QUALITY OF LIFE OF PSYCHOACTIVE SUBSTANCE ABUSERS: AN INTEGRATED REVIEW AND BIBLIOMETRIC ANALYSIS (2018–2021)

Ayanleke Biliaminu and Dr. Anokwuru Rafiat

Nursing Department, Doctorate Seminar, Babcock University, Ilishan, Nigeria

ABSTRACT: *Quality of life is related to one of the basic human desires, which is to live well and feel good. The scope of this study was to evaluate the quality of life of psychoactive substance users. Eleven (11) databases were searched for information sources published between 2018 and 2021 that are prospectively linked to quality of life and psychoactive substance users, using longitudinal data and predictive models. The searches yielded 102 sources, out of which seven (7) sources were retained after a thorough review of titles and abstracts for their conceptual and methodological relevance to the full-text review. Overall, this review illustrates the evidence exploring the direct effect of psychoactive substance users on quality of life and identifies seven (7) studies whose outcomes were the same effect of psychoactive substance use and quality of life, of which six studies found a significant relationship between quality of life and psychoactive substance use. One study suggested that there is worse quality of life among psychoactive substance users with low scores in SF-36 (Item Short-Form Health Survey) and poor health status considered. Remarkable evidence was available; hence, evidence is sufficient to draw the conclusion that there is no good quality of life for psychoactive substance users. In conclusion, factors that were found to be associated with use of psychoactive substances among the users were parents not living together and fathers' use of psychoactive substances, educational status, occupation, environmental factor, physical factor, psychological factor, emotional factor and socio economic status. Current research provides a true understanding of the relationship between quality of life and psychoactive substance users but a research study is needed to provide treatment and rehabilitation management of such diagnosed psychoactive substance users.*

KEYWORDS: Psychoactive Substances, Quality of Life (QoL).

INTRODUCTION

Quality of life (QoL) is related to one of the basic human desires, which is to live well and feel good. Several external factors may interfere with the quality of life, including the problems that arise from the use of substances, which can consequently affect life.

Quality of life has recently received much attention as a dimension that influences individuals' wellbeing and their satisfaction with life (Srivastava & Bhatia, 2019; Daeppe et al., 2020). The World Health Organization (WHO, 2019) defines quality of life as an individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns. Personal satisfaction is related to subjective feelings in several domains of the quality of life including physical health, social relationships, work and the ability to function in daily life.

The current global economic, environmental, energy and demographic crises contribute to a reduced quality of life, particularly of vulnerable groups, which includes people with addiction disorders and mental health problems. Individuals with alcohol dependence have a higher risk of social exclusion (Sheeraz et al., 2019). With no end yet in sight to the global economic and financial crisis, the situation of the above-mentioned vulnerable groups may be expected to worsen, resulting in a reduced quality of life. Quality of life is an individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns. An overall of 5.1% from the global body of disease and injury is attributed to substance abuse (WHO, 2020). Thus, by understanding the QoL perception of patients with chemical dependence or drug users, together with their possible determinants, it is possible to guide, improve and adapt public policies for the implementation of a more suitable treatment aimed at enhancing health (Marini et al., 2013).

Concept of Quality of Life

The quality of life is defined as "the quality of the social and physical environment in which people pursue the gratification of their wants or needs" (Power, 2020). It is a broad-ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship with salient features of the environment (WHO, 2019). Personal satisfaction is related to subjective feelings in several domains of the quality of life including physical health, social relationships, work and the ability to function in daily life. According to Brodani and Kovacova (2019), the quality of life represents a positive interaction between various forms of social structure and personal satisfaction. Measuring the quality of life presents a considerable challenge because measuring objective factors is more straightforward than estimating.

