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PREVALENCE AND SOCIO-DEMOGRAPHIC CORRELATES OF ALCOHOL USE DISORDERS AMONG HIV PATIENTS

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ABSTRACT

The rate of alcohol consumption is high among individuals living with HIV. The combination of hazardous alcohol drinking and HIV is deleterious to the health of the individual and the general public. Therefore, this study attempts to estimate the prevalence of alcohol use disorders in HIV-infected patients and to assess the socio-demographic factors associated with it. Across sectional descriptive study was conducted among 160 consecutive patients attending the infectious disease unit of the Plateau State Specialists Hospital Jos. A semi-structured questionnaire was used to collect data on socio-demographic variables and Alcohol Use Disorders Identification Test (AUDIT) was used to assess alcohol use disorders. The estimated prevalence of alcohol related problems was 39.4% with 28.8% harmful drinking and 10.6% hazardous drinking (alcohol abuse); 33.1% had started drinking before they were diagnosed with HIV and 6.3% after diagnosis. Male sex (p=0.000), poor education(p=0.000) and low income (p=0.002) were significantly associated with alcohol use disorders. The study revealed that alcohol use disorders are high among HIV infected patients who are males with low socio-economic status. We therefore recommend for screening and treating alcohol problems in HIV patients.

Key Words: Alcohol use disorders, socio-demographics, HIV/AIDS, harmful use

INTRODUCTION

The rate of alcohol consumption is high among individuals living with HIV/AIDS. People who abuse alcohol are more likely than the general population to contract HIV (Petry, 1999; Kalichman et al., 2007; Brown & Wechsberg, 2010). Similarly, HIV infected individuals are more likely to abuse alcohol and other substances at some time during their lives (Lefvre et al., 1995).

Studies have consistently shown that alcohol use is related to high risk sexual behaviour through multiple reasons. For example multiple sex partners, unprotected inter-course and sex with high risk partners (Audu et al., 2009; Avins et al., 2000; Boscarino et al., 1995; Malow et al., 2001). High rates of risky sexual practices have been reported among adolescents (Grunbaum et al, 2002) and may be correlated with alcohol consumption (Malow et al, 2001). There may be many factors for this association, some of which include expectations regarding the effects of alcohol on sexual arousal and performance, reduced inhibitions and diminish risk perceptions (McDonald

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et al., 2000; Fromme et al., 1999; Cooper, 2002).

The combination of problem drinking and HIV has been associated with increase medical and psychiatric complications, delays in seeking treatment and poorer outcome (Samet et al, 1998; Lucas et al, 2002). Alcohol consumption among persons with HIV may lead to disease progression through immunosupression (Wang & Watson 1995) and impaired adherence to HIV medication (Cook et al, 2001; Wagner, 2001). Tucker and Colleagues (2003) found that persons who drank tended to have worse adherence than those who did not drink, with non-adherence increasing with level of drinking severity. Furthermore, heavy alcohol consumption can also affect both efficiency and toxicity of HIV medication (Fein et al, 1998) and interfere with the metabolism of protease inhibitors (Fabris et al., 2000).

The accuracy of available prevalence of problem drinking among HIV infected persons has been inconsistent either because of small sample size, confinement of study to specific geographical areas and measurement strategy or instrument employed (Cook et al, 2001; Dingle and Oei, 1997; McManus and Weatherburn, 1994). In an analysis of a national probability sample Galvan et al (2002) found that 8% of patients with HIV infection reported heavy alcohol consumption. It was also found that being male, younger and having lower income were associated with heavy drinking.

Studies based on HIV clinic attendees have reported significant alcohol use in 22-63% of HIV patients (Cook et al., 2001; Samet et al., 2004). The prevalence of current alcohol use disorders have been estimated to range from 3-12% (Dew et al., 1997; Ferrando et al., 1990). Research findings have shown lifetime prevalence of alcohol related problems in individuals with HIV/AIDs to be 26% to 60% (Ferrando et al., 1998) compared with that of the general population of 14-24% (Regier et al., 1990; Kessler et al., 1994).

