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Perceptions of Alcohol Risk Among Individuals Living with HIV

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Abstract

The documented prevalence of alcohol use among individuals with HIV is higher than reported among the general public. Little is known about how populations with HIV perceive the risks of alcohol use and what they consider to be safe levels of consumption. This qualitative study was conducted to increase understanding of the situations and environments in which alcohol is consumed and to explore the perceptions of risks among individuals with HIV who were engaged in medical care and using alcohol regularly. Nineteen qualitative semi-structured individual interviews were conducted. The major themes that arose from these analyses were patterns of alcohol use, perceptions of risk based on the type of alcohol used, and the impact alcohol had on health. Findings suggest that alcohol is used regularly with little perception of risk; alcohol is perceived to have little effect on health and HIV progression; and providers rarely discuss alcohol use with patients. Future research includes assessment of alcohol use and the delivery of brief interventions to improve general health and HIV-related outcomes.

Introduction

HIV prevention remains a public health priority (CDC, 2008). Efforts to improve health outcomes of individuals with HIV and reduce HIV incidence are ongoing. Secondary prevention efforts have included reducing risk behaviors and enhancing engagement in medical care (CDC, 2003; Janssen et al., 2001).

Alcohol use is more prevalent among individuals with HIV than the general public (Galvin et al., 2002; Justice et al., 2004) and is associated with risky behaviors, including having multiple sex partners and less frequent condom use (CDC, 2003; Chander, Lau, & Moore, 2006; Cook et al., 2006; Durvasula, Myers, Mason, & Hinkin, 2006; Samet, Horton, Meli, Freedberg, & Palepu, 2004; Samet, Horton, Traphagen, Lyon, & Freedberg, 2003). Heavy alcohol use has been linked to progression of HIV disease (Samet et al., 2003), possibly mediated by inadequate adherence (Braithwaite et al., 2005; Chander et al., 2006; Conigliaro et al., 2003; Samet et al., 2004; Scott, 2009; Wilson, Hutchinson, & Holzemer, 2002). Heavy alcohol consumption has many detrimental physiological effects, impacting liver function, leading to toxicity and complications of HIV medications (Kresina, et al., 2002). Addressing alcohol use among this population is important (Durvasula et al., 2006; Fama et al., 2007).

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Unfortunately, a safe level of alcohol consumption for individuals with HIV is unknown. Without clear guidelines, providers often limit discussions regarding alcohol. While health care providers might be aware of the relationship between HIV and alcohol, HIV patients are not routinely asked about alcohol consumption, and counseling services are seldom available. Many factors limit alcohol use screening, including limited time and the social acceptability of alcohol (Chander et al., 2006; Conigliaro et al., 2003). Unfortunately, alcohol use disorders are often missed, particularly in patients without obvious comorbidities such as chronic liver disease (Conigliaro et al., 2003). Unrecognized alcohol problems may result in suboptimal management of HIV.

Previous research has examined perceptions of alcohol use and associated risks among adolescents and college students, but there is little data regarding alcohol consumption, the perceived risk of alcohol use, or perceptions of its effect on health outcomes among individuals with HIV. Comprehensive screening will provide the opportunities to deliver brief interventions to enhance care. Highlighting the need for these interventions may influence provider practice and thus, address risk perceptions, beliefs and use patterns among individuals with HIV. This qualitative study was designed to increase understanding about perceptions of the associated risks of alcohol use among individuals with HIV and the situations in which alcohol is consumed to learn how an intervention to reduce alcohol use would be best developed and delivered.

Methods

This study was conducted at an urban, Midwestern HIV clinic. Participants were screened for eligibility during clinic visits. All patients were assessed for current alcohol use while waiting to be seen by their health care providers as part of standard of care. Eligible participants reported drinking ≥ 4 drinks in the past week for women and ≥ 5 drinks per week for men. This cut-off was used to establish a sample of those who consume alcohol with some regularity. While this was a low threshold in relation to the NIAAA guidelines, the purpose of the study was to understand perception of risk associated with alcohol and routines surrounding alcohol use. Eligible participants were invited to participate; informed of the purpose of the interview: to increase understanding of the challenges of living with HIV, daily routines, and behaviors related to HIV infection. Demographics, current illicit drug use, and HIV biomedical parameters were collected to describe this sample. Interviews were conducted in the clinic and lasted approximately one hour. Each participant provided written informed consent prior to the start of the interview and was remunerated $20 at the end of the interview. This study was approved by Washington University Institutional Review Board.