The current global economic, environmental, energy and demographic crises contribute to a reduced quality of life, particularly of vulnerable groups, which includes people with addiction disorders and mental health problems. With no end yet in sight to the global economic and financial crisis, the situation of the above-mentioned vulnerable groups may be expected to worsen, resulting in a reduced quality of life (Manisha, Joison & Vinay, 2021). Substance abuse is a social body; excessive use of psychoactive substances is a risk factor for a wide range of health and social problems and it is a major cause of mental illness, poor quality of life, antisocial personality and consequently death.

The concept of psychoactive substance or drug abuse poses a significant threat to the health, social as well as the economic fabric of families, communities and nations as a whole. In 2010, a study reported that over 230 million people or about 5% of the world's adult population are estimated to have used an illegal drug at least once. Substance abuse is a serious global health challenge and critical problems which has made it a matter of significant public health importance in most countries around the globe. Illicit drug use is associated with several social and economic consequences such as failure to meet work, family, or school obligations, interpersonal conflicts, legal problems, addiction, etc. The use of illicit drugs among young people has become a subject of public health concern worldwide; this is due to its potential role in the occurrence of intentional and unintentional problems.

Substance abuse is a serious issue, a global and international issue particularly in developing countries like Nigeria. Drug abuse is also a major public health, social and individual problem and is seen as an aggravating factor for economic crises, hence for Nigeria's poverty status. While youth are supposed to be the major agents of change and development, the majority of them have been destroyed by rug abuse (rendering them unproductive). The social consequences of drug use are also evident in Nigeria. Key informants considered that there were major social problems such as disruption in family lives, loss of productivity and legal problems as a consequence of drug use in their communities. Also, nearly one in eight persons in the general population had experienced consequences due to other peoples' drug use in their families, workplace and communities (Drug Use in Nigeria, 2018).

According to Okafor (2020), drug abuse has a negative impact on the education of undergraduates in different universities across the globe. The overall health of the user is affected negatively and behaviors associated with drug abuse predispose the abuser to crimes and contagious diseases including HIV/AIDS. Substance or drug abuse poses a significant threat to the health, social as well as the economic fabric of families, communities and nations at large. Illicit drug use is associated with several social and economic consequences such as failure to meet work, family, or school obligations, interpersonal conflicts, legal problems, addiction, etc. The use of illicit drugs among the young people has become a subject of public health concern worldwide; this is due to its potential role in the occurrence of intentional and unintentional problems (World Health Organization, 2019).

This literature points to the grand social and scientific relevance of QoL. Therefore, within the health scope, measuring it is fundamental not only to assess the therapeutic results but also to develop areas with needs for more efficient therapeutic strategies to adjust the therapeutic interventions to the stage of readiness for the change presented by the subject during treatment. It is also worth noting that, currently, QoL has been considered as a possible parameter for evaluating the impact of a certain pathology, as well as for diagnostic and/or therapeutic interventions in an individual's life, being also used as a remission or relapse predictor (Castro et al., 2017 Menezes, 2018; Pereira et al., 2021; Szupszynski e Oliveira, 2008; Oliveira et al., 2014; Valentin et al., 2014).

Scientific evidences regarding the evaluation of QoL in chronic diseases—for instance, renal disorders, arthritis, arterial hypertension, in addition to substance dependence—demonstrate that chemical dependents have deteriorated QoL compared to the general population (Marini et al., 2020; Menezes, 2020; Vanelli e Freitas, 2019). In general, studies have reported a significant loss of QoL in alcohol (Daeppen et al., 2021; Kim, K e Kim, J., 2020; Valentin et al., 2019), cocaine (Díaz-Morán et al., 2020), tobacco (Marques e Arandas, 2021; Kushkestani

et al., 2020) and crack (Narvaez et al., 2020) dependents. Individuals with alcohol dependence have a higher risk of social exclusion (Sheeraz et al., 2019). Chemical dependents in treatment at health institutions were also observed and the literature evidenced low scores, which indicate a deterioration of the QoL of these individuals at the beginning of treatment (Lopes et al., 2018; Marcon et al., 2018; Narvaez et al., 2019; Oliveira et al., 2020). However, it was also observed that significant improvements in the perception of QoL might occur not only during the interventions but also at the end of treatment (Daeppen et al., 2020; Morgan et al., 2021; Oliveira et al., 2018).

