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Original Research Article

A comparative study of quality of life among elderly people living in old age homes and in the community

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ABSTRACT

Background: The ageing process is not determined truly by genes and personal characteristics but mainly by his adjustment with the environment he lives. Ageing of a person depends on many factors which influence the course of life like physiological, social, psychological, economic, environmental and cultural factors which in turn affect the quality of life (QoL). Given these findings, quality of life is influenced by the place where a person lives. The objective of the study was to assess and compare the quality of life of elderly living in old age homes and community.
Methods: This was a cross sectional, questionnaire based study done on elderly people (>60 years) living in old age home, urban and rural area. The study was carried out for a period of 3 months from April to June 2016 after taking consent from the study participants. WHOQoL-BREF questionnaire was used to assess the quality of life.
Results: Elderly females were more than elderly males in rural and old age home. The study participants of all the three places were concentrated in the age group 65-70 years old. The mean scores of physical, psychological and social domains were high in urban elderly people. Most of the study population was illiterate in urban and rural area but in old age home most of them were educated. There was significant difference between the mean scores for psychological and environmental domain (p=0.048 and 0.001 respectively).
Conclusions: Participants living in the urban area had higher mean scores in the physical, psychological and social domains as compared to rural area and old age home. The mean score of environmental domain was high in rural area as compared to urban and old age home.

Keywords: Elderly people, Old age home, Community, Quality of life

INTRODUCTION

Human resource is an important asset for economic growth and development of a country. The proportion of people aged over 60 years is growing faster than any other age group in almost all the countries due to longer life expectancy and declining fertility rates.[1] India stands second in aged population with 104 million (53 million females and 51 million males) after China. The old-age dependency ratios are 15.1 and 12.4 for rural and urban areas respectively.[2,3] Though population ageing reflects the success steps of public health policies and socioeconomic development of a country, it also deals with the society to increase social participation, security, health and functional capacity of the older people.[1]

The ageing process is not determined truly by genes and personal characteristics but mainly by his adjustment with the environment he lives. Key environments include home, social relationships, neighborhood and communities which constrain for health ageing.[4] The traditional Indian society and the age-old joint family system have been involved in safeguarding the social and economic security of the elderly people but with the

urbanization, modernization and industrialization; major transformations in the care and support have occurred leading to shifting of aged persons to old age homes (OAH).[5,6] Thus ageing of a person depends on many factors which influence the course of life like physiological, social, psychological, economic, environmental and cultural factors which in turn affects the quality of life (QoL). Given these findings, quality of life is influenced by the place where a person lives. But enough scientific evidence is lacking on the effect of urban or rural environment on quality of life.[7,8] With this background, the present study was conducted to assess and compare the quality of life of elderly people living in old age homes and community.

METHODS

Study design and the participants

This cross-sectional study was intended to compare the QoL of elderly people in Old Age Home and the community of Davanagere, Karnataka. The study was conducted for a period of 3 months from April to June 2016. The old age home participants were recruited from Mythri Association Old Age Home, Davangere and the urban and rural participants were recruited from urban and rural field practice area, Bhashanagar and Lokikere respectively. We selected from these three areas because of the differences of socio-demographic indices and base economic activities to properly characterize old age home, urban area and rural area. The Data was collected from a convenient sample of ninety elderly people (>60 years), thirty from each OAH, general population residing in the urban and rural field practice area.

Data collection

After obtaining permission from the old age home in charge, the study was conducted among the residents in old age home. Consent was obtained from the willing study participants. Participants in old age home were selected by simple random sampling. In urban and rural areas, the elderly people visiting the urban health center and primary health center were explained about the study. Those who were willing to participate in the study were included after taking consent.

