexual partner HIV status			Discussed getting an HIV test with sexual partner			Discussing HIV status or getting tested together
Sexual network characteristics N (%)	**No N=285 (41.7)**	**Yes N=399 (58.3)**	**p-value**	**No N=549 (80.3)**	**Yes N=135 (19.7)**	**p-value**	**AOR (95%CI)***
Type of sex partner							
Main	27 (9.47)	140 (35.1)		91 (16.6)	76 (56.3)		8.30 (3.60-19.1)
Casual	186 (65.3)	228 (57.1)		360 (65.6)	54 (40.0)		2.40 (1.14-5.05)
Exchange	72 (25.3)	31 (7.77)	<0.001	98 (17.9)	5 (3.70)	<0.001	Ref
Mean level of dependency (SD)+	1.46 (1.06)	1.73 (1.33)	0.01	1.54 (1.15)	1.96 (1.47)	<0.001	--
Quality of communication							
Poor/fair	176 (61)	112 (28)		258 (47)	30 (22)		Ref
Good/excellent	112 (39)	287 (72)	<0.001	294 (53)	105 (78)	<0.001	3.04 (1.93-4.77)
Condom use							
Never use	100 (35.1)	115 (28.8)		181 (32.0)	34 (25.2)		--
Used at first but do not presently	23 (8.07)	76 (19.1)		68 (12.4)	31 (28.0)		--
Use now and then	50 (17.5)	70 (17.5)		91 (16.6)	29 (21.5)		--
Always	112 (39.3)	138 (34.6)	0.001	209 (38.1)	41 (30.4)	<0.01	--
Partner has other sexual partners past 90 days							
No	87 (32.1)	178 (45.9)		195 (37.0)	70 (53.0)		--
Yes	184 (67.9)	210 (54.1)	<0.001	332 (63.0)	62 (47.0)	0.001	--

+ ranges from 0=not dependent to 5=totally dependent

* adjusting for level of dependency, condom use, partner has other partners, Index age and HIV status