



## Patterns of alcohol use and sexual behaviors among current drinkers in Cape Town, South Africa

Lori A.J. Scott-Sheldon <sup>a,b,\*</sup>, Michael P. Carey <sup>a,b</sup>, Kate B. Carey <sup>c</sup>, Demetria Cain <sup>d</sup>, Ofer Harel <sup>d</sup>, Vuyelwa Mehlomakulu <sup>e</sup>, Kelvin Mwaba <sup>e</sup>, Leickness C. Simbayi <sup>e</sup>, Seth C. Kalichman <sup>d</sup>

<sup>a</sup> Centers for Behavioral and Preventive Medicine, The Miriam Hospital, Providence, RI, USA

<sup>b</sup> Department of Psychiatry and Human Behavior, Alpert Medical School, Brown University, Providence, RI, USA

<sup>c</sup> Center for Alcohol and Addiction Studies, Brown University, Providence, RI, USA

<sup>d</sup> Center for Health, Intervention, and Prevention, University of Connecticut, USA

<sup>e</sup> HIV/AIDS, STIs and TB, Human Sciences Research Council, Cape Town, South Africa

### ARTICLE INFO

#### Keywords:

Alcohol  
South Africa  
Sexual risk  
Heavy episodic drinking  
HIV

### ABSTRACT

**Objective:** This study examined the association between alcohol use and sexual behaviors among South African adults who reported current drinking.

**Method:** Street-intercept surveys were administered to adults residing in neighborhoods in a South African township.

**Results:** Analyses were restricted to participants reporting current drinking ( $N = 1285$ ; mean age = 32; 27% women; 98% Black). Most participants (60%) reported heavy episodic drinking (i.e., 5 or more drinks on a single occasion) at least once per week in the past 30 days. Compared to non-heavy episodic drinkers, participants who reported heavy episodic drinking were more likely to drink before sex (79% vs. 66%) and have sex with a partner who had been drinking (59% vs. 44%). Overall, drinking before sex (self or partner) and heavy episodic drinking was associated with multiple sexual partners, discussing condom use with sexual partner(s), and proportion of protected sex. The frequency of condom use varied among participants with steady, casual, or both steady and casual sexual partners.

**Conclusions:** Alcohol use among South African adults is associated with sexual risk behaviors, but this association differs by partner type. Findings suggest the need to strengthen alcohol use components in sexual risk reduction interventions especially for participants with both steady and casual sex partners.

© 2012 Elsevier Ltd. All rights reserved.

### 1. Introduction

South Africa has the highest prevalence of HIV in the world with an estimated 5.6 million South Africans living with HIV (UNAIDS, 2010). In addition to bearing the heaviest HIV burden, South Africa also has the highest levels of alcohol consumption per adult drinker than any other region in the world (Rehm et al., 2003). According to the 2003 South African Demographic and Health Survey, 30% of South African men and 17% of women report current alcohol use with 12% of men and 14% of women reporting hazardous or harmful levels of alcohol consumption (South African Medical Research Council, 2007). Approximately one-third of South African adults reported heavy episodic drinking (Peltzer & Ramlagan, 2009). Heavy episodic drinking (HED) is defined as drinking 5 or more drinks on a

single occasion during the past week (World Health Organization, 2011).

The HIV epidemic in South Africa is associated, in part, with alcohol use (Fisher, Bang, & Kapiga, 2007). Risky alcohol consumption in South Africa has increased in recent years, partially due to the increased consumption of commercial alcoholic beverages with higher alcohol content than traditional homebrews (Parry et al., 2005; Peltzer & Ramlagan, 2009). Environments where alcohol is consumed, such as drinking venues, are frequently associated with sexual behaviors conferring risk for HIV infection (Fritz, Morojele, & Kalichman, 2010). Research shows that participants who meet sexual partners at drinking venues are more likely to have multiple sexual partners and more unprotected sex than those who did not meet their partners at drinking venues (Kalichman, Simbayi, Vermaak, Jooste, & Cain, 2008). Informal alcohol serving establishments, such as small bars and private homes where alcoholic beverages are sold and served, popularly known as “shebeens,” are often places where sex partners meet (Kalichman, Simbayi, Vermaak, Jooste, et al., 2008; Morojele et al., 2006; Weir et al., 2003). Furthermore, sex between new or casual partners often occurs at or around drinking venues

\* Corresponding author at: Centers for Behavioral and Preventive Medicine, Coro Building, Suite 314, One Hoppin Street, Providence, RI 02903, USA. Tel.: +1 401 793 8714; fax: +1 401 793 8059.

