

Original Article

Quality of life of people living with HIV/AIDS in Cross River, Nigeria

Samson-Akpan PE*, Ojong IN, Ella R, Edet OB

Department of Nursing Sciences, College of Medical Sciences, University of Calabar, Cross-River, Nigeria.

*Corresponding author: patedoho2005@yahoo.com

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ABSTRACT

Background: People living with HIV/AIDS (PLWHA) now enjoy appreciable longevity and there is need to enhance their quality of life. Unfortunately, limited studies in Nigeria have used the World Health Organization Quality Of Life BREF (WHOQOL-BREF) to determine the quality of life of PLWHA. **Aim:** This study was to assess the quality of life of PLWHA participating in five support groups in Southern Cross River Senatorial District. **Methods:** The study was a descriptive survey. It was delimited to PLWHA who belonged to support groups and were available to complete the questionnaire. A total of 123 PLWHA were recruited into the study. WHOQOL BREF was used for data collection. **Results:** The mean (SD) age of the PLWHA was 36.4 +/- 10.9. Most 83(67.5%) were females while 40 (32.5%) were males (Figure 1). With regards to education, most of the respondents 60(48.8%) attended secondary school, followed by 48(39%) who attended tertiary institutions while only 15(12.2%) had primary education (Figure 2). The highest mean (SD) quality of life score emanated from physical health, 14.04+2.66. The mean (SD) scores in the three domains were similar among the PLWHA: psychological health, 13.55+ 2.45; social relation, 13.60+3.01; environment, 13.25+2.58. **Conclusion:** The study suggests that the lower mean score for environment may be an indication of poverty and poor living conditions while higher mean score for physical health may suggest accessibility to anti retroviral drugs. Therefore it was suggested that loan should be made accessible to PLWHA in Cross River State. This should empower them to establish means of livelihood.

Key words: Quality of life, people living with HIV/AIDS, physical health, psychological health, WHOQOL-BREF, Nigeria

INTRODUCTION

Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated that at least 33.3 million people lived with HIV/AIDS in 2009, with 1.8 million HIV/AIDS related deaths, and 2.6 new infections.^[1,2] Furthermore, many African countries have

a prevalence rate of over 15%.^[3] Nigeria had 2.98 million infected people with adult prevalence rate of 3.6 and orphans were 2,175,760 as at 2009.^[1,4] Although, there is a slight decrease in adult prevalence rate from 4.4% in 2005 to 3.6% in 2009; O'Connell-Skevinton and Saxena posit that the rate of HIV/AIDS pandemic in

developing countries is scary or frightening; with little access and inadequate highly active retro viral therapy (HAART), an increased number of people living with HIV/AIDS (PLWHA) are left with no option than to suffer with the disease which impact negatively on their quality of life (QoL).^[5]

Actually, countries with high prevalence have overstretched health systems, lack resources and have the lowest level of hospital bed and health worker per person which overburdens the health care delivery system.^[6,7] Consequently, many strategies are used to give medical support to PLWHA. These approaches include organizing them into groups to access support from government and non-governmental organization on their health care needs.^[8,9] The president had also directed Federal Ministry of Health (FMOH) and National Committee on AIDS(NACA) to place 2500,000 PLWHA on anti-retroviral therapy by 2006.^[8] With major advances in medical treatments PLWHA are living longer and their quality of life has become an important focus to researchers and health care providers.^[11]

QoL is defined as individual's perceptions of their positions in the life context of the culture and value system where they live, and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept, incorporating in a complex way a person's physical health, psychological health, level of independence, social relationships, personal beliefs and relationship to salient features of the environment.^[11,12]

Fatiregun *et al.* using a descriptive cross sectional study design with WHOQOL-HIV BREF instrument on 252 PLWHA in Kogi State, Nigeria observed that the overall mean scores in the three domains were similar: psychological health 15.0+2.8; physical health 15.2+2.5; and spiritual/religion/personal beliefs 15.7+2.5.^[13] The study also highlighted lower mean scores in social relationship 13.2+2.5 and environment 13.1+1.9.^[13] Similar results were also observed in Soa Paulo, Brazil that the mean scores for social relationships and environment domains fell in the intermediate level.^[12] These results were also affirmed by Fleck *et al.* that PLWHA had a better QoL related to their physical and psychological health

but worse QoL in the social relationship domain.^[14]

Regarding the relationship between gender and QoL, Fatiregun *et al.* also observed that women showed a higher QoL score compared to men in virtually all domains and significantly higher level on the independent domain.^[13] Nevertheless other studies have reported lower QoL scores in psychological and environment domains among women.^[12,15,16]

