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Assessment of quality of life among patients with schizophrenia receiving treatment in some selected Hospitals in Jigawa state, Nigeria

Ado Shehu [1, *], Usman Sunusi Usman [2], Zulkiflu Musa Argungun [3], Hayat Gommaa [4], Sayeda Abdelateef [5], Attahir Sa'ad Ayuba [4], Ummukulsum Mustapha [1], Yunusa A [5], and Muftahu Sa'adu [6]

[1] *Faculty of Basic Medical Sciences, Khadija University Majia, Jigawa State, Nigeria.*
[2] *Public Health Department Bauchi State University, Nigeria.*
[3] *Department of Nursing Science Usman Danfodio University Sokoto, Nigeria.*
[4] *Faculty of Pharmacy, Suresh Gyan Vihar University, Jaipur, India.*
[5] *Department of Nursing Sciences Ahmadu Bello University, Zaria, Nigeria.*
[6] *Department of Social Management Sciences, Khadija University Majia, Jigawa State, Nigeria.*

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Abstract

Schizophrenia is among the most common psychiatric disorders, affecting approximately 1% of the world's population and is a leading cause of disability, Lifetime prevalence of schizophrenia is high, ranging from 0.4 to 1.4%, due to the early age of onset and chronic course of the disease (Beck et al., 2014). Study aimed at assessing quality of life among the schizophrenic patients receiving treatment from selected hospitals in Jigawa State. A descriptive cross-sectional study design was applied. A multi-stage sampling technique was used to recruited 399 schizophrenic patients, after which an interviewer administered structured questionnaire was used to collect data. SPSS version 24 was used for data analysis the mean and standard deviation of age of the respondents was 42.3± 11.2. Only one third of study participants had good quality of life and educational status of secondary (AOR=2.01,95%CI=1.76 – 11.75) and tertiary (AOR=4.00,95%CI=2.87 – 18.66), being married (AOR=3.00, 95%CI=1.45 – 17.61), cost of treatment (AOR=4.22, 95%CI= (2.14 – 24.33), non-smoking (AOR=3.25, 95%CI= 1.11 – 31.45) remained significant predictors of good quality of life among the study participants. In conclusion After adjusting for the confounding effects using logistic regression analysis; educational status of secondary (AOR=2.01,95%CI=1.76 – 11.75) and tertiary (AOR=4.00,95%CI=2.87 – 18.66), married participants (AOR=3.00, 95%CI=1.45 – 17.61), cost of treatment (AOR=4.22, 95%CI=(2.14 – 24.33), non-smoking (AOR=3.25, 95%CI= 1.11 – 31.45) and drugs and substance abuse (AOR=3.00, 95%CI=1.45 – 18.75) remained significant predictors of good quality of life among the study participants.

Keywords: Assessment; Patients; Quality of life; Schizophrenia; Jigawa State

1. Introduction

The health related problems of the schizophrenic patient started from the era of institutionalization to the period of de-institutionalization and the treatment of the condition in the community (Whitney, 2000). With the introduction of atypical antipsychotics, many patients function better due to fewer side effects making QoL issues an important area for the study in schizophrenics (Xiang YT et al, 2010). Strict adherence to medication is very important for the control of symptoms and better QoL in schizophrenic (Rababa, 2013). Many do not adhere due to various reasons ranging from insight, to financial issues etc (Mahaye et al, 2012). Examining adherence factors influencing it among schizophrenics is very important in planning appropriate care for patients with schizophrenia (Olivares et al., -2013).

*Corresponding author: Ado Shehu

The rate of developing close intimate interpersonal relationships is very low and much impaired as a result of Schizophrenia (Hayhurst et al., 2013). Moreover schizophrenia makes self-reliant and gainful employment difficult for patients, leading to a lack of independence in meeting basic needs (food, shelter, clothing, material goods etc.) (Whitney, 2000). It is not clear why patients with schizophrenia are more likely to be substance users (Smith and Larson, 2010). Report suggests that the patients want to diminish the side effects of the disease or medical treatment (Hayhurst et al., 2013). It is very well accepted that patients with schizophrenia have lower rates of employment, marriage and independent living than normal population (Mendlowicz and Stein., 2000). Schizophrenia affects the physical, psychological, emotional, social and financial life of patients (Rababah., 2013).

