

HIV/AIDS Risks among Men and Women Who Drink at Informal Alcohol Serving Establishments (Shebeens) in Cape Town, South Africa

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Abstract HIV/AIDS is devastating southern Africa and the spread of HIV is fueled in some populations by alcohol use. Alcohol serving establishments, such as informal drinking places or shebeens, often serve as high-risk venues for HIV transmission. The current study examined the HIV risks of men ($N=91$) and women ($N=248$) recruited from four shebeens in a racially integrating township in Cape Town South Africa. Participants completed confidential measures of demographic characteristics, HIV risk history, alcohol and drug use, and HIV risk behaviors. Comparisons of 94 (28%) participants who reported meeting sex partners at shebeens to the remaining sample of shebeen goers, controlling for potential confounds, demonstrated a pattern of higher risk for HIV infection among persons who met sex partners at shebeens. Few differences, however, were observed between men ($N=47$) and women ($N=47$) who had met sex partners at shebeens, suggesting greater gender similarities than gender differences in this important subpopulation. These results indicate an urgent need for multi-level HIV prevention interventions targeting shebeens and the men and women who drink in these settings.

Keywords HIV prevention · Alcohol and sexual risk · Drinking places · South Africa

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Introduction

Sub-Saharan Africa is in the midst of a catastrophic HIV/AIDS epidemic. Southern Africa is home to two-thirds of people living with HIV/AIDS in the world. Although only 10% of the world's population lives in southern Africa, more than 85% of the world's AIDS-related deaths have occurred in this region (World Health Organization 2006). In the Republic of South Africa, 10% of men and 13% of women are infected with HIV (Shisana et al. 2005). Like elsewhere in the world, much of the AIDS epidemic in South Africa occurs in the context of substance use (Parry et al. 2004). The most commonly used substance in South Africa is alcohol and there is considerable evidence that alcohol abuse contributes to the rapid spread of HIV (Cook and Clark 2005; Kalichman et al. 2007). Of particular importance are the social dynamics of alcohol use which center around the places where people drink and socialize including taverns, beer halls, and informal drinking establishments.

Businesses that serve alcohol are often the very places that link drinking with risks for HIV infection. In a Ugandan cluster study of 15 villages, for example, 4% of people live in homes that sell alcohol and 15% of people living in these homes are HIV positive; nearly double the 8% HIV prevalence in the surrounding community (Mbulaiteye et al. 2000). In addition, 42% of young men and 32% of young women surveyed at alcohol serving establishments in Zimbabwe report having sex after drinking in the previous 3 months and 15% of young men and 7% of women stated that they were drunk the last time they had sex (Mataure et al. 2002). Bottle stores, which sell carry away alcohol, can also serve as informal drinking venues and places where people meet to have sex (Lewis et al. 2005).

The most studied drinking places in relation to HIV risks in Africa are beer halls; large social venues that primarily serve beer to men. HIV prevalence is as much as two times higher among men in Zimbabwe who frequent beer halls than among men in the general population (Bassett et al. 1996; Fritz et al. 2002). Sixty percent of men and 41% of women who have multiple current sex partners report drinking at beer halls (Lewis et al. 2005). Lewis et al. also reported that HIV prevalence was associated with drinking at beer halls. For men, 27% of those who went to beer halls were HIV positive compared to 16% of men who did not go to beer halls. For women, 52% of beer hall drinkers were HIV positive compared to 29% of women who did not go to beer halls. However, women's risks for HIV were also related to their partner's going to beer halls; HIV prevalence was 25% for women who did not go to beer halls but their male partner did, whereas prevalence was 20% for women who neither they nor their partners go to beer halls.

Informal alcohol serving establishments, such as small bars and private homes where alcoholic beverages are sold and served (e.g., shebeens) are often the same places where sex partners meet (Morojele et al. 2004). Research conducted in South Africa suggests a close association between patronizing shebeens and HIV risks. Weir et al. (2003) mapped the linkages among places where people meet new sex partners and places where people drink alcohol. Weir et al. demonstrated a remarkable overlap between meeting sex partners and drinking in these venues; over 85% of the locations where people met sex partners were also alcohol serving establishments. The overlap was observed in both urban and rural areas. Across three South African cities, between 78% and 87% of new sex partners were met at shebeens. Between 30% to 57% of men and 19% to 46% of women drinking at shebeens reported having two or more sex partners in the past 2 weeks. Weir et al. also found that shebeens rarely have condoms available for their customers; 92% of alcohol serving establishments never had condoms available on site. Unfortunately, there is surprisingly little research on shebeens and their role in HIV transmission risks.