Previously, some of the groups which had been highly vulnerable to HIV infection were commercial sex workers (CSW), adolescents, youths, prisoners, and people with multiple sex partners, presently literature suggest that this infection has penetrated all levels or segments of Nigerian population.^[13,17] HIV/AIDS is a chronic progressive disease which threatens the quality of life of the infected and the affected.^[9] Therefore, it is important to determine the QoL of PLWHA in order to estimate the burden of disease since the prevalence of HIV infection is estimated to have accounted for about 20% of the disease burden.^[13] There are many instruments developed and described to measure the QoL.^[1,13,19] There are also studies that have documented the validity of WHOQOL-HIV BREF instrument used among HIV patient.^[20] However, there are limited studies in our environment using WHOQOL-HIV bref instrument.^[12,13] This study assessed the quality of life of PLWHA participating in support groups in Southern Cross River Senatorial District. Cross River State has a prevalence of 6.1% which is believed to be one of the highest in the South-South Geopolitical Zone.^[21] This study will add to the existing body of knowledge on the quality of life of PLWHA. It will also help the government and other non- governmental organizations to develop interventions that will help to improve the quality of life of PLWHA if the mean scores for different aspect of the QoL are low. It will also help PLWHA to be aware of their QoL and they may try to readjust if the mean scores are low in comparison with other studies.

METHODOLOGY

The study is a descriptive survey which took place in Southern Senatorial District of Cross River State, Nigeria. Southern Senatorial District of Cross River State is

made up of seven Local Government Areas (LGAs). Three LGAs consisting of Akamkpa, Calabar Municipality and Calabar South LGAs were randomly selected for the study. There are 20 HIV/AIDS support groups for PLWHA in the selected LGAs.^[22]

The total numbers of clients in the HIV/AIDS support groups were 218. There were five support groups covered by the NGO which were purposefully selected for the study because of the regularity and consistency of holding meetings with PLWHAs. The participants were purposefully selected on the basis of regular participation at group meetings. The total number of PLWHAs in these groups was 123, this constituted 56% of the target population. The distribution of the participants was as follows: Akamkpa LGA had three communities (Uyanga =22 PLWHA; Mbarakom=21 PLWHA; Akamkpa urban =15 PLWHA). Calabar municipality had 25 PLWHA while Calabar South LGA had 40 PLWHA from their support groups.

WHOQOL-HIV BREF (1997) US version was used for data collection. WHOQOL-HIV BREF consists of 31 items, with each item using a 5-point Likert Scale.^[23] These items are distributed in four domains as follows: physical health domain measures activities of daily living, dependent on medicinal substance and medical aid, energy and fatigue, mobility, pain and discomfort, sleep and rest, work capacity.^[23] Psychological health domain measures body image and appearance, negative feelings positive feelings self esteem, spirituality/religion/personal beliefs.^[23] Social relationship domain

measures personal relationships, social support, and sexual activity.^[23] Environment domain measures financial resources, freedom, physical safety and security, health and social care: accessibility and quality, home environment, opportunity for acquiring new information and skills, participation in and opportunities for recreation/leisure activities, physical environment (pollution/noise/traffic/climate), transport.^[23]

Statistical analysis

Data were analyzed using SPSS version 15. Data were analysed using descriptive and inferential statistics. The WHOQOL BREF was rated on Likert scale of 1-5. Five denoted the highest score. Negative worded items were corrected and scored positively. Mean and standard deviation used highlighted the summary of scores on the quality of life. All scores were multiplied by 4 in order to be directly comparable with the scores obtained from the WHOQOL BREF-100. In order to determine the difference between male and female (dichotomous variables) quality of life in relation to the different domain, independent t test was used. The level of significance was at $p < 0.05$

RESULTS

The mean (SD) age of the PLWHA was 36.4 +/- 10.9. Most 83 (67.5%) were females while 40 (32.5%) were males. With regards to education, most of the respondents 60 (48.8%) attended secondary school, followed by 48 (39%) who attended tertiary institutions while only 15 (12.2%) had primary education

Table 1: Socio-demographic pattern of the respondents (n = 123)

Variables	Categories	N	%
Gender (n=123)	Male	40	32.5
	Female	83	67.0
Educational status	Non formal		
	Primary	6	4.9
	Secondary	9	7.3
	Tertiary	60	48.8
Marital status		48	39.0
	Single		
	Married	53	43.1
	Separated	11	8.9
	Divorced	5	4.1
	Widowed	6	4.9

Table 2: Quality of life score from WHOQOL-HIV bref by domain

S/n	Domain	Mean (SD)	Minimum- Maximum
1	Physical health	14.04(2.66)	4.00-20.00
2		13.55(2.45)	4.00-20.00
3	Psychological health	13.60(3.01)	4.00-20.00
4	Social relations	13.25(2.58)	4.00-20.00
	Environment		

The highest mean (SD) quality of life score emanated from physical health, 14.04+2.66. The mean (SD) scores in the three domains were similar among the

PLWHA: psychological health, 13.55+2.45; social relation, 13.60+3.01; environment, 13.25+2.58 (Figure 1).

