

## Original article

# QUALITY OF LIFE OF ELDERLY PEOPLE AND ASSESSMENT OF FACILITIES AVAILABLE IN OLD AGE HOMES OF LUCKNOW, INDIA

Abhishek Gupta<sup>1</sup>, Uday Mohan<sup>2</sup>, Sarvada C Tiwari<sup>3</sup>, Shivendra K Singh<sup>4</sup>, Vijay K Singh<sup>5</sup>,

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**Author's Affiliation:**

<sup>1</sup>Resident, Department of Community Medicine & Public Health; <sup>2</sup>Professor, Department of Community Medicine & Public Health; <sup>3</sup>Professor, Department of Geriatric Mental Health; <sup>4</sup>Associate Professor, Department of Community Medicine; <sup>5</sup>Assistant Professor, Department of Community Medicine & Public Health, K.G. Medical University, UP, Lucknow

**Correspondence:**

Dr. Abhishek Gupta  
E-mail: ab23kgmc@gmail.com

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## ABSTRACT

**Introduction:** The old-age home industry is mostly unregulated and there is a need for putting in place certain minimum standards. Many times poor and destitute persons who may need institution-based care cannot afford them. Long-term care has a price, and there is also a need for debate on its policy and best practice.

**Objective:** The objectives were to study the quality of life of elderly people, to assess the facilities available and the factors associated with elderly people for availing the residential services of old age homes.

**Methodology:** It was a descriptive cross-sectional study. Study population was elderly (age  $\geq 60$  years) enrolled in public and private old age homes (OAHs) of Lucknow city. All the elderly living in OAHs for  $\geq 6$  months and had given the consent for interview were included in the study.

**Results:** The most important reason for elderly people living in public OAHs was **no care taking person at home** (77.1%) and private OAHs it was (36.4%). Services like medical services, recreational facilities, safety, space availability and staff availability were significantly better ( $p < 0.05$ ) in private type of OAHs. In public type OAHs 85.7 percent inmates had quality of life below average whereas in paid OAHs 63.6 percent inmates had average or above average quality of life.

**Conclusions:** No care taking person at home was the important reasons in OAHs. With the exception of food all the variables like Medical service, Recreational facilities, Safety, Space availability, Staff availability were significantly better in private OAHs. Quality of life in private OAHs was significantly better than public OAHs.

**Key words:** Public old age home, private old age home, elderly, Quality of Life

## INTRODUCTION

Old-age homes are sheltered accommodation for older people, without any nursing or health-care infrastructure.<sup>1</sup> This concept is catching up as a matter of state policy in many countries in the Region as well as a preferred individual choice given the assured safety, security and service.<sup>1</sup> The old-age home industry is mostly unregulated and there is a need for putting in place certain minimum standards.<sup>1</sup> Many times poor and destitute persons who may need institution-based care cannot afford them.<sup>1</sup> Long-term care has a price, and there is also a need for debate on its policy and best practice<sup>1</sup>.

## OBJECTIVE

The objectives were to study the quality of life of elderly people, to assess the facilities available and the

factors associated with elderly people for availing the residential services of old age homes.

## MATERIAL AND METHODS

It was a Cross-sectional descriptive study. The **participants** were elderly people (age  $\geq 60$  years)<sup>2</sup> enrolled in old age homes (OAHs) of Lucknow city. The **study period** was from August 2011 to Jan 2012. The elderly people who are living in the old age homes

for more than 6 months, scored  $\geq 20$  on Mini Mental State Examination (MMSE) instrument and gave voluntary consent were included in the study. There were two types of old age homes; private type in which inmates had to pay some amount per month, the other one was public type i.e. free of cost. Out of total 5 OAH's one was government, next two were operated by NGO's but government sponsored and other two

were private. All the in-charge of these old age homes were contacted and permission regarding study was obtained. MMSE instrument was applied on each elderly people to check cognitive function. All the elderly people living in OAHs gave consent to participate in study, out of which 6 were excluded because they were unable to get score  $\geq 20$  on MMSE instrument making a total 101 subjects in the study.