The purpose of the current study was to examine the HIV transmission risk behaviors of men and women who patronize shebeens in Cape Town South Africa. We were particularly interested in behavioral risk characteristics associated with meeting sex partners in the shebeens. We recruited men and women from shebeens to complete confidential surveys and compared participants who had met sex partners at the shebeen to those who had not met sex partners at the shebeen. In addition, we performed analyses to test for gender differences on demographic characteristics, substance use, and risk behaviors among men and women who had met sex partners at shebeens.

Methods

Participants

Participants were 248 women and 91 men recruited from shebeens in a suburban township in Cape Town South Africa. Women were over-sampled two-to-one to assure an adequate number of women who met sex partners at shebeens (Fritz et al. 2002; Morojele et al. 2006; Weir et al. 2003). All participants were age 18 and older, with a median age of 34. In terms of race, 247 (71%) participants self-identified as Colored (i.e., mixed race), 69 (20%) identified as African or Black, 7 (2%) as White or Indian, and the remaining 7% of participants did not answer the item regarding race.

Research Setting and Procedures

The township that participated in the current study is located within 20 km of Cape Town's central business district and was historically populated by mixed race (Colored) people during the final years of the Apartheid era and is among the first townships to begin racial integration in Cape Town. A significant racial minority group in South Africa (9% population) is known as Colored and is mainly made up of people who are of mixed race and is mostly concentrated in the Western Cape province; 50% of the Western Cape province and the city of Cape Town consist of Colored persons. Integrating in and around the township are indigenous Africans of Xhosa heritage.

Participants were recruited through an adapted snowball sampling procedure. We met with the owners of four shebeens within 0.5 km of a community center where the study was conducted. Shebeen owners were told of the research objectives and the study opportunity and were asked to identify two or three patrons we might recruit into the study. All four shebeen owners agreed to participate. We then used the selected shebeen patrons to inform people they knew from the shebeen about the study opportunity. The shebeen owners also gave us permission to place small flyers in their businesses to announce the study opportunity. Potential participants contacted the research site and were scheduled for a group administered assessment session. The entry criteria for the study were: currently living in the township and age 18 or older. A total of 388 individuals contacted the project office, of which 85% ($N=330$) agreed to enroll in the study. All participants who were scheduled attended their assessment session.

At the assessment session, participants completed informed consent and were administered a paper-pencil survey by research staff familiar with the township and its community. The staff members were trained in the research protocol and research ethics, particularly focus-

ing on confidentiality. Participants were asked to complete a self-administered survey, with less than 10% of participants requesting assistance, and were offered the opportunity to attend an HIV education program afterward. Staff instructed participants in how to complete the survey using an enlarged facsimile. Items and response formats were described section-by-section. Participants were compensated ZAR30 South African Rand (approximately US\$5) for their time and effort to complete the survey.

Measures

Measures were administered in English, Xhosa (an indigenous African language spoken throughout the Cape region of South Africa), and Afrikaans (the Dutch-rooted former national language of South Africa). The survey included demographic characteristics, alcohol and drug use, alcohol outcome expectancies, HIV risk history and sexual risk behaviors.

Demographic characteristics Participants reported their age, race, years of formal education, whether they were employed and their marital status.

Alcohol and other drug use To assess global use of alcohol, participants completed the Alcohol Use Disorder Identification Test (AUDIT; Saunders et al. 1992), a 10-item self-report instrument that was designed to identify individuals whose drinking places them at risk for developing alcohol problems or who are experiencing alcohol related problems. AUDIT scores range from 0 to 40, and scores of 9 or above are used to identify individuals who may be at risk or who are experiencing alcohol problems. We used 9 as the cutoff to provide greater specificity in detecting alcohol problems (Schmidt et al. 1995). The AUDIT has been used in research in South Africa (e.g., Bekker and Van Velden 2003; Simbayi et al. 2004) and is reliable and valid (Allen et al. 1997).

To examine quantity and frequency of alcohol use, we analyzed the first three items of the AUDIT separate from the entire scale (Saunders et al. 1992). The items were: “How often do you have a drink containing alcohol?” 0 = never, 1 = monthly or less, 2 = 2–4 times per month, 3 = 2–3 times per week, 4 = 4 times per week or more; “How many drinks containing alcohol do you have on a typical day when you are drinking?” 0 = one to two, 1 = three or four, 2 = five or six, 3 = seven to nine, and 4 = ten or more; and “How often do you have six or more drinks on one occasion?” 0 = never, 1 = less than monthly, 2 = monthly, 3 = weekly, 4 = daily or almost daily. To assess other drug use, we asked participants to indicate whether they had used cannabis (dagga), Methamphetamine (Tik), cocaine,

Mandrax (methaqualone, a sedative), and heroin in the past 3 months.

