QUALITY OF LIFE AND ASSOCIATED FACTORS AMONG ADULTS IN A COMMUNITY IN SOUTH WEST NIGERIA

O.O. Akinyemi¹, E.T. Owoaje¹,², O.A. Popoola¹ and O.S. Ilesanmi⁵

1. Department of Community Medicine, University College Hospital, Ibadan.
2. Department of Preventive Medicine and Primary Care, College of Medicine, University of Ibadan

ABSTRACT

Background: Quality of life (QoL) is an important measure in the assessment of population well being and health status. However despite locally validated measuring tools, little is known about the quality of life and associated factors in Nigerian adults. Objective: This study therefore aimed to assess QoL and contributory factors among adults residing in a sub urban Nigerian community.

Methods: A descriptive cross-sectional study of 527 adults, in Oru community was conducted. An interviewer-administered questionnaire adapted from the WHO quality of life (WHOQOL-BREF) questionnaire was used to obtain information from respondents. Associations were explored with the chi square test; multivariate analysis was done with logistic regression at 5% level of significance.

Results: Respondents mean age was 33.3 ±8.1 years. In all, 46.5% were currently married or cohabiting. Christianity was the dominant religion, 72.7%. In all, 81.6% had good QoL. Predictors of good QoL were respondents less than 25 years [OR: 3.5 (1.264-9.508)], having educational level that is secondary and above [OR: 4.2 (1.810-9.762)], being Unemployed [OR: 1.9 (1.099-3.351)], living in flats and other bigger apartments [OR: 1.8 (1.121-3.04]), currently ill [OR: 3.7 (2.096-6.509)], and lack of involvement in religious activities [OR: 3.1 (1.166-8.045)] were also shown to be predictors of good QoL.

Conclusion: The majority of those evaluated had good QoL. Further surveys involving larger samples sizes are required to explore the QoL in distinct sub-populations and in currently ill patients to strengthen the results of this study.

Keywords: quality of life, Nigeria, health, well-being.

INTRODUCTION

Quality of life (QoL) is a term understood differently by workers in many professions for whom it is relevant. According to Costanza et al, “quality of life is the extent to which objective human needs are fulfilled in relation to personal or group perceptions of subjective well-being”¹. QoL cannot be measured by a single variable and has substantial overlap with concepts such as social functioning, disability, social support and well-being.² Although the subjective nature of the quality of life assessment is regarded as problematic, it is still widely used, mainly to keep research costs low.²

QoL as a measure is important for: planning clinical care of patients; outcome measurement in clinical trials and health services management; health needs assessment of populations in descriptive studies; and for resource allocation and health economics.³ Of all these uses the most important are in health services research and as an outcome measure in clinical trials.⁴ Health related Quality of Life is used to assess impact of chronic illnesses like cancers and asthma on health status of individuals with such conditions.⁵⁻⁷ However, this definition misses the positive dimensions of well being as well as complexity of what is meant by the terms “perceived”, “subjective” or “evaluation”⁸⁻⁹. Little is known about the factors predictive of quality of life in Nigeria. This study therefore aimed to describe quality of life and factors associated with this in an adult population resident in a sub-urban community in South West Nigeria.
MATERIALS AND METHOD
This study, which was part of a larger one, was a
descriptive cross-sectional study of 527 consenting
adults, males and females aged 18 years and above
who have resided in Oru community for at least one
year prior to study. Oru-Ijebu is a semi-urban town
located in Ijebu North Local Government Area (LGA)
of Ogun State. According to the 2006 national
population census, it has a population of 27,000.
Sampling was done using a cluster sampling method
after four enumeration areas had been randomly
selected from the 60 in the town. Each enumeration
area has 15-30 houses and about 350-450 people. A
survey of adults in the 4 enumeration areas yielded an
adequate number of respondents.

