Quality of Life of Elderly Men and Women in Institutional and Noninstitutional Settings in Urban Bangalore District

Lakshmi Devi S and Roopa K.S.

Department of Human development and Research Centre, Smt VHD Central Institute of Home Sci., Seshadri Road, Bangalore, Karnataka, INDIA

Available online at: www.isca.in

Received 19th Novmber 2012, revised 31st December 2012, accepted 11th May 2013

Abstract

The aim of the present investigation attempt to study the quality of life (QoL) of the elderly men and women living in institutions and non-institutional settings in urban Bangalore District. The study was conducted on a purposive random sample of 800 elderly in the age ranging from 65-76 years of which 200 men and 200 women in institutional and 200 men 200 women living in non-institutional settings. WHO-QoL (100) 1996 field version was used to measure the QoL. The questionnaire was administered, data was collected and tabulated. The data obtained was subjected to statistical analysis using mean, χ^2 test and Z test. The results revealed that elderly living in institutional setting showed high level of QoL than non-institutional setting. The result also revealed that there is a significant difference between the institutional and non-institutional elderly men and women in the area of physical, psychological, level of independence, social relationship and environment domains of QoL.

Keywords: Ageing, Quality of Life, Elderly, Institutional settings.

Introduction

India is the second largest population of elderly (60+) in the world¹. As per the 2001census, the number of older persons was 70.6 million (6.91%) and projected to grow to 94.8 million (8.3%) in 2011, 118 million (9.3%) in 2016 and in 2026 it is expected to touch 173 (12.4%) million².

Ageing is a normal inevitable and universal phenomenon; literally it refers to the effects of age, commonly speaking, it means the various effects or manifestation of old age. In this sense it refers to various deterioration in the organism. While they have been usually perceived as biological, the deterioration in mental capabilities and social adaptability is no less important. Ageing has thus three aspects biological, psychological and social³. The elderly person represents a store house of knowledge and experience and reservoir of wisdom but is a highly vulnerable group in society. Their vulnerability increases with age. The vulnerability lies mainly in lack of employment, financial insecurity, ill health and neglect by society. Any system of social security of the elderly should address all these vulnerabilities. It has, therefore, to be a multi dimensional programme providing income security, health security and emotional support. While the family can provide the basic security. The major responsibility for providing social security to the elderly lies on the community and the state in the era of industrialization⁴.

The ageing of the population along with changes in the family structure and shifts in intergenerational relations has brought into focus issues pertaining to the elderly in India. The growing visibility of old age homes in India points to the needs of elderly, which were not recognized earlier. The old age homes have sprung up to cater to the needs of the elderly from different socio-economic backgrounds. The interests of the elderly to spend their old age in sacred places, the migration of children in search of employment opportunities, their maladjustment in family and poverty of the elderly are the major reasons for the Indian elderly to shift to old age homes. But since the idea of living in old age homes is relatively new in India, the adjustment process of the old age home residents, their feelings of satisfaction and dissatisfaction and expectations from family members provide an interesting field of inquiry⁵.

Today, the old age homes are indispensable as they are needed to take care of the lonely and forsaken elderly in the evening of their lives. Whenever the family does not provide full protection and security to the aged, the society has to share the burden of looking after them. Nowadays, old age homes are established to take care of the old. This idea of "institutionalization" of the aged has largely been borrowed from the western countries. In the context of the dynamic changes taking place in Indian society, the problem of the aged has assumed importance. There is a gap between the needs of old people and the availability of health and social service in these institutions. There is much research on the problem of the institutionalized old people abroad but in India, very little organized information is available about the problem of the aged living the families and in old age homes.

However in recent times, as a result of demographic transition, rapid pace of industrialization and urbanization, disintegration of joint family structures into nuclear ones, increasing

participation of families in non-agricultural labour force, the older people have become more vulnerable. The lack of familial support made elderly resort to old age homes run by private and or voluntary organisations for their care and support⁶.

Of the several consequences of such trends, one that causes serious concern is that of providing care to a large number of older persons to have better quality of life. This has different dimensions and connotations. When it comes to older people, care which implies providing physical, social, economical and emotional implies instrumental support on a continuous and long term basis. Health status is an important indicators of the QoL of the elderly⁷.