Alcohol outcome expectancies Participants completed a 10-item measure reflecting sex enhancing outcome expectancies from drinking alcohol. Items were initially adapted from a widely used general alcohol outcome expectancies measure (Brown, Goldman, Inn, & Anderson, 1980; Goldman & Darkes, 2004). Alcohol-sex outcome expectancy items were culturally adapted for use in South Africa. Example items include “I feel sexual after I have been drinking”, “I am a better sex partner after I have been drinking”, “Sex is better after I have been drinking”, and “Alcohol increases natural sex forces”. Items were responded to on four-point scales, 1 = *Strongly disagree*, to 4 = *Strongly agree*. The alcohol outcome expectancy measure was internally consistent, $\alpha=0.95$.

Drinking in sexual contexts and meeting sex partners at shebeens Participants indicated whether they drank alcohol, defined as beer, wine, or other alcoholic beverages, before sex in the previous month. Then we asked whether participants had a sex partner who drank before sex in that same time period. These measures represent frequencies of situational use of alcohol (Weinhardt and Carey 2001). Responses were made on open formats, with participants indicating the number of occurrences in the previous month. Participants reported if they had ever met a person at a shebeen that they subsequently had sex with and whether this had occurred in the previous month. Participants also reported whether they had sex with a person on the premises of the shebeen.

HIV risk history Participants indicated whether they had ever used or had a sex partner who used a condom and whether they had ever given or received money or other material gain in exchange for sex. Participants were asked if they had ever been tested for HIV and the result of their most recent HIV test.

Sexual risk behaviors Participants reported their number of male and female sex partners and frequency of vaginal intercourse occasions in the previous month. Participants were instructed to think back over the past month and estimate the number of male and female sex partners they had and the number of sexual occasions in which they practiced vaginal and anal intercourse. Numbers of partners and rates of sexual behaviors were recorded using open response formats where participants indicated the number of partners as well as frequencies of acts in the previous month. These measures were developed from instruments that have been shown to be reliable and valid (Schroder et al. 2003). Participants were also asked whether they had

ever exchanged sex for money, a place to stay, or material goods.

Data Analyses

For the purposes of this study, we conducted two sets of analyses for men and women who drink at shebeens. First, we divided participants into two subgroups: persons who did not report a history of meeting sex partners at shebeens ($N=236$) and those who did meet sex partners at shebeens ($N=94$). Logistic regressions were performed between the two groups on demographic characteristics, substance use, alcohol outcome expectancies, HIV risk histories, and sexual risk behaviors. We report adjusted odds ratios and 95% confidence intervals (95% CI). We followed the unadjusted logistic regressions with a multivariate analysis that included all of the independent indicators that were statistically significant ($p<.05$) in the unadjusted analyses. We avoided redundancies in the multivariate model by excluding sub-elements of general measures (e.g., not including both the alcohol frequency item from the AUDIT and the total AUDIT score in the multivariate model). In a second set of analyses, we subdivided the 94 participants who had met sex partners at shebeens by gender; 47 men and 47 women had met sex partners at shebeens. Comparisons of men and women were also first examined with unadjusted odds ratios followed by a multivariate model, again reporting 95% CI and interpreting statistical significance as $p<.05$. Missing values resulted in slightly different cell sizes for some variables and never exceeded 5% of cases.

Results

Results showed that 94 (28%) participants had met at least one sex partner at shebeens. Among the 94 participants who had met at least one sex partner at a shebeen, 52 (53%) had done so in the past month and 29 (30%) reported meeting two or more partners at shebeens in that time period. In addition, 23 of the 94 (25%) participants who had met a sex partner at shebeens had sex on the premises in the previous month, with 13 (14%) having done so two or more times during that time period.