Questionnaire design and validation

WHOQoL-BREF questionnaire was used in the study to assess the quality of life. It is a shorter version of WHOQoL -100 (original version) developed by WHO. WHOQOL-BREF questionnaire assesses the individual's perceptions in the context of their culture and value systems, and their personal goals, standards and concerns.[9] It is a self-report likert type scale which includes 26 questions that measure the following four broad domains: physical health, psychological health, social relationships, and environment. Two items of 26 questions give overall quality of life and general health score. The questionnaire is validated and is available in 19 different languages which include Hindi (National language) and Kannada (local language). The local language Kannada version was used in this study, which has been validated and has good reliability and internal consistency. The details were taken by interview method.

Inclusion criteria

Elderly aged >60 years and who gave consent to participate in the study.

Exclusion criteria

Those who didn't give consent to participate in the study.

Sample size calculation

Convenient sampling method was used and sample size was 90.

Outcome variable

Domains like physical, psychological, social and environment to assess the quality of life.

Explanatory variable

Sociodemographic characteristics considered were gender, age, place of residence (old age home or rural or urban community), marital status and education.

Ethical committee approval

The research was approved by the Institutional Ethics Committee with ref no IERB/ST/10-2016 dated 02 April 2016.

Data management and statistical analysis

The data was entered in Excel sheet and analysed using Epi-info version 7. The findings were expressed in terms of mean±SD, percentages. The difference between mean scores was tested by using one-way analysis of variance (ANOVA) test. The $p<0.05$ was considered as significant.

RESULTS

Socio-demographic characteristics of the study population according to the place of residence were described in Table 1. In the present study, elderly females were more than elderly males in rural and old age home. The participants in all the three areas were concentrated in the age group 65-70 years old. Related to the education, most of the study population was illiterate in urban and rural area but in old age home most of them were educated. Related to marital status, married individuals predominated in all the three areas; nevertheless, the percentage of elderly single was higher in old age home as compared to urban and rural areas.

Table 1: Socio-demographic characteristics of the study subjects.

Variables	Old age home	Rural	Urban	Total
	N (%)	N (%)	N (%)	N (%)
Gender				
Male	13 (43.3)	6 (20.0)	16 (53.3)	35 (38.9)
Female	17 (56.7)	24 (80.0)	14 (46.7)	55 (61.1)
Age group (years)				
60-65	7 (23.3)	10 (33.3)	5 (16.7)	22 (24.4)
65-70	17 (56.7)	12 (40.0)	14 (46.7)	43 (47.8)
70-75	3 (10.0)	7 (23.3)	8 (26.7)	18 (20.0)
>75	3 (10.0)	1 (3.3)	3 (10.0)	7 (7.8)
Education				
Illiterate	10 (33.3)	18 (60.0)	22 (73.3)	50 (55.6)
Primary	4 (13.3)	11 (36.7)	5 (16.7)	20 (22.2)
Secondary	3 (10.0)	0 (0.0)	2 (6.7)	5 (5.6)
PUC and above	13 (43.3)	1 (3.3)	1 (3.3)	15 (16.7)
Marital status				
Unmarried	3 (10.0)	0 (0.0)	0 (0.0)	3 (10.0)
Married	15 (50.0)	22 (73.3)	24 (84.0)	61 (67.8)
Single	12 (40.0)	8 (26.7)	6 (20.0)	26 (28.9)
Total	30 (100.0)	30 (100.0)	30 (100.0)	90 (100.0)

Table 2: Distribution of study subjects according to their perception of quality of life.

Quality of life	Old age home	Rural	Urban	Total
	N (%)	N (%)	N (%)	N (%)
Very poor	0 (0.0)	1 (3.3)	0 (0.0)	1 (1.1)
Poor	14 (46.7)	16 (53.3)	9 (30.0)	39 (43.3)
Neither poor nor good	11 (36.7)	11 (36.7)	17 (56.7)	39 (43.3)
Good	5 (16.7)	2 (6.7)	4 (13.3)	11 (12.2)
Very good	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Total	30 (100.0)	30 (100.0)	30 (100.0)	90 (100.0)

Table 3: Distribution of study subjects according to their health perception.