For assessment of facilities in OAHs inmates were asked to rate the following services: Food, Medical service, Recreational facilities, Safety, Space and Staff availability on Likert five point (1-5) scale separately.

Very Poor	= 1
Poor	= 2
Average (Neither poor nor good)	= 3
Good	= 4
Very Good	= 5

After that individuals were divided in two groups (**Below average** and **Average & above**). The study was approved by the ethical review board of King George Medical University prior to study. Descriptive statistics for categorical variables were determined and was analysed using the SPSS, version 17.0. Appropriate tests were applied and the level of significance was set at  $< 0.05$ .

**Tools of data collection:**

1. **MMSE:** Translated Hindi version of MMSE instrument used in the study. MMSE was developed by (Folstien, et.al., 1975)<sup>3</sup>. The MMSE has a maximum score of 30 points. The domains assessed are orientation to time and place (10 points), registration of three words (3 points), attention and calculation (5 points), recall of three words (3 points), language (8 points) and visual construction (1 point). The elderly who scored  $\geq 20$  points on the scale were included in the study (Crum Rm et.al., 1993)<sup>4</sup>.

2. **Socioeconomic Status:** SES is classified through detailed assessment on, "A scale for the assessment of socioeconomic status" (Tiwari et.al, 2005)<sup>5</sup> was used. There are 7 aspects investigated in the scale for determining the SES of a family or individual. These aspects are: 1- House, 2- Material Possessions, 3- Education, 4- Occupation, 5- Economic Profile, 6- Possessed Land/House cost and 7- Social profile. On SES scale maximum score which can be obtained is 70. The scores are categorized into five SES classes i.e. scores 0 to 15: lower class, scores 15 to 30: Lower middle class, score 30 to 45: Middle class, score 45 to 60: Upper middle class, score 60 to 70 upper class.

3. **WHOQOL- BREF:** The WHOQOL-bref<sup>6,7,8,9</sup> is a self-assessment instrument for assessment of quality of life in human being. Hindi version was used in the study it consists of 26 questions, divided into 4 domains, and includes two general questions about quality of life (QOL). The questions of the different sections of the instrument use the Likert response scale. The scores of all 4 domains were converted into Sten scores which lie between 0-100 (the higher the score, the better is the supposed quality of life of elderly for that domain). Overall Quality of life was calculated by sum of Sten scores of all four domains (Physical, Psychological, Social relationships, Environmental) and converting it into scale of 0 - 100. Obtained Sten score (0-100) is further divided into 5 categories to identify level of quality of life:

erly for that domain). Overall Quality of life was calculated by sum of Sten scores of all four domains (Physical, Psychological, Social relationships, Environmental) and converting it into scale of 0 - 100. Obtained Sten score (0-100) is further divided into 5 categories to identify level of quality of life:

Level of quality of life for the different categories	Sten Score
Very Poor	0-20
Poor	20-40
Average (Neither poor nor good)	40-60
Good	60-80
Very Good	80-100

**OBSERVATIONS**

Among OAH residents overall a maximum of 37.6 percent elderly were in 70 - < 80 year age group (Old-old) and a minimum of 28.7 percent in 60 - < 70 age group (Young old).