The World Health Organization defines the quality of life (QoL) as "an individual's perception of his/her position in life in the context of the culture and value systems in which he/she lives, and in relation to his/her goals expectations, standards and concerns. It is a broad-ranging concept, incorporating in a comparing way the person's physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment".

Quality of life (QOL) as an eternal quest for human beings is conceptualized as a generic, multidimensional construct that describes an individual's subjective perception of his or her physical and psychological health, as well as his or her social functioning, environment, and general life status⁹. Defined as a subjective well-being that reflects the distance between individual hopes and expectations and the effective experience, its subjectivity can be supported by objective factors such as achieving socio-cultural goals as status, wealth, and physical well-being¹⁰. For old aged quality of life is more than rating their physical health status; emotional and social health are also recognized as very important factors for their well-being¹¹. An individual QOL perception, in socio-cultural reality, according to the value system in which the person is inserted, as described by World Health Organization (WHO), expresses a position related to ones goals, expectations, patterns and worries¹

The purpose of the study was to assess and compare the overall perception of quality of life of elderly living in institutional and non-institutional settings and also to compare the two age groups of elderly men and women living in institutional and non-institutional settings on five broad domains of quality of life.

Methodology

Sample: The samplewere selected by purposive random sampling technique. The cross section of society with old age people belonging to the two age group namely 65 to 70 and 71 to 76 years residing in homes and old age institutions were selected. A total of four hundred samples were selected from old age homes of which two hundred were men and two hundred were women. A total sample of four hundred elderly living in homes of which two hundred men and two hundred women were selected for the study visiting to various parks, mahila mandals, clubs, senior citizens sangas from different areas of urban Bangalore.

Tool Used: WHO QoL-100 (1996) standardized questionnaire developed by World Health Organization. The tool was translated to the regional language Kannada. Both English and kannada version questionnaire were used for data collection.

Results and Discussion

The findings of the present study on distribution of respondents on age, gender and educational qualification and QoL of elderly men and women living in institutions and non-institutional settings are presented below.

Table-1 gives the distribution of respondents based on variables age and sex in Institutional and Non-institutional settings.

The above table indicates distribution of sample of 800 respondents under different variables. In each sub group the number is 100. A sample of fifty percent was men and the other fifty percent was women. Similarly fifty percent of the sample was in the age group of 65-70 years and the other fifty percent was in the age group 71-76 years. A sample of fifty percent was residing in the institutions where as other fifty percent was residing in non-institutions settings. An equal number of respondents were in each of the category viz., institutions and non-institutions, men and women and in the two age groups. Thus out of total sample 800 respondent, 100 respondents or 12.5 percent of the sample were in each sub group. This distribution was included sample design.

Table- 2 shows classification of respondents based on the educational level of men and women in the institutional and non-institutional settings.

Table-1
Distribution of respondents based on variables age and sex in Institutional and Non-institutional settings

Sex	Age Group		Respondents								
	(years)	Institu	ıtional	Non-Ir	nstitutional	Combined					
		N	%	N	%	N	%				
Men	65-70	100	12.5	100	12.5	200	25.0				
(n=400)	71-76	100	12.5	100	12.5	200	25.0				
Women (n=400)	65-70	100	12.5	100	12.5	200	25.0				
	71-76	100	12.5	100	12.5	200	25.0				
Total	65-76	400	50.0	400	50.0	800	100.0				

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Table-2
Shows classification of respondents based on the educational level of men and women in the institutional and non-institutional settings

Sex	Educational level	Setting								
		Instit	utional	Non-Ir	nstitutional	Com	bined			
		N	%	N	%	N	%			
Men	Illiterate	76	38.0	49	24.5	125	31.2			
	Below SSLC	46	23.0	65	32.5	111	27.8			
	SSLC	31	15.5	53	26.5	84	21.0			
(n=400)	Degree	47	23.5	33	16.5	80	20.0			
women (n=400)	Illiterate	74	37.0	143	71.5	217	54.2			
	Below SSLC	71	35.5	40	20.0	111	27.8			
	SSLC	30	15.0	16	8.0	46	11.5			
	Degree	25	12.5	1	0.5	26	6.5			

^{*}χ2 value is 132.99 Significant at 0.01 level.

