

# Quality of Life in Chronic Mental Disorder: “A Review of Studies in Nigeria”

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## ABSTRACT

### Background

Quality of life is a concept that assesses the impact of chronic disorders and the effect of medical interventions. This study aimed to provide a review of quality of life studies in Nigerian patients with chronic mental disorders, during the period from 2000 to 2012. The study also aimed to identify gaps in knowledge, and provide guidance for the direction of further studies.

### Method

We searched the Medline and PubMed with emphasis on studies conducted in Nigeria between years 2000 to 2012. The following combination of search words were used: “quality of life”, “Nigerian patients”, “schizophrenia”, “bipolar disorder”, “mania”, “depression”, “substance abuse”, “alcoholism”, “dementia” and “chronic mental disorders”.

### Result

Ten relevant studies were reviewed and these were categorised into three (quality of life in patients with chronic mental disorder; comparison of quality of life in patients with chronic mental disorder with that of other patients with other medical conditions; Factors associated with quality of life in patients with chronic mental disorder). The majority of the studies were on reported reduced subjective quality of life in the patients with chronic mental disorder when compared to the general population. Sociodemographic variable such as sex, employment status and clinical factors such as illness duration and presence of negative symptoms were associated with quality of life.

### Conclusion

Quality of life of the chronically ill is still under researched in Nigeria. More studies are needed to evaluate quality of life among the different categories of patients suffering from chronic mental disorders in our environment.

**Keywords:** Quality of life, mental disorders, Nigerian patients

## INTRODUCTION

Outcome measurement in psychiatry is a multidimensional constructs that involve several independent domains<sup>1</sup>. In the past, some of the traditional measures of medical outcomes are mortality and morbidity rates<sup>2</sup>. However, in the last four decades quality of life (QoL) has emerged as a concept in assessing the impact of chronic diseases and medical interventions. The concept of QoL is complex and has a number of different definitions. Many investigators have used this term to substitute for other terms or phrases such as 'functional status', 'health status', 'life satisfaction' and 'well being'<sup>3</sup>. The World Health Organisation defines QoL as “*individuals' perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns*”<sup>4</sup>.

QoL has both objective and subjective components. The objective component includes aspect of living conditions and social functioning such as accommodation, employment, leisure and finance. It is assessed by direct questions to the interviewees regarding different aspect of their lives. The subjective component is usually referred to as “well-being” or “life satisfaction”, and this is assessed by means of satisfaction ratings in the different life domains. Some basic and methodological issues have been raised when assessing subjective QoL of individuals with severe mental disorders because patients' evaluation may be influenced by affective, cognitive and reality distortion symptoms<sup>5</sup>. However, since

QoL refers essentially to a subjective assessment of the situation by the patient, then the best person with sufficient relevant knowledge to make that assessment is the patient<sup>6,7</sup>. Patients' subjective assessment of their wellbeing is now more acceptable as a measure of actual experience and life satisfaction than the objectively evaluated QoL<sup>8</sup>.

Progress in the conceptualization and measurement of QoL in the mental health field has lead to the development of a range QoL measures that have been applied as an outcome measure of consumers of mental health services<sup>9</sup>. QoL measurement provides useful information that can be included into the planning and the evaluation of various treatment approaches<sup>10</sup>. While the reduction of symptoms may be the primary goal of the clinician, the patient may be more interested in restoring family relationships or being able to engage in leisure activities. These 'individualized' measures, although sometimes difficult to administer and interpret, put the patient at the centre rather than at the periphery of assessing the effectiveness of treatment interventions. QoL assessments can also help determine patient preference, allow comparisons of well-being between different conditions and detect subtle differences in response to treatment that may be missed by traditional outcome measures.

