Research Article

Quality of life among elderly in a rural area

Vijaiyalakshimi Praveen*, Anitha Rani M

Department of Community Medicine, Sri Ramachandra Medical College & Research Institute, Porur, Chennai - 600116, India

Received: 29 January 2016  Accepted: 10 February 2016

*Correspondence:  Dr. Vijaiyalakshimi Praveen,  E-mail: vijaiyalakshimi@gmail.com

ABSTRACT

Background: Quality of life (QOL) among elderly is an important area of concern which reflects the health status and well-being of this vulnerable population. Their number in the developing world is increasing due to demographic transition. For India, the population of above 60 years was around 7% in 2001, which is expected to rise to 11.6% by 2026. The objective of the study was to assess the quality of life (QOL) among elderly in a rural area.

Methods: A community based cross-sectional study was conducted among 50 elderly subjects exiting the primary health centre at Nemam, Thiruvallur district, Tamilnadu. Data on QOL was assessed by WHO questionnaire (WHO QOL-BREF). Written and informed consent was obtained from all participants. The study protocol was approved by Institutional ethics committee.

Results: Majority of participants were of 60-64 years age group (40%). Out of 50 participants, 20 (40%) were male and 30 (60%) were females. Among the participants 52% were working and 76% married. The overall mean (SD) score was 49.28 (9.92) with first, second and third quartile scores of 43.8, 47 and 51 respectively. The difference of scores between men and women was statistically insignificant.

Conclusions: QOL score among elderly was found to be average. The scores of social relationship were low for both male and female elderly subjects. This implies an urgent need for health educating the elderly with regard to their social and physical group recreational activities that will build their self-confidence and thereby improving their QOL.

Keywords: QOL, Elderly, Rural, India

INTRODUCTION

At global level, QOL among elderly is an important area of concern which reflects the health status and well-being of this vulnerable population.1 There is a need to highlight the medical and psychosocial problems that are being faced by the elderly people in India and strategies for bringing about an improvement in their quality of life.2 Population ageing is a recognized international reality, both in developed and developing countries. The number of elderly in the developing world is increasing due to demographic transition, whereas their condition is deteriorating as a result of fast eroding traditional family system coupled with rapid modernization and urbanization.2 Also, presently the epidemiological transition of diseases with increase in burden of chronic morbidity conditions, which is driven by population ageing, will affect the QOL of elderly population.

In developing countries, demographic transition results in increasing life expectancy and increase in proportion of elderly population in near future.3 In view of the above, it is imperative to analyse the QOL and its associated factors among this vulnerable population so that effective measures to improve the QOL can be implemented at community level.1 For India, the population above 60 years was around 7% in 2001, which is expected to rise to 11.6% by 2026.4 It was known that socio-demographic
Longevity has increased significantly in the last few decades mainly due to the socio-economic and health care developments. These factors are responsible for the higher numerical presence of elderly people leading to change in age structure, and a higher dependency ratio. In this juncture we need to reappraise the quality of life of elderly people. The life of elderly becomes more difficult when problems related to fulfilment of basic requirements such as social relations; personal care, nutrition and accommodation are added to old age health problems. Quality of life for elder person has become increasingly important as an outcome in public health research.  

METHODS

This study was done as a cross-sectional study. The study was done in the Primary Health Centre, Nemam belonging to Poonamallee block in the Thiruvallur district, Tamil Nadu. Elderly patients of age 60 and above exiting the Nemam PHC. Inclusion criteria was all patients more than or equal to 60 years of age. Elderly patients who were not willing or in position to give information due to any reason were excluded. Around 20 elderly patients attend the outpatient department of Nemam PHC every day. Elderly patients exiting the PHC were randomly approached and if consenting were interviewed. Approximately five patients were interviewed per day for ten days and thus fifty randomly selected elderly individuals exiting the Nemam PHC during the first two weeks of August 2015 were taken as study samples.

Study tool

QOL was assessed by using WHO QOL-BREF scale which was tested and validated. This instrument contains 26 questions which reference to each four domains namely physical health, psychological, social relationships and environment to be studied. Each of these domains was rated on a 5-point Likert scale. As per the WHO guidelines, 25 raw scores for each domain was calculated by adding values of single items and it was then transformed to a score ranging from 0 to 100, where 100 is the highest and 0 is the lowest value. The mean score of each domain, total score and average score were calculated. This questionnaire was translated to Tamil and then, back to English to assess the liability of the study tool.