Educational level of the respondents was classified under four categories, i.e., illiterates, those who have not completed SSLC, those with SSLC and Degree holders. Among men respondents residing in institutions 38.0 percent of them were illiterates, 23.0 percent respondents have not completed SSLC, 23.5 percent were degree holders and 15.5 percent of them studied up to SSLC. In non-institutional settings majority of men have not completed SSLC. 24.5 percent of them were illiterates and 26.5 percents studied up to SSLC. 16.5 percent of men respondents were degree holders. Comparing institutions and non-institutional men respondents it can be noticed that in institutions majority of men were illiterates (38.0%), where as men in non-institutional settings were mostly those who have not completed SSLC (32.5%). In both institutions and non-institutional settings there were less respondents who were degree holders.

In the group of women respondents living in institutions 37.0 percent of them were illiterate, 35.5 percent of them were below SSLC and a very less percentage studied up to SSLC (15.0%). Only 12.5 percents studied up to degree. In non-institutional group of women majority of women respondents were illiterate (71.5%). 20.0 percent of respondents studied below SSLC. And 8.0 percent studied up to SSLC. Only one out of 200 respondents was a degree holder. Comparing women in both institutions and non-institutional settings it may be noticed that most of them were illiterates. Majority of both men and women in the institutional setting were illiterates. A very less percent were degree holders. Among non-institutional respondents majority of men have not completed SSLC and women were illiterates.

The obtained chi-square value for the independence of educational qualification in the sub group on demographic variables is 132.99 and is statistically significant at 0.01 levels. It suggests variations in the association between different groups and educational level.

The WHO QoL standardized questionnaire was used in research to enquire into the QoL of old age people. The Quality of life was categorized in to three levels based on scores on the WHO QoL scale. A score below 60.6 was considered as an indicator

of low level of quality of life, 60.7 to 75.4 as moderate and above 75.4 as high level of quality of life.

The frequency and percentage of men and women respondents on overall perception of quality of life in the three categories are shown in table - 3. Among the institutional respondents 67.5 percent of men and 65.5 percent of women had high level of quality of life. In non-institutional group 60.0 percent of men and 59.5 percent of women had moderate level of quality of life. In the non-institutional settings no respondents has shown a high level of quality of life.

Comparatively, in institutional setting a higher percent (66.5%) of respondents showed high quality of life than non – institutional (0%) settings. Contradicting to the findings Mathew, et.al , study revealed that institutionalzed elderly showed low level of quality of life compare to non-institutional 13 . It is surprising to know that none of the respondents living in non-institutional setting had high level of quality of life.

In institutional settings more women respondents (24.5%) reported low level of quality of life compared to men respondents (8.5%). The present study support the finding of Tajvar, et. al., women reported significant poorer quality of life than men¹⁴. Whereas, in non-institutional settings quality of life distribution is similar in both the men and women respondents.

The obtained chi – square value is 27.11 and is significant at 5 percent level. This suggests an association between overall perception of quality of life and gender differences in institutional settings. Where as, in non-institutional settings no significant association was found between overall perception of quality of life and gender differences. The chi-square value of 0.01 was not significant at 5 percent level.

An age wise analysis of the Quality of life of men and women in the two settings is indicated in table-4. The groups of men and women were divided in to two sub groups. One in the age range of 65 - 70 years and the other in the age range of 71 - 76 years.

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Table-3 Classification of Men and Women Respondents on Overall Perception of Quality of Life in Institutional and Noninstitutional Settings

Settings	Quality of Life	Scores		\mathbf{X}^2					
	Level		Men		Wor	nen	Combined		Value
			N	%	N	%	N	%	
Institutional	Low	Below 60.6	17	8.5	49	24.5	66	16.5	27.11*
	Moderate	60.7-75.4	48	24.0	20	10.0	68	17.0	
	High	Above 75.4	135	67.5	131	65.5	266	66.5	
	Total		200	100	200	100	400	100	
Non-	Low	Below 60.6	80	40.0	81	40.5	161	40.2	0.01 NS
Institutional	Moderate	60.7-75.4	120	60.0	119	59.5	139	34.8	
	High	Above 75.4	0	0.0	0	0.0	0	0.0	
	Total		200	100	200	100	400	100	

