

## Original Research Article

DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20192089>

# Quality of life among elderly population in an urban slum of Tirupati city

Visweswarara Rao Guthi, Tirupati Venkata Devi Prathyusha\*, Nagaraj Kondagunta, Nakkala Kavyasree, Chimmata Kavitha, Mandapalli Kavitha

Department of Community Medicine, SVIMS-Sri Padmavathi Medical College for Women, Tirupati, Andhra Pradesh, India

**Received:** 21 April 2019

**Revised:** 03 May 2019

**Accepted:** 06 May 2019

**\*Correspondence:**

Dr. Tirupati Venkata Devi Prathyusha,  
E-mail: drprathyusha80@gmail.com

**Copyright:** © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## ABSTRACT

**Background:** Healthy aging is a process of developing and maintaining the functional ability that enables well-being in older age. Objective of the present study is to assess the quality of life among elderly population using WHOQOL-BREF scale and to determine the association between socio demographic factors and quality of life.

**Methods:** Community based cross- sectional study was conducted in the urban field practice areas of SVIMS-Sri Padmavathi Medical College for women, Tirupati for a period of one month (February 2019 to March 2019). Study population were Elderly of age 60 years and above. Total 60 elderly were included in the study. Quality of life was assessed using WHOQOL-BREF questionnaire.

**Results:** Most of the study population was in the age group of 60-64 years, Most of them were females (71.7%). More than one third were illiterates (36.7%), 30% were studied up to primary school. 93.3% of study population were suffered from some form of illness. Mean total transformed score was high among  $\geq 70$  years compared to  $<70$  years, Males were showing high mean total transformed score compared to females, literates were showing high score and persons with illness were showing high scores and persons without illness.

**Conclusions:** It is concluded from this study that most of the elderly population are suffered from some form of illness. Overall quality of life is good among elderly within 70 years of age, males, literates and who are in living as married compared to their counter parts.

**Keywords:** Elderly population, Urban slum, WHOQOL-BREF, Socio demographic factors

## INTRODUCTION

Healthy aging is a process of developing and maintaining the functional ability that enables well-being in older age. Aging is universal phenomenon accompanied by an increased risk of disease, disability, decreased functional capacity, and eventually death, and it affects every individual, family, community, and society. The world is in the midst of a unique and irreversible process of demographic transition which will result in increasing life

expectancy and increase in the proportion of elderly population in the near future.<sup>1</sup>

India is the second largest population of the elderly (60+) in the world.<sup>2</sup> The percentage of persons aged 60 and over is expected to double between 2007 and 2050, and their actual number will be more than triple by 2050 reaching to 2 billion.<sup>3</sup> In India, the population of 60 years and above was 8% (8.1% in rural India) in 2011.<sup>4</sup> This is projected to increase from 8.6% in 2016 (103.9 million)

to 20% (324 million) by 2050 a number greater than total US population in 2012.<sup>5-7</sup>

These demographic changes and the longevity revolution require medical care needs as well as special preventive health care needs of the elderly. The rising number of older Indians with changing family relationships and severely limited old-age income support brings a variety of social, economic, and health-care policy challenges.<sup>6</sup> The obvious challenges against active aging, which is defined as the process of optimizing opportunities for health, participation, and security to enhance quality of life as people age, are multimorbidity and functional decline due to age-specific health and social and familial issues.

The World Health Organization (WHO) defined QOL as “an individual's perception of life in the context of culture and value system, in which he or she lives and in relation to his or her goals, expectations, standards, and concerns.”<sup>8</sup>

This population aging, along with epidemiological transition of diseases with an increase in burden of chronic morbidity conditions, will affect the quality of life (QOL) of elderly population in the long run in which he or she lives and in relation to his or her goals, expectations, standards, and concerns.”