Method of data collection

After obtaining IEC, SRMC approval the study was commenced. After obtaining informed consent from the study subjects, they were interviewed and the data was collected on socio-demographic factors that include age, sex, education, occupation, marital status using a structured questionnaire along with application of the instrument WHOQOL-BREF by the principle investigator.

Statistical analysis

Data entry and analysis was done using statistical package for social sciences (SPSS) 16 version software. Descriptive statistics were calculated for background variables including socio-demographic characteristics. The findings for each domain were expressed in terms of mean and SD. The difference between mean scores was tested by using independent sample t-test. p-value less than 0.05 was considered as significant.

RESULTS

Majority of participants were of 60-64 years age group (40%). Out of 50 participants, 20 (40%) were male and 30 (60%) were females. About 52% were working and 76% married. More than half of the participants (60%) have had no schooling and the maximum qualification was high school (Table 1).

Table 1: Socio-demographic profile of study subjects.

| Characteristics | Male N=20 | Female N=30 | Overall N=50 |
|-----------------|----------|------------|-------------|
| **Age (years)** |          |            |             |
| 60-64           | 9 (45)   | 11 (36.7)  | 20 (40)     |
| 65-69           | 6 (30)   | 7 (23.3)   | 13 (26)     |
| 70-74           | 4 (20)   | 10 (33.3)  | 14 (28)     |
| 75-80           | 1 (5)    | 2 (6.7)    | 3 (6)       |
| **Education**   |          |            |             |
| No schooling    | 7 (35)   | 23 (76.7)  | 30 (60)     |
| Primary         | 12 (60)  | 7 (23.3)   | 19 (38)     |
| High school     | 1 (5)    | 1 (2)      | 2 (4)       |
| **Marital status** |      |            |             |
| Married         | 18 (90)  | 20 (66.7)  | 38 (76)     |
| Widowed         | 2 (10)   | 10 (33.3)  | 12 (24)     |
| **Occupation**  |          |            |             |
| Labour          | 16 (80)  | 8 (26.7)   | 24 (48)     |
| Not working     | 2 (10)   | 22 (73.3)  | 24 (48)     |
| Agriculture     | 2 (10)   | 0          | 2 (4)       |

Independent t-test showed that QOL was significantly not altered by age, sex, marital status, education and occupation (Table 2).

The middle-old age group QOL score is lower than the young-old age group but the difference was not statistically significant (Figure 1).
The overall mean (SD) score was 49.28 (9.92) with first, second and third quartile scores of 43.8, 47 and 51 respectively. The score for social relationship domain was comparatively lower than psychological, physical and environmental domains (Table 3).

**Table 2: Association of QOL score with background variables.**

| Characteristics      | Number | Mean (SD) | P value |
|----------------------|--------|-----------|---------|
| **Age**              |        |           |         |
| 60-69                | 33     | 50.11 (10.07) | 0.414   |
| 70-80                | 17     | 47.66 (9.73)  |         |
| **Sex**              |        |           |         |
| Male                 | 20     | 48.28 (8.58)  | 0.564   |
| Female               | 30     | 49.95 (10.82) |         |
| **Education**        |        |           |         |
| No schooling         | 30     | 49.57 (10.99) | 0.805   |
| 10th Standard        | 20     | 48.85 (8.34)  |         |
| **Marital status**   |        |           |         |
| Married              | 38     | 48.07 (8.32)  | 0.125   |
| Widowed              | 12     | 53.13 (13.6)   |         |
| **Occupation**       |        |           |         |
| Working              | 26     | 50.62 (10.6)   | 0.324   |
| Not working          | 24     | 47.82 (9.15)   |         |

**Figure 1: Mean QOL scores of each domain among age groups.**

**Table 3: QOL scores of male and female of each domain.**

| Domains                | Male Mean±SD | Female Mean±SD | Total Mean±SD |
|------------------------|--------------|----------------|---------------|
| Physical               | 51.1±12.32   | 51.23±13.20    | 51.18±12.72   |
| Psychological          | 46.60±14.51  | 46.73±15.22    | 46.68±14.79   |
| Social relationships   | 43.20±12.73  | 47.20±13.29    | 45.60±13.09   |
| Environmental          | 52.20±6.10   | 54.63±10.89    | 53.66±9.28    |

