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# Quality of life among senior citizens in selected Rural and urban community, Bankura district, West Bengal

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### Abstract

A descriptive comparative survey was conducted on Quality of life among senior citizens in selected rural and urban community, Bankura district, West Bengal, to assess the quality of life among senior citizens, to compare the quality of life among senior citizens of rural and urban community and to determine the association between quality of life with selected demographic variables. By simple random sampling 106 (53 from rural and 53 from urban community) senior citizens were selected. The conceptual framework adopted for the study was based on modified health belief model (2006). Data were collected by semi structured demographic proforma and standardized WHOQOLBREFSCALE. The study finding revealed that, there was significant difference in the quality of life among senior citizens of rural and urban community ( $t = 7.19, p < 0.05$ ). In this study, maximum senior citizens (36%) had poor quality of life in rural community whereas maximum senior citizens (30%) having good quality of life in urban community. It also depicted that, senior citizens of both rural community and urban community had lowest quality of life score in the social relationship domain with the mean percentage 67.53 and 71.46 accordingly. This study also showed that, there was significant association between quality of life among senior citizens in rural community with their economic dependency ( $\chi^2=5.12, p>0.05$ ). There was significant association between quality of life among senior citizen in urban community with their gender ( $\chi^2=4.94, p>0.05$ ). Based on the findings it was recommended that, further study could be undertaken using the large sample in different setting. The study has several implications for nursing practice, education, administration and research.

**Keywords:** Quality of life, senior citizen

### Introduction

Aging is a universal phenomenon characterized by an increased risk of morbidity, disability, reduced functional capacity, and eventually death. Globally, life expectancy of geriatric population has increased due to the betterment in the quality of life (QOL) of the elderly because of the increased accessibility and availability of quality health-care services, a continuous demographic transition is occurring leading to an increase in life expectancy<sup>[1]</sup>.

The process of aging is universal and natural. According to the 2011 census, India has 104 million elderly people, 53 million of whom are female and 51 million of them are male. According to a survey published by the United Nations Population Fund and Help Age India, there would be 173 million senior people worldwide by 2026. In 2021, there will be nearly 138 million senior people in India (67 million men and 71 million women), according to the Report of the Technical Group on Population Projections for India, which states 2011–2036. This number is further predicted to rise by roughly 56 million elderly people in 2031. Older people's reliance ratio increased from 10.9% in 1961 to 14.2% in 2011 and is expected to reach 15.7% by 2021<sup>[2]</sup>.

In 2011, the Indian census shows that the elderly was 8% of the total population in which 7.70% and 8.40% comprise male and females, respectively<sup>[3]</sup>.

### Background of the study

Aging is the normal process of time time-related change, beings with birth and continues throughout life. Aging is universal phenomenon, old age is not a disease, but a normal part of the human span. It is an inevitable physiological phenomenon<sup>[4]</sup>.

A man's life is normally divided into five main stages namely infancy, childhood, adolescence, adulthood and old age in each of these stages an individual has to find himself in different situations and face different problem.

The old age is not without problems. In old age physical strength deteriorates, mental stability diminishes; money power becomes bleak couple with negligence from younger generation. Old age is a natural feature of life, a process that banging's from the time of birth. This process may be slow in some process, while some individual may grow rapidly and prematurely (WHO) [5].

Age is natural and universal process. The census of 2011, shows that India has reach 104 million elderly persons in India; 53 million females and 51 million males. A report released by the United Nations Population Fund and Help age India suggests that the number of elderly persons is expected to grow to 173 million by 2026. According to the Report of the Technical Group on Population Projections for India states 2011-2036, there are nearly 138 million elderly persons in India in 2021 (67 million males and 71 million females) and is further expected to increase by around 56 million elderly persons in 2031. The old age dependency ratio climbed from 10.9% in 1961 to 14.2% in 2011 and further projected to increase to 15.7% and 20.1% in 2021 and 2031 respectively as a whole India [6].

As the aging population is becoming more and more pronounced, the concern for the quality of life and wellbeing of the older people is also growing both in developing and developed countries. A higher quality of life improves the quality of the individual in mutually self-reinforcing manner [7].

**Problem statement**

Quality of life among senior citizens in selected rural and urban community, Bankura district, West Bengal.

**Objectives of the study**

1. To assess the quality of life among senior citizens staying in rural and urban community.
2. To compare the quality of life among senior citizens between rural and urban community.
3. To find out the association between quality of life with selected demographic variables.

**Materials and Methods**

A descriptive comparative survey design was conducted by using quantative research approach among senior citizens aging 61 years to 80 years residing in rural community-Chhatna block, Bankura District, West Bengal and urban community-Bankura municipality 11 no ward, Bankura district, West Bengal and they were selected through simple random sampling. A sami structured validated interview schedule was prepared which was conducted by 10 items to find out demographic data that includes are in age, gender, education, occupation, type of family, marital status, living arrangement, financial dependency, socioeconomic status, addiction. Quality of life assessed by using 5-point WHOQOL BREF SCALE Rating scale consisting of 26 items which reliability. 82 by cronbach's Alpha formula. Ethical clearance was taken from Institute of Ethical Commetee, BSMCH, and admistrative approval was obtain from COMOH of Bankura and BMOH of Anchuri block, Bankura. Data were collected from participants using separate code no through home visiting. Interview scheduled was used where self-introduction was given and purpose, nature of the study was explain to all participant, confidentiality anonymity were matained.

**Table 1:** Scores of quality of life among senior citizens selected in rural and urban community n=106(nr=53, nu=53)

QOL	Range	Rural		Urban	
		Frequency	Percentage	Frequency	Percentage
Poor	<Mean-1SD (<82.23)	19	36	0	0
Average	Mean-1SD—Mean+1SD (82.83-102.83)	33	62	37	70
Good	>Mean+1SD (>102.83)	1	2	16	30

Minimum possible score-26  
Maximum possible score- 130

Table 1 showed that, majority of senior citizens (62%) having average quality of life in rural community where majority of senior citizens (70%) in urban community having average quality of life.

It also presented that maximum of senior citizens (2%) having good quality of life in rural community where maximum of senior citizens (30%) having good quality of life in urban community.

**Table 2:** Domain wise of Mean, Median, Standard deviation of quality of life among senior citizens in selected rural and urban community. n=106(nr=53, nu=53)

Domains of Quality of Life	Score Range	Rural				Urban			
		Mean	Mean (%)	Median	SD	Mean	Mean (%)	Median	SD
Physical	7-35	25.06	71.60	26	3.58	27.74	77.74	28	3.38
Psychological	6-30	20.32	67.73	20	2.58	22.81	76.03	23	1.71
Social Relationship	3-15	10.13	67.53	10	1.16	10.72	71.46	11	0.79
Environment	8-40	24.72	61.80	24	3.22	30.28	75.70	30	2.05

Data presented in table 2 that, senior citizens of rural community had highest quality of life score in the physical domain with a mean percentage 71. 60 where senior citizen of urban community had the highest quality of life in physical domain also with the mean percentage 77.74.

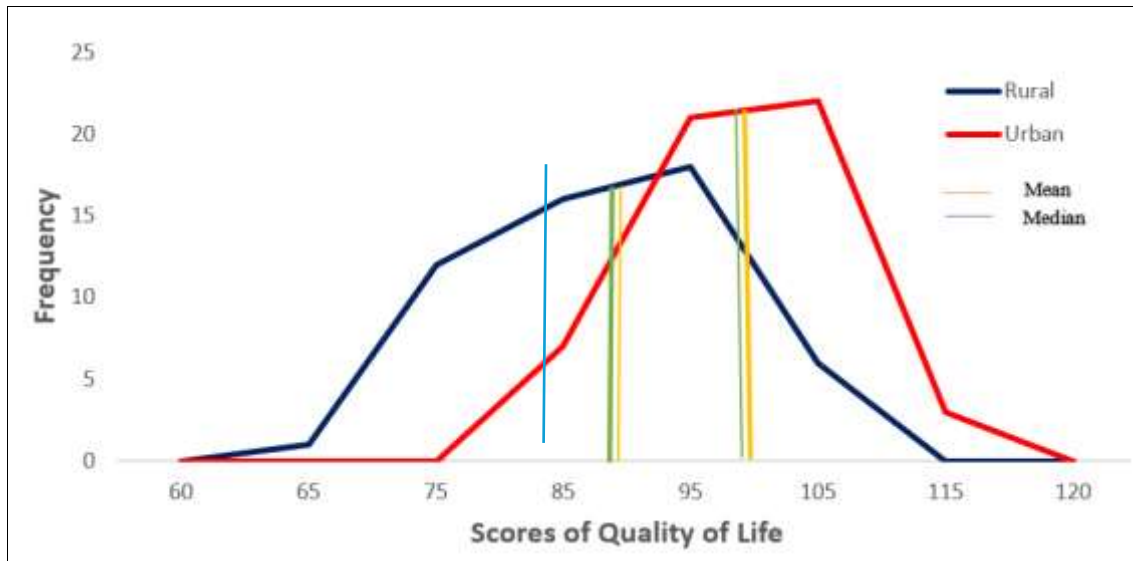
It also depicted that senior citizen of rural community had lowest quality of life score in the social relationship domain with the mean percentage 67.53 where senior citizens of urban community had lowest quality of life score in the social relationship domain with the mean percentage 71.46.

**Table 3:** Mean, median, standard deviation of overall quality of life among senior citizens selected from rural and urban community N=106

Overall Quality of Life	Mean	Median	SD
Senior citizen of Rural community-	87.09	87	9.26
Senior citizen of Urban community-	98.57	98	7.00

Table 3 showed the mean score of quality of life in rural community was 87.09, median 87 and SD value of 9.26. It also showed that the mean score of quality of life in urban community was 98.57, median 98 and SD value of 7.00.

**Findings difference between quality-of-life scores among senior citizens of rural and urban community**



**Fig 1:** Frequency polygons showing quality of life scores between senior citizens of rural and urban community. n=106(n<sub>r</sub>=53, n<sub>u</sub>=53)

The frequency polygon in figure 1 showed the distribution of scores of overall Quality of life among senior citizens residing in rural and urban community with depicted mean and median.

Overall Quality of life of senior citizen of rural community ranges from 89 to 123, with mean 87.09±9.26 and median 87 where in urban community the Quality of life of score range from 86 to 123 with mean 98.57±7.00 and median 98. In the overall Quality of life scores of senior citizens in rural community mean lies to the right side of the median. So, the distribution is positively skewed and the skewness was (0.029). So, the values of skewness were negligible indicating the score were all most normally distributed. In the overall Quality of life scores of senior citizens in urban community mean lies to the right side of the median.

So, the distribution is positively skewed and the skewness was (0.244). So, the values of skewness were negligible indicating the scores were all most normally distributed.

Findings related to comparison of quality of life among senior citizens from rural and urban community.

**Hypothesis**

**H<sub>0</sub>:** There is no significant difference between quality-of-life score of senior citizens in rural and urban community at 0.05 level of significance.

**H<sub>1</sub>:** There is a significant difference between quality-of-life score of senior citizens in rural and urban community at 0.05 level of significance.

**Table 4:** Mean, Mean difference (MD), median, Standard deviation (SD), Standard Error (SE) and unpaired ‘t’ value of quality of life n=106(n<sub>r</sub>=53, n<sub>u</sub>=53)

Overall Quality of Life	Mean	Mean difference	Median	SD	SE	Independent ‘t’ value
Senior citizen of rural community	87.09	3.2	87	9.26	1.59	7.19*
Senior citizens of urban community	98.57		98	7.00		

\*t=1.98 at df (104), p<0.05\*=Significance

The data presented in table 10, indicated that quality of life mean score 98.57±7.00, of senior citizens of urban community was significantly higher than the Quality-of-life mean score 87.09±9.26 of senior citizens in rural community with a mean difference of 3.2. Unpaired t value was computed from the above data which was found to be statistically significant as evident from corresponding ‘t’ value (7.19), df-104, was more than tabulated value 1.98 at 0.05 level of significance, indicating that the mean difference (3.2) was true difference not by chance.

So, null hypothesis (H<sub>0</sub>) was rejected and research hypothesis was (H<sub>1</sub>) accepted.

Therefore, it can be concluded that, there was significant difference between quality of life among senior citizens in rural and urban community.

**Findings related to association between quality of life among senior citizens in rural community with selected Demographic variables**

There was significant association between quality of life

among senior citizen in rural community with their economic dependency  $\chi^2 = 5.12$ ,  $df=1$ ,  $p=0.02$  more than tabulated value (3.84) at 0.05 level of significance.

So, it can be concluded that, there is significant association between quality of life and economic dependency of senior citizen in rural community and their economic dependency.

### **Findings related to association between quality of life among senior citizens in urban community with their gender.**

There was significant association between quality of life among senior citizen in urban community with their gender  $\chi^2 = 4.94$ ,  $df=1$ ,  $p=0.02$  more than tabulated value (3.84) at 0.05 level of significance. So, it can be concluded that there is significant association between quality of life and gender of senior citizen in urban community.

### **Discussion related to demographic variable**

#### **1. Findings related to demographic characteristics of the senior citizens**

- Majority of senior citizens (60.38%) belongs to 61-65 years of age in rural community and maximum of senior citizens (47.17%) belongs to 61-65 years in urban community.
- Majority of female senior citizens (58.49%) belongs to rural community and majority of male senior citizens (58.50%) belongs to urban community.
- Majority of senior citizens (71.69%) in rural community had no formal education whereas, maximum of senior citizens (43.39%) in urban community were educated up to graduation and above.
- Majority of senior citizens (75.47%) in rural community belongs to joint family whereas, majority of senior citizens (54.76%) in urban community belongs to joint family.
- Maximum senior citizens (41.51%) of rural community were homemaker whereas, majority of senior citizens (58.49%) in urban community were retired person.
- Majority of senior citizens (56.61%) in rural areas live with children where maximum senior citizens (47.16%) live with spouse and children.
- Majority of senior citizens (64.15%) were widow or widower in rural community where majority of the senior citizens (73.59%) were married in urban community.
- Maximum (49.06%) of senior citizens in rural area belongs to lower middle class (1230-2464/-), whereas, majority of the (60.39%) of senior citizens in urban area belongs to upper class (>8220/-) followed by Modified B G Prasad socioeconomic status.
- Most of senior citizens (81.13%) in rural community were financially dependent, whereas, majority of senior citizens (62.27%) in urban community were financially independent.
- Majority of senior citizens (71.69%) in rural community were tobacco products addiction and most of the senior citizens (84.91%) in urban community had no addiction.

#### **2. Findings related to quality of life**

- Majority of senior citizens (2%) had good quality of life in rural community where Maximum of senior citizens (30%) in urban community had good quality of life.
- Senior citizens of rural community had highest quality

of life score in the physical domain with a mean percentage 71.60 where senior citizen of urban community had the highest quality of life in physical domain also with the mean percentage 77.74.

- Senior citizens of rural community had lowest quality of life score in the social relationship domain with the mean percentage 67.53 where senior citizens of urban community had lowest quality of life score in the social relationship domain with the mean percentage 71.46.

#### **3. Findings related to comparison between senior citizens of rural and community**

- The present study finding revealed that, there was significant difference on the quality of life among senior citizens selected in rural and urban community at 0.05 level of significance as evidence from 't' value (7.19).

#### **4. Findings related to the association between quality of life among senior citizens and with their selected demographic variables**

- Chi square value (3.8) showed that there was no significant association between quality of life of senior citizen in rural community and age, gender, education, type of family, occupation, living arrangement, marital status, socioeconomic status, addiction at the 0.05 level of significance.
- So, Quality of life among senior citizen in rural community did not depend on their age, gender, education, type of family, occupation, living arrangement, marital status, socioeconomic status, addiction.
- As evident from computed Chi square value (5.12) more than tabulated value (3.84) at 0.05 level of significance.
- So, it can be concluded that, there was significant association between quality of life and financial dependency of senior citizen in rural community.
- Chi square value (3.8) showed that there was no significant association between quality of life among senior citizens of urban community with their age, education, type of family, occupation, living arrangement, marital status, socioeconomic status, financial dependency, addiction at 0.05 level of significance.
- So, Quality of life among senior citizen in rural community did not depend on their age, education, type of family, occupation, living arrangement, marital status, socioeconomic status, financial dependency, addiction.
- As evident from computed Chi square value (4.94) more than tabulated value (3.84) at 0.05 level of significance.
- So, it can be concluded that, there is significant association between quality of life with gender of senior citizen in urban community.

### **Discussion related to demographic variable**

The findings of the present study revealed that majority of senior citizens (60.38%) belongs to 61-65 years of age in rural community and maximum of senior citizens (47.17%) belongs to 61-65 years in urban community. Majority of female senior citizens (58.49%) belongs to rural community and majority of male senior citizens (58.50%) belongs to

urban community. Majority of senior citizens (71.69%) in rural community having no formal education whereas, maximum of senior citizens (43.39%) in urban community are educated up to graduation and above. Majority of senior citizens (75.47%) in rural community belongs to joint family whereas, majority of senior citizens (54.76%) in urban community belongs to joint family. Maximum senior citizens (41.51%) of rural community are homemakers whereas, majority of senior citizens (58.49%) in urban community are retired person. Majority of senior citizens (56.61%) in rural areas live with children where maximum senior citizens (47.16%) live with spouse and children.

The present study was partially supported by the comparative study conducted by Dr. Chowdhury A, Dr. Chakrabarty D, Dr. Jana P, Dr. Banerjee S, Dr. Mandal S. (2021) on Quality of life among the geriatric population of urban and rural area of West Bengal. The study findings showed that most of the senior citizens 64.6% belongs to 60-69 years in rural area where most of the geriatric population 69.4% belongs to urban area. In this study majority of male senior citizens 50% and 54.9% was in rural and urban area. Most of the geriatric population 81.6% live in joint family in rural area where most of the geriatric population 70.4% lives in joint family in urban community [8].

The present study partially supported by the comparative study conducted by Varghese B *et al.* (2020) to assess the quality of life among the elder people living in rural and urban areas, Indian. The study findings showed that the majority both in rural and urban elders were in the age group 60-65 years like 60% and 31.1% respectively. The majority of the elderly were female both rural 74.3% and urban 51.4%. Both the majority elderly in rural 54.3% and urban 82.9% elders were live in joint family [9].

The present study also partially supported by a study conducted by Usha VK, Lalitha K. Quality of life of senior citizens: A rural-urban comparison, Kerala, India. Majority of senior citizens belonged to the age group 65-75 years in rural (65.3%) and urban (65%) areas, majority were females (rural 61.4% and urban 66.7%) [10].

### Discussion related to Quality of life among senior citizens

In present study majority of senior citizens had (2%) good quality of life in rural community where maximum of senior citizens had (30%) good quality of life in urban community.

The present study supported by Usha VK, Lalitha K. (2016) conducted a study on Quality of life of senior citizens: A rural-urban comparison, Kerala, India. Majority senior citizens (51.1%) had good QOL in rural area where majority of senior citizens (53.3) had good QOL in urban areas.

The present study supported by a study conducted by Dasgupta A, Pan T, Paul B, Bandopadhyay L, Mandal S. (2018) Quality of life of elderly people in a rural area of West Bengal: A community-based study. 54.1% of the participants were found to have poor QOL in rural area [11].

In present study senior citizens had lower level of quality of life in the domain of social relationship ( $10.13 \pm 1.16$ ), and environmental ( $24.72 \pm 3.22$ ) than urban senior citizens social relationship ( $10.72 \pm 0.79$ ) and environmental ( $30.28 \pm 2.05$ ) domain.

The present study partially supported by Mudey A *et al.* (2011) Assessment of quality of life among rural and urban elderly population of Wardha District, Maharashtra, India.

The rural elderly population reported significant lower level of quality of life in the domain of social relation  $55.9 \pm 2.7$  and environmental  $57.1 \pm 3.2$  than urban population [12].

### Discussion related to comparison between quality of life among senior citizens selected in rural and urban community

The findings of present study revealed that there was significant difference on the quality of life among senior citizens selected in rural and urban community evident from ( $t = 7.19, p < 0.05$ ).

Varghese B *et al.* (2020) conducted a comparative study on quality of life among the elder people living in rural and urban areas, at Uttar Pradesh. The urban elders had better QOL in the only environmental domain ( $P = 0.003$ ) than the rural population [13].

### Conclusion

Senior citizens of rural community and urban community had poor social relationship (67.53%), (71.46%) and poor psychological domain (61.80%), (75.70%). So Yoga, aerobics and exercises classes can be arranged for senior citizens to enhance their quality of life. So, Yoga, aerobics and exercises classes can be arranged for senior citizens to enhance their quality of life.

Provision for geriatric care with counselling should be arranged in the community to serve the senior citizen especially to them who perceive their health as poor.

Social programme like cultural function, sports can be organised in community halls.

Awareness programme on health promotion can be arranged for care giver of senior citizens specially on rural area to improve the quality of life among senior citizens.

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This research project is the kind blessing of supreme God: whose guidance helps me to complete my dissertation successfully. I would like to thank my institution, Government College of Nursing, Bankura Sammilani Medical College, Bankura for giving opportunity to conduct the study. The present study has been completed under the supervision and guidance of Ms. Jashoda Biswas, Professor, Govt. College of Nursing, Bankura Sammilani Medical College, Bankura. I consider, it is a great honour and privilege to work with her. I am greatly indebted to her and express sincere gratitude for her sustained patience, constant encouragement, valuable guidance, and support from the very inception till the completion of the study. I would like to express my sincere gratitude to the other guide Mrs. Poulomi Karmarkar, Clinical Instructor, Govt. College of Nursing, Bankura Sammilani Medical College, Bankura for her humble opinion and constant support throughout the study.

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**Conflict of Interest**

Not available

**Financial Support**

Not available

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