The interview guide was developed with a transdisciplinary team of medical anthropologists, the HIV Clinic Director, and epidemiologists. The overall goal was to understand the environment and situations in which risk behaviors occurred and how individuals perceived these behaviors in relation to their HIV status. Alcohol use patterns were assessed to understand the perceptions of alcohol abuse and the role of alcohol on health outcomes. The purpose of this study was to provide insights for intervention development. The scope of our interview guide was narrowly defined due to the homogeneity of the sample's HIV status. Process evaluations were conducted to assess saturation in data collection, when qualitative findings were repeated, and interviews ended when there was a perception of saturation by the principal investigator (Guest, Bunce, & Johnson, 2006).

Open coding procedures were used to avoid imposing any preconceived theoretic constructions. Interviews were coded using ATLAS.ti 5.0 (Muhr, 2004), which allowed

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codes to be condensed and clustered into concept memos and compared using thematic categories and analytic schemes (Bernard, 1994; Charmaz, 2006; Patton, 1980).

Results

Nineteen individuals were interviewed during July and August 2007. The majority was male ($n = 13$) with 7 African Americans and 6 Caucasians. The sample included 5 females, of whom 4 were African American and 1 was Hispanic/Latino, and one male-to-female transgendered African American participant. The median age was 46 years (range 29-57 years). The majority of participants reported annual incomes <$20,000 ($n = 13$) and were unemployed ($n = 11$). Participants reported a median of 17 years (1-23 years) since HIV diagnosis. Ten participants reported becoming engaged in medical care within three months of their diagnosis, while seven engaged in medical care ≥ 1 year after diagnosis, 2 participants could not recall. During the past 30 days, 4 participants reported using crack, one of whom reported daily use. The median number of alcoholic drinks reported during a 7 day period was 12, (range 6-48 drinks). Median CD4 cell count for this sample was 333 cells/mm^3 (IQR 251-599). Eleven participants reported being on HAART medication, 8 of whom had viral loads <400 copies/mL.

Analyses from the open-ended interviewing highlight three major themes: 1) patterns of alcohol use, 2) perceptions of risk associated with the type of alcohol used, and 3) the influence of alcohol on health and HIV infection.

Patterns of Alcohol Use

The majority of respondents described alcohol use as a common part of their daily lives, whether drinking socially or in isolation. Individuals portrayed drinking as an acceptable behavior, regardless of social surroundings. One male respondent reported, “When we went out to dinner last night we had wine. If I go out with friends I'll have a cocktail or two, or will go over to a friend's house for a drink.” Another reported going to the same bar every day at happy hour and having two to three drinks. Respondents also described how alcohol use is perceived differently in various social situations. For instance, a male respondent stated, “There is no alcohol in my home. My mom don't like to have it in the house because she doesn't drink.” Others reported having specific individuals with whom to drink. “My little brother, that's the main one I drink with,” reported one respondent. Another respondent reported that she drank “at home, I don't go out and drink.” This was in conjunction with her partner who also drinks: “He drink his beer and he don't throw it in my face, you know like trying to force me to drink.”

Daily Routines of Alcohol Use—Alcohol consumption varied in respondents’ daily routines. One male respondent said that he drinks “in the afternoon, while I'm doing a little work or something around the house. I just have a taste for it and I go and get one [beer].” Another respondent seemed to incorporate drinking into his daily routine saying, “I drink when I get home from work, usually. I get a tumbler and I just fill it up with bourbon coke. Usually I have 2 of those a night. But it's a tumbler; it's not just a glass.” Other respondents started their day drinking: “Having a beer in the morning puts me in an ideal mood.” A male respondent described the manner in which he incorporated drinking in his day saying, “I had one [beer] after I took my shower at 7:30 this morning before breakfast.” Another noted alcohol starts his day: “Just to get me up, get my blood flowing. Just like this morning, just get me rolling to get me here, okay?”

Reasons for Alcohol Consumption—Respondents discussed reasons for their alcohol consumption in the context of their patterns of use; which revealed diverse responses

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ranging from “I want to sleep” to another respondent plainly stating the desire “to get drunk.” One female respondent shared that she drinks “when I'm depressed,” a sentiment shared by another male respondent: “Usually I'm down in the dumps when I start drinking.” One woman discussed how drinking helps me to process emotions: “It calms me down, but then it, it makes me bring out everything inside of me that I wasn't saying to myself because I talk to myself a lot and it brings out what I feel about everything.” Another respondent described his alcohol use as related to the taste of beer specifically: “I like the taste and it's more of a thirst, you know. I don't drink it for the effect.” Only one respondent discussed his alcohol use as a complement to other drug use, “Well, the only time I drink is when I use cocaine. All of that comes together.”