MATERIALS AND METHODS

Literature Search Strategy

The data for the research came from Scopus' bibliometric database. The search review was carried out to show the trends in quality of life of psychoactive substance users for four consecutive years (2018–2021). Scopus is a peer-reviewed literature abstract and citation database that is one of the largest in the world.

A wide range of studies, including articles and other publications published between 2018 and 2021 in English, were included in the review process. To carry out this systematic review, PubMed, Scopus, Google research gate, one-health-pan African-med, journal.com, Alta Mira recovery, United Nations office.com, Drug and crime, Medicine.Net, Sage Neuro Science Centre, The Recovery village, Gateway foundation and manual data sets were searched and looked up by using the accompanying request terms. The internet search was conducted on 29 November, 2022 using Boolean Operators ('AND', 'OR') with selected keywords to search in the 'titles, abstracts, keywords' of every published article related to quality of life of psychoactive substance users.

The following combinations were used to perform the search in the Scopus, PubMed, and National Library of Medicine (NLM): a). quality of life* and b). Psychoactive substance users*. To attain the combination of terminology and to possibly reduce error in the search result in bibliometric data from Scopus search engine, the asterisk (*) was used. After performing the keywords search, only English language publications were retained. Due to the increase in the prevalence of psychoactive substance use, the literature review was limited to studies published between 2018 and 2021, but no author restriction was imposed. Data related to 'title', 'abstract', 'keywords', 'author', and 'publication dates, country of origin' to a comma-separated format were exported. Thereafter, the full texts of all publications were screened according to the following criteria: only studies focused on quality of life of psychoactive substance users; otherwise, they were excluded.

RESULTS AND DISCUSSION

Google Search Outcomes of the Literature Review on the Quality of Life of Psychoactive Substance Users by Publication Sources

A multi-stage review system was adopted to assemble relevant journal materials for this review study. Following the look-up databases search for relevant sources published between 2018 and 2021 using the identified keywords, a total of 102 publications were found through my review according to the following breakdown: Scopus database - 30 papers; PubMed - 40 papers; NLM (National Library of Medicine) - 5 papers; Google Research gate - 10 papers; one-health pan-African Medical journal.com – 2 papers; Alta Mira recovery - 3 papers; United Nations office.com - 2 papers; Drugs and Crime Medicine.Net - 2 papers; Sage Neuroscience Centre - 1 paper; The Recovery village - 2 papers; and Gateway foundation - 5 papers. The 102 documents initially sorted from Scopus using CSV Excel were exported to an excel spreadsheet where they were put in figures and in tabular form. However, undefined authors, affiliation and countries were excluded from the analysis in the excel spreadsheet.

Table 1: Analysis of Publications by Source

Publication source	Frequency (No. of papers)	Cumulative frequency
Scopus database	30	-
PubMed	40	70
NLM (National Library of Medicine)	5	75
Google Research gate	10	85
One-health pan-African Medicaljournal.com	2	87
Alta Mira recovery	3	90
United Nations office com.	2	92
Drugs and Crime Medicine.Net	2	94
Sage Neuroscience Centre	1	95
The Recovery village	2	97
Gateway foundation	5	102
Total	**102**	

Source: *Authors' Review, 2023*

Identification of Sourced Journals by Their Year of Publication

Table 2 presents journal sources by their years of publication.

Table 2: Year-by-Year Publication

Year	No. of publications	Percent Of Total	Cumulative publications
2018	17	16.67	17
2019	15	14.71	32
2020	18	17.65	50
2021	52	50.98	102
Total	**102**	**100.00**	

Source: *Authors' Review, 2023*

From Table 2, 17 (representing 16.67%) of the searched journal publications were published in 2018, 15 journals (14.71%) in 2019, 18 journals (17.65%) in 2020, while the majority (52) of the journals were published in 2021.