Empirical studies in the field of quality of life for chronic mentally ill patients have reported several deficiencies in the patient's adjustment to an equal life in society (Lehman, 1983) (Kugo et al, 2006, Tolman, 2010). Usually these individuals are unmarried, unemployed, and they have a low monthly income (Kazadi, 2008). In subjective estimations of satisfaction with different life domains such as finance, unemployment, safety, education, relationship, leisure, and also inner experiences and mental health, dissatisfaction with life has been shown (Kazadi, 2008). The chronic schizophrenic patients also generally rate their global well-being lower than that of the normal population (Hayhurst et al., 2013). Studies have shown that this group of patients estimates their normal well-being to be even worse than other socially disadvantaged groups (Hayhurst et al., 2013). The present study rests on the assumption that quality of life is a subjective sense of well-being depending on the person's objective life conditions, functional capacity, and subjective experiences of their life (Bartels & Pratt, 2009). In Jigawa state during the researcher's contact with schizophrenic patients in the clinics, it was observed that many of them were having difficulties in keeping their jobs which lead them to financial crises and made them to be unable to cope with cost of drugs, unable to adhere to the drugs and to keep to hospital appointments. They also have unstable marital affairs or relationship while most of them depend on their families or relatives. The schizophrenics often feel very guilty with inbuilt stigmatization

1.1. Quality Of Life of Schizophrenic Patients

Objective as well as subjective social indicators pointed out that a great deal of the patients had an impaired quality of life and live as a marginalized group, with a poor integration in social life, the vast majority of the patients were unmarried and lived alone in their own apartments, most of them were unemployed and many had a low monthly income. (Hansson, 1999). In 1993, The WHOQOL (The World Health Organization Quality of Life) group defined QOL as individuals' perceptions 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, It is a wide concept implying many aspects and many interpretations have come from it, QOL concept comprises different dimensions including individual's physical and emotional health, psychological and social well-being, fulfilment of personal expectations and goals, economic assurance, and finally functional capacity to develop daily routines normally. From the review three main findings were identified. First, all the studies employed the WHOQOL-Bref Scale version, which is a widely used generic QOL instrument. Second, QOL was evaluated mainly in patients diagnosed with schizophrenia who were recruited either from the out-patient clinic or shortly after discharge from in-patient care. Thirdly, some socio-demographic and illness related variables were found to be statistically associated with QOL (Bartels & Pratt, 2009). According to Makanjuola, (2011) there were no published studies in the years prior to the 2003; none were published in the years 2006, 2008 and 2011, indicating a scanty research interest in QOL in patients with chronic mental disorders within Nigeria. Some studies have demonstrated that subjective QOL of patients with psychiatric disorders continue to improve years after been discharged An important issue in any illness is how a person on medication feels and functions in everyday life. QoL is one of the outcome measures and also provides some information on the effectiveness Schizophrenic treatment (Bartels & Pratt, 2009).

Regarding in-patients care, Abola (2013), have reported that schizophrenic patients continue to experience deterioration in QOL after discharge from in-patient facilities. Two of the studies reported Poor correlations between the objective indices and subjective QOL, studies from developed countries have also shown similar discrepancies between objectively and subjectively assessed QOL in patients with psychiatric disorders. Skantze , (2009) suggested that the reason for this discrepancy was that the same objective event may result in an opposite assessment by the same individual depending on the persons' perspective at the time of the interview, another reason suggested was that improvements in objective indices may result in negative subjective responses (Aloba et al., 2013). Adewuya and Makanjuola, (2011) in their study identified the presence of anxiety or depression, unemployment and poor social support as the most important factors in explaining poor subjective QOL. In another study from a psychiatric facility in North-central Nigeria, Makanjuola, (2011) reported that gender and occupational status were the factors that were statistically associated with subjective QOL in a group of patients receiving treatment for schizophrenia and identified medication non-adherence as the illness-related factor that significantly correlated with lower scores in all the domains of the WHOQOL-Bref while, Olusina and Ohaeri, (2003) in their study reported no statistically significant associations