Table 1 shows the demographic characteristics, substance use, HIV risk history, and sexual behaviors of participants who did and did not meet sex partners in shebeens. Men and unmarried persons were significantly more likely than women and married persons to have met sex partners at shebeens. Participants who met sex partners at shebeens reported greater frequencies and quantities of

alcohol use as well as AUDIT scores, indicating possible alcohol problems. The mean AUDIT score for individuals who had met sex partners at shebeens was 16.8 ($SD=9.3$) compared to a mean score of 10.5 ($SD=9.2$) for participants who had not met sex partners at shebeens, a significant difference, $OR=1.1$, 95% CI 1.1–1.2, $p<.01$. In addition, having met sex partners at shebeens was associated with drinking in sexual contexts and using non-alcohol drugs, namely cannabis and methamphetamine. Individuals who met sex partners at shebeens also endorsed significantly greater expectancies that alcohol enhances sexual performance and relationships.

Results also showed that individuals who had met sex partners at shebeens were significantly more likely to report having been diagnosed with a sexually transmitted infection and were more likely to have engaged in sexual exchange. With regard to sexual behaviors, having met sex partners at shebeens was associated with having had two or more sex partners in the previous month and reporting more unprotected vaginal intercourse during that time period.

Results of the multivariate regression, also shown in Table 1, indicated that being male, endorsing indicators of problem drinking, higher sexual enhancement expectancies for alcohol use, having two or more sex partners and higher rates of unprotected vaginal intercourse were significant independent factors associated with meeting sex partners at shebeens.

Differences Among Men and Women Who Have Met Sex Partners at Shebeens

Men ($N=47$, 52%) and women ($N=47$, 19%) had a history of meeting sex partners in shebeens. Both men ($N=31$, 69%) and women ($N=21$, 47%) had met sex partners at shebeens in the previous month. Men ($N=25$, 54%) were significantly more likely to have had sex on the premises of a shebeen in the previous month than were women ($N=11$, 23%), $OR=6.4$, 95% CI=2.0–20.0. Comparisons of men and women who had met sex partners at shebeens on demographic characteristics, substance use, HIV risk history, and sex behaviors indicated that men who had met sex partners at shebeens were significantly more likely than their female counterparts to have used cannabis, exchanged sex, and to have had two or more sex partners in the past month. In contrast, women were significantly more likely to indicate that their sex partners had drunk before sex in the past month and were significantly more likely to have been tested for HIV than men (see Table 2). The multivariate analysis showed that among those significant factors, having used cannabis, having been tested for HIV, and having had two or more sex partners in the past month independently differentiated men and women who had met sex partners at shebeens.

Table 1 Demographic and behavioral characteristics of shebeen goers who have and have not met sex partners at shebeens

	Met sex partners at shebeens (<i>N</i> =94)		Has not met partners at shebeens (<i>N</i> =236)		Unadjusted		Adjusted	
	<i>N</i>	%	<i>N</i>	%	OR	95%CI	OR ^a	95%CI
Demographic characteristics								
Men (reference)	47	50	42	18				
Women	47	50	194	82	4.6**	2.7–7.8	2.1*	1.0–4.2
Married (reference)	30	32	107	46				
Unmarried	664	68	129	54	0.6*	0.3–0.9	1.2	0.6–2.4
Race African/Black (reference)	24	25	42	18				
Colored	64	67	176	73	0.6	0.2–1.5		
Other	8	8	23	10	0.9	0.4–2.2		
Employed	19	20	36	15	1.3	0.7–2.5		
Age (<i>M</i> , <i>SD</i>)	31.7	9.5	34.8	10.4	1.0	1.0–1.1		
Education (<i>M</i> , <i>SD</i>)	9.4	2.1	9.0	2.3	0.9	0.8–1.0		
Alcohol and drug use								
Drinks 2+ times per week	35	38	57	24	1.8*	1.1–3.0		
Drinks 3+ drinks each time	73	76	130	54	2.7*	1.5–4.6		
AUDIT score 9 and higher	75	78	127	53	3.1**	1.8–5.3	3.8**	1.7–8.6
Drank before sex ^b (<i>M</i> , <i>SD</i>)	2.9	2.8	1.2	3.8	1.2**	0.1–1.3	1.0	0.9–1.1
Sex partner drank ^b (<i>M</i> , <i>SD</i>)	2.6	3.8	1.7	6.9	1.0	0.9–1.1		
Used Cannabis (Dagga)	32	34	33	14	3.2**	1.8–5.5	1.5	0.6–3.3
Used methamphetamine (Tik)	17	18	19	8	2.5**	1.2–5.1	1.6	0.5–4.7
Used cocaine	3	3	6	3	1.2	0.3–5.2		
Used other drugs	5	5	3	1	4.3	1.0–18.6		
Alcohol expectancies (<i>M</i> , <i>SD</i>)	24.2	7.9	15.3	7.6	1.1**	1.1–1.2	1.1**	1.1–1.2
HIV risk history								
STI diagnosis	26	27	35	15	2.2**	1.2–3.9	1.4	0.6–2.1
Exchanged sex	24	26	16	7	4.7**	2.3–9.3	1.4	0.5–4.0
Tested for HIV	49	52	129	54	1.1	0.7–1.8		
Tested HIV+	3	6	7	6	1.1	0.2–4.2		
Sexual behaviors^b								
2+ sex partners	33	34	20	8	5.6**	3.1–10.5	2.9**	1.3–7.0
Used condom at last sex	29	31	75	34	1.2	0.7–1.9		
Unprotected vaginal sex (<i>M</i> , <i>SD</i>)	4.5	6.7	2.4	4.4	1.1**	1.1–1.2	1.1*	1.1–1.2
Unprotected anal sex (<i>M</i> , <i>SD</i>)	1.6	9.7	0.4	2.2	1.1	0.9–1.1		
Percent condom use (<i>M</i> , <i>SD</i>)	52.2	38.4	57.1	38.6	0.7	0.4–1.3		