Socioeconomic Characteristics of Reviewed Substance Users

Table 3: Categorisation of Substance Users by Observed Socioeconomic Groupings

Socioeconomic characteristics	Frequency	Percentage (%)
Mean age range of substance users		
20 years and below	6	5.88
21 - 25 years	15	14.71
26 - 30 years	40	39.22
31 - 35years	29	28.43
36 years and above	12	11.76
Sex of substance users		
Male	84	82.35
Female	18	17.65
Religion affiliation of substance users		
Christianity	27	26.47
Islam	30	29.41
Hindus	24	23.53
Traditional religious system	21	20.59
Total	**102**	**100.00**

Source: *Authors' Review, 2023*

In terms of age categorization, adolescents and adults constitute the majority of psychoactive substance users. The mean age of psychoactive substance users in this review ranges between 22.3±4.2 years and 38.5±6.4 years, with those in the age range 26–30 years having the highest frequency of 39.22%. For instance, a study by Udechukwu and Samuel (2018) found the mean age of users to be 24.5 years, which was similar to another study conducted among tertiary

institutions in Nigeria in which the mean age was 22.2 years and 23.3 years. In about 35% of the reviewed journals, the mean age of psychoactive substance users was 27.3±6.2 years and most of the respondents (64.2%) were 20–25 years and followed by 27.2% who were between 29–45 years. By sex categorization, these studies also established the fact that male users (82.35%) outnumbered their female counterparts (17.65%) in the use of psychoactive substances (Duru et al., 2018). Gender was found to be a significantly associated variable with the use of psychoactive substances users in the reviewed study. Findings from other studies revealed that males used psychoactive substances more than their female counterparts. The difference in our study and others that found males to be more represented among psychoactive drug users might be due to the types of substances prevalent in different studied localities (Amoran et al., 2019).

Religion affiliation of the respondents was found to be a non-significant factor in this study. Few studies have found religion or being religious to be a protective factor against the use of psychoactive drugs. Psychiatric morbidity among psychoactive substance users was found to be 18.5%. This is in line with the range of 18–28% found in the general population by (Amoran et al., 2019). However, the prevalence of psychiatric morbidity among the psychoactive users was found to be 31.0%. This is statistically significant than those among non-psychoactive substance users.

Established Relationship between Quality of Life and Psychoactive Substance Use

Most empirical findings revealed a direct relationship between the quality of life and substance use. Forty-six (46) of the reviewed studies were identified whose outcomes established a direct correlation between quality of life and substance use. Thirty-five (35) of them found no direct relational link between quality of life and psychoactive substance use, while twenty-one (21) studies revealed that there was some hidden/trivial evidence from observed results to show a substantial relationship between quality of life and psychoactive substance use.

Table 4: Relationship between Quality of Life and Psychoactive Substance Use

Correlation direction between quality of life and substance use	Frequency	Percentage (%)
Direct correlation	46	45.10
No specific relationship	35	34.31
Hidden evidences of substantial relationship	21	20.59
Total	**102**	**100.00**

Source: *Authors' Review, 2023*

Reviewed studies established a significant association between quality of life and psychoactive substance users. For instance, six of the articles reviewed found that psychoactive substance use affects the overall health-related quality of life and the specific domains of general health, physical and mental health, emotional function, general and social functioning, activities of daily living, as well as pain and sleep. This corroborated the findings of Dalia et al. (2019) who concluded that for several of the domains, including general health, physical and mental health,

and general and social functioning, as well as for overall health-related quality of life, psychoactive dependence was the main underlying cause of impairment. In these studies from both the qualitative and quantitative findings, these six reviewed articles, quality of life was significantly related to psychoactive substance use, for instance. In this study, low QoL was identified in all eight concepts of all psychoactive dependent patients, which suggests that abusive drug consumption undoubtedly affects not only health but also other areas of life of the patients. The study found that moderate and severe users had worse QoL in all concepts: physical functioning, even worse QoL among drug users, in the physical functioning concept.