between socio-demographic characteristics and illness related factors and QOL. Studies conducted outside Nigeria have reported varied associations between QOL and different socio-demographic factors in psychiatric patients, in the European schizophrenia cohort study which was a naturalistic investigation of people with schizophrenia living in 3 European countries, correlates of QOL identified include; depression, accommodation status and employment (Hospital & Hospital, 2013).Similar QOL correlates have also been identified among Nigerian patients with schizophrenia; Poor social support has been identified as an important determinant of poor subjective QOL among Nigerian patients. Lancon, John & Barnett, (2009) in a study among patients with schizophrenia in France reported that living with spouses or other family members was found to be significantly associated with better QOL, Other studies outside Nigeria have also shown that supportive social relationship is positively predictive of higher QOL scores in individuals diagnosed with severe mental illness (Hospital & Hospital, 2013).

Three hundred and forty four (47%) of the 729 participants experienced negative discrimination when they tried making or keeping friends, 315 (43%) of 728 from their family members, 209 (29%) of 724 when finding a job, 215 (29%) of 730 when keeping a job, and 196 (27%) of 724 during intimate or sexual relationships. Positive experienced discrimination was rare (Burns, 2014). Anticipated discrimination affected 469 (64%) when applying for work, training, or education and 402 (55%) who were looking for a close relationship; 526 (72%) felt the need to conceal their diagnosis, over a third of participants had anticipated discrimination when seeking a job or during close personal relationships when no discrimination was experienced (Burns, 2014). The proportion of patients with quality of life impairment was high with 93.7% presenting a score less than 4 on the QLS-BR, 36.3% with moderate impairment and 57% presenting severe impairment (score less than 2) (Burns, 2014). Similar results were observed in different national and international researches in a national study conducted with schizophrenic patients receiving outpatient treatment, moderate quality of life impairment was found in 63.4% of cases and severe impairment in 36.6%(Burns, 2014). In a study conducted with institutionalized patients (penitentiary hospital), moderate impairment was found in 38.9% of patients and severe impairment in 61.1% of patients(Burns, 2014). This variation can be explained by the different samples of patients studied.

According to Fernandes (2011), some studies indicate working would promote an increase in the quality of life of schizophrenic patients, particularly greater wellbeing and greater satisfaction with finances and leisure. This could be understood when considering the difficulties involved in professional practices within this population. In a study of the 11 patients interviewed that had some sort of job, only one had formal employment (Fernandes et al., 2008). This indicates precariousness in occupational conditions for this population, which could explain the association with reduced quality of life. Studies that show a negative association between quality of life and occupation underline the fact that these patients described their occupations as stressful and demanding (Fernandes et al., 2008).

1.2. Factors Influences the quality of Life

Awad and Hogan (2000), proposed a model which suggests that QoL in schizophrenia patients on neuroleptic medication is influenced by three factors: psychopathological symptoms, psychosocial functioning and neuroleptic side effects. A study by Dernovsek, Rupel, Rebolj, & Tavcar (2001), confirmed the validity and usefulness of this model in patients with first-episode schizophrenia. The sample included 200 mostly chronic outpatients with several episodes of schizophrenia and hospitalisations. Males were younger than females and had an earlier onset of illness. This result indicates that at least some patients were well-adjusted and still working. Others were receiving disability pension. Therefore almost all patients had some source of income. One-third of males and more than one-half of females had concomitant medical illnesses (mostly hypertension, diabetes mellitus, etc.) The study also revealed that smoking was present in two-thirds of patients while alcohol use was less frequent. However, the study not demonstrates the impact of medical illnesses, smoking and alcohol use on QoL.