The World Health Organization estimates that 450 million people live with a mental illness or behavioural disorder



worldwide<sup>11</sup>. 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<sup>12</sup>. QoL has also been demonstrated to be lower in patients with chronic mental illnesses when compared to the general population<sup>13</sup>. Mental disorder can be defined as "a clinical significant behavioural or psychological syndrome or pattern that occurs in an individual and that is associated with present distress or disability or with a significant increased risk of suffering death, pain, disability, or an important loss of freedom"<sup>14</sup>. Chronic mental disorders are disorders with persistent symptoms that occur over a long period of time and they include disorders such as schizophrenia, major depression, bipolar disorder, dementia and substance use disorder<sup>15</sup>.

The present study aimed to provide a review of QoL studies in Nigerian patients with chronic mental disorders, during the period from 2000 till date. The study also aimed to identify gaps in knowledge, and provide guidance for the direction of further studies.

## MATERIALS AND METHODS

A comprehensive electronic literature search was conducted through the databases Medline (2000 till date) and Pub Med (2000-till date) with emphasis on studies conducted in Nigeria. Only the articles on the subjects of QoL and mental disorders were included in the research. Also included in the review were Postgraduate Fellowship dissertations (National Postgraduate Medical College and West African College of Physicians) with research topics focusing on QoL and mental disorders. Key words used for the electronic and manual searches included: "quality of life", "Nigerian patients", "schizophrenia", "bipolar disorder", "mania", "depression", "substance abuse", "alcoholism", "dementia", and "mental disorders".

The electronic and manual searches for this review were conducted between June and September, 2012. The search through the electronic databases during the period 2000 till date showed that during this period, seven papers were published on the subject of QoL in patients with chronic mental disorder. Six postgraduate fellowships dissertations were identified but three dissertations were excluded because they have been published<sup>16-18</sup>. Hence, three unpublished postgraduate fellowships dissertations were included in the review. The studies identified for this review are shown in Tables 1 and 2. We decided to categorize the studies on the basis of the theme of the title of the paper into the following categories: a) QoL in patients with chronic mental disorder; b) comparison of QoL in patients with chronic mental disorder with that of other patients; (c) Factors associated with QoL in patients with chronic mental disorder.

## RESULTS

### QoL in Patients with Chronic Mental Disorder

We identified eight studies on QoL in patients with chronic mental disorders; seven were published articles while one is a fellowship dissertation. Five of these studies were conducted in the South Western part of Nigeria while the other three articles were from northern part of the country. All of the studies used World Health Organization Quality

of Life Scale Brief Version (WHOQOL-BREF), which is a 26-item self-administered generic questionnaire; a short version of the WHOQOL 100 scales<sup>4</sup>. The WHOQOLBREF is an international QoL instrument which produces a profile with four domain scores (physical health, psychological health, social relationships, environmental domain) as well as two separately scored items about the individuals' perception of their QoL and health (Overall QoL and Overall Health). In the south-western group, the earliest QoL study in Nigeria within the review period was conducted by Olusina and Ohaeri<sup>19</sup>, in which they evaluated the subjective QoL in recently discharged 93 outpatients with schizophrenia and 25 with affective disorder. The patients reported highest satisfaction in the "overall sense of well-being" and "satisfaction with self" items of the WHOQOL-BREF. There was moderate satisfaction in the area of "satisfaction with personal relationship" and "ability to work" while there was dissatisfaction with adequacy of money to meet needs, dependence on treatment and sex life. They authors also found that two-thirds of the patients were categorized as having average QoL in each of the six domains of living experience. Three studies conducted in Ile-Ife described various aspects of QoL in schizophrenia<sup>17, 20, 21</sup>. Adewuya and Makanjuola assessed subjective QoL in 99 outpatients with schizophrenia and reported that the patients perceived their QoL lower than expected<sup>17</sup>. Thirty-six patients (36.4%) reported poor subjective QoL. The same authors in the following year published another paper which evaluated subjective life satisfaction in relation to the objective living conditions of 99 outpatients with schizophrenia<sup>21</sup>. They found that patients reported high levels of satisfaction with life and found life meaningful in the face of unfavourable objective living situations. Patients' levels of satisfaction with personal relationships, transportation, and money were low.

