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**PSYCHOACTIVE SUBSTANCE USE AS CORRELATES OF
QUALITY OF LIFE AMONG UNDERGRADUATES IN
UNIVERSITY OF LAGOS**

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ABSTRACT: The study investigated the relationship between substance use and the quality of life of undergraduate students in the University of Lagos. It also determined if students who use alcohol in combination with other psychoactive substances report lower quality of life than students who use other substances apart from alcohol. The study was a cross-sectional survey involving One hundred and forty two (142) participants using a convenient sampling method. The sample comprised 61 females and 81 males. A self-report questionnaire, which included questions that elicited the demographic information from participants and three psychological instruments namely; The World Health Organization Quality of Life Scale (WHOQOL Brief) World Health Organization Alcohol Use Disorder Identification Test (WHO AUDIT), and The Drug Abuse Screening Tool (DAST-10) was used to collect data from participants. The results showed that the use of psychoactive substances is a predictor of low quality of life ($r = -.353$, $p < .001$). It also showed that, the use of alcohol in combination with other psychoactive substances is also a predictor of low quality of life when compared to using other substances apart from alcohol ($r = -.253$, $p = .002$). The study concluded that the use of psychoactive substances has a negative influence on the quality of life of undergraduate students. The finding of the present study implies that parents, guidance's and teachers need to be more involved and monitor the activities of students especially their involvement in substance use so as to reduce or help them overcome the desire to use drugs.

Keywords: Psychoactive Substance Use, Quality Of Life, Undergraduates, Lagos

INTRODUCTION

Quality of life according to Rice, (1984) "is the degree to which the experience of an individual's life satisfies that individual's wants and needs (both physically and psychologically)". Quality of life, also known as life satisfaction, has to do with functioning and well-being, it is the subjective perception an individual has towards several aspects of his/her life, including the mental, physical, social, and, in general, his/her day to day activities (Patrick & Erikson, 1993). In other words, Quality of life which is a term used to determine how satisfied a person is across different aspects of his or her life. It is sometimes referred to as life satisfaction and, usually, more used in the area of general health (De Castro et al., 2012). It is embedded in the proposed definition of health outlined by World

Health Organization (1948) which covers the physical, mental and social well-being of an individual. It is very subjective and has to do with an individuals' general perception of his/her satisfaction or well-being. Therefore, different individuals have different indices for their subjective well-being evaluation (Seidl and Zannon, 2004; Moriello *et al.*, 2010).

World Health Organization (WHO) quality of life group (1994. P.17) opined that quality of life is an "individual's perception of his/her position in life, in the context of the culture and value system in which he/she lives and the evaluation of his/her goals, expectations, standards and career". That is how well their values and expectations match or correlate with their situation or living condition. Quality of life has been sub-divided into four broad categories or subscales and these subscales are a direct projection of how well individuals perceive their ability to cope with life in the following areas; Psychological, physical, social, and environmental factors come together to interact and influence the person's perception about how they view their lives and how well they are satisfied with it Organization for Economic Co-operation and Development (ECOD 2011).

The present study was interested in finding out if psychoactive substance use or abuse is a correlate of the quality of life of undergraduate students. According to The World Health Organization (WHO, 1994), substance abuse is the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. NAFDAC (2004) defined drug abuse as the excessive and persistent self-administration of a drug without regard to the medically or culturally accepted patterns. It could also be seen as the extent to which drugs interfere with the health and social functioning of an individual. It is also defined as chemical modifiers of living tissues that could bring about psychological and behavioural changes" (Nnachi, 2007). Drugs are chemical substances that alter the chemical functions of the body, thereby producing an entirely new behaviour or replicate of an already existing behaviour in a more pronounced way (Rang, Dale, Ritter, Flower, & Henderson, 2011). Drug abuse is a continuum of substance use (Balogun, 2006; Okoye, 2011). According to the DSM-5, substance use disorder is a pattern or recurrent use of drugs resulting in significant impairment in several aspects of a person's life. These impairments can manifest in different forms such as health problems, disability, failure to meet major responsibilities at work, school or home (American Psychiatric Association, 2013), to damaging personal, social and environmental consequences. These consequences have become serious societal problems (Adelson, 2006).

