

QUALITY OF LIFE OF PEOPLE LIVING WITH HIV/AIDS IN KOGI STATE, NIGERIA

*A. A. Fatiregun, *K. C. Mofolorunsho, **K. G. Osagbemi

*Department Of Epidemiology, Medical Statistics and Environmental Health, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria

**College of Health Sciences, University of Ilorin, Ilorin Nigeria

Correspondence:

Dr A. A. Fatiregun

Department of Epidemiology, Medical Statistics and Environmental Health

Faculty of Public Health, College of Medicine

University of Ibadan

Ibadan, Nigeria

Email: akinfati@yahoo.com

ABSTRACT

Introduction: With the appreciable rise in longevity of people living with HIV/AIDS (PLWHA), the need for supporting their quality of life (QoL) has become increasingly important. However, limited studies have been conducted using the World Health Organization quality of life HIV (WHOQOL-HIV) bref in our environment.

Objective: This study assessed the QoL of PLWHA attending anti-retroviral (ARV) clinics in Kogi State in north central Nigeria.

Methods: A descriptive cross-sectional study design was used. Two hundred fifty-two PLWHA from five health care centres located across the three zones of Kogi State in Nigeria were consecutively selected. A questionnaire, administered at interview and containing data on socio-demographic, medical, and the WHOQOL-HIV bref was used to assess each study participant.

Results: The overall QoL mean scores in the three domains were similar: psychological health, 15.0 ± 2.8 ; physical health, 15.2 ± 2.5 ; and spirituality/religion/personal beliefs, 15.7 ± 3.4 . Lower QoL mean scores were observed in social relationships

(13.2 ± 2.5) and environment (13.1 ± 1.9) domains. A significant difference in mean QoL scores in the level of independence domain was observed among women (14.4 ± 1.9) compared to men (13.9 ± 1.7 ; $p=0.028$).

Conclusions: Lower QoL in the environment and social relationships domains may be suggestive of stigma and discrimination, as well as poor living conditions, in the PLWHA physical environment.

Key words: Quality of life, PLWHA, HIV, AIDS, WHOQOL-HIV bref.

INTRODUCTION

By the end of 2007, 33.2 million people worldwide were living with HIV; 2.5 million people became newly infected and 2.1 million people had lost their lives to AIDS in the same year¹. With the alarming increase in the HIV/AIDS pandemic in developing countries, and the limited accessibility and availability of highly active anti-retroviral therapy (HAART), the majority of people living with HIV/AIDS (PLWHA) continue to suffer with the disease, with a serious impact on their quality of life (QoL)².

HIV/AIDS continues to contribute significantly to public health problems in Nigeria. Although HIV

infection was initially limited to people with risky behaviors, such as commercial sex workers (CSWs), adolescents, youths, prisoners, and people with multiple sexual partners, the currently available evidence suggests that this infection has permeated all strata of the Nigerian population¹. The prevalence of the infection is estimated to have accounted for about 20% of the total disease burden globally³⁻⁶. AIDS has a chronic debilitating course and as such, determining the impact on the QoL in PLWHA is important for estimating the burden of the disease⁷.

QoL is a term that is popularly used to convey an overall sense of well-being and includes aspects, such as happiness and satisfaction with life as a whole. QoL relates both to the adequacy of material circumstances and to personal feelings about these circumstances with overall subjective feelings of well-being that is closely related to morale, happiness, and satisfaction⁸⁻¹⁰. QoL has recently been scientifically-defined and it has been considered synonymous with health status, functional status, psychological well-being, happiness with life, satisfaction of needs, and assessment of one's own life¹¹.

Several instruments for measuring QoL have been developed and described¹². The validity of the WHOQOL-HIV bref instrument used among HIV/AIDS patient has also been documented¹³. However, limited studies have been conducted using the WHOQOL-HIV bref in our environment¹¹. The current study assessed the QoL of PLWHA attending anti-retroviral therapy clinics in health care centres in Kogi State in north central Nigeria. Kogi State is one of the high-risk states in Nigeria for HIV/AIDS, with a prevalence of 5.5% in the general population¹⁴.

METHODS

This was a descriptive, cross-sectional study. PLWHA (252) were consecutively recruited from the following five health care facilities in Kogi State: the Federal Medical Centre Lokoja (47), Partners Against AIDS in the Community (PAAC) Obangede (60), St. John's Catholic Hospital Kabba (56), Grimard Hospital Anyigba (53), and the Evangelical Church of West Africa (ECWA) Hospital Egbe (36). A questionnaire, administered at the time of interview and containing data on socio-demographic, medical, and the WHOQOL-HIV bref instrument was used to assess each study participant. The WHOQOL-HIV bref consists of 31 items, with each item using a 5-point Likert scale. These items are distributed in six domains. The six domains of QoL are as follows: physical health, psychological health, level of independence, social relationships, environment, and spirituality/religion/personal beliefs. The physical health domain measures pain and discomfort, energy and fatigue, and sleep and rest. The psychological health domain measures positive feelings, thinking, learning, memory and concentration, self-esteem, bodily image and appearance, and negative feelings. The level of the independence domain measures mobility, daily life activities, dependence on medications or treatments, and work capacity. The social relationships domain includes personal relationships, social support, and sexual activity. The environment domain measures physical safety and security, home environment, financial resources, health and social care, accessibility and quality, opportunities for acquiring new information and skills, participation in and opportunities for recreation and leisure activities, and physical environment (pollution, noise, traffic, climate, and transport).

The spirituality/religion/personal beliefs domain measures forgiveness and blame, concerns about the future, and death and dying¹⁵.