E-mail address: [lori\\_scott-shedon@brown.edu](mailto:lori_scott-shedon@brown.edu) (L.A.J. Scott-Sheldon).

(Kalichman, Simbayi, Vermaak, Jooste, et al., 2008; Morojele et al., 2006; Myer, Matthews, & Little, 2002). Finally, Kalichman, Simbayi, Vermaak, Jooste, et al. (2008) showed that meeting sexual partners in shebeens is associated with problem drinking. The association between alcohol use and sexual risk behaviors suggests that importance of examining high risk alcohol use (i.e., HED) as well as contextual factors (i.e., drinking before sex or partner drinking before sex) associated with sexual risk and prevention behaviors.

Consuming large quantities of alcohol (e.g., HED), but not the frequency of drinking, is associated with having more sexual partners, unprotected sex, and concurrent sexual partners (Kalichman, Simbayi, Kaufman, Cain, & Jooste, 2007). A recent meta-analysis examining the association between alcohol use and HIV from studies conducted in Africa (Fisher et al., 2007) found drinker status to be associated with HIV infection such that drinkers were 70% more likely to be HIV-positive than non-drinkers. Risk of HIV was notably higher among problem drinkers vs. non-problem drinkers. Baliunas, Rehm, Irving, and Shuper (2010) found the incidence of HIV was associated with overall level of alcohol consumption. Moreover, risk of HIV infection among heavy episodic drinkers was double that of non-heavy episodic drinkers. HED is a risk factor in the transmission of HIV.

Efforts to understand alcohol-related risks must also take into account the context in which alcohol is consumed. Alcohol consumption, before or during sex, is associated with sexual behaviors that may increase the risk of acquiring HIV infection (Baliunas et al., 2010). For example, Simbayi et al. (2004) found alcohol use before sex was associated with multiple sexual partners and more unprotected sexual occasions among patients at a South African sexually transmitted disease (STD) clinic. Among HIV<sup>+</sup> South Africans, drinking before sex was associated with unprotected sex but only when participants consumed greater amounts of alcohol (Kiene et al., 2008). Heavy episodic drinkers may consume more alcohol during sexual events because they drink more alcohol in all contexts. Furthermore, Kiene et al. found drinking before sex was associated with a higher likelihood of unprotected sex when participants reported having sex with a casual rather than a steady sexual partner. Thus, the association between contextual alcohol use and risky sexual behavior may be moderated by sexual partner type.

The primary purpose of this study was to use cross-sectional data to examine the association between alcohol use and sexual risk

behaviors among South Africans. Specifically, we examined individual (HED) and contextual (self or partner drinking before sex) factors that may influence the association between alcohol use and sexual risk behavior among current drinkers. We expected that both individual and contextual alcohol use would be associated with multiple sexual partners, failure to discuss condom use with sexual partners, and fewer condom-protected events. A secondary purpose was to explore the alcohol-risky sexual behavior association by partner type (steady partners only, casual partners only, or both steady and casual partners). We expected individual alcohol use would predict risky sexual behavior with steady partners, whereas the context of alcohol use would be associated with risky sexual behavior with casual partners given that alcohol use prior to sex is more common with casual rather than steady sexual partners (Myer et al., 2002). Examining the association between alcohol use and sexual risk behavior can guide intervention development to avert new infections among South Africans who consume alcohol.