In a study by Pyne *et al.*, (2008) on the quality of life of alcohol users, they found that psychiatric symptoms like anxiety, bipolar disorders, sleep disorders and depression negatively influenced the quality of life of alcohol dependent patients, and that alcohol abusers had lower levels of quality of life compared with the general population. From their findings Srivastava *et al.*, (2009) concluded that "a large population of people with substance abuse disorder have a co-morbid psychiatric disorder and vice versa". Alcohol alone increased the likelihood of a depressive disorder by 3 to 4 times (Kessler *et al.*, 1994; Grant & Pickering, 1996, Hesse, 2006, Boden & Fergusson, 2011), and when associated with other drugs, it is reported to increase to as much as 7 times (Grant & Pickering, 1996).

Compared to the general population drug abusers suffer higher levels of “ill-health” and “physical impairment” (Srisvastava, 2009).

Drug abuse, according to United Nations Office on Drugs and Crime (2016), can be strongly related to the prevalence of diseases like HIV and Hepatitis B and C. World Drug Report by UNODC also revealed that out of the 12 million people who reported abusing drugs through the injection route, 1.2 million currently live with HIV while 6 million are living with Hepatitis C (UNODC, 2016).

Substance use disorder, according to UNODC, is more prevalent among young people than adults and, in the Sub-Saharan Africa, where Nigeria is located, with about half of her total population below 25 years (Liranso & Yosph, 2017). The consequence ranges from personal health problems, which are psychological or physical in nature, to social problems like interpersonal relationships and family life problems, to environmental problems like pollution and other environmental hazards (OECD, 2011). Substance use disorders can result in a wide range of psychological and physical problems that usually result to co-morbid disorder (Stinson *et al.*, 2005). Addiction, which is defined as a chronic, relapsing disorder is characterized by compulsive drug seeking and use despite its adverse consequences, is the major link between drug use and drug use disorder. Substance dependence that causes psychological dependence could mean a dependence which is not of physical or chemical nature (Sarason & Sarason, 1989). While addiction to drugs that led to physiological dependence, involves the dependence that usually results from the compulsive need to constantly use the drug in order to satisfy certain bodily functions that have adjusted to the effects produced by the drug (Sarason & Sarason, 1989).

Several drugs react differently in the body thereby producing varying effects and side effects. This could account also for why users progress to substance use disorder, as different people derive different effects from different drugs. The link between drug use and its disorder follow certain progression; from the experimentation with drugs when the user just tries out the drug, to the phase where the user starts taking the drug routinely for its pleasurable effects, and then on to a phase when the user starts to tolerate the drug and finally, to the last phase where the user becomes addicted and there is associated compulsive use of the substance (Weis & Mirin, 1987). Discontinuing the use becomes hard due to either the pleasurable effect of the drug or the avoidance of the negative consequences of the withdrawal symptoms (Weis & Mirin, 1987).

In Nigeria today and, at the global level, drug abuse is a major contributor to public health problems and other societal health related issues (UNODC, 2005). According to a report by NDLEA, substance abuse is a major problem in schools, colleges, and universities in Nigeria (NDLEA, 1997; 2000 and 2005). As this often leads to mental health problems that fundamentally could last a life time and, on the primary level could lead to dropping out of school.

According to a report by UNODC, the global trend of drug abuse has greatly increased overtime, This increase has been, though gradual, consistent from 2006-2014, with the

figure of abusers rising from 208 million in 2006 to 247 million in 2014. Statistics which also indicate a rise in the number of those who abuse illicit drugs from 26% to 29.5%, report an adverse social, physical and mental effect (UNODC, 2016).

Statement of Problem

The current rise in the global trend of drug use and abuse over the years has become a serious problem to every country and agencies involved in combating drug abuse around the world. As stated earlier, UNODC (2016), reported that the global trend of drug abuse has greatly increased, this increase has been consistent from 2006-2014, with the figure of abusers rising from 208 million in 2006 to 247 million in 2014. The increase in the number of people who abuse drugs has a downward influence on the quality of life of abusers as suggested by Pyne *et al.*, (2008), who found that psychiatric symptoms like anxiety, bipolar disorders, sleep disorders and depression negatively influenced the quality of life of alcohol dependent patients, they also found that alcoholics had lower levels of quality of life compared with the general population.

