A Comparative Study of Health Status and Quality of Life of Elderly People Living in Old Age Homes and within Family Setup in Raigad District, Maharashtra

Priyanka Amonkar, Madhavi Jogesh Mankar, Pandurang Thatkar, Pradeep Sawardekar, Rajesh Goel, Seema Anjenaya
Departments of Paediatrics and Community Medicine, MGM Medical College, Mumbai, Maharashtra, India

Abstract

Background: The traditional concept of family in India to provide support to the elderly is changing soon with disintegration of joint families. In this scenario the concept of old age homes (OAHs) is gaining momentum and the number of people seeking OAH care is rapidly increasing. However, not much is known about the quality of life (QOL) of Indian elderly staying in the OAH setup. Objectives: To assess and compare the health status, Quality of Life and Depression in elderly people living in OAHs & within family using WHOQOL-OLD questionnaire & Geriatric Depression Scale Methods: A cross sectional study was conducted in elderly aged above 60 years of age. After taking a written consent and matching for age and sex & socioeconomic status, 60 elderly from OAHs & 120 elderly living within family setup were selected randomly. The WHOQOL-OLD standard questionnaire & GDS were used to assess quality of life & depression in elderly. Result: The QOL of elderly in domains of autonomy, past present & future activities, social participation and intimacy was better in family setup (60.62, 70.62, 66.14 and 58.43) as compared to OAHs (51.35, 62.91, 59.47and 41.16) (p<0.05). There was statistically significant difference in mean geriatric depression scores of both the group (3.96 within family setup and 5.76 in OAH's). Conclusion: Quality of life of elderly within family setup was better as compared to elderly in OAHs.

Keywords: GDS, Old Age Home, Quality of Life, WHOQOL-old

Introduction

India is the second largest population of the elderly (60+) in the world. With the increase in life expectancy, the size of the geriatric population in India has gone from 20 million in 1951–100 million (8.3%) in 2014 and the number will rise to approximately 130 million by 2021. The conventional concept of family in India, which was to provide support to the elderly, is changing soon with urbanization; modernization, the disintegration of joint family structures into nuclear ones and the changing role of women. Thus, older people have become more vulnerable. Their vulnerability lies mainly in lack of employment, financial insecurity, ill health, and neglect by society. To add to this, misery 45% of aged Indians have chronic diseases and disabilities. The lack of family support made elderly resort to old age homes (OAHs) run by private or voluntary organization for their care and support. In this scenario the concept of OAHs is gaining momentum, and the number of people seeking institutionalization is rapidly increasing. However, not much is known about the response of its residents to institutionalization and its impact on their physical and mental health. Hence, the present study was conducted to assess the health status and QOL of elderly in OAHs as compared to elderly within family setup.

Objectives

1. To assess the health status, morbidity pattern, and living conditions of elderly people living in OAHs and within family setup

Address for correspondence: Dr. Madhavi Jogesh Mankar, Riddhi Siddhi Residency, Sector 03, Flat No 601 (A) Wing, New Panvel, Navi Mumbai, Maharashtra, India. E-mail: Madhumankar@gmail.com

How to cite this article: Amonkar P, Mankar MJ, Thatkar P, Sawardekar P, Goel R, Anjenaya S. A comparative study of health status and quality of life of elderly people living in old age homes and within family setup in Raigad District, Maharashtra. Indian J Community Med 2018;43:10-3.

Received: 26-08-16, Accepted: 07-11-17

Access this article online

Quick Response Code:

Website: www.ijcm.org.in

DOI: 10.4103/ijcm.IJCM_301_16

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com
2. To compare quality of life (QOL) of elderly people living in OAHs and those living within family setup, by using the World Health Organization QOL assessment Quality of Life Assessment OLD (WHOQOL-OLD) questionnaire.

3. To assess the prevalence of depression in both the groups using the geriatric depression scale (GDS) 15 Short Form.

**Materials and Methods**

After obtaining permission from Institutional Ethics Committee, a cross sectional descriptive study was conducted, during the period from January 2015, to July 2015, on elderly people living in two different settings as follows: (a) Those living in OAHs and (b) Those living with their families. Out of three OAHs situated in Panvel, Raigad District, two were selected randomly by lottery method. Thus, a total of 60 consenting elderly from OAHs were interviewed. About 120 elderly from family setup (sample size of 1:2) were selected randomly by the door to door visits in the area surrounding these OAHs and were approximately matched for age, sex, and socioeconomic condition. Matching was made to ensure both the groups are similar and thus eliminate sociodemographic confounding factors which may also affect the QOL. Elderly in the age group of 60–90 years and willing to participate were included in the study. Elderly, who were bedridden, severely ill, audio-visually handicapped or cognitively impaired were excluded from the study. For study purpose, we decided that a minimum of 6 months experience at OAHs would be required to give an unbiased opinion on living conditions of OAHs. Thus, those living in the OAH for <6 months were excluded from the study. Informed written consent was obtained from the study participants after explaining the aims and objectives of the study.