^{*}Significant at 5% Level,

NS: Non-Significant

 X^2 (0.05,2df) = 5.991

Table - 4 Respondents by Age on Overall Quality of Life among men and women in the Institutional and Non Institutional settings

Settings	Sex	Age group (In Years)	Quality	Total	χ2 Value		
			Low Below 60.6	Moderate 60.7 - 75.4	High Above 75.4		
Institutional	Men	65-70	14.0	20.0	66.0	100	8.52*
		71-76	3.0	28.0	69.0	100	
	Women	65-70	25.0	15.0	60.0	100	5.94 NS
		71-76	24.0	5.0	71.0	100	1
Non-Institutional	Men	65-70	11.0	89.0	0.0	100	70.08*
		71-76	69.0	31.0	0.0	100	1
	Women	65-70	45.0	55.0	0.0	100	1.68 NS
		71-76	36.0	64.0	0.0	100	

^{*}Significant at 5% Level.

NS: Non-Significant χ^2 (0.05, 2df) = 5.991

Women 65-70 year χ^2 value 88.57* Women 70-76 year χ^2 value 123.85*

Men 65-70 year χ^2 value 110.75* Men 71-76 year χ^2 value 129.65*

Total γ2 value 209.39*

In the institutional settings majority of men and women in the two age groups showed higher level of quality of life. Comparatively more women in 65-70 years (25.0%) and 71-76 years (24.0%) showed low level of quality of life than men. In the age group of 65 -70 years more men reported low level of quality of life than men in the age group of 71-76 years.

In the non-institutional setting majority of men respondents in the age group 65-70 years showed moderate level of quality of life. In the age group 71-76 (69.0%) years, men respondents reported low level of quality of life. Comparatively, in noninstitutional setting, women of 65-70 years (45.0%) reported more often low level of quality of life than men (11.0%) of that age group of respondents. In non institutional settings both men and women respondent reported only low and moderate level of quality of life.

The obtained χ^2 value is significant in men group for both institutional and non institutional settings. This suggests an

association between level of quality of life and age group in both institutional (χ 2 value 8.52) and non institutional (χ 2 value 70.08) settings. Where as, for women group χ 2 value was not significant. The level of quality of life and age has no association in both institutional (χ 2 value 5.94) and non institutional (χ 2 value 1.68) settings for women.

Chi square value for men living in different settings in two age groups of 65-70 years (χ 2 value 110.75) and 71-76 years (χ 2 value 129.65%) were found to be significant at 5 percent level. Similar trend was seen in women respondents, in the age group 65-70 years (χ 2 value 88.57) and 71-76 years (χ 2 value 123.85). There is an association between the setting and quality of life for both men and women in the two age groups.

Total chi square value of 209.39 was found to be significant. This suggests an association between quality of Life and gender differences, setting of life as well as age group.

The significance of difference between the sub groups on Quality of life was analyzed using the mean scores of different groups on QoL scores. The results are shown in table -5.

Table - 5 reveals respondents' mean score on overall quality of life among men and women living in institutional and non-institutional settings. For overall perception, the maximum score is 510. The sample size in institutional and non institutional setting and in men and women group of respondents is 400 each.

Above results in institutional setting shows the means score to be higher in both men (386.50) and women (371.93) respondents compared to non institutional men (312.46) and women (312.09). Where as, in institutional men respondents, means score was higher than institutional women respondents. In non-institutional setting, mean score was similar for both men and women respondents.

The obtained 'Z' value of 19.76 for men's group was found to be significant beyond 0.05 level and suggests a difference in score on WHO QoL overall perception of quality of life between men respondents living in institutional and non-institutional settings. Similar trend was found in differences between WHO QoL overall perception of quality of life in women respondents living in institutional and non-institutional settings. 'Z' value of 13.31 was found to be significant beyond 5 percent level. There is a significant difference in the quality of

life of women respondents living in two different settings. Both men and women showed higher mean score in the institutional settings as compared to the non-institutional settings.

