ALCOHOL-RELATED PROBLEMS AND HIGH RISK SEXUAL BEHAVIOUR IN PATIENTS WITH HIV/AIDS ATTENDING MEDICAL CLINIC IN AHMADU BELLO UNIVERSITY TEACHING HOSPITAL (A.B.U.T.H), ZARIA

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ABSTRACT

Objectives: To determine the rate of alcohol related-problems in patients with HIV/AIDS.
To determine the association between alcohol-related problems and high risk sexual behavior in patients with HIV/AIDS.
Methodology: A consecutive sample of 120 patients with HIV/AIDS attending the M.O.P.D in A.B.U.T.H, Zaria was assessed. All participants were screened for alcohol related problems (hazardous use, harmful use and dependence) using the Alcohol Use Disorder Identification Test (AUDIT). High risk sexual behavior was assessed using the HIV Risk-taking Behavior Questionnaire (HRBQ). A socio demographic questionnaire was also administered.
Result: Alcohol-related problems were found in 28.3% of participants, 10% had hazardous use, 3.3% had harmful use and 15% had alcohol dependence. There was a significant association between alcohol-related problems and risky sexual behavior.
Conclusion: Alcohol-related problems are fairly common in people already infected with HIV/AIDS and are associated with high-risk sexual behavior which promotes further HIV transmission. Thus, treatment should be part of an effective HIV intervention/prevention program.

INTRODUCTION

People with alcohol use disorders are more likely than the general population to contract HIV. Similarly, people with HIV are more likely to abuse alcohol at some time during their lives.[1] Krupitsky et al. found a rate of 9% for alcohol abuse/dependence in hospitalized patients with HIV/AIDS[2]. Alcohol use is associated with high-risk sexual behaviors and IV drug use which are two major modes of HIV transmission.

In persons already infected, the combination of heavy drinking and HIV has been associated with increased medical and psychiatric complications, delays in seeking treatment,[3] difficulties with HIV medication compliance,[4,5] and poorer HIV treatment outcomes.[6] Decreasing alcohol use in people who have HIV or who are at risk for becoming infected reduces the spread of HIV and the diseases associated with it.

Nigeria has the third largest population of people living with HIV/AIDS in the world, after India and South Africa. The seroprevalence rate has been on the increase from 1.8% in 1991 to 5.4% in 1999 (FMH sentinel survey report, 1999).

Alcohol-related problems are a major public health issue. A review of the studies on alcohol use in Nigeria shows that there has been a rapid increase in alcohol availability and consumption in recent times with young adults in universities and colleges being those mainly concerned.[7] Most alcohol-related problems appear in non-alcoholic dependent individuals who fall into the categories of hazardous or harmful drinkers according to the WHO (2000) terminology.

Studies in Nigeria have focused on lifetime and current prevalence rates of alcohol use without exploring alcohol-related problems.[8,9] Adewuya in a sample of University students found Alcohol related problems in 13.2% of subjects of which 9.4% had Hazardous drinking, 3.1% had Alcohol abuse and 0.74% had Alcohol dependence[10]. There is an urgent need to encourage extensive epidemiological and longitudinal studies of alcohol-related problems in Nigeria in order to accurately determine the populations at risk. Early detection of people with hazardous alcohol intake and time bound interventions aimed at decreasing alcohol consumption and thus the likelihood of harm and dependence is warranted.

People who abuse alcohol are more likely to engage in behaviors that place them at risk for contracting or transmitting HIV. A history of heavy alcohol use has been correlated with a lifetime tendency toward high-risk sexual behaviors, including multiple sex partners, unprotected intercourse, sex with high-risk partners (e.g., injection drug users, prostitutes), and the exchange of sex for money or drugs.[11, 12–14] There may be many reasons for this association. For example, alcohol can act directly on the brain to reduce inhibitions and diminish risk perception.[15–17] Decreasing alcohol use among HIV patients not only reduces the medical and psychiatric consequences associated with alcohol consumption but also decreases other drug use and risky sexual behavior and hence reduce HIV transmission[6]. Thus, alcohol and other drug abuse treatment can be considered primary HIV prevention as well.[18]

METHODS

The subjects were made up of a consecutive sample of 120 patients with HIV/AIDS attending the virology clinic at the Ahmadu Bello University Teaching Hospital, Zaria during the period from April to May 2008.

Subjects were administered the sociodemographic questionnaire, Alcohol Use Disorder Identification Test (AUDIT) and the HIV Risk-taking Behavior Questionnaire (HRBQ). The AUDIT was used to screen for subjects with alcohol related problems and those with AUDIT score of 4 to 6 were said to have Hazardous drinking, those with scores of 7 to 8 had Alcohol abuse and those with scores of 9 and above had Alcohol dependence[10].

The HRBQ was used to assess subjects risky sexual behavior which was categorized as "high" or "low" on the basis of subjects reporting the following: having not used a condom at the last sex, having had an occasional partner at the last sex, having had three or more partners in the last 12 months, having had six or more cumulative partners, having a history of sexually transmitted diseases and having received or given money or gift in exchange for the most recent sexual encounter. Respondents reporting fewer than two risk factors were defined as having low risk while those reporting two or more were defined as having high risk sexual behavior[19].