p*<0.05*p*<0.01^a Variables included in the multivariate model^b All sex behaviors reported the previous month

Discussion

Meeting sex partners at alcohol serving establishments is an important risk factor for HIV transmission in southern Africa. We found that one in four persons recruited from shebeens in a Cape Town township reported having met sex partners at a shebeen and among those individuals it was common to have had sex on the premises of a shebeen. The connection between alcohol serving establishments and sexual risks for HIV is at least in part a function of drinking in sexual networking contexts. Drinking before sex is more common with non-regular than with regular sex partners (Myer et al. 2002). We found that participants who met sex

partners at shebeens drank heavier, had more sex partners, and had higher rates of unprotected intercourse relative to their counterparts who did not meet sex partners at shebeens. Drinking establishments may amplify HIV transmission risks by providing a place where high-risk sex encounters can easily unfold (Fritz et al. 2002). Alcohol establishments are often themselves sex venues, where back rooms, corners, and adjacent buildings, shacks, or lots afford locations for sex (Morojole et al. 2006). Places that serve alcohol, such as shebeens, therefore appear closely linked to HIV transmission risks in southern Africa.

Having met sex partners at shebeens was independently associated with endorsing sexual enhancing alcohol out-

Table 2 Demographic and behavioral characteristics of men and women shebeen goers who have met sex partners at shebeens

	Men (N=47)		Women (N=47)		Unadjusted		Adjusted	
	N	%	N	%	OR	95%CI	OR ^a	95%CI
Demographic characteristics								
Married	13	28	17	38	0.6	0.3–1.6		
Race African/Black (reference)	16	34	7	14				
Colored	28	60	36	77	0.3	0.1–1.8		
Other	3	6	4	9	0.9	0.2–4.6		
Employed	10	21	9	20	1.1	0.4–3.0		
Age (M, SD)	30.9	9.9	32.4	9.1	1.0	0.9–1.1		
Education (M, SD)	9.6	2.1	9.1	2.1	0.9	0.7–1.1		
Alcohol and drug use								
Drink 2+ times per week	21	45	13	29	0.5	0.2–1.1		
Drinks 3+ drinks	34	72	37	79	1.4	0.5–3.6		
AUDIT score 8 or higher	35	75	38	78	1.4	0.5–3.8		
Drank before sex ^b (M, SD)	2.8	2.4	2.8	3.1	1.0	0.9–1.2		
Sex partner drank ^b (M, SD)	1.7	2.0	3.5	5.0	0.8 ^a	0.6–0.9	0.8	0.7–1.0
Used Cannabis (Dagga)	21	45	10	21	2.9 ^a	1.2–7.3	3.2*	1.1–10.1
Used Amphetamine (Tik)	9	19	8	17	1.5	0.4–3.3		
Used cocaine	2	4	1	2	2.0	0.2–23.2		
Used other drugs	5	10	0					
Alcohol expectancies	21.6	7.1	20.8	8.6	1.1	0.9–1.1		
HIV Risk history								
STD Diagnosis	17	36	9	20	2.3	0.9–5.9		
Exchanged sex	16	36	8	17	2.6*	1.1–6.9	1.5	0.4–5.3
Tested for HIV	20	42	29	63	2.3*	1.1–5.3	3.9*	1.3–12.1
Tested HIV+	1	2	2	4				
Sexual behaviors ^b								
2+ sex partners	22	47	10	21	3.3**	1.3–8.0	5.5**	1.7–18.0
Used a condom at last sex	15	33	13	28	0.8	0.3–1.9		
Unprotected vaginal sex (M, SD)	4.7	7.3	4.4	6.3	1.0	0.9–1.1		
Unprotected anal sex (M, SD)	0.3	0.7	2.6	13.7	0.8	0.5–1.2		
Percent condom use (M, SD)	56.4	36.9	49.6	40.1	1.6	0.5–4.7		

