# ASSESSMENT OF QUALITY OF LIFE IN GERIATRIC POPULATION IN THE FIELD PRACTICE AREA OF URBAN HEALTH TRAINING CENTRE, VIMSAR, BURLA

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#### ABSTRACT

#### BACKGROUND

Ageing is generally defined as a process of deterioration in the functional capacity of an individual that results from structural changes, with advancement of age. Ageing is a universal process and it affects every individual, family, community and society.

The present study was designed to assess the quality of life of geriatric age group population residing in field practice area of VIMSAR, Burla and to find out factors affecting their quality of life.

#### MATERIALS AND METHODS

A community based cross-sectional study was adopted for studying the health problems of elderly and their quality of life, using WHO Quality of Life-BREF questionnaire. Simple random sampling technique was used for sample collection. A total of 213 individuals  $\geq$  60 years of age were enrolled for study for a period of three months, out of which 150 participated in the study.

#### RESULTS

Out of 150 geriatric population, 69(46%) were male and 81(54%) female, most of them were in the age group of 60-64 yearsmale 30 (43.5%) and female 32 (39.5%). Maximum number of study subjects suffered from cataract 82 (54.7%), followed by Osteoarthritis and Hypertension 20 (13.3%) each, Diabetes 15 (10%) and psychiatric problem in 2 (1.3%). The mean QOL score for all the elderly persons when put together was in the second quartile indicating that in general, on an average, the population as a whole had moderate quality of life.

#### CONCLUSION

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.

#### **KEYWORDS**

Quality of Life, Geriatric, Hypertension.

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#### BACKGROUND

World Health Organization defines of quality of life 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". It is thus a broad concept covering the individual's physical health, mental state, level of independence, social relationships, personal beliefs and their relationship to salient features in the environment.<sup>1</sup> The two extremes of

Financial or Other, Competing Interest: None. Submission 26-04-2018, Peer Review 28-04-2018, Acceptance 14-05-2018, Published 22-05-2018. Corresponding Author: Dr. S. K. Panda, Associate Professor, Department of Community Medicine, VIMSAR, Burla P.O., Sambalpur Dist., Odisha – 768017. E-mail: smitavss@yahoo.co.in DOI: 10.18410/jebmh/2018/352 COI SO life child and elderly need special care. Elderly life is full of problems – physical, social and economic. While ageing of the population is essentially a simple phenomenon, its consequences are multiple and not always well recognized. It is rightly said by Sir James Sterling Ross- "You do not heal old age, you protect it, you promote it, you extend it". The elderly are afflicted by the process of ageing which causes a general decline in health.<sup>2</sup>

Ageing is a normal, inevitable, biological and universal phenomenon. It is the outcome of certain structural and functional changes taking place in different parts of the body as the life years increases. United Nations though has not adopted a standard criterion to define the aged; generally use 60+ years to refer to the elder population.<sup>3</sup> It is the time the combined effects of ageing, social changes and diseases are likely to cause a break down in health and their wellbeing.<sup>4</sup> The ageing population is growing at an unprecedented rate. There are presently 740 million individuals in the world aged 60 years or over, and that

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number is expected to rise to 1 billion by the end of the present decade and possibly to 2 billion by mid-century.<sup>5</sup> India alone has around 100 million elderly at present, and the number is expected to increase to 323 million, constituting 20 per cent of the total population, by 2050.<sup>6</sup>

#### **Objectives of the Study**

- (1) To assess the socio-demographic profile of geriatric population registered under Urban Health Training Centre, VIMSAR, Burla.
- (2) To determine the Quality of Life (QOL) of elderly and as well as to explore the impact of residence, category, gender, education, number of family members, marital and health status on individual perceptions.

#### MATERIALS AND METHODS

A community based cross sectional study was conducted during the period September 2017 to November 2017 in population of age group 60 years and above from NAC areas of Burla residing for at least last 6 months. Out of 48, 000 population in Burla, 4200 were of above 60 age group. Under VIMSAR medical college, the Urban Health Training Centre (UHTC), Goudpali has 25 Anganwadi centres (AWCs). Out of 25 AWCs, 5 AWCs were selected for the study by simple random sampling through lottery method. A total of 213 geriatric population were registered in these five AWCs who were enrolled for the study out of which 150 were interviewed. 63 geriatrics were not included in the study as they did not meet the inclusion criteria. Pretested proforma with WHO Quality of Life (QOL) BREF questionnaire was used in the study. Individuals were assessed for their morbidity status by referring to their prescriptions and medications if they had been consuming any. Interview was conducted by house to house survey using local language in maximum privacy and confidentiality without changing the meaning of the questionnaire.

The WHO QOL-BREF took into consideration four domains of quality of life i.e. physical, psychological, environmental and social relationship. It had 26 questions and the mean score of items within each domain was used to calculate the domain score.

## Method for Manual Calculation of Individual Scores are as Follows:

- Physical domain- ((6-Q3) + (6-Q4) + Q10+ Q15 + Q16 + Q17+ Q18) X 4
- Psychological domain-(Q5+Q6 +Q7 +Q11 +Q19 + (6-Q26)) X4
- Social Relationship domain-(Q20+Q21+Q22) X 4
- Environmental domain-(Q8 + Q9 +Q12+Q13+Q14 +Q23 +Q24 +Q25) X4

If more than 20% of the data was missing from an assessment, the assessment was discarded. Where up to 2 items were missing, the mean of other items in the domain was substituted. Where more than 2 items were missing, the mean of other items in the domain was not calculated. These scores were then transformed to scale of 0- 100 by

multiplying each domain scores with 100/16. Higher transformed score on each of the domain indicates higher quality of life in that particular area.

#### RESULTS

Socio-demographic Profile	Frequency	Percentage					
Gender (N= n1+ n2=150)							
Male (n1)	69	46%					
Female (n2)	81	54%					
Age in Years (Male) (n1=69)							
60-64	30	43.5%					
65-69	22	31.9%					
70-74	9	13%					
75-79	7	10.1%					
>80	1	1.4%					
Age in Years (Female) (n2=81)							
60-64	32	39.5%					
65-69	24	29.6%					
70-74	20	24.7%					
75-79	3	3.7%					
>80	2	2.5%					
Туре	of Family						
Nuclear	21	14%					
Joint	75	50%					
Extended	54	36%					
Education Status							
Illiterate	8	5.3%					
Primary/Middle	38	25.3%					
Metric/Intermediate	62	41.3%					
Higher education	42	28%					
Occupation							
Agriculture	30	20%					
Service	25	16.7%					
Unskilled/Skilled labour	47	31.3%					
Self employed	32	21.3%					
Unemployed	16	10.6%					
Table 1. Distribution of Study Subjects According							
to Socio-Demographic Profile (N=150)							

The study conducted depicted that out of 150 geriatric population, 81(54%) were female and 69(46%) male. In both the sex, most of them, male 30(43.5%) and female 32(39.5%) were in the age group of 60-64 years. Majority of them 75(50%) belonged to joint family and according to education status, most of them 62(41.3%) had studied metric/intermediate and only 8(5.3%) were illiterate. All were married, 10(6.7%) were widow/widower and one was divorce. Among 150 elderly subjects 16(10.6%) were unemployed and most of them 47(31.3%) were involved in skilled/unskilled labour work. (Table 1)

Socio-economic status classification				
(Modified Kuppuswamy Socio-economic status classification)				
Class I	6	4%		
Class II	9	6%		
Class III	34	22.7%		
Class IV	53	35.3%		
Class V	48	32%		
Table 2. Socio-Economic Status Classification (N=150)				

According to Modified Kuppuswamy socio-economic status scale maximum people belonged to upper lower class 53 (35.3%). (Table 2)