Health perception	Old age home	Rural	Urban	Total
	N (%)	N (%)	N (%)	N (%)
Very dissatisfied	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Dissatisfied	14 (46.7)	9 (30.0)	10 (33.3)	33 (28.2)
Neither satisfied nor dissatisfied	2 (6.7)	14 (46.7)	12 (40.0)	28 (31.1)
Satisfied	11 (36.7)	7 (23.3)	7 (23.3)	25 (27.8)
Very satisfied	3 (10.0)	0 (0.0)	1 (3.3)	4 (4.4)
Total	30 (100.0)	30 (100.0)	30 (100.0)	90 (100.0)

Table 4: Scores in different domains of quality of life with respect to place of residence.

Domain	Area				P value
	Old age home	Rural	Urban	Total	
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	
Physical	52.30±11.55	48.63±11.51	55.87±15.68	52.27±13.25	0.106
Psychological	44.47±12.63	45.43±13.23	52.20±13.18	47.37±13.32	0.048
Environmental	29.93±18.03	43.87±17.10	42.57±11.93	38.59±17.07	0.001
Social	42.43±14.20	45.30±12.70	46.50±7.21	44.74±11.75	0.392

With respect to overall QoL, majority (46.7%) of elderly people in old age home and rural community (53.3%) felt that their quality of life was poor. More than half of the elderly people in urban area perceived their quality of life as neither poor nor good (Table 2).With respect to their health perception, majority (46.7%) perceived their health as dissatisfied in old age home and neutral in both rural and urban area (Table 3).

Participants living in the urban area had higher mean scores in the physical, psychological and social domains as compared to rural area and old age home. The mean score of environmental domain was high in rural area as compared to urban and old age home. The results of One-Way ANOVA shows that there was significant deference between the mean scores for psychological and environmental domain (p=0.048 and 0.001 respectively) (Table 4 and Figure 1).

Scoring of each facet was 0-1 (very poor), 1-2 (poor), 2-3 (neither poor nor good), 3-4 (good) and 4-5 (very good). Most of the facet's mean score fell in the range 2-3, i.e., neither poor nor good in all the three areas. Maximum mean score was observed for dependence on medical substances and medical aid in rural area and old age home; negative feelings in urban area. The minimum mean score was observed for financial resources in all the three areas (Table 5).

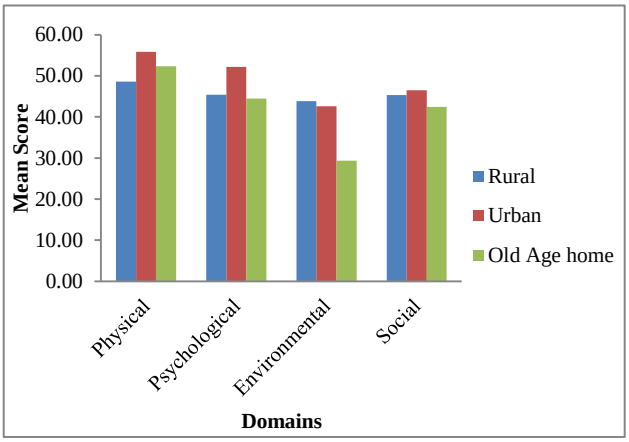

Figure 1: Mean scores in different domains of quality of life.

Table 5: Mean values of the facets of QoL in elderly people according to their place of residence.

