QUALITY OF LIFE OF ELDERLY PEOPLE IN INSTITUTIONAL AND NON- INSTITUTIONAL SETTING: A CROSS-SECTIONAL COMPARATIVE STUDY

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ABSTRACT

Introduction: Ageing of the population along with changes in the family structure and shifts in intergenerational relations has brought into focus issues pertaining to health status across all domains, which in turn reflect the quality of life of elderly in India. This study was carried out with an objective to assess and compare the quality of life among elderly, residing in old age homes and in the community.

Methodology: This study was carried out in the field practice area of PESIMSR, Kuppam, during June and November 2013. A total of 112 elderly were included in the study. Quality of life was assessed in four domains using WHO QOL (BREF) and the data was analyzed using SPSS software ver19.

Results: Overall quality of life was low in both the groups. However, in the physical domain, institutional elderly had higher QOL (50.47 vs 47.18) and in the social domain, non institutional elderly had higher QOL (47.63 vs 33.60). Overall, 21.42% rated their QOL as good and 24.1% rated their health as satisfied. Sociodemographic variables were significantly related to QOL in social domain.

Conclusion: Quality of life depends on multiple dimensions of well being which needs comprehensive assessment and multidimensional approach to improve.

Keywords: Ageing, Quality of life, Institutional, Community, Elderly.

INTRODUCTION

Ageing is a normal biological phenomenon. Change 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[1]. In 2015, 60 years and above were 900 million in the world population and it is expected to a total of 2 billion by 2050. Likewise, 80 years and above are about 125 million people now and by 2050, this will be 436 million worldwide, China alone contributing about 120 million to this. By 2050, more than 80% of the older people will be living in the lower and middle income countries[1,2]. Though the rate of population ageing around the world is increasing considerably, India will have slightly more than 20 years time to make the same adaptation[1].

Change in the family structure and shifts in intergenerational relations have brought into focus many issues. World Health Organization defines Quality of Life as individuals' 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[2].

It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of their environment[2].

Conditions that are common in the elderly age group include hearing loss, eye problems (cataracts and refractive errors), generalized body ache and osteoarthritis, COPD, diabetes mellitus, depression and dementia etc.[1,3,4,5] In addition to these common conditions, elderly patients also deal with various physiological, environmental, psychological problems and social stigmas. Hence, for comprehensive assessment of older persons' health status, it is essential to consider the overall situation of the elderly and their quality of life[1,3,4,5]. It is imperative to assess issues pertaining to health status across all the domains, which in turn reflect the quality of life of elderly. WHO-QOL (BREF) [6,7] instrument, which has four domains, was used for the in-depth assessment of Quality of life of the elderly people.

Using various tools, few studies have been done to know the Quality of Life of elderly persons[8,9,10,11,12,13]. However, there are limited studies which compare the quality of life of elderly living in different settings. In this regard, the present study was undertaken to assess and compare the Quality of Life of elderly living in an old age home and in the community in a rural area of Andhra Pradesh.

OBJECTIVES

The objectives of the study were to assess and compare the quality of life among elderly residing in old age home and in the community and to find out the association between the quality of life and socio-demographic factors of these elderly.

MATERIALS AND METHODS

A cross sectional study was carried out in the field practice area of PESIMSR, Kuppam, Andhra Pradesh from June to November 2013. A total of 112 individuals, aged 60 years and above, were included in the study. After listing out all the elderly people living in two old age homes in the area, 69 elderly were included for the study. Of these, 7 were not able to respond due to impairment and illness and 6 could not be contacted even after repeated visits. Hence, 56 subjects were included from the old age homes. An equal number of elderly subjects were selected from the villages in the field practice area by simple random sampling.

After getting permission from institutional ethics committee, the study was started. The study tool consisted of two parts – 1. Socio-demographic details, and 2. WHOQOL BREF[6,7] instrument questionnaire. The data was collected from each individual after getting informed written consent.

The data was entered first into MS excel 2007 version. Then, the analysis was done based on Bref_spss syntax file version 16 by WHO[6,7]. For descriptive analyses, the categorical variables were analyzed by using percentages and the continuous variables were analyzed by calculating (i) Mean ± Standard Deviation and (ii) Median with inter-quartile range (IQR). In the present study, Shapiro-Wilk Expanded test was applied, and it was found that the data was not normally distributed. Therefore, the Median with inter-quartile range was mainly considered for the analysis, though Mean ± Standard Deviation was also represented.

RESULTS

The socio-demographic details of study subjects from old age homes and community are represented in Table 1. Of the total of 112 elderly (56 each from old age home and community), majority were females (60.7% in old age home vs 50% in community), married were 57.1% vs 78.6% respectively, and 66.1% elderly from the old age home were literate compared to 32.1% from the community.

Perceived Quality of Life (QOL) and Quality of Health (QOH) among the elderly were almost the same for those living in old age home and in the community (Table 2).