It was known that different socio demographic factors such as age, education, marital status, and family structure had greatly influenced the QOL among elderly population. There is a wide gamut of social, psychological, emotional and physical factors that determine the medical problems and this entire set of contributory factors needs to be addressed. With this backdrop, this study was done to assess different domains of QOL and its association with socio demographic factors among geriatric population. Objective of the present study is to assess the quality of life among elderly population using WHOQOL-BREF scale and to determine the association between socio demographic factors and quality of life.

## METHODS

Community based cross-sectional study was conducted in the urban field practice areas of SVIMS-Sri Padmavathi Medical College for women, Tirupati for a period of one month (February 2019 to March 2019). Study population were Elderly of age 60 years and above. Inclusion criteria was more than or equal to 60 years of age. Elderly who were not willing to participate were excluded. Each elderly was contacted by house to house visit. A total of 60 elderly were participated in the study. Quality of life (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.

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, marital status using a structured questionnaire along with application of the instrument WHOQOL-BREF. 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

In this total 60 elderly population of age 60 years and above were participated.

**Table 1: Distribution according to socio demographic factors.**

Socio demographic variables	Number	Percentage (%)
<b>Age (in years)</b>		
60-64	23	38.3
65-70	18	30.0
71-75	10	16.7
76-80	7	11.7
>80	8	13.3
<b>Sex</b>		
Male	17	28.3
Female	43	71.7
<b>Education</b>		
Illiterate	22	36.7
Primary	18	30.0
Secondary	17	28.3
Intermediate and above	3	5.0
<b>Marital status</b>		
Married	36	60.0
Widow/widowed	24	40.0

From Table 1 it was observed that most of the study population were in the age group of 60-64 years (38.3%) followed by 65-70 years (30%), 71-75 years (16.7%), >80 years (13.3%) and 76-80 years (11.7%). Most of them were females (71.7%). More than one third were illiterates (36.7%), 30% were studied up to primary school, 28.3% were studied up to secondary school and only 5% were studied up to intermediate and above. 60%

of study population were married and 40% were widow/widowed.

**Table 2: Distribution according to morbidity status.**

Illness	Number	Percentage (%)
Yes	56	93.3
No	4	6.7

Table 2 shows 93.3% of study population were suffered from some form of illness.

**Table 3: Distribution according to total scores.**

Variable	Mean±SD (total transformed score)	P value
<b>Age</b>		
<70 years	212.78±35.98	
≥70 years	218.31±27.09	0.610
<b>Sex</b>		
Male	226±27.66	
Female	208±35.35	0.065
<b>Marital status</b>		
Married	221.75±34.30	
Widow/widowed	202.33±30.99	0.030
<b>Education</b>		
Illiterate	204.13±31.86	
Literate	219.68±34.49	0.089
<b>Illness</b>		
Yes	213.35±35.17	
No	222.25±10.87	0.620

**Table 4: Distribution according to physical domain.**

Variable	Mean±SD (physical domain transformed score)	P value
<b>Age</b>		
<70 years	52.61±10.34	
≥70 years	52.04±9.00	0.845
<b>Sex</b>		
Male	53.76±8.27	
Female	51.54±9.58	0.403
<b>Marital status</b>		
Living as married	53.78±8.26	
Widow/widowed	49.75±10.19	0.098
<b>Education</b>		
Illiterate	49.90±9.08	
Literate	53.47±9.16	0.151
<b>Illness</b>		
Yes	52.08±9.42	
No	53.25±6.50	0.810

Table 3 shows means of total transformed scores. Mean total transformed score was high among ≥70 years compared to <70 years, Males were showing high Mean total transformed score compared to females, Literates

were showing high score and persons with illness were showing high scores and persons without illness. All these differences were statistically non significant. Married were showing high mean transformed score compared to widow/widowed. This difference is statistically non significant.

From the Table 4 it was observed that mean physical domain transformed score was high among <70 years, male population, married, literate and without illness. All these differences were statistically non-significant.