Table 3: Relationship between gender and quality of life scores of PLWHA

Domain	Male		Female		T-Value
	Mean	(SD)	Mean	(SD)	
Physical	14.3	(2.6)	13.9	(2.6)	.72
Psychological	13.3	(2.5)	13.6	(2.4)	-.57
Social relation	13.8	(2.7)	13.5	(3.1)	.49
Environment	13.7	(2.8)	13.0	(2.4)	1.30

$P < 0.05$; df 121; crit. t 1.97

The result of gender status in Table 3 showed no significant difference in all the domains of QoL. The calculated t-value in all the domains of QoL were less than the critical t-value of 1.97 at 0.05 level of significance with 121 degree of freedom. Further results also showed that majority of the respondents rated their QoL scores as good 57 (46.3%), very good 21 (17.1%) while 21 (17.1%) said their QoL scores were neither poor nor good. Regarding being satisfied with health, majority of the respondents 59 (48%) said they were 'satisfied' with their health; 13 (10.6%) were 'very satisfied' with their health while 27 (22%) were neither 'satisfied nor dissatisfied'.

DISCUSSION

In this study, the overall QoL mean scores in the three domains (psychological health, social relation and environment) were similar and they fell within the intermediate level. It was also noted that physical health had the highest score. These results are affirmed by Fatiregun *et al.* which observed

that the overall mean scores in the two domains (physical and psychological health domains) were similar.^[13] It was also noted that the scores in Fatiregun *et al.* study were higher than what were obtained in this study.^[13] Regarding physical health having the highest score this may be attributed to the availability of anti retroviral therapy which is highly subsidized by the government.^[8]

It was also observed that environment had the lowest mean score followed by psychological health. These results are also in consonance with Fatiregun *et al.*^[13] study which also highlighted lower mean scores in environment. Similar results were also observed in Soa Paulo, Brazil that the mean scores for social relationships and environment domains fell in the intermediate level.^[12] Environment domain measures financial resources, freedom, physical safety and security, health and social care: accessibility and quality, home environment, opportunity for acquiring new information and skills, participation in and opportunities for recreation/leisure

activities, physical environment (pollution/noise/traffic/climate), transport.^[22,23] The results indicating low scores for environment in this study may imply lack of money and poor living conditions since most the respondents were of secondary school level whose earnings may not be adequate for personal and social needs.

The results for social relations and psychological health domains may also indicate stigmatization and discrimination faced by the PLWHA. In addition, personal relationships, sexual activities and social support of PLWHA can have negative effect in the social relation domain if the individual experiences difficulty in these situations.^[13]

The results also revealed that there was no significant difference in all the domains when men and women were compared. The results are at variance with the findings of Fatiregun *et al.*^[13] which documented that women showed a higher QoL score compared to men in virtually all domains and significantly higher level on the independent domain.^[12] The current result may be attributed to the fact men and women were accessible to the antiretroviral therapy and equally they face discrimination and stigmatization. The men and women equally face issues relating to social relation and environment.

The majority of the respondents rated their QoL as 'good' and 'very good'. Regarding being satisfied with health, majority of the respondents said they were 'satisfied' with their health; and also 'very satisfied' with their health. The result is not surprising because the participant enjoyed the highest score in the physical health which can impact positively on the psychological and social health.

CONCLUSION

In conclusion, the PLWHA in this study had the highest mean score on QoL related to physical health domain which may be related to encouragement by the support groups which enhance compliance to antiretroviral drugs. Environment had the lowest mean score. Therefore it was suggested that link to support groups should be established early as PLWHA come in contact with health care personnel or non-governmental agencies. It was also

suggested that a revolving loan should be made accessible to PLWHA through the support groups which can also double as Cooperative Society for PLWHA. This is hoped would empower them to establish means of livelihood. Secondly, Government should continue to make antiretroviral drugs accessible to PLWHA at a subsidized price to enhance higher quality of life. There is still need to carry out a large scale study in the whole state to ascertain the quality of life of PLWHA.