Table 1: Socio-demographic profile of the study subjects (n=112)

Socio-demographic details	Elderly in the Old age home (%)	Elderly in the Community (%)
Age (years)		
<70	32 (28.6)	45 (40.2)
71 – 80	23 (20.5)	8 (7.1)
>80	1 (0.9)	3 (2.7)
Gender		
Male	22 (39.3)	28 (50.0)
Female	34 (60.7)	28 (50.0)
Marital status		
Married	32 (57.1)	44 (78.6)
Others	24 (42.9)	12 (21.4)
Education		
Illiterate	19 (33.9)	38 (67.9)
Literate	37 (66.1)	18 (32.1)
Religion		
Hindu	37 (66.1)	51 (91.1)
Christian	15 (26.8)	1 (01.8)
Muslims	4 (7.1)	4 (7.1)

Table 3 shows the domain scores. Of these, in the physical and psychological domain, elderly living in old age home had higher mean and median scores compared to those in the community, while the elderly living in the community had higher mean and median scores in the social domain. The scores for the psychological and social domains among the elderly living in old age home and those in the community were found to be statistically significant (P<0.05).

Table 4 and 5 shows the quality of life in various domains in relation to socio-demographic variables. Among the elderly in the old age home, quality of life among females was less in all the domains, except for the environmental domain when compared with men. Married people had better QOL in all the domains except in the social domain. Literates had better QOL in physical, social and environmental domains. Financially dependent elderly had better quality of life compare to independent persons. Among the elderly living in the community, variables like men, being married, and financial dependent categories demon-

strated better quality of life in all the domains, and literates showed better QOL in all the domains except in the social domain.

Table 2: Perceived Quality of Life and Perceived Quality of Health of elderly study subjects

Indicators	Subjects (N =56)	
	Old age home (%)	Community (%)
Quality of Life Scores		
Very poor	1 (1.78)	0 (0)
Poor	15 (26.78)	8 (14.28)
Neither poor nor good	18 (32.14)	28 (50)
Good	18 (32.14)	20 (35.71)
Very good	4 (7.14)	0 (0)
General Health Scores		
Very dissatisfied	1 (1.78)	2 (3.57)
Dissatisfied	16 (28.57)	10 (17.85)
Neither satisfied nor dissatisfied	16 (28.57)	20 (35.71)
Satisfied	20 (35.71)	24 (42.85)
Very satisfied	3 (5.35)	0 (0)

Table 3: Scores of the subjects for various domains of Quality of Life

Domains of QOL	QOL scores of the subjects				'p' value
	Old age home		Community		
	Median score (IQR)	Mean score (± SD)	Median score (IQR)	Mean score (± SD)	
Physical	50.00 (42.85 – 57.14)	50.31 (±10.92)	46.42 (39.28 – 56.25)	47.19 (±13.53)	0.059
Psychological	45.83 (37.50 – 54.83)	46.13 (±12.45)	37.50 (33.33 – 50.00)	41.59 (±14.50)	0.001
Social	33.33 (16.66 – 50.00)	33.33 (±20.71)	50.00 (41.66 – 58.33)	47.02 (±17.22)	0.035
Environmental	46.87 (35.15 – 59.37)	47.04 (±15.16)	46.87 (37.50 – 59.37)	47.71 (±14.99)	0.849

P value calculated for mean score of old age home and community; P<0.05 is statistically significant.

Table 4: Distribution of Physical and Psychological QOL Domains in relation to socio-demographic variants

Socio-Demographic status	Physical domain [Median (LQR-UQR)]		Psychological domain [Median (LQR-UQR)]	
	Old age home	Community	Old age home	Community
Age				
60 – 70 yrs	53.57 (46.43-57.14)	46.43 (39.29-57.14)	50 (37.50-54.17)	41.67 (33.33-45.83)
71 – 80 yrs	42.86 (39.29-46.43)	42.86 (32.14-57.14)	45.83 (41.67-50.00)	37.5 (33.33-54.17)
>80 yrs	53.57 (42.86-64.29)	50 (50.00-50.00)	37.5 (37.50-50.00)	41.67 (41.67-41.67)
Sex				
Male	53.57 (46.43 -64.29)	51.79 (39.29-39.29)	50 (37.50-54.17)	41.67 (33.33-56.25)
Female	50 (39.29-57.14)	42.86 (39.29-46.43)	45.83 (37.50-54.17)	37.5 (29.17-41.67)
Education				
Illiterate	50 (42.86-57.14)	48.21 (39.29-58.93)	47.92 (39.58-54.17)	41.67 (33.33-43.75)
literate	53.57 (41.07-57.14)	46.43 (39.29-53.57)	45.83 (35.42-52.08)	37.5 (33.33-54.17)
Marital status				
Married	53.57 (39.29-57.14)	46.43 (39.29-60.71)	50 (37.50-54.17)	41.67 (33.33-45.83)
Others	46.43 (42.86-57.14)	44.64 (33.93-53.57)	45.83 (41.67-54.17)	39.58 (31.25-50.00)
Financial status				
Dependent	53.57 (42.86-57.14)	46.43 (39.29-60.71)	50 (39.58-54.17)	41.67 (33.33-50.00)
Independent	51.79 (39.2957.14)	39.29 (32.14-46.43)	45.83 (35.42-52.08)	33.33 (25.00-37.50)