**Table 5: Distribution according to psychological domain.**

Variable	Mean±SD (psychological domain transformed score)	P value
<b>Age</b>		
<70 years	44.15±12.78	
≥70 years	42.38±9.24	0.644
<b>Sex</b>		
Male	49.11±11.75	
Female	41.65±11.63	0.029
<b>Marital status</b>		
Living as married	47.69±11.98	
Widow/widowed	37.87±9.68	0.001
<b>Education</b>		
Illiterate	41.59±12.64	
Literate	45.02±11.68	0.291
<b>Illness</b>		
Yes	43.64±12.08	
No	45.50±13.17	0.769

**Table 6: Distribution according to social relationship domain.**

Variable	Mean±SD (social relationship domain transformed score)	P value
<b>Age</b>		
<70 years	60.08±15.65	
≥70 years	67.38±9.61	0.116
<b>Sex</b>		
Male	64.00±12.50	
Female	60.74±15.65	0.447
<b>Marital status</b>		
Living as married	61.63±15.09	
Widow/widowed	61.70±14.66	0.986
<b>Education</b>		
Illiterate	58.50±14.61	
Literate	63.50±14.78	0.210
<b>Illness</b>		
Yes	61.39±15.07	
No	65.50±10.96	0.596

Table 5 shows mean psychological domain transformed score was high among males, married. These differences were statistically significant. Mean psychological domain transformed score was high among  $<70$  years, literates, persons without illness. These differences were statistically non-significant.

Table 6 shows the mean social relationship transformed score domain was high among  $\geq 70$  years, males, widow/widowed, literates, persons without any illness. These differences were statistically non-significant.

**Table 7: Distribution according to environmental domain.**

Variable	Mean $\pm$ SD (environmental domain transformed score)	P value
<b>Age</b>		
<70 years	56.51 $\pm$ 10.98	
$\geq 70$ years	55.92 $\pm$ 7.96	0.858
<b>Sex</b>		
Male	60.00 $\pm$ 8.39	
Female	54.95 $\pm$ 10.77	0.089
<b>Marital status</b>		
Living as married	58.64 $\pm$ 10.42	
Widow/widowed	53.00 $\pm$ 9.46	0.038
<b>Education</b>		
Illiterate	54.13 $\pm$ 10.21	
Literate	57.68 $\pm$ 10.33	0.203
<b>Illness</b>		
Yes	56.27 $\pm$ 10.60	
No	58.00 $\pm$ 6.27	0.749

Table 7 shows the mean environmental domain transformed score was high among  $<70$  years, males, married, literates, persons without any illness. These differences were statistically non-significant.

## DISCUSSION

The present study was a community based cross sectional study was done to assess the quality of life among elderly population using WHOQOL-BREF questionnaire. In this study most of the study population were in the age group of 60-64 years. Similar finding was observed in studies done by Praveen et al, Ahmed et al and Karmakar et al.<sup>9</sup>

<sup>11</sup> Female were more compared to males. Similar finding was observed in studies done by Praveen et al Kumar et al.<sup>9,12</sup> Most of the study population were illiterates. Similarly in studies done by Praveen et al, Karmakar, et al most of the study participants were illiterates.<sup>9,11</sup> In this study most of them were living as married. Similar findings observed in studies done by Praveen et al, Ahmed et al and Karmakar et al.<sup>9-11</sup>

The mean physical domain score was high among  $<70$  years compared to  $>70$  years male population, married,

literate and without illness. In studies done by Karmakar et al, Kumar et al mean physical domain score was high among  $<70$  years.<sup>11,12</sup> This is similar to this study. In study done by Karmakar et al and Praveen et al females have high score and in study done by Kumar et al males were showing high score.<sup>9,11,12</sup> In this study literates were showing high score. Similar findings were observed in Karmakar et al.<sup>11</sup> In this study living as marries were showing high scores. Similarly in studies done by Karmakar et al and Kumar et al.<sup>11,12</sup>

Mean psychological domain transformed score was high among males, married. Mean psychological domain transformed score was high among  $<70$  years, literates, persons without illness. Similar findings were observed in a study done by Karmakar et al.<sup>11</sup>

The mean social relationship transformed score domain was high among  $\geq 70$  years, males, widow/widowed, literates, persons without any illness. In a study done by Karmakar et al.<sup>11</sup> Similar results were observed except for sex it was shown that females have high score.