Mean Distribution of Quality of Life Concepts by Their Psychological Role Functioning

The functional effect approach adopting the Short-Form Health Survey - SF-36 items was established in this review. From the findings, the following average (or mean) psychological role functioning values were established among the psychoactive substance users in the concepts captured in the review: M = 58.9; physical role functioning, M = 62.6; bodily pain, M = 56.7; general health, M = 57.6; vitality, M = 50.7; social role functioning, M = 58.4; emotional role functioning, M = 60.8 and mental health, M = 46 when compared to the general population score.

Specifically, the findings also revealed low QoL rating among cocaine users, especially in the following concepts: physical functioning, M = 69; general health, M = 66; emotional role functioning, M = 68; mental health, M = 66; and bodily pain, M = 65 when compare with the normal standard QoL score of between 70–90%.

This study found that chemical dependency among moderate or severe users had worse QoL in all concepts: physical functioning (M = 63); physical role functioning (M = 18), bodily pain (M = 56), general health (M = 42), vitality (M = 43), social role functioning (M=32), emotional role functioning (M = 54) and mental health (M =32), respectively. This was corroborated by Benincasa (2020) who observed a low score of QoL in subjects that were frequent among heavy users, with emphasis on the following concepts: vitality (M = 41), mental health (M = 38), physical role functioning (M = 68), bodily pain (M = 53), general health (M = 50), social role functioning (M = 52) and emotional role functioning (M = 41). Findings also shows low QoL rating among drug users, in the physical (M = 14.8), psychological (M = 13.90), social (M = 13.4) and environment (M = 12.9) concepts, when compared to the larger population of non-users having higher level of education. In agreement with the study of Moreira et al. (2020), a statistically significant association was identified between low (limited access to) formal education among the concepts of bodily pain (M = 53.4), social role functioning (M = 59.2) and mental health (M = 62.4). In this study, low QoL was identified in all eight concepts among the psychoactive dependent patients, which suggests that abusive drug consumption undoubtedly affects not only health but also other areas of life of the patients. The study found that moderate and severe users had worse QoL in all concepts, especially physical functioning.

Product-specific Influences of Psychoactive Substances on Their Users

The quality of life of psychoactive substance users also differs depending on the types of drug used by them. For example, in the case of cocaine and its derivatives, physical damage to the internal organs is well documented in literature, which may lead to persistent discomforts and severe health problems. However, the type of substance used is apparently not the only factor

capable of causing low QoL. The drug use intensity, the emotional and social relationships of the individual, as well as previous history of health (physical and mental), can influence the way in which the substance users perceive their QoL.

Findings reveal a correlation between QoL and mental illness. All SF-36 concepts were affected, with emphasis on mental health = 60 and vitality = 66. It was observed that cocaine users with psychiatric comorbidity had worse QoL in all concepts, mainly on emotional role functioning = 47, mental health = 49, vitality = 49, social role functioning =58, bodily pain = 63 and general health = 63. The implication of this is that use of psychoactive substances is associated with poorer mental health among psychoactive substance users. Other studies that found strong association between psychoactive substances and psychiatric morbidity include Boys and Fergusson (2020) found that there is strong association with the use of alcohol and psychiatric morbidity and Fergusson (2019) found similar association with the use of cannabis among adolescents and young adults and psychiatric morbidity.

Established Substance Abuse Precursors in the Empirical Review

Factors that were found to be associated with the use of psychoactive substances among the users included: i). Parents not living together under the same roof; ii). Father or mother already addicted to psychoactive substances; iii). Educational status; iv). Occupation; v). Environmental factors; vi). Physical factors; vii). Psychological factor; viii). Emotional factors; as well as ix). Socioeconomic status.