In Nigeria this rise has become really alarming (NDLEA, 2005). Drug abuse affects different aspects of an individual's life, including the psychological, sociological, physical and environmental aspects. NDLEA (2005) pointed to "substance abuse as a major problem in schools, colleges, and universities in Nigeria". This has often led to mental health problems that fundamentally could last a life time and, on the primary level has led to increased number of students dropping out of school (NDLEA, 2005). The combative measure against the abuse of drugs is costing the government of every nation a large chunk of their national budget. This includes empowering law enforcement agents to be able to intercept and seize those products before general circulation and also to set up treatment centres to help in the treatment and rehabilitation of affected persons. The abuse of drugs has a further serious effect on the society as it is one of the leading causes of infections of deadly diseases UNODC (2016).

Although studies on ascertaining the influence of drug abuse on the quality of life have been carried out (Aishatu *et al.*, 2016; Shareef, Srivastava & Tiwari, 2013; Linnuste, 2011; Srivastava *et al.*, 2009; Pyne *et al.*, 2008; Grant & Pickering, 1996; Volk *et al.*, 1997, & Kessler *et al.*, 1994), most of these studies were carried out outside Nigeria and only a handful of studies have been done in Nigeria (Balogun, 2006; Okoye, 2011). Hence the present study tried to find out the effects substance use and addictions have on the quality of life of undergraduates in Nigeria as a way of adding to knowledge.

Review of Literature

In a study carried out by Volk *et al.*, (1997) measuring "Alcohol Consumption Patterns and Health-related Quality of Life", using 1333 primary care patients consisting of 399 males and 934 females with the age range between 18-86, it was found that, alcohol dependence was associated with poorer quality of life when compared with patients without alcohol dependence, who scored higher on quality of life scores. Another study by Srivastava &

Bhatia (2009), on Quality of Life as an Outcome in the Treatment of Alcohol Dependence was carried out. They used 56 inpatients between the ages of 18 and 45, that have been dependent on alcohol for over three months in a direct comparison with 150 healthy individuals, using the World Health Organization Quality of Life Scale (WHOQOL Brief). The study found out that the quality of life of alcohol dependent patients increased as they responded positively to treatment, which was abstaining from alcohol use. They also found out that the domain score of the quality of life of alcohol dependent patients was significantly lower when compared with the control group.

Linnuste (2011) described and analyzed “Quality of life of Alcohol Dependent men in Estonia”. Using the WHOQOL-100 which had 6 domains, it was found that the physical health domain (12.06), psychological well-being domain (11.88) and the spirituality domain (11.86) had the lowest scores compared to the European average. They also found out that the study group had a significant lower quality of life when also compared to the European average score of quality of life.

Aishatu *et al.*, (2016) carried out a study on Substance Abuse Disorders and Quality of Life of Clients at an Addiction Rehabilitation Centre in Nigeria, using 190 clients with age range between 13 and 55 years old. The study used the subjective quality of life performance questionnaire, the WHOQOL-BREF. They also interviewed the participants comprising 111 that abuse alcohol only, 70 participants that abuse multiple substances and the remaining 9 participants interviewed abuse marijuana only, with the Composite International Diagnostic Interview schedule (CIDI). They found that the patients scored poorer in the physical health domain and the environmental domain, while they had average scores in the social domain.

Shareef, Srivastava and Tiwari (2013) studied “Burden of Care and Quality of Life in Opioids and Alcohol Abusing Subjects”. Using a cross sectional study design, they studied 37 patients of mixed sex and family members. They studied employed the WHOQOL-BREF and family burden interview schedule (FBIS) to obtain responses from the participants. Result of their study indicated that the quality of life of drug users were significantly low, but there was no significant difference in their quality of life score when they were abusing alcohol and when the treatment started as opposed previous findings that the burden of treatment on substance abuse patients reduced their quality of life. They also found out that the quality of life of alcohol users was significantly lower when compared to opioid users. Their study concluded that the quality of life of those who abuse drugs is lower compared to when they stop abusing drugs.

The study by Morgan *et al.*, (2003) on “Health-related Quality of Life for Adults Participants in Outpatient Substance Abuse Treatment, using 252 subjects consisting of 37 females and 215 males. The subjects were randomized in a clinical trial for substance abuse treatment using SF-36 health-related quality of life instrument. Among their findings was that substance abuse treatment increases quality of life of patients and that at the end of treatment their rates of impairment were significantly reduced in all eight of SF-36 subscales.