## 2. Methods

### 2.1. Participants and procedures

We restricted our analyses to the 1285 (out of 1694) participants who reported using alcohol in the past month (Table 1). Participants (98% Black African; *M* age = 32, *SD* = 8.54, range = 19–57 years; 27% women) were residents of a large primarily Xhosa-speaking (predominantly Black African) township in Cape Town, South Africa, who reported consuming alcohol at least once in the past month (76% of the sample). The township, with discrete and geographically demarcated neighborhoods, was located approximately 20 km from Cape Town's central business district. The township comprise indigenous Africans of Xhosa cultural heritage. We used the PLACE (Priorities for Local AIDS Control Efforts) method, described by Weir, Morroni, Coetzee, Spencer, and Boerma (2002) and Weir et al. (2003), to identify neighborhoods where the risk for HIV is greatest. Field workers used street intercept methods to sample from eight non-contiguous neighborhoods within the township. Our previous research found that within a township, residents had similar alcohol consumption and sexual risk behavior patterns (Kalichman et al., 2006). Demographic and socioeconomic rates in the neighborhoods

**Table 1**  
Characteristics of the sample overall and by heavy episodic drinking status.

Variables	Overall ( <i>N</i> = 1285)	No heavy drinking ( <i>n</i> = 516)	Heavy drinking ( <i>n</i> = 769)	Test for differences
<b>Demographics</b>				
Age	31.62 (8.54)	31.17 (8.05)	31.93 (8.84)	<i>t</i> (1280) = −1.57, <i>p</i> = .12
Gender (% women)	27%	27%	26%	$\chi^2$ (1) = 0.12, <i>p</i> = .73
Ethnicity (% Black African)	98%	98%	98%	$\chi^2$ (1) = 0.03, <i>p</i> = .86
<b>Type of sexual partner</b>				
Steady, %	46%	49%	44%	$\chi^2$ (2) = 3.90, <i>p</i> = .14
Casual, %	6%	5%	7%	
Both steady and casual partners, %	37%	35%	39%	
<b>Sexual risk factors</b>				
Participant drank alcohol before sex	6.37 (9.06)	5.21 (9.60)	7.14 (8.61)	<i>t</i> (1245) = −7.13, <i>p</i> < .001
Partner drank alcohol before sex	3.84 (7.21)	4.31 (6.16)	3.13 (8.50)	<i>t</i> (1253) = −5.39, <i>p</i> < .001
<b>Sexual risk behaviors</b>				
Sexual partners (% ≥ 2 partners)	44%	42%	45%	$\chi^2$ (1) = 1.08, <i>p</i> = .30
Condom use (mean %)	0.49 (0.38)	0.53 (0.39)	0.46 (0.37)	<i>t</i> (1093) = 2.97, <i>p</i> < .01
Frequency of condom use, steady partners	3.08 (1.96)	3.34 (2.06)	2.89 (1.86)	<i>t</i> (1071) = 3.70, <i>p</i> < .001
Participants with both partner types	2.83 (1.86)	2.99 (1.94)	2.74 (1.81)	<i>t</i> (476) = 1.44, <i>p</i> = .15
Frequency of condom use, casual partners	4.62 (1.75)	4.81 (1.63)	4.51 (1.81)	<i>t</i> (555) = 1.98, <i>p</i> = .05
Participants with both partner types	4.62 (1.75)	4.44 (1.84)	4.91 (1.57)	<i>t</i> (475) = 2.85, <i>p</i> < .01
Discussed condom use with sexual partner	53%	57%	50%	$\chi^2$ (1) = 6.84, <i>p</i> = .01

Note. Unadjusted means (SD) are provided except where noted. Heavy episodic drinking was defined as 5 or more drinks on a single occasion during the past week. Proportions of participants reporting steady, casual, or both steady and casual sexual partners do not sum to 100 because some participants (*n* = 131) did not report having a steady or a casual sexual partner. Responses to the measures of frequency of condom use with steady and/or casual partners ranged from 1 (never) to 6 (all the time) and included any participant reporting sex with a steady sexual partner (frequency of condom use, steady partners) or any participant reporting sex with a casual sexual partner (frequency of condom use, casual partners) in the past 30 days (i.e., participants could be included in both analyses if they reported having sex with a steady and a casual partner).

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات