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## A comparative study to assess the quality of life among elderly population of urban and rural areas of Kamrup district, Assam

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### Abstract

Ageing brings number of changes in every human being and these changes have impact on the quality of life of elderly.

**Aim:** To compare the quality of life among elderly population of urban and rural areas of Kamrup District, Assam.

**Methods:** This comparative study was conducted in selected urban and rural areas of Assam. By using non probability convenient technique 300 elderly people were interviewed by administering socio-demographic questionnaire and WHOQOL BREF tool.

**Results:** Out of all domains, highest mean scores were found in social relationship domain with 16.51 in urban and 16.67 in rural areas indicating good QOL. There is a significant difference in QOL of elderly people residing in urban and rural areas ( $p<0.05$ ).

**Conclusion:** Present study concluded that in rural areas, overall perception of QOL is good and overall perception of health is also satisfied compare to urban areas.

**Keywords:** Quality of life, elderly people

### Introduction

Ageing is a normal, physiological, biological and universal phenomenon that happens in all the living beings<sup>[1]</sup>. But the ageing process does not start at the same time for everyone<sup>[2]</sup>. Ageing is just a part of the life cycle in which a person is born, attains childhood, adolescence and adulthood and finally becomes old and ultimately dies.<sup>3</sup> The positive quality of life -as well as the negative-of elderly people depends on the subject's internal variables (his/her emotional attitude facing the facts of life) and on external variables (contingencies, environmental resources)<sup>[4]</sup>. Ageing brings a number of changes in the physical, psychological, hormonal and the social conditions<sup>[5]</sup>. There are changes in the appearance, slowing down of functioning of body organs, changes in day to day interests, attitude and life styles<sup>[6]</sup>. These changes are expected to affect the quality of life of the elderly. These problems can decrease quality of life of elderly.

Ageing as a natural process of life is due to gradual changes in metabolic activity of organs and disability in regeneration capacity of cells<sup>[7]</sup>. Health problems begin to plague the elderly. Changes in the biological aspect results from the impact of the accumulation of a variety of molecular and cellular damage. This leads to a gradual decrease in physical and mental activity, and can increase the risk of disease and ultimately death<sup>[8]</sup>. The World Health Organization defines Quality of life as 'an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns'<sup>[9]</sup>. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment<sup>[10]</sup>.

According to the United Nations, the population of the world stood around 6.1 Billion in the dawn of 21<sup>st</sup> century and likely to increase to 9.3 Billion by 2050. Between 2000 and 2050, the Global age population is likely to multiply almost by four-fold that is 595 million to 2 Billion. The same phenomenon is expected in both growth rates of the elderly and its proportional in coming decades. The proportion of the elderly people is expected to increase from 10% in 2000, 15% in 2025 and 21.1% in 2050 respectively<sup>[11]</sup>.

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By 2050, more than 80% of the older people will be living in the lower and middle income countries [12]. India is in a phase of demographic transition. There were nearly 104 million elderly persons (aged 60 years or above) in India (population census 2011). From 5.6% in 1961 the proportion has increased to 8.6% in 2011 [13]. A total of 71% of elderly population resides in rural areas while 29% is in urban areas (census of India 2011) [14]. According to Final Population Tools of 2011 Census, the population of Assam stood around 3.1 crore. Elderly population was seen a steady increase in Assam. Elderly people, above the age of 60 years are increased from 4.24% in 1961 to 6.7% in 2011 [15, 16].

Common health problems of elderly people are heart diseases, COPD, diabetes, sensory impairment, joint pain, depression, dementia Alzheimer disease, physical injury etc. Elderly people's health and QOL are influenced by several factors such as physical, psychological, social and cultural rights [17]. So as a nurse it is necessary to do prevention of illness, promotion of health, maintenance and rehabilitation of health among elderly population. The main aim of health promotion is to improve the quality of life. A good quality of life is necessary to improve the standard of living and the experience of a person. There is a need for nurses to participate in quality of life measures to the nature of the care they are expected to provide that is, holistic care, where she plans, implements and evaluates care, based on the diagnosis she made. Health care can be evaluated by using quality of life measurement in various ways, in order to assess the individual needs a measure of well-being [18]. A study done by Verma (2008) showed that the total QOL is significantly better in urban area than rural. But as per researcher assumption, in rural areas, the elderly work till their body permits they experience power, prestige in family life, social life and economic independence. While in urban areas, the elderly work for certain age limit as per their jobs, after which they suffer from economic insecurity, loss of power leading to low quality of life. The researcher is trying to explore the domain in which rural -urban population are lacking and recommend the measures to improve the quality of life [19].

## AIM

To compare the quality of life among elderly population of urban and rural areas of Kamrup District, Assam.

## Method and Materials

A comparative descriptive study was done among elderly population residing in urban and rural areas of Kamrup District, Assam. By using non probability convenience sampling technique, total of 300 individual aged 60-85 years and both male and female were taken during the study period. Individuals who are suffering from mental illness, cognitive impairment and active/acute medical and surgical conditions were excluded in this study.

The study was started after getting ethical approval from the institution. After taking consent from the participants, data were collected at home by using interview schedule. To collect demographic data, a demographic tool has been prepared by the researcher. The quality of life of elderly people was assessed by administering WHOQOL BREF questionnaire consisting four domains, that was physical, psychological, social relationship and environmental domain. The questionnaire consists of 26 questions in addition two items for overall perception of QOL and health were also included. Each item was rated on five point scale (1-5) including intensity, frequency, capacity and evaluation. The raw score of each domain was calculated

which was between 4-20 and then transformed into range between 0-100 for ease of comparison. Quality of life was categorized in to three levels based on scores on the WHO QOL scale. Approximately 15-20 minutes were taken for each participant for collecting the information.

The collected data were analyzed by using SPSS (Statistical Package for Social Sciences) version20. Mean and standard deviation were calculated to describe the QOL score in each domain. Unpaired t-test was applied to compare the QOL among urban and rural areas of elderly people and chi square test was done to determine the association of QOL with selected demographic variables. P value less than 0.05 was considered significant.

## Results

The study was conducted on 300 elderly people in selected rural and urban areas of Kamrup District, Assam. Among the study participants, maximum of elderly people were from the age group 60-65 years [urban 40% and rural 54%]. Among the general characteristics of the study population it was found that 45% of elderly people are illiterate in rural areas and 43% had completed primary level of education in urban areas. It was found that majority of elderly people are belongs to Hindu religion in both rural (95%) and urban (100%) area and most of them are from nuclear family. Majorities (70%) of elderly people are married in rural area and 66% were widow/widower in urban areas. A maximum of 50.5% elderly people's family monthly income was in the category of Rs. 5, 000-10,000 in rural area. It was found that majority of elderly people in rural areas (99%) and in urban areas (85%) do not need any assistance to perform their daily activities.

The present study findings reveal that maximum of elderly people in both rural areas (87.5%) and in urban areas (56%) are not having any chronic illness and majority of participants do not need any assistance. In urban areas, elderly people are having joint pain (28%), followed by high B.P. (21%), known case of diabetes mellitus (19%) and low B.P. (4%). And in rural areas, elderly people are having high B.P. (6%) followed by joint pain (5.5%), and known case of cataract (1.5%).

Findings of the present study revealed as shown in Table 1: shows that in rural areas overall perception of quality of life is good i.e.140 (70%) and in urban areas it is neither poor nor good i.e.60 (60%) and in rural areas overall perception of health of elderly people is satisfied (68.50%) and in urban areas it is neither satisfied nor dissatisfied (80%).

**Table 1:** Perception of Quality of Life and Health by study participants

Indicators	Participants (N=300)	
	Urban (%)	Rural (%)
<b>Perception of Quality of Life</b>		
Very Poor	0	0
Poor	14	1
Neither Poor nor Good	60	29
Good	26	70
Very Good	0	0
<b>Perception of Health</b>		
Very dissatisfied	0	0
Dissatisfied	6	0
Neither satisfied nor dissatisfied	80	31.5
Satisfied	14	68.5
Very satisfied	0	0

Domain scores are scaled in positive direction, i.e. higher mean scores denote higher quality of life.

**Table 2:** Distribution of Mean Scores of QOL in terms of Domain

Domains of QOL	Quality of life scores							
	Urban area (n=100)				Rural area (n=200)			
	Mean	Median	SD	SE	Mean	Median	SD	SE
Physical health	13.38	13	1.874	0.187	13.75	14	1.210	0.086
Psychological	14.68	15	1.775	0.177	15.49	15	1.494	0.106
Social relationships	16.51	16	0.847	0.085	16.67	16	1.245	0.088
Environment	15.43	15	1.683	0.168	15.05	15	1.321	0.093

Present study reveals that social relationship domain is having highest quality of life in both urban (16.51%) and rural (16.67%) areas.

The present study revealed that there is a significant association of quality of life of elderly people with selected demographic variables (age in years, educational qualification, marital status, earning members, monthly income of the family, chronic illness, need assistance) residing in urban areas of Kamrup District, Assam as p value is <0.05. There is a significant negative correlation between age and quality of life of elderly people ( $r = -0.489$ ,  $p = 0.000$ ) at 0.01 level of significance. The findings have revealed that quality of life is decreased when age of elderly people is increased. There is a significant positive correlation between educational status and quality of life of

elderly people ( $r = 0.636$ ,  $P = 0.000$ ) at 0.01 level of significance revealing that higher the educational status higher will be the quality of life.

The present study shows that there is a significant association of quality of life of elderly people with selected demographic variables (age, marital status, earning members, present occupation, monthly income of the family, chronic illness) residing in rural areas of Assam as  $p < 0.05$ . There is a significant negative correlation between age and quality of life of elderly people ( $r = -0.519$ ,  $p = 0.000$ ) at 0.01 level of significance.

Present study reveals that there is a significant difference in QOL (Physical health, psychological, environmental) of elderly people residing in rural and urban areas as shown in Table: 3.

**Table 3:** Comparision of QOL in terms of Domain, N=300

Domains of QOL	Areas	Mean	SD	t- Value	df	p- Value	Remarks
Physical	Rural	13.75	1.210	2.063	298	0.04	S*
	Urban	13.38	1.874				
Psychological	Rural	15.49	1.494	4.127	298	0.000	S**
	Urban	14.68	1.775				
Social	Rural	16.67	1.245	1.121	298	0.263	NS
	Urban	16.51	0.847				
Environmental	Rural	15.05	1.321	-2.137	298	0.03	S*
	Urban	15.43	1.683				

## Discussion

The present study findings reveal that social relationship domain is having highest QOL in both urban (16.51%) and rural (16.67%) areas. These findings are supported by similar study which is done by Sowmiya KR Quality of Life of Elderly Population in Mettupalayam, a Rural Area of Tamil Nadu. Findings revealed that the highest score was for the social relationship domain with mean 56.6 and standard deviation of 19.56 and the lowest score was for physical domain with mean score of 45 and standard deviation 11.84.

There is a significant association of quality of life of elderly people with selected demographic variables (age, marital status, earning members, present occupation, monthly income of the family, chronic illness) residing in rural areas of Kamrup District, Assam.

The present study findings can be supported by similar study which is done by Urosevic J on quality-of life of the elderly in urban and rural areas in Serbia. Findings revealed that for those living in rural areas there was a statistically significant positive association between anxiety/depression and age, wealth status, marital status, living with family members and achieving social contacts, while a negative correlation was observed between anxiety/depression and education.

There is a significant association of quality of life of elderly people with selected demographic variables (age, educational qualification, marital status, income of the

family, chronic illness, need for assistance) residing in urban areas of Kamrup District, Assam.

Present study findings also support the study conducted by Baernholdt M on quality of life in rural and urban adults 65 years and older: findings from the National Health and Nutrition Examination Survey. Findings revealed that there is an association between QOL and needs and health behaviors.

There is a significant difference in QOL (Physical health, psychological, environmental) of elderly people residing in rural and urban areas.

Present study supports the findings of a study conducted by Muday A on assessment of quality of life among rural and urban elderly population of Wardha District, Maharashtra, India. Findings reveal that there is a difference between the quality of life in rural and urban elderly population which is due to the socio-demographic factors, social resource, lifestyle behaviors and income adequacy.

## Recommendations

- Similar study can be conducted among larger sample size to generalize the study.
- The study can be replicated in different settings.
- Future study can be done to compare the subjective QOL of elderly people with objective assessment of their quality of life.
- A comparative study can be done among elderly people residing in own home and old age home.

## Conclusion

The present study has concluded that in rural areas overall perception of QOL is good and perceived health is satisfied compare to urban areas. In the elderly population, overall health is influenced by multiple factors, including a person's physical, psychological, environmental and social factors. The study findings highlights that nurse must promote social support, counsel and educate elderly people to maintain their Quality of life.

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