The WHO quality of life (WHOQOL-BREF)
questionnaire was used to measure physical health,
psychological (mental) health, social relationship and
relationship with features in their environment as a
function of quality of life. This quality of life assessment
tool has been validated in Nigeria.6-7, 10-12 The
WHOQOL-BREF has 26 items scored on a Likert
scale of 1 to 5. Scores were scaled in a positive direction
(i.e. higher scores denote higher quality of life). The
scoring of negatively phrased questions (3, 4 and 26)
were reversed (1=5, 2=4, 3=3, 4=2, 5=1) thus
transforming them to positively phrased questions.5
The higher the score on the WHOQOL-BREF, the
better the quality of life.10 Scores less than 78, which
corresponds to an average response of 3 or below
on each item were categorised as poor QoL while
scores equal to and above 78 were categorised as good
QoL.

The research instrument was translated to Yoruba, the
predominant local language (in the community) for
ease of communication and to ensure proper
understanding. It was then back-translated to English
to ensure the original meaning was retained. The
research instrument was pre-tested in Ago-Iwoye (a
semi-urban community in Ijebu-North Local
Government) which is similar to the study site in terms
of geographical location, culture, beliefs and lifestyle
of the people. Twenty questionnaires were pretested
and appropriate amendments were then made after
the pre-test. Data was entered and analyzed using SPSS
version 17. Relevant frequencies, percentages, means
and appropriate diagrams were generated. Chi square
test was used to assess associations between categorical
variables. Predictors of good QoL was determined
with logistic regression analysis. Significance was set at
5%.

Ethical approval for this study was sought from the
joint UI/UCH Ethical Review Committee and
permission to conduct the study obtained from the
Medical Officer of Health, Ijebu-North Local
Government. Informed consent was obtained from
participants before administering questionnaires.
Respondents were informed that participation was
voluntary and that they would not suffer any
consequences if they chose not to participate or to
withdraw from the study at any point.

RESULTS
Respondents mean age was 33.3 ±8.1 years, over half
[286 (54.3%)] were in the 25-34 year age group. One hundred
and thirty six (25.8%) were currently married
or cohabiting and Christianity was the dominant

<table>
<thead>
<tr>
<th>Variable</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>61 (11.6)</td>
</tr>
<tr>
<td>25-34</td>
<td>286 (54.3)</td>
</tr>
<tr>
<td>35-44</td>
<td>134 (25.4)</td>
</tr>
<tr>
<td>≥45</td>
<td>46 (8.7)</td>
</tr>
<tr>
<td>Mean ±SD</td>
<td>33.3 ±8.1</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>320 (60.7)</td>
</tr>
<tr>
<td>Female</td>
<td>207 (39.3)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Currently married/ cohabiting</td>
<td>136 (25.8)</td>
</tr>
<tr>
<td>Not currently Married</td>
<td>391 (74.2)</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Christianity</td>
<td>383 (72.7)</td>
</tr>
<tr>
<td>Islam</td>
<td>144 (27.3)</td>
</tr>
<tr>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td>One room winged apartment</td>
<td>254(48.2)</td>
</tr>
<tr>
<td>Flat &amp; others</td>
<td>273(51.8)</td>
</tr>
<tr>
<td>Educational status</td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>13(2.5)</td>
</tr>
<tr>
<td>Primary</td>
<td>18 (3.4)</td>
</tr>
<tr>
<td>Secondary</td>
<td>190 (36.1)</td>
</tr>
<tr>
<td>Tertiary Education</td>
<td>306(58.1)</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>141 (26.8)</td>
</tr>
<tr>
<td>Skilled worker</td>
<td>68 (12.9)</td>
</tr>
<tr>
<td>Unskilled worker</td>
<td>152(28.8)</td>
</tr>
<tr>
<td>Student</td>
<td>122(23.1)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>44 21</td>
</tr>
<tr>
<td>Current Health problems*</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>209(39.7)</td>
</tr>
<tr>
<td>No</td>
<td>318(60.3)</td>
</tr>
<tr>
<td>Religious activity</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>467(88.6)</td>
</tr>
<tr>
<td>No</td>
<td>60(11.4)</td>
</tr>
</tbody>
</table>

* Bungalows, duplexes
**These were Malaria (86%), Typhoid (7%), Common cold (6%) and Stress (1%).

