

AIDSTAR-One SPOTLIGHT ON PREVENTION

Alcohol and Risky Sex: Breaking the Link

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Look beneath the surface of the HIV epidemic in any country around the globe and you will find an array of structural drivers of risk that are rarely discussed. These are the underlying social forces that influence whether individuals choose a healthy behavior instead of an unhealthy one, or whether they have a choice at all. Poverty, gender inequality, stigma, and discrimination are all such structural drivers of risk. But in countries battling the most severe HIV epidemics in the world, there is yet another powerful and under-addressed structural force at play: the ubiquitous availability of cheap alcohol and drinking norms that encourage its hazardous use.

According to the World Health Organization, alcohol use is the world's third largest risk factor for disease and disability (World Health Organization 2011). Only child malnutrition and unprotected sex are responsible for more ill health globally. Alcohol contributes to a wide range of health harms, including injury, liver disease, and cancer. Only recently, however, has alcohol's role in the transmission of HIV begun to be recognized and measured, and interventions developed to address it.

Alcohol and HIV

Research conducted around the world, much of it in the high HIV-prevalence countries of sub-Saharan Africa, shows quite consistently that alcohol consumption is associated with risky sexual behavior

(Cook and Clark 2005; Kalichman et al. 2007). People who drink alcohol engage in more unprotected sex, multiple partnering, and commercial sex than do non-drinkers (Kalichman et al. 2007; Zablotska et al. 2006). More specifically, multiple studies have shown that drinking alcohol before sex or being intoxicated during sex is directly linked with HIV. In Rakai, Uganda, use of alcohol before sex increased HIV acquisition by 50 percent in a study of over 14,000 women and men (Zablotska et al. 2006). Among men who visited beer halls in Harare, Zimbabwe, having sex while intoxicated was strongly associated with having recently acquired HIV (Fritz et al. 2002). Similarly, in a large study of male wine bar patrons in Chennai, India, unprotected sex was found to be significantly higher among those who used alcohol before sex (Sivaram et al. 2008). And in Mumbai, India, sex under the influence of alcohol was independently associated with having a sexually transmitted infection or HIV among men who patronized female sex workers (Madhivanan et al. 2005).

Drinking venues have also been associated with HIV risk because they bring together the opportunity to drink alcohol and meet casual sex partners. In rural eastern Zimbabwe, a population-based survey of nearly 10,000 women and men showed that visiting a beer hall in the last month was associated with both risky behavior and with HIV infection (Lewis et al. 2005). In Cape Town, South Africa, men and women who met sex partners at informal bars (*shebeens*)

engaged in heavier drinking, had more sex partners, and had higher rates of unprotected sex compared to people who did not meet sex partners at shebeens (Kalichman et al. 2008).

Research has also elucidated the causal pathway underpinning this association. We know that alcohol decreases cognitive capacity to accurately judge risk and increases attention to sexual arousal (Cue Davis et al. 2007; George and Stoner 2000). Alcohol use may thus facilitate risk taking among individuals who would not take the same risks while sober.

But how much alcohol use is risky? Evidence is mounting that it is not the frequency of drinking as much as the quantity drunk on a given occasion that best predicts ill health and risky sex. Heavy episodic drinking, more popularly known as “binge drinking,” is defined as five or more drinks on a single occasion for men, or four or more drinks on a single occasion for women, generally within about two hours (National Institute of Alcohol Abuse and Alcoholism 2004). Binge drinking is a common practice around the world, but in countries with high HIV prevalence, it is particularly common and may explain a great deal of the alcohol-HIV association. Across sub-Saharan Africa, for example, nearly one-third of drinking men reported binge drinking once a week or more in the past year (World Health Organization 2011), and the prevalence of this behavior is highest in the southern African countries most affected by HIV.

More research is needed to understand the causal links between alcohol consumption and risky sex. But one thing is certain: in countries experiencing very high rates of HIV infection, high rates of hazardous drinking may be exacerbating the epidemic.

The Response

Innovative programmatic approaches to respond to hazardous use of alcohol and risk of HIV infection are

currently underway in several developing countries. These programs are being delivered only on a small scale and are concentrated in Eastern and Southern Africa. A main challenge, as with all structural drivers of the epidemic, is that creating an effective response requires working at several levels simultaneously.

The Individual

Those who engage in hazardous drinking, such as binge drinking, need to be made aware of the risks to their health. They need opportunities to explore how alcohol may trigger their risky sexual behavior and what they can do to avert those risks by moderating their drinking.

The World Health Organization’s Brief Intervention model (Babor and Higgins-Biddle 2001) for counseling primary care patients who screen positive for problem drinking is the foundation for these individual-level programs. It has been adapted by the Human Sciences Research Council of South Africa and successfully used with sexually transmitted infection clinic patients in Cape Town (Fritz 2010). In Kenya, screening and brief counseling for problematic alcohol use have been integrated into the Liverpool VCT, Care & Treatment program and post-test clubs with promising results (Mackenzie et al. 2008).

