

Quality of life of elderly of Northern Karnataka and Jaintia hills region

Aging as a natural process of life is due to gradual changes in metabolic activity of organs and disability in regeneration capacity of cells. Worldwide, the average life span of people has been increasing. Several factors including heredity, life style, healthy diet and physical activity can affect the longevity of life. According to the WHO report (2015), there are more than 600 million elderly individuals worldwide; it is estimated this rate will be double by 2025 and 2 billion by 2050 (Anon., 2015). Quality of life (QOL) is defined as an individual's perception of their position in life in the context of the culture and values systems in which they live and in relation to their goals, expectations, standards and concerns (Netaji *et al.*, 2008). All the aspects of "Health status", "Lifestyle", "Life satisfaction", "Mental health" and "Well-being" together reflects the multidimensional nature of quality of life in an individual. During later stage of life, quality of life is more than rating their physical health status, emotional and social health status. Poor economic, cultural, health care conditions and also inadequate social interactions can result in poor quality of life in elderly people. Considering the vulnerability of elderly people, the present study (2015-16) was conducted to assess the quality of life in elderly population and to know the influence of socio-demographic factors such as age, gender and socio-economic status (SES) on quality of life of elderly of northern Karnataka and Jaintia hills region, of Meghalaya.

The population for the study consisted of elderly aged 60 years and above from northern Karnataka and Jaintia hills, Meghalaya. For rural sample, two districts out of the seven districts of Northern Karnataka under University of Agricultural Sciences, Dharwad jurisdiction (Bagalkot, Bijapur districts) were selected randomly. From each selected district, one taluk was selected randomly and from each selected taluk, two villages were selected randomly. A sample of 10 to 15 elderly from each village was drawn through door to door survey; with a total of 50 samples from four villages. In case of rural sample of Jaintia hills, one district was selected. From the selected district one taluk was selected. From the selected taluk, two villages were selected and from each selected village, a sample of 25 elderly was drawn; with a total of 50 samples from two villages. For urban sample one city from each region was selected where in elderly were drawn from one old age Home with 25 samples and another equal number of 25 samples from city was recruited through door to door survey. Thus, the total sample selected for the study was 200 elderly men and women drawn equally from Northern Karnataka and Jaintia hills, Meghalaya.

For urban sample, selected old age homes were contacted and permission was taken for data collection in both the regions. Each sample was interviewed in their homes/old age centers. The interview took around 15-20 minutes for each sample. However in case of some of the urban sample the questionnaire was self-administered.

Quality of Life Inventory scale developed by Frisch (1994) was used to assess quality of life of elderly. The scale consists of 32 statements. The statements are based on 16 areas of life *i.e.*, Health, Self-esteem, Goal and Values, Money, Work, Play, Learning, Creativity, Helping, Love, Friends, Children, Relatives, Home, Neighborhood, and Community. Each areas consists of two questions; first question measures how important certain aspects are to one's life and the second question measures how satisfied one is with the above mentioned areas. The scores ranged from 0 to 2 for first question (e.g. How important is health to one's happiness) in which 0 stands for "not important", 1 for "important" and 2 for "extremely important", respectively. Another score ranged from -1 to -3 (dissatisfied) and +1 to +3 (satisfied) for second question (e.g., how satisfied are you with your health) in which -1 stands for "a little satisfied", -2 for "somewhat dissatisfied", and -3 for "very dissatisfied". While +1 stands for "a little satisfied", +2 for "somewhat satisfied" and +3 for "very satisfied". The categories were made as very low (0-36), low (37-42), average (43-57) and high (58-77) as per the norms. The socio-economic status was assessed by Aggarwal *et al.* (2005) scale. The scale consists of 22 statements. SES was categorized as poor (16-30), lower middle (31-45), and upper middle (46-60). ANOVA and t-test analysis was used to know the differences between elderly of both regions and between age, gender, SES level and QOL.

When quality of life between elderly of northern Karnataka and Jaintia hills was assessed, it was observed that majority (42 % and 52 %) of elderly of both urban Dharwad and rural northern Karnataka region were in average level and one third (58 % and 48 %) was in low and very low level (Fig. 1a). Among the urban and rural elderly of Jaintia hills, majority (46 % and 42 %) belonged to high level and one third (54 % and 58 %) belonged to low and very low level (Fig. 1b). It is apparent from Table 1, that elderly of Jaintia hills had significantly higher mean scores, indicating their QOL was better than elderly of northern Karnataka. The possible explanation could be due to the difference in the socio-demographic factors, social resources, lifestyle behaviors and income adequacy. Wang and Hseuh (2008) stated that the difference might be due to the culture and life styles in different regions which might enhance their beliefs and improve their QOL.