Table 1: Socio demographic and medical characteristics of respondents
religion, 383(72.7%). In all 254(48.2%) lived in one room apartment winged type of accommodation (Table 1). The majority 496(94.1%) of the study population attained at least secondary education with 31(5.9%) reporting primary or no formal education and 31.5% of respondents were unemployed. Table 1 shows some other social and medical characteristics of respondents. Current health problems such as malaria, typhoid, common cold and stress were reported by 209(39.7%). Involvement in religious activities was documented for 467(88.6%) respondents. In all 427(81%) were Yorubas, 57(11%) were Ibos, and 43(8%) were Hausas.

Quality of Life (QoL) Profile of Respondents

Table 2 summarises positive responses to questions on the WHOQOL-BREF. In all, 415 (78.7%) rated their overall quality of life as good (based on response to question 1). Using the aggregate scores from the administration of the WHOQOL-BREF 430(81.6%) had good QoL by scoring equal to and above 78.

Association between Respondent Characteristics and Quality of Life

The association between respondents’ personal and social variables and QoL is shown in Table 3.

<table>
<thead>
<tr>
<th>Variable</th>
<th>(N=527) n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How would you rate your quality of life?</td>
<td>415 (78.7)</td>
</tr>
<tr>
<td>2. Satisfied with your health</td>
<td>360 (68.3)</td>
</tr>
<tr>
<td>3. Feeling of incapacitation by pain</td>
<td>326 (61.9)</td>
</tr>
<tr>
<td>4. Medical treatment is needed to function in your daily life</td>
<td>274 (52.0)</td>
</tr>
<tr>
<td>5. How much do you enjoy life?</td>
<td>471 (89.4)</td>
</tr>
<tr>
<td>6. Your life is meaningful</td>
<td>475 (90.1)</td>
</tr>
<tr>
<td>7. Able to concentrate</td>
<td>495 (93.9)</td>
</tr>
<tr>
<td>8. Feel safe in your daily life</td>
<td>485 (92.0)</td>
</tr>
<tr>
<td>9. Physical environment is healthy</td>
<td>458 (86.9)</td>
</tr>
<tr>
<td>10. Adequate energy for everyday life</td>
<td>464 (88.0)</td>
</tr>
<tr>
<td>11. Able to accept your bodily appearance</td>
<td>480 (91.1)</td>
</tr>
<tr>
<td>12. Adequate money to meet your needs</td>
<td>300 (56.9)</td>
</tr>
<tr>
<td>13. Adequate information for daily living</td>
<td>377 (71.5)</td>
</tr>
<tr>
<td>14. Opportunity for leisure activities</td>
<td>423 (80.3)</td>
</tr>
<tr>
<td>15. How well are you able to get around?</td>
<td>308 (58.4)</td>
</tr>
<tr>
<td>16. Satisfaction with your sleep</td>
<td>377 (71.5)</td>
</tr>
<tr>
<td>17. Satisfaction with your ability to perform your daily living activities</td>
<td>380 (72.1)</td>
</tr>
<tr>
<td>18. Satisfaction with your capacity for work</td>
<td>379 (71.9)</td>
</tr>
<tr>
<td>19. Satisfied with yourself</td>
<td>412 (78.2)</td>
</tr>
<tr>
<td>20. Satisfaction with your personal relationships</td>
<td>379 (71.9)</td>
</tr>
<tr>
<td>21. Satisfaction with your sex life</td>
<td>332 (63.0)</td>
</tr>
<tr>
<td>22. Satisfaction with support from your friends</td>
<td>257 (48.8)</td>
</tr>
<tr>
<td>23. Satisfaction with the conditions of your living place</td>
<td>269 (51.0)</td>
</tr>
<tr>
<td>24. Satisfaction with your access to health services</td>
<td>249 (47.2)</td>
</tr>
<tr>
<td>25. Satisfaction with your transport</td>
<td>196 (37.2)</td>
</tr>
<tr>
<td>26. How often do you have negative feelings such as blue mood, despair, anxiety, depression?</td>
<td>372 (70.6)</td>
</tr>
</tbody>
</table>