Individual and group counseling services also need to be widely available for individuals who are actually addicted to alcohol. The current availability of dependency treatment is woefully inadequate in all low-income countries with high HIV prevalence. However, some organizations, such as the Nairobi-based Support for Addictions Prevention and Treatment in Africa (www.sapta.or.ke), are working tirelessly to expand these critical services by training addiction counselors who can work in community settings and with populations most at risk for HIV, such as sex workers and impoverished urban youth (Support for Addictions Prevention and Treatment in Africa 2011).

Social Norms

An effective alcohol-HIV response requires programs that seek to shift social norms about drinking. These may take the form of mass media campaigns, peer education, community outreach, or edutainment at drinking venues. Binge drinking on the weekend, for example, reflects a common norm: that alcohol is an appropriate reward for hard work. In most societies, alcohol and masculinity norms are also tightly linked, where the ability to drink heavily has come to represent physical strength, endurance, and sexual prowess. All of these deeply engrained norms are enthusiastically used by alcohol producers to advertise their products, thus ensuring endless reproduction of unhealthy drinking behaviors.

But norms can also be challenged—by employers in conversation with their staff, by bartenders in conversation with their patrons, by community opinion leaders in conversation with their peers, and by parents in conversation with their children. In Chennai, India, for example, popular individuals at local wine bars were empowered to dispel the commonly held notion that social drinking among male friends should naturally be followed by seeking casual or commercial sex (Sivaram et al. 2004). School curricula can also be used to help children explore deeply rooted norms about drinking, imagine alternatives, and practice the skills they will need to resist societal pressure to conform (AIDSTAR-One 2010; Karnell et al. 2006). Mass media and community outreach programs, such as Soul City South Africa's Phuzza Wize program, use a television soap opera and other media to relay information about hazardous drinking and explore community responses to alcohol use and violence (Soul City Institute 2011).

Laws and Policies

Finally, national and international alcohol legislation and policy represent a vitally important yet little de-

veloped avenue for reducing alcohol-related harm. As leading alcohol researchers point out in a 2008 editorial in the *British Medical Journal*, "Alcohol is the only strong psychoactive substance in common use that is not controlled internationally" (Room et al. 2008, a2364). To date, alcohol still lacks an international framework convention (such as exists for tobacco) that would legally bind nations to certain standards for how alcohol can be marketed and sold.

However, in 2010, the World Health Assembly endorsed a global strategy to reduce the harmful use of alcohol and is working with member states to develop policies, laws, and programs to reduce the burden of disease associated with alcohol (World Health Assembly 2010). Among other things, these include reducing the availability of alcohol through taxation and pricing policies, legislating how alcohol is marketed, and improving enforcement of underage drinking laws—all proven approaches for reducing population-level alcohol consumption and thus limiting its harm. Ironically, policymakers in low and middle income countries, where the burden of alcohol-related disease is often highest, have the least incentive to create and enforce such laws. In many of these countries, investment by national and multinational breweries is perceived to be a critical contributor to economic growth.

Despite these obstacles, some countries have taken tough stands on alcohol regulation. In 2008, for example, Botswana instituted an unprecedented 30 percent levy on alcoholic beverages. In 2010, the government increased the levy to 40 percent, the revenue from which is directed toward education and recreation programs for youth and other health promotion activities, as well as alcohol addiction services. The levy was championed by President Ian Khama, who specifically called out HIV risk as a consequence of heavy drinking. Other countries, such as South Africa and Kenya, have recently passed legislation to limit how and where alcohol is advertised and marketed.

A Multilevel Response to Alcohol

As the HIV epidemic enters its fourth decade, the world grapples with how to sustain its response. More and more, we realize that sustainability relies on integrating HIV prevention into broader health and social development agendas so that funding can be leveraged for its greatest impact. How to achieve this integration is perhaps the most pressing question HIV practitioners and funders are now asking. Focusing on structural drivers may be one answer. Although it might seem like an unaffordable luxury to address these so-called “distal” determinants of health, in reality, nothing could be more pragmatic.

Just consider the potential multiplier effects of a coordinated, multilevel response to alcohol, which has the potential to reduce not only the spread of HIV in countries most heavily impacted, but simultaneously reduce rates of fetal alcohol syndrome, death and injury from car crashes and violence, liver disease, tuberculosis, high blood pressure, psychological disorders, and some cancers, to name just some of the more obvious potential benefits. Other important benefits include improving worker productivity and decreasing health care costs substantially (Harwood, Fountain, and Livermore 1992).

Thus, attending to structural drivers of ill health, such as alcohol, makes integration across health and other social programs impossible not to do, and the creative collaborations that result can serve to sharpen and strengthen everyone’s toolkit. Against the backdrop of static or diminishing funds for HIV, building an effective and sustainable response may in fact depend on our ability to recognize and address these higher-level determinants of health. ■

About the Author

Katherine Fritz, PhD, MPH, is Director of Global Health at the International Center for Research on Women. Her training is in cultural anthropology and public health. She has conducted HIV prevention research since 1994,

focusing on developing and testing culturally appropriate community-level interventions in sub-Saharan Africa. Since 2000, much of her research has centered on understanding alcohol use as a driver of HIV risk, including conducting the first randomized controlled trial of a bar-based HIV prevention intervention in Africa. She currently serves as AIDSTAR-One’s technical lead in the area of alcohol and HIV.

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