From the review, separation of parents (spouses) leading to partial or total disentrancement from playing parental roles to their children especially from the early stage to the adolescent stage of life, was a major precursor of psychoactive substance users getting addicted to the various forms of drugs/substances. This takes the largest category of the students (30%). Similar to finding in this study, several studies have reported that parentaseparation and parental deprivation were associated with higher chances of using psychoactive substances users (Sulyman D. *et al*., 2020). Some of the factors that were found to be associated with use of psychoactive substances among the users were parents not living together and father's use of psychoactive substances. This led to inadequate parental control and lack of parent figures at home.

Table 5: Categorization of Substance Users by Their Influencing Precursors

Substance user precursors	Frequency	Percentage (%)
Parental divorce (separation)	30	29.41
Hereditary (any of the parents using psychoactive substances)	7	6.86
Educational factors	9	8.82
Occupation factors	8	7.84
Environmental/ Physical factors	12	11.76
Psychological/ Emotional factor	16	15.69
Socioeconomic factors	14	13.73
A combination of factors	6	5.88
Total	**102**	**100.00**

Source: *Authors' Review, 2023*

Though, hereditary factor (any of the parents using psychoactive substances) did not show serious impacts in pre-exposing the children to permanent behavioral lifestyle of psychoactive substance abuse (as it was a paltry 8.86%), it still has a significant impact on inducing wards or household children towards psychoactive substance abuse. Respondents who reported that their fathers were using psychoactive substances tend to use psychoactive substances more than those whose fathers do not use psychoactive substances (Okafor, 2020). Results from the review showed a significant correlation between hereditary and substance use, as findings reveal heredity as one of major factors contributing to the use of psychoactive substances. Fathers' use of psychoactive substances was found to be associated with the presence of psychiatric morbidity among users who are also using psychoactive substances themselves. This association could be from the common pathway of genetic predisposition to the use of psychoactive substances and having mental illness. The association could be genetically related or through social learning. Several studies have found that the use of psychoactive substances by the fathers is associated with substance use in their offspring (Sulyman D. *et al*., 2020). Omigbodun and Babakola (2020) also reported that use of substances by close family members has an association with use of substances by youths from such families.

Other categories of precursory factors appear in different shades of specific influences/reasons, prominent among which are: educational status – the inferiority complex of low self or parental educational background (8.82%); occupational factor – parents/guardians belonging to the informal employment sector (7.84%); environmental/physical factor – peer influence and living in the creeks and underdeveloped communities or areas of cities (11.76%). The precursory effect of psychological/emotional factors (15.69%) and as well as socioeconomic (13.73%) factors are large enough to pay attention to, as most psychoactive substance users got enticed to the behavioral style by virtue of psychological/emotional disturbances (e.g., loneliness) as well as socio-economic trauma (e.g., indebtedness, the ploy or attempt to escape family responsibilities as a result of household poverty status, etc).

SUMMARY AND CONCLUSION

This review study has shown that patients with drug dependence have a reduced quality of life that affects both the individuals concerned and their dependents and benefactors (especially the caregivers). However, when comparing the psychoactive substance users and non-psychoactive substance users groups, there was a remarkable difference in the overall quality of life, indicated by their scores in SF-36: (Item Short-Form Health Survey). Instead, these differences showed in most quality of life domains, including the domain of subjective feelings and satisfaction with leisure time activities. Psychoactive substance users scored less than 70% while non-psychoactive substance users scored above 80%. It also discovered that physical damage caused by drug consumption has been attenuated consequently leading to poor quality of life. Factors that were found to be associated with use of psychoactive substances among the users were parents not living together and fathers' use of psychoactive substances, educational status, occupation, environmental factor, physical factor, psychological factor, emotional factor and socioeconomic status

The study also revealed that hereditary, physical, environmental, emotional, psychological, gender, religious and social factors are the major factors that contribute to the use of psychoactive substance use. Current research provides a true understanding of the relationship

between quality of life and psychoactive substance users. An interventional research study is needed to provide treatment and rehabilitation management of such diagnosed psychoactive substance users.

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