Table 2: Proportion of positive responses to questions on the WHOQOL.
### Table 3: Factors affecting QoL among respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Good</th>
<th>Poor</th>
<th>χ² (p value)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25</td>
<td>51 (83.6)</td>
<td>10 (16.4)</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>236 (82.5)</td>
<td>50 (17.5)</td>
<td>9.21 (0.027)</td>
</tr>
<tr>
<td>35-44</td>
<td>113 (84.3)</td>
<td>21 (15.7)</td>
<td></td>
</tr>
<tr>
<td>≥45</td>
<td>30 (65.2)</td>
<td>16 (34.8)</td>
<td></td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>256 (80.0)</td>
<td>64 (20.0)</td>
<td>1.38 (0.240)</td>
</tr>
<tr>
<td>Female</td>
<td>174 (84.1)</td>
<td>33 (15.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single/never married</td>
<td>161 (81.3)</td>
<td>37 (18.7)</td>
<td></td>
</tr>
<tr>
<td>Currently married/ cohabiting</td>
<td>197 (80.4)</td>
<td>48 (19.6)</td>
<td>1.18 (0.552)</td>
</tr>
<tr>
<td>Separated/divorced/widowed</td>
<td>72 (85.7)</td>
<td>12 (14.3)</td>
<td></td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary &amp; below</td>
<td>15 (48.3)</td>
<td>16 (51.7)</td>
<td>24.18 (&lt;0.001)</td>
</tr>
<tr>
<td>Secondary &amp; above</td>
<td>415 (83.7)</td>
<td>81 (16.3)</td>
<td></td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>284 (78.7)</td>
<td>77 (21.4)</td>
<td>6.52 (0.011)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>146 (87.9)</td>
<td>20 (12.1)</td>
<td></td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One room winged apartments</td>
<td>194 (76.4)</td>
<td>60 (23.6)</td>
<td>8.88 (0.003)</td>
</tr>
<tr>
<td>Flat &amp; others</td>
<td>236 (86.4)</td>
<td>37 (13.6)</td>
<td></td>
</tr>
<tr>
<td><strong>Currently ill</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>190 (90.9)</td>
<td>19 (9.1)</td>
<td>20.01 (&lt;0.001)</td>
</tr>
<tr>
<td>No</td>
<td>240 (75.5)</td>
<td>78 (24.5)</td>
<td></td>
</tr>
<tr>
<td><strong>Religious activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>375 (80.3)</td>
<td>92 (19.7)</td>
<td>4.57 (0.032)</td>
</tr>
<tr>
<td>No</td>
<td>55 (91.7)</td>
<td>5 (8.3)</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4: Predictors of good QoL among respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Odds ratio</th>
<th>P-Value</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;25</td>
<td>3.466</td>
<td>0.16</td>
<td>1.264</td>
</tr>
<tr>
<td>25-34</td>
<td>1.980</td>
<td>0.87</td>
<td>0.906</td>
</tr>
<tr>
<td>35-44</td>
<td>2.221</td>
<td>0.67</td>
<td>0.946</td>
</tr>
<tr>
<td>≥45</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary &amp; above</td>
<td>4.204</td>
<td>0.001</td>
<td>1.810</td>
</tr>
<tr>
<td>Primary &amp; below</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>1.919</td>
<td>0.022</td>
<td>1.099</td>
</tr>
<tr>
<td>Employed</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flat &amp; others</td>
<td>1.846</td>
<td>0.016</td>
<td>1.121</td>
</tr>
<tr>
<td>One room winged apartments</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td><strong>Currently ill</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3.695</td>
<td>&lt;0.001</td>
<td>2.097</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Religious activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3.062</td>
<td>0.023</td>
<td>1.166</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Among respondents 45 years or older 65.2% had good QoL while it was more (above 80%) in each of the other age groups (p<0.05). A higher percentage of female respondents had good QoL 84.1% compared to 80% of males (p>0.05). Similarly there was no significant association between marital status or family background and QoL. A higher proportion of those with secondary or higher levels of education (83.4%) had good QoL when compared to individuals with only primary or no formal education (p<0.05).