The significant "Z" value (2.73) in the Institutional setting for men and women reveals differences in the overall perception of quality of life between men and women in institutional setting. However in the non institutional setting, the obtained 'Z' test value of 0.23 was found to be not significant at 5 percent level. WHO QoL overall perceptions of quality of life in non-institutional settings for men and women showed no significant differences. However, in intuitional settings results showed a significant difference in the perception of quality of life among men and women respondents, where as in non institutional settings men and women respondents showed no differences in their perception of quality of life.

A comparison of sub groups on different domains of WHO-QoL dimensions was made. The results are given in Table- 6. The mean scores of five dimensions for men and women in Institutional and Non institutional settings are reported.

There is a significant difference between the institutional and non-institutional male respondents in all the areas of quality of life. The 'Z' value found to be for the area physical (19.06), psychological (20.71), level of independence (15.67), social relationship (18.13), environment (13.55) and the value was found to be significant at 5 percent level.

Table-5
Mean Scores on Overall Quality of Life of among Men and Women Respondents living in Institutional and Non-institutional Settings

Groups	Settings (N= 200 in each Cell)								
	Institu	tional	Non-instit						
	Mean	S.D	Mean	S.D					
Men	386.50	47.0	312.46	24.7	19.76*				
Women	371.93	60.9	312.09	18.2	13.31*				
'Z' Test	2.7	3*	0.23 N						

^{*}Significant at 5% level, NS: Non Significant Z(0.05, 398 df) = 1.96

Table – 6
A comparison of Men and Women Respondents living in Institutional and Non institutional Settings on different areas of Quality of Life

No.	Domains of QoL				Resp	onse on Qu	ality of Lif	če (%)			
		Men (n=400)				'Z'	Women (n=400)				'Z'
		Instituti (n=20		Non- Institutional (n=200)		Institutional (n=200)		Non- Institutional (n=200)		Test	
		Mean	SD	Mean	SD		Mean	SD	Mean	SD	
I	Physical	71.2	9.3	57.5	4.1	19.06*	68.3	9.9	57.2	3.5	14.95*
II	Psychological	77.7	13.4	56.6	5.3	20.71*	76.5	11.8	56.1	4.9	22.58*
III	Level of Independence	71.6	7.9	61.0	5.4	15.67*	69.6	12.5	61.9	5.1	8.07*
IV	Social Relationship	79.0	8.8	62.4	9.5	18.13*	75.5	13.3	63.0	7.5	11.58*
V	Environment	80.6	9.2	68.4	8.8	13.55*	75.9	14.1	67.5	6.3	7.69*

^{*} Significant at 5% level,

Z(0.05, 398df) = 1.96

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Table – 7
Age wise comparison of Respondents on different Domains of Quality of Life

No.	Domains of HO			Responden			ality of Life				
	QoL		65-70 (n=400)	•	'Z'	71-76 (n=400)				'Z'
		Institu (n=2				Test	Institut (n=20		Noi Institut (n=2	ional	Test
		Mean	SD	Mean	SD		Mean	SD	Mean	SD	
I	Physical	71.7	8.8	67.8	10.2	4.09*	57.3	4.0	57.4	3.5	0.27 ^{NS}
II	Psychological	79.8	10.8	74.4	13.7	4.38*	56.2	5.6	56.6	4.5	0.79 ^{NS}
III	Level of	72.5	9.1	68.7	11.5	3.66*	61.9	5.9	61.0	4.6	1.70 ^{NS}
	Independence										
IV	Social Relationship	79.4	10.6	75.1	11.8	3.83*	62.4	8.9	62.9	8.2	0.58^{NS}
V	Environment	80.3	10.6	76.3	13.1	3.36*	67.5	8.1	68.4	7.1	1.18 ^{NS}

^{*}Significant at 5% Level,

NS: Non-Significant, Z(0.05,398df) = 1.96

There is a significant difference between the institutional and non-institutional women respondents in all the areas of quality of life. The 'Z' value for the area physical (14.95), psychological (22.58), level of independence (8.07), social relationship (11.58), and environment (7.69) is significant at 5 percent level and indicates significant differences in the scores of women in the two settings. For both men and women the scores in different areas of quality of life were more in the institutional settings as compared to the non-institutional setting.