Morbidity	No. of individuals	Percentage		
Cataract	82	54.7%		
Osteoarthritis	20	13.3%		
Hypertension	20	13.3%		
Diabetes mellitus	15	10%		
Depression and psychiatric disorders	2	1.3%		
No disorder	11	7.3%		
Table 3. Distribution of Morbid Conditions (N=150)				

The distribution of co-morbid conditions depicted that maximum number of study subjects suffered from cataract 82(54.7%), followed by Osteoarthritis and Hypertension 20(13.3%) each, Diabetes 15(10%) and psychiatric problem in 2(1.3%). The status of co-morbid conditions was taken on the basis of prescriptions and medications if they had been consuming any. It was observed that nearly 50% were falling under the second quartile score of Quality of Life and very few (3.8%) individuals were having a very good QOL as classified by their quartile scores. (Table 3)

Total QOL Score	Physical Health Domain	Psychological Domain	Social Relationship Domain	Environmental Domain	QOL	
1 <sup>st</sup> quartile	49	40	69	42	Poor	
2 <sup>nd</sup> quartile	35	45	41	47	Moderate	
3 <sup>rd</sup> quartile	28	41	25	24	Good	
4 <sup>th</sup> quartile	38	24	15	37	Very good	
Table 4. Quartile Distribution of Quality of Life						

The mean QOL score which included (physical, psychological, social relationship and environmental domain) for all the elderly persons when put together was in the second guartile indicating that in general, the population as a whole had moderate quality of life. 67% of geriatric people have better QOL in the physical health domain, 72.6% of the geriatric people have better psychological domain, 54% of the geriatric people are better in their social relationships and 54.6% better in the environment domain. This meant that highest score was for psychological domain and lowest for social relationship domain. Literate elderly had better mean QOL domain scores than the illiterates. Married individuals and those who were currently working had a better quality of life in psychological domain when compared to widow/widower and those elderly people who had their jobs had a better quality of life than those who were not working, unskilled or self-employed (Table 4).

#### DISCUSSION

In the present study, the findings revealed that the population as a whole had moderate quality of life. 67% of geriatric people have better QOL in the physical health

domain, 72.66% of the geriatric people have better psychological domain, 54% of the geriatric people are better in their social relationships and 54.66% better in the environment domain. Persons who were educated had a better quality of life than those who were illiterate. This finding is corroborated to the earlier findings of.<sup>7,8</sup> Also similar results were observed by Barua A et al 2005, in their study on quality of life of geriatric populations, in which they stated that currently married had a better life than those who were single (unmarried/widowed).<sup>9</sup> Another important findings of our study was that the elderly people who had currently having their jobs had a better quality of life than those who were not working, unskilled or self-employed which conjure up with the earlier findings of.<sup>10</sup> that occupations had a positive association with quality of life.

It was observed in our study that maximum number of study subjects suffered from cataract 82(54.7%), followed by Osteoarthritis and Hypertension 20(13.3%) each, Diabetes 15(10%) and psychiatric problem in 2(1.3%). Similar morbidity conditions of elderly were revealed in the earlier studies conducted by Bharati DR et al and Manandhar MC.<sup>11,12</sup> Also a study of Tamil Nadu reported that decreased

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visual acuity due to cataract and refractive errors were observed in 57% of the elderly, and hypertension 14%, diabetes 8.1%.<sup>13</sup> Another study from rural area of Rohtak district of Haryana, revealed that the leading symptoms among the male elderly were visual impairment 65%.<sup>14</sup>

There is a limitation in our study that we conducted study on 150 respondents, so the strict generalization of our result needs a large-scale survey for further conformity.

## CONCLUSION

There is a rapid expansion in the elderly population. Thus, there is an urgent need to develop geriatric health care services in developing countries like India. The implication of our findings might be seen on the part of government agencies and policy makers to carry out special surveys to identify the vulnerable aged people, particularly aged females/widows. Also, there is an urgent need of social protection in form of assuring old age pension and compulsory health insurance.

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