The factors influencing QOL that considered were age, gender and SES. The results (Table 2) showed that young-old elderly of northern Karnataka had significantly better QOL than old-old and oldest old wherein young-old category had highest mean score (CD value of 3.25); while not much differences was found between old-old and oldest old. A study by Kumar *et al.* (2014) also revealed that older age was associated with low QOL score as in case of elderly of northern Karnataka. Similarly, in Jaintia hills, young-old had highest mean score compared to old-old and oldest-old but these differences were not significant. The mean scores decreased steadily with increasing in age

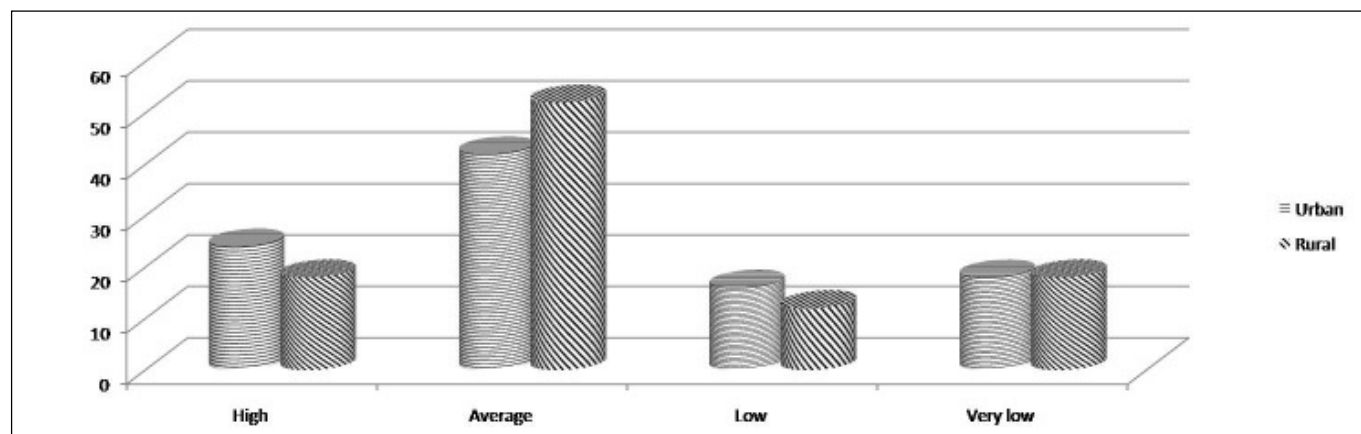


Fig. 1a. Percentage distribution of elderly of northern Karnataka by level of quality of life

Table 1. Comparison of mean scores of quality of life of elderly of northern Karnataka and Jaintia hills N=200

Regions	Quality of life		
	Mean	SD	t-test
Northern Karnataka	46.37	13.19	2.74*
Jaintia hills	56.87	35.95	

*=0.05 level of significance

indicating that there was a slight decline in quality of life as age increased.

There was no significant difference in mean scores between gender and QOL in both regions (Table 3). Bishak et al. (2014) also stated that there was no statistical difference in the points of life quality of elderly men and women. However, men had slightly higher mean quality of life score than women.

Regarding SES (Table 4), the elderly with upper middle SES had significantly better quality of life compared to lower middle and poor SES in case of elderly of Jaintia hills but in case of northern Karnataka there was no statistical significance. Most of elderly from northern Karnataka (50 %) were in lower middle SES and very few (6 percent) were in upper middle level. While in Jaintia hills, 32 per cent belonged to lower middle and about 28 per cent were in upper middle SES. It was also observed that mean scores of QOL were significantly higher only in case of elderly of Jaintia Hills for lower middle SES and upper middle SES compared to poor SES. This trend was similar in Northern Karnataka region, though it did not reach the level of significant.

Rathnayake and Siop (2015) also reported that poor QOL among older people was associated with poor family income

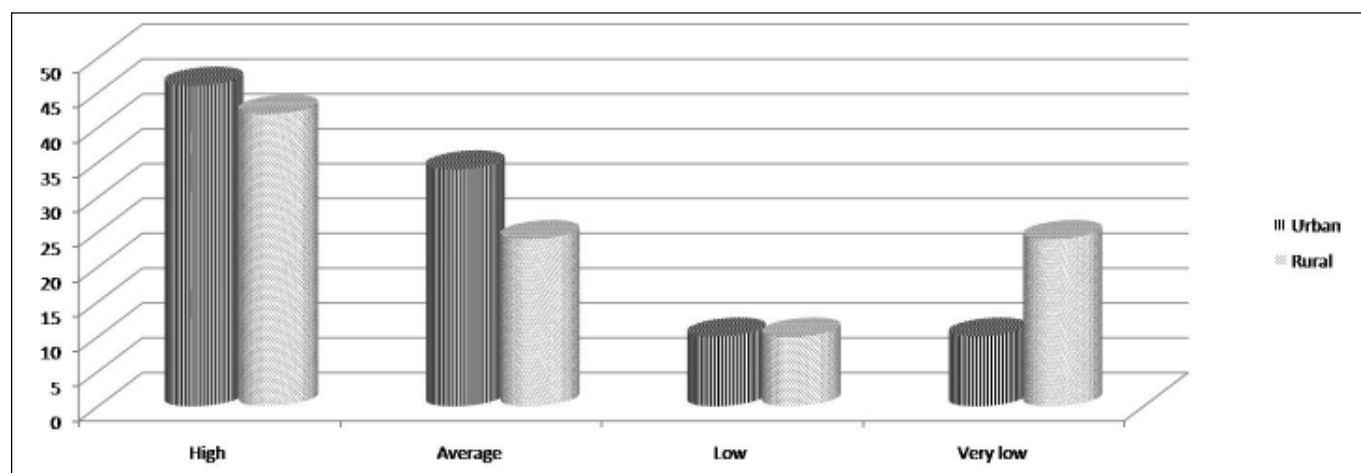


Fig. 1b. Percentage distribution of elderly of Jaintia hills by level of quality of life

