

The DRAM, Vol. 4(1) - Alcohol use and HIV risk in South Africa

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Residents of sub-Saharan Africa comprise 60% of the 41 million people in the world with acquired immune deficiency syndrome (AIDS; World Health Organization and UNAIDS, 2004); about 18.8% of South African adults have human immunodeficiency virus (HIV; World Health Organization, 2006). Changing behaviors that increase the risk of HIV exposure, such as risky consumption of alcohol, might improve the public health in this region. This week's DRAM reviews a study examining the relationships among alcohol-sex outcome expectancies, alcohol use in sexual contexts, sensation seeking, and HIV risk behaviors within a population of South African sexually transmitted infection (STI) clinic patients (Kalichman, Simbayi, Jooste, Cain, & Cherry, 2006)

The men (292) and women (219) receiving STI services from a clinic in Cape Town anonymously reported demographic information, drug use history, and responses to the Alcohol Use Disorder Identification Test (AUDIT; Saunders, Aasland, Barbot, de la Fuente, & Grant, 1993). In addition, these respondents completed culturally-adapted versions of The Sensation Seeking Scale (Kalichman et al., 1994) and an alcohol-sex outcome expectancy scale (Kalichman & Simbayi, 2003). The participants also reported HIV risk-related behaviors, such as unprotected sex, number of sex partners, and injection drug use. The authors created a composite index of these behaviors. The authors tested correlations among these measures.

Variable	HIV risk index	Alcohol use in sexual contexts	Alcohol-sex outcome expectancies
Sensation seeking	.20*	.09*	-.08
Alcohol-sex outcome expectancies	.19*	.34*	---
Alcohol use in sexual contexts	.36*	---	---

* $p < .01$

Adapted from Kalichman (2006)

Figure. Correlations among sensation seeking, alcohol-sex outcome expectancies, alcohol use in sexual contexts, and HIV risk index scores. Click image to enlarge.

The sample was 98% indigenous African, 90% were unmarried, 87% had a high school education or less, 58% were unemployed, and 45% were under 25 years of age. About 64% of men and 23% of women met criteria for problem drinking according to their AUDIT scores. Controlling for marital status and gender, those

with drinking problems scored higher than those without such problems on sensation seeking, alcohol-sex expectancy, and more HIV risk factors. Problem drinkers were not more likely to have HIV, but only half had ever been tested. HIV risk was associated positively with all three variables, and sensation seeking was significantly related to alcohol use within the context of sex, which was related to HIV risk (see Figure).

Three factors limited the study methodologically. The study used retrospective self-report. Participants might have reported inaccurately past information about sex and substance use. Second, correlations prohibit determining which variable causes another. Finally, the authors only sampled one public health clinic within one geographic area, so these results might not generalize to other locations or to other populations.

A number of variables surrounding alcohol consumption reflect HIV risk behaviors. Although we cannot assume causality from the data, providing education about the dangers of drinking in sexual contexts might lower alcohol-sex outcome expectancies and the risk of HIV, especially for sensation seekers. Effective efforts to reduce incidence of HIV in South Africa can expand past targeting just safer sex practices, to targeting behaviors, personalities, and contexts that can compromise these practices.

—Leslie Bosworth

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References

- Kalichman, S. C., Johnson, J. R., Adair, V., Rompa, D., Multhauf, K., & Kelly, J. A. (1994). Sexual sensations seeking: Scale development and predicting AIDS-risk behavior among homosexually active men. *Journal of Personality and Assessment*, 62, 385-397.
- Kalichman, S. C., & Simbayi, L. C. (2003). HIV testing attitudes, AIDS stigmas, and voluntary HIV counseling and testing in the Western Cape, South Africa. *Sexually Transmitted Infections*, 79, 442-447.
- Kalichman, S. C., Simbayi, L. C., Jooste, S., Cain, D., & Cherry, C. (2006). Sensation seeking, alcohol use and sexual behaviors among sexually transmitted

infection clinic patients in Cape Town, South Africa. *Psychology of Addictive Behaviors*, 20(3), 298-304.

Saunders, B. J., Aasland, O. G., Barbot, T. F., de la Fuente, J. R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption: II. *Addiction*, 88, 791-804.

World Health Organization. (2006). *Epidemiological Fact Sheets on HIV and Sexually Transmitted Infections: South Africa*. Geneva, Switzerland: World Health Organization.

World Health Organization and UNAIDS. (2004). *AIDS epidemic update*. Geneva, Switzerland: World Health Organization.