The mean environmental health domain transformed score was high among  $<70$  years, males, married, literates, persons without any illness. These results were contrast in study done by Karmakar et al where  $\geq 70$  years, females and widows were showing high scores.

## CONCLUSION

It is concluded from this study that Most of the elderly population are suffered from some form of illness. Overall quality of life is good among elderly within 70 years of age, males, literates and who are in living as married compared to their counter parts.

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: The study was approved by the Institutional Ethics Committee*

## REFERENCES

1. Rovan HH, Avan AS, Mirium H. Current and future prevalence of dependency, its relationship to total population and dependency ratios. Bull WHO. 2004;82:251-8.
2. Ministry of Planning. Eleventh Five Year Plan Document 2007-2012. New Delhi: Government of India; 2008. Available from: <http://www.planningcommission.nic.in/plan/planer/fiveyr/11th/11v1>. Accessed on 20 March 2019.
3. United Nations. Global Issues: Ageing. UN. Available at: <http://www.un.org/en/globalissues/ageing/index.shtml>. Accessed on 10 April 2019.
4. Population Composition. Census of India. Chapter – 2. Available at: [http://www.censusindia.gov.in/vital\\_statistics/srs\\_report/9chap%202%20%202011.pdf](http://www.censusindia.gov.in/vital_statistics/srs_report/9chap%202%20%202011.pdf). Accessed on 27 March 2019.

5. Government of India. Ministry of Statistics and Programme Implementation. Elderly in India Profiles and Programmes; 2016. Available at: [http://www.mospi.nic.in/sites/default/files/publications/ElderlyinIndia\\_2016.pdf](http://www.mospi.nic.in/sites/default/files/publications/ElderlyinIndia_2016.pdf). Accessed on 27 March 2019.
6. Help Age India. State of Elderly in India 2014; 2015. Available at: [https://www.helpageindia.org/images/pdf/state\\_elderly\\_India\\_2014.pdf](https://www.helpageindia.org/images/pdf/state_elderly_India_2014.pdf). Accessed on 27 March 2019.
7. Scommegna P. Today's Research on Aging. India's Aging Population. Program and Policy Implications. Population Reference Bureau. 2012;25:1-6.
8. WHOBREF. Introduction, administration, scoring and generic version of the assessment. Field trial version December 1996. Programme on Mental Health.pdf. Accessed on 10 April 2019.
9. Praveen V, Anitha RM. Quality of life among elderly in a rural area. *Int J Community Med Public Health.* 2016;3(3):754-7.
10. Ahmed MT, Jadhav J, Sobagaiah RT, Vishwanatha. Assessment of quality of life and activities of daily living among geriatric population in Bengaluru city. *Int J Community Med Public Health.* 2017;4(10):3842-5.
11. Karmakar N, Datta A, Nag K, Tripura K. Quality of Life among Geriatric Population: A Cross-Sectional Study in a Rural Area of Sepahijala District, Tripura. *Indian J Public Health.* 2018;62(2):95-9.
12. Kumar GS, Majumdar A, Pavithra G. Quality of Life (QOL) and Its Associated Factors Using WHOQOL-BREF. Among Elderly in Urban Puducherry, India. *J Clin Diagnos Res.* 2014;8(1):54-7.

**Cite this article as:** Guthi VR, Prathyusha TVD, Kondagunta N, Kavyasree N, Kavitha C, Kavitha M. Quality of life among elderly population in an urban slum of Tirupati city. *Int J Community Med Public Health* 2019;6:2430-4.