Facets	Area		
	Old age home	Urban	Rural
	Mean±SD	Mean±SD	Mean±SD
1. Overall quality of life	2.700±0.750	2.833±0.648	2.467±0.681
2. General health	3.100±1.125	2.967±0.850	2.933±0.740
3. Pain and discomfort	3.767±0.430	3.333±0.884	3.300±0.794
4. Dependence on medical substances and medical aid	4.067±1.143	3.433±0.935	3.633±0.964
5. Positive feelings	2.400±0.498	2.900±0.712	2.600±0.814
6. Spirituality, religion and personal beliefs	2.833±0.874	3.067±0.450	2.733±1.015
7. Thinking, learning, memory and concentration	2.800±1.126	2.800±0.761	2.567±0.679
8. Freedom, physical safety and security	2.633±1.245	2.767±0.817	2.700±0.915
9. Physical environment	2.967±1.129	3.100±0.548	2.633±1.159
10. Energy and fatigue	2.733±0.944	2.933±0.785	2.467±0.730
11. Bodily image and appearance	2.433±1.104	2.933±1.015	2.533±0.681
12. Financial resources	1.900±1.094	2.400±0.894	2.100±0.759
13. Opportunities for acquiring new information and skills	2.600±0.498	2.500±0.509	2.667±0.802
14. Participation in and opportunities for recreation and leisure activities	2.533±0.900	2.567±0.679	2.900±0.845
15. Mobility	2.867±0.973	3.033±0.850	2.733±0.583
16. Sleep and rest	2.367±1.098	3.433±0.774	2.633±0.765
17. Activities of daily living	2.867±0.973	3.000±0.830	2.900±0.845
18. Work and capacity	2.867±0.937	3.300±0.702	3.033±0.809
19. Self esteem	2.833±0.834	2.933±0.691	2.900±0.845
20. Personal relationships	2.200±0.997	2.800±0.805	3.033±1.129
21. Sexual activity	2.000±0.910	2.600±0.563	2.433±1.223
22. Social support	2.300±1.149	2.867±0.730	2.800±0.761
23. Home environment	2.900±0.995	2.967±0.556	3.033±1.098
24. Health and social care: Accessibility and quality	2.900±0.960	2.900±0.305	3.033±0.809
25. Transport	2.767±1.006	2.967±0.490	3.000±0.788
26. Negative feelings	3.467±1.008	3.700±0.750	3.500±1.137

DISCUSSION

Elderly people face a number of mental and physical problems which directly affects their quality of life. Currently, a few studies are available which have assessed the causes of poor quality of life in old age home and community. In the present study, an attempt has been made to assess and compare the quality of life of elderly people living in old age homes and community.

General information

In the present study, the concentration of elderly females was higher than elderly males in rural community and old age home. Similar high percentage of elderly female was observed in studies done by Chandrika et al, in Visakhapatnam city.[10] But male elderly were seen to be high compared to female in a study done by Gupta et al, in Lucknow.[11] All the three areas were concentrated in the age group 65-70 years old. Similar observation was reported in a study done by Chandrika.[10] Related to the education, most of the study population was illiterate in urban (73.3%) and rural (60%) area but in old age home most of them were educated. This is in contrast to the findings observed in a study done in Bangalore where illiterate elder people were more both in old age home and community.[12] Related to marital status, married individuals predominated in urban, rural areas and old age home; nevertheless, the percentage of elderly single was higher in old age home than that found in urban and rural areas. Similar findings of high concentration of married elderly people in both old age home and community are observed in many studies.[10,11,13,14]

Overall quality of life

With respect to overall QoL, poor quality of life was observed in majority of elderly people living in old age home (46.7%) and rural community (53.3%). In urban area, the quality of life was perceived by majority (56.7%) as neither poor nor good. Similar perception of poor quality of life in old age home was observed in a study done by Gupta in Lucknow.[11] But these findings are in contrast to that found in a study in urban Bangalore where the quality of life was high in old age homes; and low to moderate in community.[12]

Health perception

Most of elderly living in old age home perceived their health as dissatisfied and elderly people in rural and urban area perceived their health as neither satisfied nor dissatisfied. On extensive search, no studies were found which analyzed the perception of health in the elderly.

Domains of quality of life

Comparing the domains of quality of life, mean scores were found to be high in physical, psychological and social domains in elderly people living in urban area as compared to rural area and old age home group. The mean score of environmental domain was high in rural area as compared to urban and old age home. This implies that quality of life was better in community (either urban or rural) than old age home. Among the facets of quality of life, maximum mean score is obtained by dependence on medical substances in old age and urban elderly people and negative feelings in urban elderly people. Other facets with high mean scores include pain and discomfort and dissatisfaction with sleep and rest. Financial resources have the lowest mean score among all the domains in both old age home and community. This observation of better mean scores in physical, psychological and social domains in community is in line with the study done by Gupta.[11] But these findings are in contrast to that observed by Tavares DMS et al, where elderly people residing in rural areas had better quality of life in all domains than urban elderly people.[15] In a study done by Devi, both genders living in old age home showed high mean scores in all domains of quality of life.