Data entry and statistical analysis were performed using the statistical package for social science (SPSS) software, version 14.0. The descriptive statistics, such as mean and standard deviation, were used to summarize the score of the QoL. Domain scores were scaled in a positive direction (higher scores denoting a higher QoL). The mean score of items within each domain was used to calculate the domain scores by multiplying by 4, so that scores ranged from 4 (minimum) to 20 (maximum), with higher scores indicating a better QoL. For the analysis of statistical differences between the mean scores

of QoL for dichotomous variables, the student t-test was used. The level of statistical significance was set at $p < 0.05$.

RESULTS

Of the 252 PLWHA who participated in the study, 62.7% were females. The mean age of participants was 34.8 years, with a range of 18-58 years. The majority of the participants were of Ebira (25.8%) and Igala (25.8%) ethnic groups, while Yoruba accounted for 23.8% of the participants. The married respondents constituted more than one-half of the entire sample size (51.6%), while 23.8% were unmarried. Educational status showed that 67.5% of the respondents were educated up to the secondary school level (**Table I**).

Table I: SOCIO-DEMOGRAPHIC STATUS OF THE RESPONDENTS

Variables	Categories	N	%
Gender (n=252)	Male	94	37.3
	Female	158	62.7
Tribe (n=252)	Yoruba	60	23.8
	Ebira	65	25.8
	Igala	65	25.8
	Bassa	13	5.2
	others	49	19.4
Marital status (n=252)	Married	130	51.6
	Single	60	23.8
	Widowed	26	10.3
	Divorced	16	6.3
	Separated	12	4.8
	Co-habitation	8	3.2
Educational status (n=252)	Primary	72	28.6
	Secondary	98	38.9
	Tertiary	38	15.1
	None	44	17.5

The mean scores in the domains of QoL were high for spirituality/religion/personal beliefs and the psychological domain, but lower for environment and social relationships. **Table II** shows a summary of the QoL domain scores.

Table II: DISTRIBUTION OF MEANS, STANDARD DEVIATIONS, AND RANGE OF RAW SCORES OBTAINED FROM THE QUALITY OF LIFE QUESTIONNAIRE (WHOQOL-HIV bref) BY DOMAIN

Domain	Mean (SD)	Minimum – Maximum
1. Physical health	15.2 (2.5)	4.0 – 20.00
2. Psychological health	15.0 (2.8)	4.0 – 20.00
3. Level of independence	14.2 (1.9)	4.0 – 20.00
4. Social relationships	13.2 (2.5)	4.0 – 20.00
5. Environment	13.1 (1.9)	4.0 – 20.00
6. Spirituality/religion/personal beliefs	15.7 (3.4)	4.0 – 20.00

The gender status of the PLWHA showed a significant difference in only the level of independence domain of the QoL. The results of the Student t-test between gender and domain scores are summarized in **Table III**.

Table III: GENDER AND QUALITY OF LIFE SCORES

Domain	Male	Female	p-value
	Mean (SD)	Mean (SD)	
Physical health	15.2 (2.7)	15.2 (2.5)	0.834
Psychological	14.7 (2.8)	15.2 (2.7)	0.204
Level of independence	13.9 (1.7)	14.4 (1.9)	0.028
Social relationship	13.0 (2.5)	13.2 (2.6)	0.354
Environmental	13.0 (1.9)	13.2 (1.9)	0.383
Spiritual/religious/ personal beliefs	16.1 (3.1)	15.4 (3.6)	0.137

Independent samples test

DISCUSSION

In this study, the mean score was highest and similar in the spirituality/religion/personal beliefs, physical, and psychological health domains, indicating a better QoL in these domains. However, the mean scores in the social relationships and environment domains were at the intermediate level. As documented by Ebisabete *et al.* (2007)¹¹ in a study

conducted to assess the QoL of PLWHA in Sao Paulo, Brazil, the results showed that mean scores for social relationships and environment domains fell in the intermediate level, a result observed to be similar with the present study. Also, in a study conducted in Casa da by Fleck *et al.* (2000), PLWHA had a better QoL (i.e., physical and psychological health), but worse QoL in the social relationship

domain¹⁶. The resulting low level QoL in the social relationships domain could reflect stigmatization and discrimination faced by the participants. Also, issues like personal relationships, sexual activities, and social support of PLWHA can have a negative effect in the social relationship domain.

In the current study, women showed a higher QoL score compared to men in virtually all domains and a significantly higher level on the independence domain. However, previous studies have reported lower QoL scores in psychological and environment domains among women^{11,17,18}. The reason for the observed higher QoL scores in women could be due to constant visits and show of concern among the females in our environment.

Generally, especially in a country like Nigeria, people tend to be spiritual and religious only when confronted with issues that are beyond them. This could account for the observed high QoL scores in the spirituality/religion/personal belief domain. A paper by Szaflarki *et al.*¹⁹ reported that one-third of patients with HIV/AIDS believed that their life was better now than before they were diagnosed with HIV. Several factors, including spirituality were associated with believing that life has improved. Szaflarki and his colleagues¹⁹ used path analysis to examine the conceptual model of how spirituality/religion is related to QoL. Ironson *et al.*²⁰ in their study to examine the relationship between changes in spirituality/religion post-HIV diagnosis and disease progression, observed that nearly one-half of the patients reported an increase in spirituality/religion following diagnosis and as such, their findings corroborated with those of Szaflarski and his colleagues¹⁹, confirming that

patients become more spiritual/religious after disease diagnosis.

In conclusion, the PLWHA studied appear to have a higher QoL in the spirituality/religion/personal beliefs, physical, and psychological health domains, but a lower QoL in the social relationships and environment domains, which could be an indication of discrimination as well as poor living conditions in their physical environment.

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