Table 2. Mean score of quality of life of elderly of northern Karnataka and Jaintia hills by age

N=200

Age cohorts (Years)	Quality of life					
	Northern Karnataka			Jaintia hills		
	Mean	SD	F-test	Mean	SD	F-test
Young-old(60-74)	48.38	12.99	3.25*CD=3.64	59.13	34.78	0.22 ^{NS}
Old-old(75-84)	40.43	12.29		54.64	40.24	
Oldest-old(85+)	46.33	14.08		53.68	32.56	

*=0.05 level of significance, NS=Non-significant

Quality of Life of Elderly of Northern Karnataka and.....

and poor self-rated health. Similarly, Onunkwor (2016) found significant association of QOL with economic status, which suggested that the elderly's socio-economic status was significant predictor of their health related QOL.

Thus, the study concluded that quality of life was higher among the elderly of Jaintia hills region than among elderly of

northern Karnataka region. Noticeably in both the regions, old-old and oldest old elderly were at risks of lower quality of life as compared with the young old elderly. Female elderly were also in higher proportion in low QOL compared to male elderly. Elderly with poor SES were at lower level of quality of life. So there is a need to provide educational intervention for successful and healthy ageing.

Table 3. Mean score of quality of life of elderly of northern Karnataka and Jaintia hills by gender

N=200

Gender	Quality of life					
	Northern Karnataka			Jaintia hills		
	Mean	SD	t-test	Mean	SD	t-test
Male	49.85	14.72	1.36 ^{NS}	64.35	34.24	1.37 ^{NS}
Female	45.44	12.70		53.50	36.44	

NS-Non-Significant

Table 4. Mean score of quality of life of elderly of northern Karnataka and Jaintia hills by Socio-economic Status

N=200

Socio-economic status	Quality of life					
	Northern Karnataka			Jaintia hills		
	Mean	SD	F-test	Mean	SD	F-test
Poor	44.00	11.68	0.80 ^{NS}	29.50	27.35	27.66*CD=8.17
Lower middle	46.61	14.66		58.89	32.71	
Upper middle	48.80	11.05		89.77	21.28	

*=0.05 level of significance, NS-Non-Significant

Department of Human Development and Family Studies
College of Rural Home Science
University of Agricultural Sciences,
Dharwad - 580005, Karnataka, India
E-mail: pkhadi@yahoo.com

DAHUN MASSAR
PUSHPA B. KHADI

(Received: July, 2016 ; Accepted: December, 2016)

References

- Anonymous, 2015, World Health Organization Quality of Life assessment (WHOQOL, 2015): development and general psychometric properties. *Soc. Sci. Med.*, 46(12): 1569-85.
- Aggarwal, O.P., Bhasin, S.K., Sharma, A.K., Chhabra, P., Aggarwal, K. and Rajoura, O.P., 2005, A new instrument (scale) for measuring the Socioeconomic status of a Family: Preliminary Study. *Indian J. Community Med.*, 30(4): 111-114.
- Bishak, Y. K., Payahoo, L., Pourghasem, B. and Jafarabadi, M. D., 2014, Assessing the Quality of Life in Elderly People and Related Factors in Tabriz, Iran *J. Caring Sc.*, 3(4):257-263.
- Frisch, M. B., 1994, Quality of Life Inventory (Scale). Pearson clinical Assessment, NSC Pearson, Inc, USA, pp:1-7
- Kumar, S.G., Majumdar, A. and Pavithra, G., 2014, Quality of Life (QOL) and Its Associated Factors Using WHOQOL-BREF among Elderly in Urban Puducherry. India. *J. Clinical and Diagnostic Res.*, 8(1): 54-57.
- Netaji, V., Shirinbayan, P., Akbari, A., Foroughan, M., Taheri, P. and Sheikhvatan, M., 2008, Quality of life in elderly people in Kashan, Iran. *Middle East J. Age Ageing*, 5 (2): 21-25.
- Onunkwor, O. F., Al-Dubai, S. R., George, P. P., Arokiasamy, H. Y., Barua, A. and Shuaibu, H. O., 2016, A cross-sectional study on quality of life among the elderly in non-governmental organizations' elderly homes in Kuala Lumpur. *J. Health and Quality of Life Outcomes*, 14(6):1-10.
- Rathnayake, S. and Siop, S., 2015, Quality of life and its determinants among older people living in the rural community. *Indian J. Gerontol*, 29(2):131-153.
- Wang, Q. and Hsueh, Y., 2008, Parent-child interdependence in Chinese families: Change and continuity. The changing family and child development, Aldershot, UK: Ashgate, pp: 60-69.