Limitation of the study

Due to constraint in time, the study was carried out on only 90 study subjects. Convenient sampling method was used which might have led to selection bias.

Recommendation

Further studies on a large group of elderly population are necessary to assess the factors affecting the quality of life according to their place of residence.

CONCLUSION

All the elderly people perceived their quality of life as either poor or neutral. Physical, psychological and social domains were found to be high in urban elderly people than rural or old age home. The environmental domain was high in rural area as compared to urban and old age home.

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

REFERENCES

1. Ageing. Health topics. World Health Organization. Available at: http://who.int/topics/ageing/en/. Accessed on 20th January 2017.
2. Situation Analysis of the Elderly in India June 2011. Central Statistics Office. Ministry of Statistics &Programme Implementation. Government of India. Available at: http://mospi.nic.in/sites/default/files/publication_reports/elderly_in_india.pdf. Accessed on 20th January 2017.

3. Elderly in India-Profile and Programmes 2016. Central Statistics Office. Ministry of Statistics and Programme Implementation. Government of India. Available at: http://www.mospi.gov.in/sites/default/files/publication_reports/ElderlyinIndia_2016.pdf. Accessed on 20th January 2017.
4. Age-friendly environments. Ageing and life course. Programmes. World Health Organisation. Available at: http://who.int/ageing/age-friendly-environments/en/. Accessed on 20th January 2017.
5. Soneja S. Elder abuse in India. Country report for World Health Organization. Help Age India. Available at: http://www.who.int/ageing/projects/elder_abuse/alc_ea_ind.pdf. Accessed on 20th January 2017.
6. Kumar SV. Challenges before the elderly. An Indian Scenario. New Delhi: MD Publications Pvt Ltd; 1995: 286.
7. Celich SLK, Creutzberg M, Goldim JR, Gomes. Ageing with quality of life: the perception of elderly participants in groups of senior citizens. REME Rev Min Enferm. 2010;14(2):226-32.
8. Mudey A, Ambekar S, Goyal RC, Agarekar S, Wagh VV. Assessment of Quality of Life among Rural and Urban Elderly Population of Wardha District, Maharashtra, India. Ethno Med. 2011;5(2):89-93.
9. WHOQoL-BREF. Introduction, administration, scoring and generic version of the assessment. Field trial version, December 1996, programme on mental health. WHO, Geneva. Available at: http://www.who.int/mental_health/media/en/76.pdf?ua=1.
10. Chandrika S, Radhakumari P, Devi Madhavi B. Quality of Life of Elderly Residing in old Age Homes and Community in Visakhapatnam City. IOSR J Dent Med Sci. 2015;14(10):27-31
11. Gupta A, Mohan U, Tiwari SC, Singh SK, Singh VK. Dimensions and determinants of quality of life among senior citizens of Lucknow, India. Int J Med Public Health. 2014;4:477-81.
12. Devi SL, Roopa KS. Quality of Life of Elderly Men and Women in Institutional and Non institutional Settings in Urban Bangalore District. Res J Family Community Consumer Sci. 2013;1(3):7-13.
13. Asadullah Md et al. A study on morbidity profile and quality of life of inmates in old age homes in Udupi district, Karnataka, India. Int J Basic Applied Med Sci. 2012;2(3):91-7.
14. Usha VK, Lalitha K. Quality of life of senior citizens: A Rural-Urban comparison. Indian J Soc Psychiatr. 2016;32:158-63.
15. Tavares DMS, Bolina AF, Dias FA, Ferreira PCS, Haas VJ. Quality of life of elderly. Comparison between urban and rural areas. Invest Educ Enferm. 2014;32(3):401-13.

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