Akinsulore evaluated the relationship between depression and subjective QoL of 100 outpatients on treatment for schizophrenia<sup>20</sup>. Depression was assessed in this study with the Zung's Self-Rating Depression Scale<sup>22</sup>. When the overall subjective quality of life and health satisfaction scores were compared, the non-depressed patients had statistically significant higher scores than the depressed patients. Also the non-depressed subjects had statistically significant higher scores than the depressed subjects in all the other four domains of WHOQOL-BREF. The results in this dissertation showed that the presence of depressive symptoms in patients with schizophrenia has significant adverse effect on their QoL and subjective well being. Finally, in the south-western group Adelufosi and colleagues investigated the relationship between QoL and medication adherence among 313 outpatients receiving treatment for schizophrenia<sup>16</sup>. They found that non-adherence to medication was statistically significantly associated with reduced scores on all the WHOQOL-BREF domains and they concluded that awareness on the part of the clinicians, of the risk factors for medication non-adherence early in patients' management may significantly contribute to improvement in patients' QoL.

In the northern group, Makanjuola and colleagues examined QoL in 100 patients with schizophrenia and found that patients with schizophrenia over the course of



the illness had good objective QoL in all areas of life except in the social relationship domain<sup>23</sup>. However, the patients indicated increased subjective dissatisfaction in all the QoL domains. The same authors two years later compared QoL between 100 patients with schizophrenia and 35 patients with affective disorder<sup>18</sup>. They found that, at the onset of illness, patients with schizophrenia and affective disorder had good objective QoL scores. But, over the course of the illness, there was deterioration in the objective QoL of both groups of patients with a significant increase in those who were either divorced or separated and those who became unemployed. When the QoL was assessed subjectively using the WHOQOL-BREF, patients with schizophrenia, initially and over the course of their illness had statistically significant level of dissatisfaction in the overall QoL, general health and psychological domains compared to the patients with affective disorder who had dissatisfaction in the overall QoL and general health, physical, psychological and environmental domains. Adebisi and colleagues assessed perceived family support and subjective QoL among 137 outpatients with schizophrenia<sup>24</sup>. They reported that there is a significant association between poor perceived family support, and longer duration of illness and treatment. They also reported positive correlation between poor perceived family support and poor social domain, poor overall QoL and poor overall health in the WHOQOL-BREF.

#### Comparison of QoL in patients with chronic mental disorder and patients with other chronic medical condition

There are two studies that compared QoL between patients with chronic mental disorders with that of other patients<sup>25,26</sup>. The first study examined 600 consenting patients which consist of 200 patients with epilepsy, 200 patients with hypertension and 200 patients with schizophrenia<sup>26</sup>. In the study, over 70% of all respondents rated their QoL as "moderately high" with less than 20% scoring "poor" in overall QoL, health satisfaction and four other domains of QoL. They reported that patients with epilepsy had better QoL than the patients with schizophrenia and hypertension. The second study evaluated subjective quality of life in 93 outpatients with bipolar affective disorder and compared it with 84 individuals with diabetes mellitus and 100 healthy controls after the three groups have been matched by age and gender<sup>25</sup>. The WHOQOL-BREF scores of the bipolar patients were significantly lower than those of healthy controls in all the domains, while the bipolar patients had better scores than the patients with diabetes mellitus in the physical, social and environmental domains.

#### Factors associated with QoL in patients with chronic mental disorder

The influence of various socio-demographic and clinical factors on the QoL of patients with chronic mental disorders and have been explored in many cross-sectional studies. While one study reported that there is no association between QoL and sociodemographic factors<sup>19</sup>, several other studies have reported various sociodemographic associated with QoL. The sociodemographic factors reported by Nigerian researchers to be associated with poor QoL are gender<sup>18,23,26</sup>, unemployment<sup>17,18,20,23,26</sup>; poor perceived social support<sup>17</sup>; income per month and level of education<sup>20,26</sup>.

Clinical characteristics identified by Nigerian studies as significant predictors of poor QoL are depressive symptoms<sup>17,20</sup> and presence of comorbid medical problem<sup>17</sup>. In addition, negative symptoms of schizophrenia predicted poor QoL in the social and environmental domains of the WHOQOL-BREF while number of episodes predicted poor QoL in the social domain<sup>20</sup>.