Maremmani *et al.*, (2007) in their study on “substance abuse and quality of life”. Using 213 patients studied between their 3rd month and the 12th of their admittance in the psychiatric department of the University of Pisa hospital. After the study it was found that patients treated over one year with substance abuse problems (Methadone or Buprenorphine) responded positively to treatment by reducing their drug use which was checked using urinary test their quality of life improved.

Ventegodt and Mernct (2003) studied the effect of “psychoactive drugs on quality of life”. Using 1501 persons aged between 31 and 33 randomly selected from the CDR (Danish Central Register) and 4626 persons from Copenhagen perinatal birth cohort 1959-61. The study found, that, Cannabis was the most abused drug among the population. Marijuana had no influence on low quality of life, while drugs like cocaine and amphetamine and psilocybin had a little impact on quality of life. Patients who abuse drugs like heroine, and morphine and a mixture of alcohol and tranquilizers were found to exhibit lowest quality of life.

Andrade, Alessi and Petry (2011) studied “the impact of contingency management on quality of life among cocaine abusers with and without alcohol dependence”. Using 393 samples over a 12 weeks treatment period, it was found that alcohol dependent patients had the lowest quality of life score and that as treatment progressed, their quality of life scores increased. Their study supports a negative correlation between drug abuse and quality of life.

Paiva *et al.*, (2017) examined “depressive symptoms, anxiety, hopelessness and quality of life of users of cocaine/crack in outpatient treatment”. Using a cross sectional study involving a sample of 25 inpatients recuperating from substance abuse dependence, using the WHOQOL-BREF. The study found a negative correlation between the development of psychiatric symptoms among participants and quality of life.

METHOD

Research Design

The research design for the present study was a cross sectional survey design. The predictor variables are substance use and alcohol. The criterion variable is quality of life.

Participants

One hundred and forty-two (142) participants from the University of Lagos participated in the survey (Male: 61, Female: 81, Mean Age: 22.56 SD: 2.76). Participants were selected from a pool of 289 pretested subjects using a purposive sampling technique, on the basis of their score on the Drug Abuse Screening Tool (DAST). Participants who scored below 2 on the scale were excluded from the study.

Instruments

The research Instruments used were self- report questionnaires, which included questions that elicited demographic information from participants and two standardized psychological instruments measuring the variables in the study. Two of the instruments have a 5-point Likert response format while response for the third scale is in a dichotomous form (Yes/No). The World health Organization Quality of Life Scale (WHOQOL Brief), developed by Kuyken *et al.*, (1994) assessed participant's perceived quality of life. The WHOQOL is a 100 item with six broad domains; Physical health, psychological functioning, Level of independence, Social relationships, Environment and Spirituality, Religion/Personal beliefs. Each domain as four items, it also includes four general items covering subjective overall quality of life and health. Each item on the scale is scored from the most negative to the most positive; the higher the score of an individual the more his/her quality of life. Scores can be obtained for each domain, and a global score can also be obtained by summing all the domains. Nigerian findings by Aknyemi, Owoaje, Popoola and Ilesanmi (2012) show that respondents in a community survey self reported a good of life with 62% of respondents 45years or older having a good quality of life and an even higher percentage of respondents, 80% in other age groups reported a god quality of life. The Drug Abuse Screening Tool (DAST-10), is a10 item screening tool developed by Harvey (1982) measures drug use, dependence and related personal and social problems. The instrument has a high internal consistency $r = .92$, criterion validity as it correlates with other drug abuse screening tools like the Michigan Abuse Screening Tool (MAST) ($r = .59$) in a sample of 176. Nigerian finding by Njoku and Obogo (2017), found that as the level of depressive symptoms increases drug abuse also increased among secondary school students. Health Organization Alcohol Use Disorder Identification Test (WHO AUDIT), a 10 item screening tool that was developed by Babor *et al.*, (1984) and Saunders *et al.*, (1993) for the identification of alcohol use and disorder . It has a high internal consistency of .95 and a test retest reliability of $r = .86$. The instrument has also shown to have a very high correlation ($r = .78$) with other standardized drug abuse screening such as CAGE. A reliability test conducted with DAST among the participants showed a high internal consistency (cronbach alpha of 0.76). Nigerian finding of AUDIT has been validated by Adewuya (2005), using the ICD-10 diagnostic criteria. A sensitivity of 93.5 and specificity of 91.5 for hazardous alcohol use was found when a cut-off score of 5 and above is used.