**Table 1: Biosocial characteristics of elderly people living in old age homes**

Characteristics	Old Age Homes		
	Public (n=35)(%)	Private (n=66)(%)	Total (n=101)(%)
<b>Type of elderly<sup>16</sup></b>			
Young old	11 (31.4)	18 (27.3)	29 (28.7)
Old-old	16 (45.7)	22 (33.3)	38 (37.6)
Oldest old	08 (22.9)	26 (39.4)	34 (33.7)
<b>Sex</b>			
Male	17 (48.6)	37 (56.1)	54 (53.5)
Female	18 (51.4)	29 (43.9)	47 (46.5)
<b>Religion</b>			
Hindu	35 (100.0)	65 (98.5)	100 (99.0)
Muslim	00 (00)	01 (1.5)	01 (1.0)
Sikh	00 (00)	00 (00)	00 (00)
<b>Caste</b>			
SC/ST	10 (28.6)	00 (00)	10 (9.9)
OBC	11 (31.4)	07 (10.6)	18 (17.8)
General	14 (40.0)	59 (89.4)	73 (72.3)
<b>Marital Status</b>			
Unmarried	03 (8.6)	03 (4.5)	06 (5.9)
Married	09 (25.7)	23 (34.8)	32 (31.7)
Widow/Widower	20 (57.1)	35 (53.0)	55 (54.5)
Divorce/Separated	03 (8.6)	05 (7.6)	08 (7.9)
<b>Living Arrangement</b>			
Only with Spouse	07 (20.0)	14 (21.2)	21 (20.8)
Living alone	28 (80.0)	49 (74.2)	77 (76.2)
Others <sup>@</sup>	00 (00.0)	03 (4.5)	03 (3.0)
<b>Educational Profile</b>			
Illiterate	18 (51.4)	04 (6.1)	22 (21.8)
Primary pass	10 (28.6)	05 (7.6)	15 (14.9)
10 <sup>th</sup> pass	04 (11.4)	08 (12.1)	12 (11.9)
Graduate/diploma	02 (5.7)	27 (40.9)	29 (28.7)
Postgraduate and above	01 (2.9)	22 (33.3)	23 (22.8)
<b>Socio-Economic Status<sup>5</sup></b>			
Class I	00 (00.0)	01 (1.5)	01 (1.0)
Class II	00 (00.0)	06 (9.1)	06 (5.9)
Class III	00 (00.0)	40 (60.6)	40 (39.6)
Class IV	10 (28.6)	16 (24.2)	26 (25.7)
Class V	25 (71.4)	03 (4.5)	28 (27.7)

@ Living with family member other than spouse

Among elderly living in public OAH a maximum of 45.7 percent elderly were in 70 - <80 years age group while among those living in private OAH, a maximum of 39.4 percent elderly were in ≥ 80 years age group (Oldest old). Among OAH's elderly, 99.0 percent were Hindus and 72.3 percent belonged to general caste. Majority OAH residents were widow/widower (54.5%) followed by married (31.7%) and 76.2 percent elderly were living alone followed by 20.8 percent living with spouse. Majority of elderly of public OAHs were illiterate (51.4%) followed by primary pass (28.6%) pass and majority of private OAH's elderly were graduate/diploma pass (40.9%) followed by postgraduate and above (33.3%). Majority of public OAH's residents were belonged to class V (71.4%) and majority of private OAH's residents belonged to class III (60.6%) followed by class IV (24.2%). [Table 1]

The most important reason for elderly people living in public OAHs was **no care taking person at home** (77.1%) followed by **poverty** (20.0%) and **children do not support** (17.1%). In case of private OAH most important reason was **no care taking person at home** (36.4%) followed by **self-satisfaction** (34.8%) and **loneliness** (31.8%). [Table 2]

In public type OAHs 85.7 percent inmates had quality of life below average whereas in paid OAHs 63.6 percent inmates had average or above average quality of

life. Quality of life in private OAHs was significantly better ( $p > 0.05$ ) than in public OAHs with Cramer's  $V = 0.473$  & Odds ratio = 10.50. [Table 4]

Services like medical services, recreational facilities, safety, space availability and staff availability were significantly better ( $p < 0.05$ ) in private type of OAHs. [Table 3]

**Table 2: Reasons of elderly for residing at Old Age Homes**

Reasons for residing at Old Age Home*	Type of old age home (n = 101)		
	Public (%)	Private (%)	Total (%)
Children do not support	06 (17.1)	13 (19.7)	19 (18.8)
Self-satisfaction	02 (5.7)	23 (34.8)	25 (24.8)
Misbehaviour of Daughter in law	04 (11.3)	11 (16.7)	15 (14.9)
Death of spouse	04 (11.4)	10 (15.2)	14 (13.9)
Economic Problem	04 (11.4)	02 (3.0)	06 (5.9)
To give service to GOD	00 (00.0)	01 (0.8)	01 (1.0)
No care taker at home	27 (77.1)	24 (36.4)	51 (50.5)
Poverty	07 (20.0)	00 (00.0)	07 (6.9)
Health Problem	00 (00.0)	07 (10.6)	07 (6.9)
Loneliness	01 (2.9)	21 (31.8)	22 (21.8)
Strained relation (other than daughter in law)	03 (8.6)	04 (6.1)	07 (6.9)
Child settled abroad	00 (00.0)	04 (6.1)	04 (4.0)
Other	01 (2.9)	01 (1.5)	02 (2.0)