WHOQOL-OLD Module standard questionnaire was used to assess QOL in elderly. The WHOQOL-OLD was developed from the parent instrument: WHOQOL Group’s WHOQOL-100. It is a multidimensional measure of QOL and comprises of six domains (24 items): sensory abilities, autonomy, past present and future activities, social participation, death and dying, and intimacy (4 items per domain). Items are scored with the reverse coding of positive responses so that higher scores equal higher QOL; the authors define the scale ranges as 24 (lowest possible QOL) to 120 (highest possible QOL). Response scales are all 5-points. [5-7] A predesigned and prestructured questionnaire was used to evaluate sociodemographic characteristics, morbidity pattern and living condition in OAHs and attitude toward life. The results so obtained were compared between both the groups.

GDS Short Form is designed and validated by Yesavage et al., specifically for rating depression in the elderly was used to assess the presence of depression. [8-10] A score of 0–5 is normal. A score >5 suggests depression. Elderly were interviewed in regional language Marathi by the research investigator. Data was collected by SPSS 20 (SPSS company Bangalore, India). Appropriate tests were used for comparison between two groups. The value of $P = 0.05$ was considered as statistically significant.

**Result**

In OAH >45% of the elderly were in the age group of above 80 years and 63.30% elderly were widowed. There was no statistically significant difference observed between elderly in both groups in terms of age, sex, and financial dependency. In the OAHs, about 31.67% elderly reported that they had suffered domestic violence/verbal abuse, not satisfied with food (16.67%), and not able to pursue hobbies (21.67%). The overall living condition in the OAHs was different from the living condition of elderly in family setting ($P < 0.05$) [Table 1].

Majority of elderly were suffering from hypertension (46.67%, 58.33%), joint pain (43.33, 33.33%) hearing impairment (40.0%, 23.33%), and diabetes mellitus (6.67%, 33.33%) in OAHs and

**Table 1: Sociodemographic profile and living condition of elderly people**

| Characteristics                  | Old age home ($n=60$) $n$ (%) | Elderly living with family ($n=120$) $n$ (%) | $P$ |
|----------------------------------|-------------------------------|---------------------------------------------|-----|
| Age group (years)                |                               |                                             |     |
| 60-69                            | 14 (23.3)                     | 26 (21.7)                                   | >0.05 |
| 70-79                            | 18 (30.0)                     | 52 (43.3)                                   |     |
| 80 and above                     | 28 (46.7)                     | 42 (35.0)                                   |     |
| Sex                              |                               |                                             |     |
| Male                             | 25 (41.7)                     | 54 (48.3)                                   | >0.05 |
| Female                           | 35 (58.3)                     | 66 (51.7)                                   |     |
| Education                        |                               |                                             |     |
| Illiterate and primary           | 5 (8.3)                       | 19 (15.8)                                   | >0.05 |
| Secondary                        | 17 (28.3)                     | 26 (21.7)                                   |     |
| High school                      | 19 (31.7)                     | 24 (20.0)                                   |     |
| Graduation and above             | 19 (31.7)                     | 51 (42.5)                                   |     |
| Marital status                   |                               |                                             |     |
| Married                          | 8 (13.3)                      | 78 (65.0)                                   | <0.05 |
| Unmarried                        | 12 (20.0)                     | 12 (10.0)                                   |     |
| Divorced/separated               | 2 (3.3)                       | 0                                           |     |
| widowed                          | 38 (63.4)                     | 30 (25)                                     |     |
| Family type                      |                               |                                             |     |
| Joint                            | 18 (30.0)                     | 54 (45.0)                                   | <0.05 |
| Nuclear                          | 19 (31.7)                     | 10 (8.30)                                   |     |
| Living with spouse               | 9 (15.0)                      | 40 (33.4)                                   |     |
| Living alone                     | 14 (23.3)                     | 16 (13.3)                                   |     |
| Financial status                 |                               |                                             |     |
| Dependant                        | 17 (28.3)                     | 44 (36.6)                                   | >0.05 |
| Independent                      | 43 (71.7)                     | 76 (63.4)                                   |     |
| Living condition*                |                               |                                             |     |
| Insecure                         | 7 (11.6)                      | 16 (13.3)                                   | <0.05 |
| Unhappy with food                | 10 (16.6)                     | 8 (6.6)                                     |     |
| Can’t pursue hobbies             | 13 (21.6)                     | 8 (6.6)                                     |     |
| Domestic violence/abuse          | 19 (31.6)                     | 12 (10.0)                                   |     |
| Psycho-social views *            |                               |                                             |     |
| Neglected by family              | 26 (43.3)                     | 52 (43.3)                                   | >0.05 |
| Old age has adversely affected life | 35 (58.3)                 | 90 (75.0)                                   |     |

*Multiple responses
within family setup, respectively. It was observed that Diabetes Mellitus, hearing impairment, and difficulty in sleeping were more common problems among elderly staying in OAHs as compared to those staying within family setup.