Table 5: Distribution of Social and Environmental QOL Domains in relation to socio-demographic variants

Socio-demographic status	Social domain [Median (LQR-UQR)]		Environmental domain [Median (LQR-UQR)]	
	Old age home	Community	Old age home	Community
Age				
60 – 70 yrs	33.33 (16.67-50.00)	50 (41.67-58.33)	46.88 (35.94-59.38)	48.23 (37.50-59.38)
71 – 80 yrs	33.33 (16.67-50.00)	41.67 (41.67-58.33)	53.13 (40.63-59.38)	44.62 (28.13-62.50)
>80 yrs	33.33 (16.67-33.33)	25 (25.00-25.00)	43.75 (31.25-62.50)	50 (50.00-50.00)
Sex				
Male	37.5 (16.67-50.00)	58.33 (45.83-66.67)	42.19 (31.25-46.88)	50 (40.63-62.50)
Female	29.17 (16.67-50.00)	41.67 (29.17-50.00)	51.56 (37.50-59.38)	40.63 (37.50-50.00)
Education				
Illiterate	29.17 (16.67-50.00)	45.83 (33.33-54.17)	43.75 (35.94-57.81)	50 (35.94-56.25)
Literate	33.33 (20.83-50.00)	50 (41.67-58.33)	57.81 (39.06-60.94)	43.75 (37.50-62.50)
Marital status				
Married	33.33 (16.67-0.00)	50 (33.33-54.17)	46.88 (37.50-59.38)	46.88 (37.50-53.13)
Others	41.67 (25.00-8.33)	45.83 (41.67-58.33)	40.63 (31.25-53.13)	46.88 (35.94-62.50)
Financial status				
Dependant	33.33 (25.00-50.00)	50 (41.67-58.33)	43.7 (37.50-56.25)	50 (35.94-62.50)
Independent	33.33 (16.67-50.00)	41.67 (25.00-41.67)	48.44 (32.81-59.38)	34.38 (37.50-43.75)

DISCUSSION

In the present study, median domain scores for the community participants showed maximum quality of life in social domain, followed by environmental and physical domains. The minimum scores were in the psychological domain. A cross-sectional study done in Mettupalyam[8] showed better mean scores in social domain and least scores in the physical domain. In a community based study in Kerala[9], the QOL mean scores were better in the physical domain, followed by social domain and worse in the psychological domain. A study from rural Assam[10] showed better mean scores in the environmental domain and least scores in the social domain. Better mean scores in the social domain followed by psychological domain, and poor scores in the physical and environmental domains were reported in a study in rural Haryana[11]. A study among the urban elderly in West Bengal[12] reported better QOL scores in the environmental domain compared to rest of the domains and the least score was reported in the social domain. Mean domain scores were better in physical, psychological and environmental domains, but was poor in social domain as per the results of a Puducherry based study[13]. A study carried out in rural Maharashtra[14] reported highest scores in physical domain and lowest in psychological domain.

Our study showed better median QOL scores in physical domain, followed by environmental and psychological domains among the old age home participants. The least score was in social domain. The present study shows statistically significant difference only in psychological and social domains of the elderly from the old age home and in the community, whereas study done in Lucknow[15] showed that the difference in the mean domain scores of physical, psychological and environmental domains was statistically significant among the study subjects in old age homes and in the community.

In the present study, the males have better median QOL scores and the difference is statistically significant compared to females, similar findings are being reported by few studies[11,12,16]. In the present study the elderly from the community who were literate, married and financially independent had better quality of life in all the domains. Studies from Northern India[9,11] also reported similar findings. In a study conducted in South India[13], QOL scores were less in illiterates, no income elderly and those from nuclear families, while a study done in North India[15] found that married persons staying in the old age home have better QOL.

CONCLUSION

There is a significant difference in the quality of life between the elderly people from old age homes and those living in the community. The elderly living in old age homes have better physical health compared to the participants in the community, which can be due to the regular, timely food intake and less physical exertion. On the other hand, social domain shows minimum scores for them. This may be due to the fact that, in the community, elderly people enjoy better social relationship as they stay closer to their family members as well as with the neighborhood.

RECOMMENDATIONS

Counselling, bridging intergenerational gaps, social and family support is very essential, especially for the institutional elderly. For these to happen, elderly should be trained for income generating work by the involvement of non-governmental organizations, and also, there should be inter-sectoral coordination between Panchayat Raj and Health departments. Periodic health checkups for both the physical and psychiatric well being of the people living in old age homes as well as in the community should be carried out on a regular basis.

LIMITATIONS

The present study has its limitations. As the number of persons staying in the old age home is less, same number of participants in the community was collected.

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