#### DISCUSSION

In reviewing the QoL studies carried out in Nigeria over the past twelve years, it is clear that there are few studies conducted in the country and most of the studies were conducted in the south-western and northern part of Nigeria. Moreover, the majority of the reviewed studies employed cross-sectional design which is limited in the ability to demonstrate causal relationships with regards to the predictors of QoL.

Only one generic QoL instrument (WHOQOL-BREF) was used in all of the reported studies. There is at present no QoL measure specifically designed for use in chronic mentally ill populations. Although existing generic QoL instruments are likely to capture key aspects of QoL, they may be insensitive to some of the unique problems posed by the various chronic mentally ill population. Despite these limitations, the researches in this review still point to a number of consistent findings. The majority of the studies reported a reduction of subjective QoL in patients with chronic mental disorder. However, patients reported high levels of satisfaction with life and found life meaningful against a background of unfavourable objective living situations. The review also showed that there is little correlation between subjective quality of life and objective living situation which agrees with studies from Western cultures<sup>27</sup>. Patients with chronic mental disorders appeared to report better subjective QoL than would be expected from their living circumstances. Reasons for this difference might be that the measures of subjective and objective quality of life assess different constructs<sup>28</sup>, or patients may be more satisfied because they have lowered their level of aspiration and compare themselves only with those in their own group<sup>21</sup>. This fact raises a major concern about the use of subjective QoL instruments to evaluate outcome measures.

Hence, there is a need to identify specific life satisfaction measures in patients with chronic mental disorder that address this issue. Patients also reported low levels of satisfaction with personal relationships, transportation, and money; this affects the clinical outcome of the patients. Therefore, there is the need to develop specific programmes that can address these aspects of patients' life.

Two studies demonstrated depressive symptomatology is an important predictor of low subjective QoL<sup>17,20</sup>. This is in support of findings from other cultures that have shown a strong association between QoL and emotional symptoms<sup>29</sup>. Depression is strongly connected to a lower QoL, but it does not influence the perception of the past or future QoL<sup>31</sup>. The relationship between depressive symptoms and poor subjective QoL scores had been variously attributed to depressed patients tending to overestimate their difficulties, which they review on recovery<sup>32</sup>.

#### CONCLUSION

QoL of the chronically ill is still under researched. More



studies are needed to evaluate QoL among the patients suffering from chronic mental disorders in our environment and to compare their QoL with those of patients with chronic medical conditions. This will enable the QoL of our patients with chronic mental disorders to be placed in a better perspective. Also, there is need for longitudinal studies especially when the initial QoL evaluation indicates an improvement in the immediate period following hospitalization. These studies will help identify the factors that may be considered in the treatment of our patients that will positively contribute to their QoL. All the QoL studies done in Nigeria utilized the WHOQOL-BREF; there is need for future studies to evaluate the psychometric properties of other generic QoL instruments among patients with chronic

mental disorders in Nigeria. In the future, studies on QoL in Nigeria should also include "disease specific" assessment scales that would consider particular aspects of the patients' psychopathology. It would also be important to measure QoL from both patients and observer's (family members, friends, health professionals etc.) perspective, in the context of social, economic, and cultural background of the patient. Similarly to what has been observed concerning QoL in developed countries, virtually all the studies in Nigeria have focused on patients with schizophrenia. Therefore, QoL in other forms of psychiatric disorders need to be evaluated and comparisons between the patients with different disorders are also needed in our environment.