The total WHOQOL-old score was 59.42 in the elderly staying in OAHs and 64.41 in elderly staying within family setup ($P > 0.05$). The WHOQOL domain scores in terms of autonomy, past present and future activities, social participation and intimacy were comparatively more (60.62, 70.62, 66.14, and 58.43) in the elderly staying with family than those staying in OAHs (51.35, 62.91, 59.47, and 41.16). The differences between mean scores of two groups were statistically significant [Table 2]. In WHOQOL domain Death and Dying, the mean score was higher (70.41) in elderly people staying in OAHs than in elderly people staying with their family (54.79). The difference between mean score was statistically significant ($P < 0.001$). The GDS mean score was significantly more ($P < 0.001$) in OAHs (5.76) than within family (3.96).

**DISCUSSION**

So far, the health policies in India have focused mainly on maternal and child health, and very few polices exist for the support of elderly. There is a need for greater involvement of the government in geriatric care. More than half of the residents of OAHs in our study were above 75 years and widowed. Similar results were found in the studies conducted in OAHs in Ranchi by Panday et al. and Chandrika et al. Thus, the elderly may have resorted to OAHs as they had no one to look after them at home after the death of their spouses.

In India, there is lesser awareness about the special needs of elderly and caretakers are yet to understand the basis of elderly care (physical, mental, psychological, and social support). The study showed that the overall QOL of elderly staying within the family (64.41) is better than the elderly staying in OAHs (59.42). However, the result is not statistically significant; similar to the result found in the study conducted in Vishakhapatnam city. The QOL in the family setup is significantly better in four out of six domains of the questionnaire. These domains assessed the ability to live independently and take decisions, satisfaction with life and having things to look forward to, ability to participate socially, and have intimate relationships. This difference may be due to care, love, and companionship offered by friends and relatives in family setup. Despite this, elderly in the family setup were more worried and had fears regarding death as compared to OAH residents.

On the contrary, some studies revealed that elderly living in OAH had higher QOL than family setup. In our study, we found that there is no statistically significant difference between males and females in all domains of QOL except in the domain social participation similar to a study in Jammu stated that females in family setup had a good QOL may be due to a positive attitude and good social relationship. On the contrary, the study conducted in rural Northern India reported that males had better QOL in the same domain.

We found that 60% of the elderly in OAHs are depressed and have significantly higher GDS scores as compared to those in family setup. In family setup, males are significantly depressed than females, this could be due to females are engaged in household chores, rearing of grandchildren. Similar studies conducted in Hyderabad and Maharashtra also revealed that geriatric depression was more in OAHs, ranging from 53.6%–60%. This could be due to loneliness after separation from family, poor health or due to adverse living conditions.

**Table 2: Quality of life of elderly assessed by World Health Organization Quality of Life-old module and geriatric depression scale**

| Domains in WHOQOL-old module | Elderly | $n$ | Mean | SD   | SEM  | Mann–Whitney U-test statistic | $Z$   | $P$  |
|-------------------------------|---------|-----|------|------|------|-------------------------------|-------|------|
| I: Sensory abilities (old)    |       |     |      |      |      |                               |       |      |
| Within family                 | 120    | 75.83 | 22.468 | 2.051 | 3398 | −0.618                       | 0.537 |      |
| OAHs                          | 60     | 71.97 | 26.752 | 3.454 |       |                               |       |      |
| II: Autonomy (old)            |       |     |      |      |      |                               |       |      |
| Within family                 | 120    | 60.62 | 17.352 | 1.584 | 2736 | −2.641                       | 0.008*|      |
| OAHs                          | 60     | 51.35 | 20.198 | 2.608 |       |                               |       |      |
| III: Past, present and future activities (old) | | | | | | | |
| Within family                 | 120    | 70.62 | 17.800 | 1.625 | 2787 | −2.496                       | 0.013*|      |
| OAHs                          | 60     | 62.91 | 21.920 | 2.830 |       |                               |       |      |
| IV: Social participation (old)|       |     |      |      |      |                               |       |      |
| Within family                 | 120    | 66.14 | 14.732 | 1.345 | 2927 | −2.064                       | 0.039*|      |
| OAHs                          | 60     | 59.47 | 17.394 | 2.246 |       |                               |       |      |
| V: Death and dying (old)      |       |     |      |      |      |                               |       |      |
| Within family                 | 120    | 54.79 | 15.601 | 1.424 | 1973 | −4.992                       | 0.001**|     |
| OAHs                          | 60     | 70.41 | 20.484 | 2.644 |       |                               |       |      |
| VI: Intimacy (old)            |       |     |      |      |      |                               |       |      |
| Within family                 | 120    | 58.43 | 21.432 | 1.956 | 2043 | −4.574                       | 0.001**|     |
| OAHs                          | 60     | 41.16 | 23.210 | 3.048 |       |                               |       |      |
| Total transformed scores with 24 items (0-100) | | | | | | | |
| Within family                 | 120    | 64.41 | 12.091 | 1.104 | 2966 | −1.596                       | 0.11  |      |
| OAHs                          | 60     | 59.42 | 15.608 | 2.049 |       |                               |       |      |
| Depression by GDS scale       |       |     |      |      |      |                               |       |      |
| Within family                 | 120    | 3.96  | 4.024  | 80.42 (mean rank) | 2390 | −3.693                       | 0.0001|      |
| OAHs                          | 60     | 5.76  | 3.406  | 110.67 (mean rank) |       |                               |       |      |