The twelfth edition of Statistical Package for Social Sciences (SPSS-12) Software was used for the data entry and analysis. Chi-square test was used to characterize the significance of the difference between high risk sexual behaviors in HIV/AIDS patients with Alcohol related problems compared to those without Alcohol related problems. The level of significance was set at 5% confidence limit.

RESULTS

A total of 120 subjects with HIV/AIDS participated in the study. The socio-demographic characteristics of subjects are presented in Table 1.

Table 1. Socio-demographic characteristics of subjects

Variables	Frequency	Percentages (%)
Gender		
Male	78	65
Female	42	35
Mean age	32.4 (SD 6.97)yrs	
Marital status		
Single	54	45
Married	50	41.7
Divorced	6	5
Widowed	10	8.3
Employment		
Unemployed	64	53.3
Employed	56	46.7
Education		
Primary	14	11.7
Secondary	44	36.7
Tertiary	46	38.3
Arabic	6	5
None	10	8.3
Family type		
Monogamous	84	70
Polygamous	36	30
Religion		
Christianity	56	46.7
Islam	64	53.3

The number of HIV/AIDS patients with and without alcohol related problems are presented in Table 2 below

Table 2: Patients with and without Alcohol related problems

Variables	Frequency	Percentage
Alcohol related problems	34	28.3
No Alcohol related problems	86	71.7
Alcohol related problems		
Hazardous use	12	10
Alcohol abuse	4	3.3
Alcohol dependence	18	15
Total	34	28.3

High risk sexual behavior was observed in 10 (8.3%) of subjects while 110 (91.7%) had low risk sexual behavior.

Risky sexual behavior in HIV/AIDS patients with Alcohol related problems was compared with that in similar group of patients with no Alcohol related problems as shown in table 3.

Table 3 Risky sexual behavior in HIV/AIDS patients with and without Alcohol related problems

Diagnosis	Low risk sexual behavior	High risk sexual behavior
No Alcohol related problems	84 (76.4%)	2 (20%)
Alcohol related problems	26 (23.6%)	8 (80%)
Total	110 (100%)	10 (100%)

X^2= 42.449 df=1 p value= .000

DISCUSSION

This study found a preponderance of male gender (65%) among patients with HIV/AIDS. This was not surprising considering the fact that the study was conducted in a region where women (especially those belonging to the Moslem faith) has cultural restrictions which tend to limit them from attending the hospital unless when permitted by their husband.

The mean age of the subjects was 32.4 (SD 6.97) years. The possible reason for this is that people are most sexually active between the ages of 18 to 25 years and are likely to acquire the infection during this period. However, symptoms may not become apparent until about 10 to 12 years after initial infection making it more likely for patients to present in their 30s. Some previous studies also had similar findings.[20]

A large proportion of subjects were married (41.7%) and about 30% live in polygamous settings which have major implications and carry the risk of further HIV transmission among spouses and their children. Majority of the subjects (53.3%) were unemployed as was the case in some other studies.[21] This may be due to ill health and discrimination. Also, such category of patients may indulge in excessive alcohol use as a maladaptive coping strategy.

A significant proportion of the subjects had Alcohol related problems (28.3%), with 10% having Hazardous use, 3.3% having alcohol abuse and 15% alcohol dependence. This is in keeping with several other studies that found increased rate of alcohol related problems in patients with HIV/AIDS.[1,2] The rate of alcohol related problems found in this study is much higher than the 13.2% found in a sample of University students in Nigeria.[10] People with HIV/AIDS may be more likely to abuse alcohol as an expression of maladaptive coping strategy or due to the presence of other co-morbid psychiatric conditions which are prevalent in patients with HIV/AIDS such as adjustment disorders, anxiety disorders, personality change and Affective disorders. It may also be due to chronic frustration from discrimination and unemployment among others. High risk sexual behavior was observed in 8.3% of subjects and 80% of subjects with high risk sexual behavior also had alcohol related problems. There was a significant association between alcohol related problems and high risk sexual behavior. A history of heavy alcohol use has been correlated with a lifetime tendency toward high-risk sexual behaviors.[11,12-14] There may be many reasons for this association. Alcohol can act directly on the brain to reduce inhibitions and diminish risk perception and hence produce a tendency towards high risk sexual behavior.

As HIV continues to spreads rapidly in Nigeria and most of Africa, addressing alcohol use in HIV-infected persons holds potential to decrease the transmission of HIV by lowering the prevalence of high sexual behaviors. At present, the most effective way to slow the spread of HIV/AIDS is through changing the sexual risk behaviors that transmit HIV from individual to individual. Drinking alcohol significantly increases the risk of these behaviors in complex ways. The availability and abuse of alcohol increases the difficulty of preventing initiation of these risk behaviors and the difficulty of maintaining protective behaviors once they have been adopted. In addition, continued abuse of alcohol by HIV infected individuals increases the negative impact of the disease on the individuals, their

families, and the health care system. Interventions to reduce alcohol abuse and treat alcohol dependence significantly improve the success of HIV preventive and treatment interventions.

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