In Nigeria, studies have focused on life time and current prevalence rates of alcohol use without exploring alcohol related problems (Adejide et al., 1987; Adelekan et al., 1992). Obot (1993) in a general population survey in the Middle Belt of Nigeria found the prevalence of light, moderate and heavy drinkers to be 16.5%, 16.7% and 10.4% respectively. Furthermore, the prevalence of alcohol related problems in a sample of Nigeria students was found to be 13.2% (Adewuya, 2005).

Early detection and intervention aim at reducing alcohol consumption in HIV patients will not only reduce medical and psychiatric consequences associated with alcohol consumption, but also decreases other drug use and risky sexual behaviour thereby, reducing HIV transmission (Lucas et al., 2002; Chersich, 2009). Thus, alcohol and other drug abuse treatment can be considered primary HIV prevention as well (Metzger et al., 1998; Boscarino et al., 1995). Despite these findings, there is limited information available on the use of alcohol and its predictors among HIV/AIDS patients in Nigeria. Hence, we undertook this study to investigate the prevalence and socio-demographic correlates of alcohol use disorders among HIV infected patients receiving treatment. The specific objectives of the study were; to estimate the prevalence of alcohol use disorders in HIV/AIDS patients and to assess the socio-demographic factors associated with alcohol use disorders among HIV/AIDS infected patients.

METHOD

The cross-sectional descriptive study was carried out at the infectious disease unit of the Plateau State Specialist Hospital, Jos. Jos is the capital city of Plateau state and it is located at the centre of North central region of Nigeria. It has an estimated population of 822,873.

Ethical clearance

Ethnical approval was sought for and obtained from the Health Research Ethics Committee of the hospital before the commencement of the study.

Population

The population for this study consisted of all patients (aged 16 years and above) receiving treatment for HIV/AIDS at the infectious disease unit of the hospital.

Instrument

Alcohol related problems were assessed with Alcohol Use Disorders Identification Test (AUDIT). The AUDIT is a cross-culturally validated instrument which has demonstrated good content, criterion and construct validity (NIAAA, 1995) and reliability from 0.77 to 0.83 alpha (Bohn, Babor & Kranzler, 1995). The ten-item instrument includes questions to determine patterns of drinking considered harmful, hazardous and symptomatic dependence in the preceding 12 months. A score of 4 to7 and eight and above were considered indicative of harmful and hazardous use (alcohol abuse) respectively. A semi-structured questionnaire was used to collect the socio-demographic data.

Procedure

With the informed consent of each consecutive subject the semi-structured questionnaire was used to collect socio-demographic data and AUDIT was used for assessment of alcoholic consumption. This was done on every clinic day until a sample size of 160 patients was obtained. Those who failed to give consent were excluded.

RESULTS

A total of 63 (39.4%) of the 160 patients, were identified to have alcohol related disorders with 46(28.8%) and 17(10.6%) as harmful drinking and hazardous drinking respectively. Higher proportion 53(33.1%) of patients with alcohol related problems had started drinking before they were diagnosed with HIV compared to 10(6.3%) who started drinking after diagnosis.

The mean age of the study sample was 35.6 years (SD = 8.667 years). The majority of respondents were aged between 24-34 years, representing 45% of the study sample. This group had the highest number (29; 46%) of patients considered to have alcohol related problems.

There was a preponderance of female subjects (64.4%); despite this males constituted majority (55.6%) of those with alcohol related problems compared with females (44.4%).

A higher proportion (42; 66.7%) of alcohol related problems was seen in those who were singles than those who were married (21; 33.3%). Of those who earned less than ten thousand naira monthly 49(77.8%) had significant alcohol related problems compared to those who earned more than ten thousand naira monthly (14; 22.2%). A majority, (55; 87.3%) of those who had secondary education or below were significantly associated with alcohol

Table 1: Patients' alcohol related problem status and type and disorders

Drinking and problem variables	n	%
A. Patients with and without alcohol related problems		
No alcohol related problems	97	60.6
Alcohol related problems	63	39.4
Total	160	100
A. Patients with alcohol related disorders and when they started drinking alcohol		
Started drinking before diagnosis	53	53
Started drinking after diagnosis	10	10
Total	63	63
C. Types of alcohol related disorders		
Harmful drinking	46	28.8
Hazardous drinking	17	10.6
Total	63	39.4