Previous Publication: This study has been published in part as an abstract in the proceedings of the 6th International AIDS Society (IAS) Conference on HIV Pathogenesis, Treatment and Prevention, that held on 17th-20th July 2011, in Rome, Italy.

REFERENCES

1. Joint United Nations Programme on HIV/AIDS 2010. UNAIDS report on the global AIDS epidemic. http://www.unaids.org/globalreport/documents/2011123_globalReport_full_en.pdf on 7th October, 2011.
2. Abiodun O.A. HIV/AIDS-related sexual behaviour among commercial motorcyclists in Sagamu, South-West, Nigeria. *Int J Med Biomed Res* 2013;2:69-74
3. Opiyo P, Yamano T, Jayne TS. HIV and home-based health care. *Int J Equity Health* 2008; 7:8 <http://www.equityhealthj.com/content/1/1/8> on 25th October, 2013.
4. United Nations General Assembly Special Session. 2010. UNGASS country progress report, Nigeria. http://www.unaids.org/en/dataanalysis/monitoringcountryprogress/2010progressreports/2010progressreportssubmittedbycountries/nigeria_UNGASS2010_Fin on 7th October, 2011.
5. O'Connell K, Skevington S, Saxena S. WHOQOL HIV Group. Preliminary development of the World Health Organization's quality of life HIV instrument (WHOQOL-HIV): Analysis of the pilot version. *SocSci Med* 2003;57:1259-75.
6. John ME, Ndebbio TJ, Duke EU, Essienmoh EE, Robinson-Bassey GC. Community Mobilization and education for home based care of people living with HIV/AIDS in rural community of Cross River State, Nigeria. *Nigerian J Nurs* 2008;1:21-30.
7. Avert. 2009. HIV and AIDS care in the home. <http://www.avert.org/aids-home-care.htm> on 17th July, 2009
8. Federal Ministry of Health. National health sector strategic plan for HIV/AIDS in

- Nigeria, 2005-2009. Federal Ministry of Health. Nigeria. 2004
9. Samson-Akpan PE, Ella RE, Ojong IN. Influence of home-based care on the quality of life of people living with HIV/AIDS in Cross River State. *Global J Pure and Appl Sci* 2012;8:95-103.
 10. Geurtsen B. Quality of life and living with HIV/AIDS in Cambodia. *Transcult Nurs* 2005;16:41-49.
 11. World Health Organisation. What is quality of life? *World Health Forum* 1996;1:354-356.
 12. Elisabete C, Marandi DS, Ivan FJ, Fernanda L. Quality of life of people living with HIV in Sao Paulo, Brazil. *Rev Saude Publica* 2007;41 www.scielo.br/pdf/rsp/v41s2/en_5947.pdf on 25th October, 2013.
 13. Fatiregun AA, Mofolorunsho KC, Osagbemi KG. Quality of life of people living with HIV/AIDS in Kogi State, Nigeria. *Benin J Postgrad Med* 2009;11:21-27.
 14. Fleck MPA, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, Pinzon V. Aplicacao da versao portuguesa do instrument abreviado de avaliacao da qualidade de vida "WHOQOL-Bref". *Rev Saude Publica* 2000;34:178-83.
 15. Mrus JM, Williams PL, Chon ST, Wu AW, Tseva J. Gender differences in health-related quality of life in patients with HIV/AIDS. *Quality of life research: Qual Life Res An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation* 2005;14:479-491.
 16. Wisniewski AB, Apel S, Selnes O A, Nath A, McArthur JC, Dobs AS. Depressive symptom, quality of life and neuropsychological performance in HIV/AIDS: the impact of gender and injection drug use. *J Neurovirol* 2005;11:138-43.
 17. Joint United Nations Programme on AIDS. 2007. AIDS epidemic update. 07.27E/JC1322E, Geneva: World Health Organization/UNAIDS.
 18. Hughes J, Jelsma J, Maclean E, Darder M, Tinise X. The health-related quality of life of people living with HIV/AIDS. *Disabil Rehabil* 2004;26:371-376.
 19. McDowell I and Newell C. *Measuring health: A guide to rating scales and questionnaires*, 2nd ed. Oxford Press, New York; 1996.
 20. Saxena S, O'Connell K, Underwood L. A commentary: Cross cultural quality of life assessment at the end of life. *Gerontologist* 2002;42:S81-85.
 21. Global AIDS Initiative in Nigeria. *Basic facts on HIV/AIDS and situation in Nigeria*. GHAIN. Calabar, 2007.
 22. Positive Development Foundation (PDF). *Conscientizing against Injustice and Violence (CAIV)*. Records on support groups, 2010. World Health Organization. WHOQOL-BREF. U.S., 1997.

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