Procedure

The researcher first provided adequate explanation about the study objectives by seeking the consent of participants before giving the questionnaires to them. The questionnaires were administered to the students at their classrooms and retrieved immediately after completion. A total of 320 questionnaires were distributed. 289 were retrieved, but only 142 questionnaires respondents self-reported to be using the at least psychoactive drug and that were also found to have been properly filled were used for data analyses in the study. No compensation was given to participants and participants gave their full consent to take part in the study.

Hypotheses

Substance abuse will significantly predict a lower quality of life among undergraduate students.

Alcohol abuse will significantly lower the quality of life of undergraduate students

Results

Hypothesis 1

Hypothesis states that Substance abuse will significantly predict a lower quality of life among undergraduate students. The hypothesis was analysed using the Pearson correlation statistics. The result is presented in Table 1.

Table 1: Correlation between substance abuse and quality of life

	Quality of life	Drug abuse
Quality of life	1	-.353** .000
Drug abuse	-.353** .000	1

**Correlation is significant at 0.01 level

The results show that drug abuse and quality of life have a statistically significant negative relationship ($p < .001$). This means undergraduate students involved in drug abuse have lower quality of life. Hence, hypothesis 1 is accepted.

The second hypothesis states Alcohol abuse will significantly lower the quality of life of undergraduate students. This hypothesis was analyzed using Pearson correlation statistics. The result is presented in Table 2

Table 2: Correlation between alcohol abuse and quality of life of undergraduate students

	Quality of life	Drug abuse
Quality of life	1	-.253** .002
Drug Abuse	-.253** .002	1

** Correlation is significant at the 0.01 level.

The result shows that alcohol abuse and quality of life have a significant negative relationship ($p < .01$). This implies that undergraduate students who abuse alcohol reported a significantly lower quality of life. In other words, the higher the level of alcohol abuse, the lower the quality of life. Therefore, hypothesis 2 is accepted.

Discussion

The present study tried to investigate drug abuse as a correlate of quality of life among undergraduates. The study revealed that there is a significant moderate negative association between drug abuse and quality of life, which means that as drug abuse increases quality of life reduced and as quality of life increased drug abuse reduced. This finding is similar with the findings of other researchers. Morgan *et al.* (2003) carried out similar research using outpatient substance abusers and found that substance abuse treatment increased the quality of life of patients as drug abuse reduced, quality of life increased. Maremmani, (2007) also carried out similar research using patients at a psychiatric hospital and found out that quality of life increased significantly as drug abusers responded positively to treatment by reducing their drug use. Ventegodt and Mernct (2003) also carried out similar research using a large sample and found out that drugs like heroin, morphine and a mixture of tranquilizer had the highest impact on quality of life, as the quality of life of those that abuse the above drugs were the lowest compared to abusers of the other drugs. There were also much stronger association in these studies, and also the difference in the samples could be responsible for this observed difference as these studies focused on patients suffering from severe drug abuse disorders while the samples of the present study were university students.

The findings of the present study also revealed a significant negative correlation between alcohol abuse and quality of life, meaning that as alcohol abuse increases that quality of life of the individual reduces and as quality of life increases drug abuse reduces. This finding is in line with the finding of other researchers; Volks *et al.* (1997) found that alcohol dependence was associated with lower quality of life. Similarly Srivastava and Bhatia (2009) found that the quality of life of alcohol dependent patients increased as they responded positively to treatment by reducing alcohol abuse. Linnuste (2011) also carried out similar study and found that alcohol dependent patients had lower quality of life when compared to the European average score on quality of life.

Conclusion

This study examined the influence of substance use on the on quality of life of undergraduates. According to the finding of this study, substance abuse results in lower quality of life among participants who abuse at least one substance. The study also concluded that alcohol abuse is related with a lower quality of life, when compared to other drugs of abuse. Conclusively, the results of the present study demonstrated that substance abuse is a predictor of lower quality of life among those who abuse substance.

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