A comparison of two age groups of respondents in the two settings on different domains of WHO-QoL dimensions was made considering the mean scores in different domains. The results are given in Table - 7. The mean scores of five dimensions for the respondents in Institutional and Non institutional settings for the two age groups are reported.

Table -6 depicts the comparison of respondents in institutional and non-institutional settings in the age group of 65-70 years and 71-76 years on their overall perception of quality of life in five areas of WHO QoL.

There is a significant difference in the age group of 65-70 years on all the areas of quality of life between respondents living in institutional and non-institutional settings. The 'Z' values for the areas physical (4.09), psychological (4.38), level of independence (3.66), social relationship (3.83), and environment (3.36) and are found to be significant at 5 percent level.

There is no significant difference between the two settings in the age group of 71-76 years on all the areas of quality of life. The 'Z' values are not significant for the area physical (0.27), psychological (0.79), level of independence (1.70), social relationship (0.58), environment (1.18) showing the not significant at 5 percent level.

Conclusion

The quality of life which each individual possess is very important in all aspects be it physical, psychological, social,

emotional, spiritual or environmental. Only if they have fulfillment in all these aspects in life they have a high QoL. In institutional settings a higher percentage of elderly showed high QoL as compared to non-institutional setting where none of the elderly men and women respondents showed high level of QoL. There is a significant difference between the institutional and non-institutional elderly men and women in all the dimensions of quality of life.

References

- 1. Government of India. *Eleventh Five year Plan Document* 2007-2012, New Delhi: Ministry of Planning. (2008)
- 2. Registrar General, *Census of India -2001*, New Delhi: Government of India. (2001)
- **3.** Mahapatra S., Second Home After Home for Elderly: a study of Old Age Homes in the Globalized, *Indian Journal of Gernotology.*, **24(1)**, 115-126 **(2010)**
- **4.** Subrahmnyam R.K.A., Social Security for Elderly, *Shipra Publication*, Delhi,120 (**2005**)
- **5.** Mishra A.J., A study of the Family linkage of the Old Age Home Residents of Orissa, *Indian Journal of Gernotology.*, **22(2)**, 196-221 (**2008**)
- **6.** Gunashekaran S and Muthukrishanaveni., Living Condition and Health Status of Elderly in Old Age Homes, *Help Age India Research and Development Journal.*, **14(3)**, 8-18 **(2008)**
- 7. Ramnachandaran and Radika R., Health Status of Elderly: Evidence from India and Japan, *Indian Journal of Gernotology.*, 27(2), 223-234 (2013)
- **8.** WHO-QOL Group, Field trial WHOQOL-100, Fact, definitions and questions, Geneva, (1995)
- Jang Y., Ching-Lin H., Wang Y. and Wu Y.H., A validity study of the WHOQOL Bref assessment in persons with traumatic spinal cord injury, *Arch. Phys. Med. Rehabil.* 85, 1890–1895 (2004)

Res. J. Family, Community and Consumer Sci.

- **10.** Dantas, Estélio H.M. Fitness, Health, Wellness and Quality of Life, *Physical Education Mineira Review.*, **10** (1), 106-150 (2002)
- **11.** Srapyan Z., Haroutune K. and Petrosyan V., Role of depressive and cognitive status in self-reported evaluation of quality of life in older people: comparing proxy and physician perspectives. *Age and Ageing* **35(2)**, 190-193 **(2006)**
- **12.** WHO–World Health Organization. Constitution. WHO, New York. http://www.who.int/governance/eb/who_constitution_en. pdf (**2006**)
- 13. Mathew M.A., George S.L and Paniyad N., Comparative Study on Stress, Coping Strategies and Quality of Life of Institutionalized and non-institutionalized in Kottayam District, Keral., *Indian Journal of Gerontology*, 23(1), 79-89, (2009)
- **14.** Tavar M., Mohammad A. and Ali M., Determination of health related Quality of Life in Elderly in Tehran-Iran, *BMC Public Health*, **323**, 1-8 (**2008**)