**DISCUSSION**

Our study shows that overall QOL score of elderly living in rural area is average. On further look at the score of each domain, the social relationship domain has the lowest score alike for both genders. Similar findings were revealed by other studies done in rural area of South India. Studies done in Northern India shows a higher overall score and also better social and interpersonal relationship scores than our study. The differences observed in QOL scores among our study and other studies might be due to the difference in pattern of associated factors as QOL would be affected by events of life related to his/her society or community.

Our study has revealed a higher environmental domain score which shows that rural elderly are more satisfied about their environment. The pollution free, stress free and greener environment of rural areas could be the reason for this higher score among all the domains which was not shown by other studies.

It was observed in our study that though age, sex, marital status or occupation seems to have a say on the quality of life, the association was not statistically significant. This finding was contrary to others studies which showed older group had a lesser QOL score.

The current study has got its own limitations. Due to lack of time and resource the principle investigator adopted convenient sampling procedure and this study could be treated as a preliminary outcome to carry further study. Since this study deals with elderly population there are chances of recall bias. Also chances of selection bias needs a mention as only those elderly who are physically independent could walk up to the PHC for treatment. Despite the limitation, this study gives fair information on the QOL among elderly using a standard tool.

**CONCLUSION**

QOL score among elderly was found to be average. The scores of social relationship were low for both male and female elderly subjects. This implies an urgent need for health educating the elderly with regard to their social and physical group recreational activities that will build their self-confidence and thereby improving their QOL. Health educating the others family members particularly the young on their role in keeping the elders happy and active and to support them physically, socially and environmentally is equally important. Further research studies will help in comprehending the influence of other factors on the QOL scores of elderly.

**ACKNOWLEDGEMENTS**

Authors would like to thank Dr. Anitha and their three batch mates, MO of the PHC and concerned staffs for lending their support for the study and the subjects who participated in the study.
Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Kumar SG, Majumdar AGP. Quality of life (QOL) and its associated factors using WHOQOL-BREF among elderly in urban Puducherry, India. Journal of Clinical and Diagnostic Research: JCDR. 2014;8(1):54-7.
2. Qadri SS, Ahluwalia S, Ganai AM, Bali spS, Wani FA, Bashir. H. An epidemiological study on quality of life among rural elderly population of northern India. Int J Med Sci Public Health. 2013;2(3):514-22.
3. Rovan HH, Avan AS, Mirium H. Current and future prevalence of dependency, its relationship to total population and dependency ratios. Bulletin of WHO. 2004;82:251-8.
4. Dyson T, Cassen R, Visaria L. Twenty-first century India: population, economy, human development and the environment. New York, NY: Oxford University Press; 2004. p. 438.
5. Barua A, Mangesh R, Kumar Harsha HN, Mathew S. A cross-sectional study on quality of life in geriatric population. Indian J Community Med. 2007;32:146-7.
6. Vitorino LM, Paskulin LM, Viana L.A. Quality of life among older adults resident in long-stay care facilities. Rev Lat Am Enfermagem. 2012;20:1186-95.
7. McDaid O, Hanly MJ, Richardson K, Kee F, Kenny RA, Savva GM. The effect of multiple chronic conditions on self-rated health, disability and quality of life among the older populations of Northern Ireland and the Republic of Ireland: a comparison of two nationally representative cross-sectional surveys. BMJ Open. 2013;3(6):ii.e002571.
8. Swain PK, Raj D, Pedgaonkar SP. A study on quality of life satisfaction & physical health of elderly people in Varanasi: An urban area of Uttar Pradesh, India. Int J Med Sci Public Health. 2014;3:616-20.
9. World Health Organization. WHOQOL–BREF: Introduction, Administration, Scoring and Generic Version of the Assessment. Programme on mental health. Geneva, WHO. 1996. Available from: URL: http://www.who.int/mental_health/media/en/76. pdf

Cite this article as: Praveen V, Rani AM. Quality of life among elderly in a rural area. Int J Community Med Public Health 2016;3:754-7.