\* Multiple responses

**Table 3: Assessment of facilities available in Old Age Homes**

Facilities	Type of old age home		Total (n = 101)	p value	Odds Ratio	95% CL
	Public (n=35)	Private (n=66)				
Food	Below Average	9 (25.7)	9 (13.6)	0.13	2.19	0.78- 6.16
	Average & Above	26(74.3)	57 (86.4)			
Medical Services	Below Average	18 (51.4)	13 (19.7)	0.001	4.31	1.75-10.60
	Average & Above	17 (48.6)	53 (80.3)			
Recreational facilities	Below Average	15 (42.9)	15 (22.7)	0.035	2.55	1.05-6.16
	Average & Above	20 (57.1)	51 (77.3)			
Safety	Below Average	14 (40.0)	00 (0.0)	0.000	4.14	2.85-6.01
	Average & Above	21 (60.0)	66 (100.0)			
Space availability	Below Average	14 (40.0)	01 (1.5)	0.000	43.33	5.37-349.49
	Average & Above	21 (60.0)	65 (98.5)			
Staff availability	Below Average	16 (45.7)	04 (6.1)	0.000	13.05	3.89-43.78
	Average & Above	19 (54.3)	62 (93.9)			

Figures in paranthesis indicate percentaeg

**Table 4: Association of quality of life of elderly people by their living place**

Overall quality Of life (n= 101)	Old Age Home		
	Public (%)	Private (%)	Total (%)
Very Poor*	10(28.6)	01(1.5)	11(10.9)
Poor*	20(57.1)	23(34.8)	43(42.6)
Average#	04(11.4)	27(40.9)	31(30.7)
Good#	01(2.9)	14(21.2)	15(14.9)
Very Good#	00(0.0)	01(1.5)	01(1.0)
<b>Total</b>	<b>35(100.0)</b>	<b>66(100.0)</b>	<b>101(100.0)</b>

\* 'very poor' and 'poor' groups were pooled and # 'Average', 'Good' and 'Verygood' groups were pooled to calculate statistical analysis.  
 Df=1;  $\chi^2=22.38$ ; P value=0.471, Cramer's  $V=0.471$ ; OR(95% CL)=10.50 (3.59-30.65)

**DISCUSSION**

In OAHs Muslims were only 1.0 percent and Sikhs were absent this may be due to joint family system was still present in these religion so less probability OAH settlement because chance of **no care taking person at home** was less in joint family system.

Result also showed that SC/ST are still financially weaker section because homeless elderly people of this section were not getting services of private OAHs as their presence were nil in private OAHs although they were present in significant number in public OAHs.

Result also showed that Majority of elderly people from private OAHs were educated (graduate and

above) while majority of elderly people from public OAHs were upto primary pass, these findings are within range of similar studies.<sup>10, 11, 12</sup>

In the present study, it was observed that around 41.0 percent elderly people gave reason of strained relation (with son/ with daughter in law/ other member), around half of them gave reason of no care taking person at home, self-satisfaction and loneliness were important reason in private OAHs similar to other studies<sup>13,14,15</sup>.

## CONCLUSIONS

No care taking person at home was the important reasons in OAHs. With the exception of food all the variables like Medical service, Recreational facilities, Safety, Space availability, Staff availability were significantly better in private OAHs. Similarly quality of life in private OAHs was significantly better than public OAHs.

## RECOMMENDATIONS

Government sponsored or PPP based OAHs with better infrastructure and facilities should be established at district level.

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