**Table 1:** Summary of studies assessing quality of life in patients with chronic mental disorders

Study	Location	Population (s)	Instrument (s) used	Main Findings and Limitations
Adelufosi et al (2012)	Aro, Abeokuta	313 patients with DSM-V diagnosis of schizophrenia	WHOQOL-BREF Brief Psychiatric Rating Scale Morisky Medication Adherence Questionnaire	Patients with poor medication adherence had lower scores on all domain of the WHOQOL-BREF and on the facets of overall QoL and general health compared with medication adherent patients Limitation: Cross-sectional nature of study and study conducted in single hospital setting.
Adebisi et al (2012)	Sokoto	137 patients with schizophrenia	WHOQOL-BREF The Perceived Social Support Family Scale	Significant association of poor family support with longer duration of illness and treatment, poor social domain QoL, poor overall QoL and poor overall health Limitation: Hospital based and cross-sectional study design
Adewuya & Makanjuola (2010)	Ile-Ife	99 outpatients with schizophrenia	WHOQOL-BREF Instrumental Activities of Daily Living Scale Rosenberg Self-Esteem Scale	Good satisfaction with life in the face of objective poor circumstances. Little correlation between subjective QoL and objective living situation Limitation: Cross-sectional nature of study and study conducted in single hospital setting.
Adewuya & Makanjuola (2009)	Ile-Ife	99 outpatients with schizophrenia	WHOQOL-BREF Brief Psychiatric Rating Scale Global Assessment of Functioning Drug Attitude Inventory	Patients perceived their QoL lower than those reported from other regions of the world. Poor subjective QoL correlated with anxiety/depression, unemployment, comorbid medical problems and poor social support Limitation: Cross-sectional nature of study and study conducted in single hospital setting.
Makanjuola et al. (2007)	Ilorin	100 patients with schizophrenia and 35 patients with affective disorder	WHOQOL-BREF	Change in subjective QoL ratings from good to poor as illness progresses in both groups. Marital & occupational predictive of QoL. Good outcome in terms of objective QoL scores and illness outcome is poor in terms of subjective QoL ratings Limitation: Long period of recall and study conducted in single hospital setting.
Makanjuola et al. (2005)	Ilorin	100 patients with schizophrenia	WHOQOL-BREF	Poor correlation between objective indices and subjective QoL. Gender and occupational status correlated with subjective QoL Limitation: Study conducted in single hospital setting.
Olusina & Ohaeri (2003)	Ibadan	93 patients with schizophrenia and 25 patients with affective disorder	WHOQOL-BREF	Items of highest satisfaction included overall sense of well being and satisfaction with self; satisfaction with personal relationships and ability to work were moderate ; while there was dissatisfaction with adequacy of money to met needs, dependence on treatment and sex life. There were no significant associations between psychiatric diagnosis socio-demographic characteristics and QoL. Limitation: Study conducted in single hospital setting



**Table 2:** Postgraduate fellowship dissertation on quality of life in patients with chronic mental disorders

Study	Location	Population (s)	Instrument (s) used	Main Findings and Limitations
Akinsulore A. (2011)	Ile-Ife	100 outpatients with Schizophrenia	WHOQOL-BREF Positive and Negative Syndrome Scale for schizophrenia Zung's Self-Rating Depression Scale Global assessment of Functioning	Non-depressed patients had higher scores in all the WHOQOL-BREF domains than the depressed. Educational level, Depressive symptoms and Negative symptoms predicted lower scores in some of the WHOQOL-BREF domains. Limitation: Cross-sectional nature of study and study conducted in single hospital setting
Aloba O.O. (2010)	Ile-Ife	93 outpatients with bipolar affective disorder 84 patients with diabetes mellitus 100 healthy controls	WHOQOL-BREF Hamilton Rating Scale for depression Young Mania Rating Scale General Health Questionnaire Global assessment of Functioning	Patients with bipolar disorder reported lower QOL compared to healthy controls, but the bipolar patients despite some socio-demographic disadvantages had better scores than the diabetic patients in some QOL domains
Eboreime H. I. (2006)	Benin city	200 patients with epilepsy, 200 patients with hypertension and 200 patients with schizophrenia	WHOQOL-BREF General Health Questionnaire Brief Psychiatric Rating Scale	over 70% of all respondents rated their QoL as "moderately high" with less than 20% scoring "poor" in overall QoL, health satisfaction and four other domains of QoL. Epileptic patients had better QoL than patients with schizophrenia and hypertension

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