The average dose of neuroleptic, expressed in chlorpromazine equivalents, was somewhat lower in females, but the difference was not significant due to the large variability of data (Dernovsek et al., 2001). This variability is frequently found in prescription habits surveys. The mean dosage was concordant with current guidelines for treatment of schizophrenia. Males had higher scores on the flattened and incongruous affect, psychomotor retardation and poverty of speech, while females were more anxious. In general, the psychopathological symptoms were quite frequent in these patients, which can be explained with illness chronicity. Extrapyramidal side effects were frequent: Parkinsonism was found in 50%, akathisia in 25% and tardive dyskinesia in 13.5% of patients, but the total scores were mild to moderate. According to Rupel, (2001) Psychopathological symptoms were not related to the QLS score, other disease-related variables (duration of illness, age at onset, number and cumulative duration of hospitalisations) were not in correlation with the QLS score, the above-mentioned study also did not find a correlation between psychopathological symptoms and QoL, this finding may be explained by the characteristics of the study sample, which included mostly chronic and

stable outpatients, Two of the three influences (psychosocial functioning and side effects, but not psychopathological symptoms) (Rupel et'al., 2001).

2. Results

2.1. Quality of Life

Table 1 Assessment of the level of Quality of life of Schizophrenic patients receiving treatment in hospital in Jigawa state

Quality of life (QoL)	Frequency	Percentage (%)
Good	131	32.8
Poor	268	67.2
Total	399	100.0

Table 1 shows that 131 (32.8%) of the study participants have good quality of life, while 268 (67.2%) have poor quality of life

Table 2 Bivariate analysis showing relationship between socio-demographic variables and quality of life among schizophrenic patients

	Quality of life			
Variables	Good	Poor	X^2	P-value
Age range				
20 – 29	22	110	3.22	>0.05
30 – 39	25	75		
40 – 49	38	24		
50 – 59	31	26		
60 – 69	15	33		
Non formal education	19	96	27.68	<0.05*
Primary	18	40		
Secondary	73	111		
Tertiary	21	21		
Male	90	125	2.73	>0.05
Female	41	143		
Ethnic group				
Hausa	80	166	1.93	>0.05
Fulani	40	65		
Others	11	37		
Religion				
Islam	100	231	2.23	>0.05
Christianity	31	37		
Occupation				

Farmers	70	119	5.84	>0.05
Civil servants	21	49		
Housewives	20	35		
Student	12	34		
Business	8	31		
Marital status				
Single	25	128	47.22	<0.05*
Married	101	123		
Divorced	5	17		

*Statistically significant difference

Table 2above showed that only educational and marital status were significantly associated with good quality of life among study (P<0.05).

Table 3 Multivariate (Logistic Regression) analysis of predictors of quality of life among schizophrenic patients

Predictors	**Crude OR (95% CI)**	**Adjusted OR (95% CI)**	**p-value**
Educational status			
Non-formal	Referent		
Primary	0.76 (0.55 – 11.56)	1.23 (0.97 – 16.77)	>0.05
Secondary	2.33 (1.11 – 12.45)	2.01 (1.76 – 11.75)	<0.05*
Tertiary	1.96 (1.56 - 12.09)	4.00 (2.87 – 18.66)	<0.05*
Marital status			
Single	Referent		
Married	2.68 (0.44 – 22.45)	3.00 (1.45 – 17.61)	<0.05*
Divorced	1.56 (1.03 – 17.95)	2.00 (0.88 – 14.89)	>0.05
Cost of treatment			
< N1000	Referent		
N1000	2.75 (1.15 – 29.45)	4.22 (2.14 – 24.33)	<0.05*
Type of treatment			
Drugs	Referent		
ECT	3.97(0.95 – 39.45)	2.05(0.75 – 55.76)	>0.05
Combination of drugs and ECT	0.75 (0.23 – 44.48)	0.65 (0.33 – 39.97)	>0.05
Engaged in smoking			
Yes	Referent		
No	2.78 (1.23 – 44.78)	3.25 (1.11 – 31.45)	<0.05*
Engaged in alcoholism			
Yes	Referent		
No	2.75 (1.15 – 53.25)	4.00 (0.75 – 37.11)	>0.05
Engaged in drugs and substance abuse			