Perceptions of Risk Associated with the Type of Alcohol Used

Respondents perceived types of alcohol to have different effects. For instance a male respondent who would only drink beer said, “No I can't drink anything that's hard.” Another referred to her partner's drinking patterns: “He drink beer in the summer time and drink strong liquor in the winter time because it don't make him as sick.” This distinction between beer and liquor was commonly reported by the respondents and is summed up by a male respondent: “Beer is not like that liquor, it will just tear his brain out.”

Several respondents reported how beer, specifically, was a part of their daily lives. One male respondent stated, “I love my beer, I drink two to three beers a day.” Another male respondent stated, “I just have that one beer. I do my eight [hours of work], I get off and then I stop and have two Bud Lights®, but last night I got three of them.” When respondents referred to drinking a beer, the majority reported 32 ounces being the typical amount consumed. Most respondents described a daily routine that includes beer consumption.

Risk Reduction Efforts—Respondents reported changes in consumption over time, as one male respondent stated, “Typically I’m going to have a beer maybe once a day. You know, just before dinner. When I was drinking, I was drinking hard liquor and beer and wine. I'd been drinking everything.” Another respondent reported drinking “beer, wine, whiskey, whichever [was] available back in the days. But now all I drink is beer.” One female respondent described how she has tried to cut back her consumption: “A drink or two after work or a drink or two in the morning would lead me right back to where I started and I don't want to be there.” The same respondent also described having several beers “every so often.” The notion of changing patterns of alcohol consumption was clear as one man stated, “I was a very early drunk. I'm not now because I know how to control it when I drink now...I was always drunk.” Another male reported how different his alcohol-related behaviors were now, “I mean because I wasn't paying attention and being careful about it. I mean I drove drunk.” The changes in alcohol consumption were never discussed in relation to HIV infection, instead related to age and development.

Perceived Influence of Alcohol on Health

The final theme that arose was the effect on health and HIV-specific health of respondents. One male described alcohol, “It's a depressant. I'm going through this stuff and I'm still walking around, I'm still drinking.” One male reported perceiving the risk of alcohol consumption as related to HIV and dealing with psychiatric disorders, “Supposedly, it has an adverse effect on me being bipolar, which I don't notice.” Another male referred to the complications related to alcohol use: “It's bad on your liver. But that's what I was told by my counselor.” Additionally, a male respondent referred to alcohol's effect in relation to his diagnosed heart disease: “Probably raises my blood pressure.” One female respondent reported that she had painful symptoms related to drinking alcohol, “But I can feel it when it's messing with me because my sides start hurting real bad. My stomach start hurting real

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bad. My sides and my stomach start hurting real bad....” When she was asked if her health care provider was aware of the symptoms she experienced when she was drinking, she diverted her response, “All I know is that I'm still having all these pains I been having.” Although the interviewer asked about the relationship between alcohol use and HIV complications, there was little concern expressed by respondents.

Health Care Provider Perceptions—Respondents reported that medical care providers' perceptions of alcohol use were varied. One male suggested a doctor recommended drinking beer, “One time they told me yeast was good for me, you know the yeast in the beer was good for me, it wouldn't harm me, so it was like...‘Can I get another doctor, please?’ Throughout most of the interviews, individuals who drank in larger amounts than those who drank less stated that their health care providers knew their levels of alcohol consumption. One male responded, “I'm sure he does. I answered a long list of questions many, many times.” Another male claimed that his health care provider was aware of the amount of alcohol he drank and “he doesn't really say anything,” while another male respondent claimed his doctor told him “I need to quit.” Yet another stated that his health care providers know how much he drinks and had recommended quitting. For many of the respondents, the perceived risk was minimal, and therefore discussing alcohol use patterns with their medical care providers seemed unnecessary.

Perceived Alcohol Impact on Health Outcomes—The impact of alcohol on HIV-related health outcomes was perceived as minimal. Several respondents developed routines to drink alcohol around the times they took their medications to limit any impact. One said, “You ain't diluting your medicine and it ain't affecting your health. But don't drink with it because it will put you down. Don't drink with the medicine. That's not going to work and it's gonna make you sick.” They seemed to manage their alcohol consumption and medication in ways to best promote both drinking and adhering to their medication. One respondent reported drinking large amounts regularly and taking his medication without concern of interactions, because “I don't drink it to get drunk.” One woman reported that she is concentrating on cutting down her alcohol intake, “I'm trying to make myself better than I was and I know alcohol kills medicine.” One male respondent described his alcohol and drug use patterns in relation to health care providers' recommendations.

> “They haven't said that drinking messes with the medication... No one came to me and said slow down. We talked about the marijuana smoke and using crack cocaine that will deteriorate you from what I gather. I started out drinking, I did the hard stuff first and then I eased all the way down to the mild stuff. That's my lifestyle and I don't do it every day, but it's still part of my lifestyle.”