Table 2: The relationship between socio-demographic variables and alcohol related problems

Socio-demographic variables	Alcohol related problems		Total	Statistics
	None	Present		
Sex:				
Male	22 (22.7)	35(55.6)	57(35.6)	$X^2 = 17.999$
Female	75(77.3)	28(44.4)	103(64.4)	df = 1
Total	97(100)	63(100)		$p = 0.000$
Age:				
15 – 24	9(9.3)	3(4.8)	12(7.5)	$X^2 = 1.361$
25 – 34	43(44.3)	29(46.0)	72(45.0)	df = 3
35 – 44	30(30.9)	19(30.2)	49(30.6)	$p = 0.715$
45 and above	15(15.5)	12(19.0)	27(16.9)	
Total	97(100)	63(100)	160(100)	
Marital status:				
Singles (never married, divorced, separated, widows & widowers)	69(71.1)	42(66.7)	111(69.4)	$X^2 = 0.359$ df = 1
Married	28(28.9)	21(33.3)	49(30.6)	$p = 0.549$
Total	97(100)	63(100)	160(100)	
Monthly income in Naira:				
< 10,000	47(48.5)	49(77.8)	96(60.0)	$X^2 = 13.685$
> 10,000	50(51.5)	14(22.2)	64(40.00)	df = 1
Total	97(100)	63(100)	160(100)	$p = 0.000$
Educational level:				
Secondary Education & below	63(64.9)	55(87.3)	118(73.8)	$X^2 = 9.858$
Tertiary education	34(35.1)	8(12.7)	42(26.2)	df = 1
Total	97(100)	63(100)	160(100)	$p = 0.002$

related problems compared with (8; 12.7%) who had tertiary education. Low income, poor education and male sex were significantly associated with alcohol related problems.

DISCUSSION

This study found a high rate of alcohol related problems (39.4%; 28.8% with harmful drinking and 10.6% with hazardous drinking), 33.1% started drinking before they were diagnosed with HIV and 6.3% after diagnosis. This is consistent with earlier studies that found high rate of alcohol related problems among patients with HIV/AIDS (Petry, 1999; Lefvre et al, 1995).

The prevalence of alcohol related problems found in this study is agreed with that reported in the general population (Obot, 1993) but much higher than 13.2% found in a sample of university students in Nigeria (Adewuya, 2005). People with alcohol related problems are more likely to contract HIV infection because they tend to engage in behaviours that place them at risk (Malow et al, 2001). Similarly, 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 (Olley et al, 2003; Pence et al, 2008).

This study had a preponderance of females (67.6%). However, there was a significantly higher percentage of alcohol related problems among males compared with females. This concurs with the study done by Olley et al, (2003). This discrepancy may be accounted for by socio cultural factors in our environment. Studies have also reported that there is gen-

der- difference in responses, such as increased alcohol use and more risky behaviors in men (Olley et al, 2003).

Large proportion of alcohol related problems was found among those without spouse (61.4%). This high rate may reflect the difference in the composition of the study group. Having lower income has been associated with heavy drinking (Galvan, 2002). Similarly, this study demonstrated a significant relationship between low socio-economic status and alcohol related problems. This could be as a result of chronic frustration from discrimination and unemployment among HIV/AIDS patients. Additionally, low socio-economic factors could certainly have affected their ability to access and utilize available resources necessary for their well being.

In conclusion, this study has shown that there is high rate of alcohol related problems and socio-demographic correlates associated with it among persons with HIV/AIDS. The high prevalence of alcohol related problems in HIV/AIDS patients underscore the need for screening of alcohol related problems in all HIV/AIDS patients receiving treatment. Particular attention should be given to individuals who are males, with lower socio-economic status. Implementing these measures can reduce alcohol related problems in HIV positive individuals, with potential benefits for both their personal health and the public health in general.

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