Yes	Referent		
No	1.27 (1.01 – 22.45)	3.00 (1.45 – 18.75)	<0.05*

*Statistically significant difference

After adjusting for the confounding effects using logistic regression analysis; educational status of secondary (AOR=2.01,95%CI=1.76 – 11.75) and tertiary (AOR=4.00,95%CI=2.87 – 18.66), married participants (AOR=3.00, 95%CI=1.45 – 17.61), cost of treatment (AOR=4.22, 95%CI=(2.14 – 24.33), non-smoking (AOR=3.25, 95%CI= 1.11 – 31.45) and drugs and substance abuse (AOR=3.00, 95%CI=1.45 – 18.75) remained significant predictors of good quality of life among the study participants.

3. Discussion of Findings

Quality of life (QoL) is of great importance to patients with schizophrenia and their families. Although the use of QoL measures may contribute to better adherence to therapeutic interventions, more satisfaction with care, improved health outcomes and reduction of health costs, QoL assessment remains underutilized in clinical practice (Hansson, 1999). In this study, only about one third of the study participants were found to have good quality of life, this may be due to the fact that most study participants engage in low income earning occupation; even among farmers most of them are subsistence farmers. Different studies showed that early changes in QoL, as well as the clinical and functional status at entry to-treatment programs have an important impact on long-term QoL and clinical outcome in patients with schizophrenia. (Fernandes et al., 2008). Especially in long-term treatment, not only the reduction of symptoms alone, but also treatment-related factors, such as the therapeutic alliance and the integration of care, continuously improve QoL in patients with schizophrenia (Makanjoula., 2011)

The observation that schizophrenia might have a milder course in developing countries has previously been reported (Murphy et al, 1971). The WHO (1978), in a report on international pilot study of schizophrenia, found that a greater proportion of patients from the industrialized countries had an unremitting psychotic illness, with more hospitalization and conspicuous personality changes which supported the findings of this study with mean number of hospitalization of 0.87 compared to the findings of Koivumaa-Honkanen et al (1999), who reported a mean number of hospitalization of 7.3 among schizophrenic.

In this study only about one third of the study participants were found to have good quality of life following treatment: most of the variable used in assessing quality of life among the study participants were subjective assessment or feelings among the study participants. But, Mendlowicz and Stein, reported that anxiety disorders that includes panic disorder, social phobia, posttraumatic stress disorder, generalized anxiety disorder, cause significant impairment in QOL and psychosocial functioning. QOL has also been demonstrated to be lower in patients with chronic mental illnesses such as schizophrenia, when compared to the general population (Xiang YT et al.,2010). QOL has been described by Donovan D.,2005 to be poor among substance dependent individuals compared to cohorts without substance use disorders, this is similar to finding of this study that showed that schizophrenic patients who engaged in drugs and substance abuse were three times more at risk of having low quality of life compared to those who didn't engage on drugs and substances abuse. In another study by Smith and Larson using the MOS 36-item Short-Form Health Survey questionnaire, it was found that individuals with substance-use disorders had significantly lower scores in the physical and mental functioning domains compared to the general population as well as patients with lung disease and diabetes and patients awaiting cardiac surgery. Mental illness has been shown to negatively affect most aspects of the patient's life, especially the physical and psychological aspects, as well as the affected individual's social, occupational and economic status (Mendlowicz and Stein., 2000).

4. Conclusion

The educational status of secondary and tertiary, married participants, cost of treatment, non-smoking, and drugs and substance abuse remained significant predictors of good quality of life among the study participants.

Recommendations

Government and other relevant stakeholders should introduce a modified behavioral change communication techniques and procedures that will help schizophrenic patients to stop or decrease the level of drug abuse and smoking: this will invariably improve the quality of life of those schizophrenic patients who are involved in drug abuse and smoking.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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