Another respondent discussed his challenges with problem drinking, “And, I'm a practicing alcoholic. I've tried AA and it just--I'm not ready to stop yet. I'll stop when I'm ready to stop...”

Discussion

Limited data is available regarding the extent of alcohol use among HIV-infected populations (Chander et al., 2006; Conigliaro et al., 2003; Samet et al., 2004; Samet et al., 2003). Furthermore, routine screening recommendations have been difficult to implement consistently in primary care settings (NIAAA, 2007). Given highly prevalent alcohol use among our HIV-infected population, we performed this qualitative study to gain insight into the patterns of alcohol use, the perceptions of risk related to alcohol, and the perceptions of the impact of alcohol on health (Shacham et al., 2009). Most respondents reported drinking large quantities of alcohol weekly yet fail to perceive significant health risk. Additionally, respondents reported that they received minimal risk reduction counseling regarding alcohol

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use. These findings, albeit from a selected group of individuals, highlight the underutilization of provider feedback serves as tacit approval of alcohol consumption and its negative impact on risk behaviors and overall health. Simple screening tools and discussion aids regarding alcohol can greatly enhance HIV care providers' ability to assess alcohol use and intervene, when appropriate.

The discussions highlighted disordered alcohol consumption typically not revealed in routine interviews. Respondents commonly reported symptoms of abuse and dependence including the timing of first drink of the day, drinking in isolation, and as treatment for symptoms of depression or anxiety. These factors are important in relation to the diagnosis of alcohol use disorders and interventions, yet without specific questioning, most providers are unaware of these symptoms. Another common theme focused on alcohol serving sizes. Previous qualitative research has documented this factor as a challenge to screening (Lemmens, 1994). These findings demonstrate misperceptions regarding alcohol use among patients are prevalent.

There were few perceived risks in association with alcohol consumption. Many participants reported that they were not drinking to feel intoxicated and therefore perceived it as a safe behavior, although the lack of intoxication was likely reflective of high tolerance. Furthermore, there was minimal recognition that increased quantity of consumption was associated with greater health risks. Previous research has explored this lack of knowledge and inability to differentiate risk based on quantity (Greenfield & Kerr, 2008; Greenfield & Rogers, 1999; Kerr et al., 2005; Lemmens, 1994; Sjoberg, 1998). While the current consumption of beer was not perceived as harmful behavior, the majority of the sample believed that previous consumption of hard liquor had been detrimental to their health. In fact, the current consumption of beer alone was reported as a harm reduction strategy by many respondents. These changes in patterns of alcohol use (liquor to beer) that occur from adolescence through adulthood are consistent with previously reported research. Unfortunately, these changes do not serve as harm reduction illustrating that the biases regarding type of alcohol are often misguided (Greenfield & Rogers, 1999; Kerr, Greenfield, Tujague, & Brown, 2005).

Recommendations regarding alcohol consumption are challenging given the social acceptability of alcohol. The majority of individuals reported that their health care providers were aware of their alcohol use; however the inconsistent feedback was most often based on informal and often incomplete questioning by providers. The amount of alcohol consumed provides another opportunity for intervention and education. For instance, the reporting of drinking a beer is not adequate, particularly when an individual might be referring to a 32-ounce beer (Lemmens, 1994). Using established alcohol screening instruments can help overcome some of these challenges (Babor, Kranzler, & Lauerman, 1989; Hesselbrock, Babor, Hesselbrock, Meyer, & Workman, 1983; Mackenzie, Langa, & Brown, 1996; NIAAA, 2007). Furthermore, several respondents reported they had been counseled to abstain, yet only one recounted discussions specifically related to alcohol use. This study found that the use of alcohol among individuals with HIV is perceived as innocuous and little intervention is being conducted by providers to reduce consumption in order to improve HIV-related health outcomes.

This study illustrates the need for a consistent approach to alcohol screening in HIV care settings. Alcohol consumption is common and adversely influences both health behaviors and health outcomes. The results illustrate the need for increased and thorough routine screening for alcohol use and the development of methods to address high alcohol consumption in the outpatient clinic setting and patient intervention regarding alcohol use.

Future research includes quantitative assessment of alcohol use and the delivery of physician-delivered brief interventions to improve general health and HIV-related outcomes.

Limitations

These findings are limited in scope due to the relatively small sample. It was a cross-sectional examination conducted with a clinic-based sample recruited in one clinic during a short period of time. The study design did not allow for comparisons by gender or race, which can be done in larger quantitative studies. The screening for eligible participants relied on self-reported consumption. Topics that were not repeated during the interviews were unlikely to be included in the analysis. The study results did offer initial insight as to the patterns of alcohol use among this population, their perceptions of alcohol's risks related to their health outcomes, and patients' perspective of alcohol use interventions delivered by their health care providers.

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