* $p < 0.05$ ** $p < 0.01$ ^a Variables included in the multivariate model^b All sex behaviors reported the previous month

come expectancies, over and above participant gender, alcohol use, and risky sexual behaviors. The importance of alcohol outcome expectancies in predicting HIV transmission risks has been suggested in previous research (Kalichman et al. 2007; Morojole et al. 2006). However, we are not aware of previous research that has demonstrated an intersection between alcohol outcome expectancies and meeting sex partners at shebeens. Our current study is cross-sectional in design and therefore does not allow for causal or directional conclusions; sexual enhancement expectancies may motivate persons to seek sex partners at places where alcohol is served and it is equally likely that meeting sex partners at shebeens enhances sexual outcome expectancies. Prospective studies are therefore needed to verify the directionality of the association between alcohol expectancies and meeting sex partners at shebeens.

We identified few gender differences among shebeen goers. Women were more likely to have been tested for HIV and men were more likely to have used non-alcohol drugs and to have had multiple sex partners. In addition, compared to men, women who met sex partners at shebeens were more likely to report that their partners drank before sex. Similar patterns of gender differences have been observed on these same characteristics in the general population of this same township (Kalichman et al. 2006). What was therefore most striking about the comparisons of men and women who had met sex partners at shebeens were their similarities on a variety of risk behaviors, including markers for HIV risk history. HIV risk reduction interventions for men and women who meet sex partners in shebeens may therefore address the same target behaviors within the same contexts. Interventions will of course

require continued attention to gender tailoring given that gender roles and social expectations for gendered behavior remain important.

The results of the current study should be considered in light of its methodological limitations. One important constraint on this study was the relatively small number of men in the sample. We over-sampled women two-to-one to assure that we would have enough women who had met sex partners at shebeens to conduct analyses, an a priori decision that was based on previous research (e.g., Fritz et al. 2002; Weir et al. 2003). Still, the relatively small number of men in the sample is a limitation of the study. The number of shebeens we sampled was also relatively small and came from a single area within a single township. It is also possible that these shebeens represent lower-risk environments because the owners were open to allowing us to recruit from their businesses. Another limitation is that we relied on self-report measures for all of the assessments in this study. Because self-reported substance use and sexual behaviors may be under-reported, the rates of behaviors observed should be considered lower-bound estimates. With these limitations in mind, we believe that the current study findings have important implications for future research and interventions.

Previous research in the US has shown promising effects of interventions that target alcohol use as a risk factor for HIV transmission. For example, Cooperman et al. (2005) found that women who attended alcohol treatment reduced their sexual risk behaviors, and similar results have been reported by others (e.g., Palepu et al. 2005). Challenging positive alcohol expectancies does not always lead to changes in drinking, but there is evidence that enhancing negative outcome expectancies can reduce alcohol use in specific situations (Jones et al. 2001). Intervention research is therefore needed to identify the optimal strategies for reducing sexual risk-related alcohol use and ultimately reducing sexual risk behaviors. Our findings suggest the importance of intervening at the level of the drinking establishment. By integrating HIV prevention into well-established and frequently attended social institutions, such as shebeens, HIV prevention activities have the potential to reach large numbers of persons at greatest risk for HIV infection. Fritz et al. (2002) reported that beer hall owners expressed interest in the possibility of implementing HIV prevention interventions in their businesses and this finding parallels our own experience at shebeens. Intervention models, such as Kelly et al.'s (1992, 1997) Popular Opinion Leader (POL), have demonstrated positive effects when delivered in bars in US cities. The POL intervention is aimed at changing the social climate and fostering social norms supportive of HIV risk reduction and condom use at the community level. Kelly et al. demonstrated that unprotected anal intercourse at the community level could

be reduced by promoting conversations about HIV/AIDS and safer sex among bar patrons. This model is particularly compelling for alcohol serving establishments because of the overlap between social and sexual networks that develop in these settings. Research testing structural and community level risk reduction interventions in alcohol serving establishments in southern Africa is urgently needed.

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