There was a significant association between type of housing and QoL (p<0.05). While 76.4% of those who lived in one room winged type of accommodation reported good QoL, this was significantly lower than 86.4% observed among people who occupied better housing units like flats. Three seventy five (80.3%) respondents involved in religious activities had good QoL compared to 92 (19.7%) of those who were not involved (p<0.05). Among participants with current medical problems, 190/209 (90.9%) had good QoL, while 240/318 (75.5%) of those without current medical problem had good QoL (p<0.05). A slightly higher number of employed respondents 77(21.4%) reported poor QoL compared to unemployed respondents 20(12.1%), (p<0.05).

**Predictors of good Quality of Life among the respondents**

The predictors of good QoL are shown in table 4. Binary logistic regression analysis showed that predictors of good QoL were respondents less than 25 years [OR: 3.5 (1.264- 9.508)], having educational level that is secondary and above [OR: 4.2 (1.810- 9.762)]. Being Unemployed [OR: 1.9 (1.099- 3.351)], living in flats and other bigger apartment [OR: 1.8 (1.121- 3.04)], currently ill [OR: 3.7 (2.096- 6.509)], and lack of involvement in religious activities [OR: 3.1 (1.166- 8.045)] were also shown to be predictors of good QoL.

**DISCUSSION**

In this work, factors associated with good QoL on bivariate analysis were age less than 45 years, educational level from secondary and above, being unemployed, good housing. Other associated factors of good QoL included currently ill and no involvement in religious activity. Gender and marital status were found not to be associated with QoL in this study.

Logistic regression analysis revealed that age less than 25 years, secondary educational level and above, being unemployed, good housing, currently ill and no involvement in religious activities were significant predictors of good QoL.

Younger respondents in this study were found to have better QoL. Young people have fewer responsibilities to think about as they are being catered for most times by their parents. The health problems and subsequent decrease in functional capacity that affects old age are not usually present in younger people. The finding of no significant association between marital status and quality of life in this work is at variance with what has been reported. However, gender as shown in other studies did not have significant association with QoL. Participants who engaged in religious activities reported poorer quality of life. This result is also at variance with what has been documented that individuals involved in significant social networks like religious organizations, have access to social resources such as assistance and support. The reason for this picture in the study population is not immediately clear but a possible explanation could be due to the passive attitude to life adopted by some religious people who believe all the affairs of their lives are controlled by God and thus may not strive to develop themselves or improve their quality of life.

Contrary to available evidence, this work showed a poorer QoL among those employed compared to those unemployed. This could be as a result of the communal style of living in the population studied where an employed person has other people outside his/her family to take care of; an employed person may thus rate his/her quality of life low. Another possible reason for this observation could be the fact that about half of the respondents classified as ‘unemployed’ were students who could have rated their QoL as good if they were satisfied with the support they received from their sponsors. Indices related to better social standing and living conditions such as higher educational levels and good accommodations were shown to positively impact QoL in this study. Similar evidence was observed in previous studies.

Current illness was found as a predictor of good QoL. This could occur since non-chronic and curable illnesses were reported among the respondents. QoL have been used in previous studies to assess the impact of chronic health states and it has been shown that Presence of chronic diseases like Diabetes, Hypertension, Depressive disorder, Functional disability, Visual impairment and Dementia could lead to poor QoL.

In this study, illnesses reported by respondents where acute, transient, and curable (eg malaria, typhoid) whose effects on QoL need further evaluation.

**CONCLUSION**

The majority of the community dwellers had good QoL. Factors such as higher education and living in...
flats and other bigger apartments and lack of involvement in religious activities contributed positively to QoL. Further studies to explore the QoL in distinct sub-populations and the contribution of acute illnesses to QoL will be required to deduce a full picture of health status in communities like the one studied.

Limitation
The cross-sectional nature of the survey did not allow for inferences to be drawn as to causal relationship among variables. Oru community is peculiar due to the presence of a higher institution and international refugee camp. Surveys involving larger sample sizes are required to strengthen the findings of this study.

REFERENCES