*Significant at 5% level of significance, **: Significant at 1% level of significance. OAHs: Old age homes, GDS: Geriatric depression scale, SD: Standard deviation, SEM: Standard error mean, WHOQOL: World Health Organization Quality of Life
in the OAHs. The limitation of this study is it covers only one district, further multi-centric studies are required to determine the reason for this difference.

**Conclusion**

The result of this study showed that the QOL of elderly was better within family setup as compared to elderly in OAHs. Elderly people in OAHs were significantly more depressed than elderly within family setup.

**Financial support and sponsorship**

Nil.

**Conflicts of interest**

There are no conflicts of interest.

**References**

1. Ministry of Planning. Eleventh Five Year Plan Document 2007-2012. New Delhi: Government of India; 2008. Available from: http://www.planningcommission.nic.in/plan/planfivyear/11th/v1/v1. [Last accessed on 2016 May 20].
2. Central Statistics Office. Situation Analysis of the Elderly in India 2011. Ministry of Statistics & Programme Implementation, Government of India. Available from: http://www.scribd.com/document/102693341/Situation-Analysis-of-Elderly-in-India. [Last accessed on 2016 Jun 05].
3. Laxmi Devi S, Roopa KS. Quality of life elderly men & women in Institutional and Non-Institutional settings in urban Bangalore district. Res J Fam Community Consum Sci 2013;1:7-13.
4. Dey AB. A manual for trainers of physicians in primary and secondary health care facilities. In: WHO, Ministry of Health and Family Welfare, editors. Introduction: Hand Book on Health Care of Elderly. 1st ed. Paras Medical Publisher; Hyderabad, India; AIIMS; 2005. p. 11-6.
5. Power M, Quinn K, Schmidt S, WHOQOL-OLD Group. Development of the WHOQOL-old module. Qual Life Res 2005;14:2197-214.
6. The World Health Organization quality of life assessment (WHOQOL): Development and general psychometric properties. Soc Sci Med 1998;46:1569-85.
7. Anu Luisa GC, Gomez Benito J. Quality of life in the elderly: Psychometric properties of the WHOQOL-OLD module in Mexico. Health 2013;5:110-6.
8. Sheikh JI, Yesavage JA. Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. Clin Gerontol 1986;5:165-73.
9. Yesavage JA. Geriatric depression scale. Psychopharmacol Bull 1988;24:709-11.
10. Yesavage JA, Brink TL, Rose TL, Lum O, Huang V, Adey M, et al. Development and validation of a geriatric depression screening scale: A preliminary report. J Psychiatr Res 1982;17:37-49.
11. Panday R, Kiran M, Srivastava P, Kumar S. A study on quality of life between elderly people living in old age home and within family setup. Open J Psychiatry Allied Sci 2015;6:127-31.
12. Chandrika S, Radhakumari P, Devi Madhavi B. Quality of life of elderly residing in old age homes and community in Vishapatnam city. J Dent Med Sci 2015;14:27-31.
13. Dubey A, Bhasin S, Gupta N, Sharma N. A study of elderly living in old age home and within family set-up in Jammu. Stud Home Comp Sci 2011;5:93-8.
14. Syed Q, Ahluwalia SK, Abdul G, Bali S, Wani F, Humaira B. An epidemiological study on quality of life among rural elderly population of Northern India. Int J Med Sci Public Health 2012;2:514-8.
15. Godishala S, Swathi P. Death anxiety, death depression, geriatric depression and suicidal ideation among institutionalized and non-institutionalized elders. Int J Sci Res 2014;4:1-8.
16. Goud AA, Nikhade NS. Prevalence of depression in older adults living in old age home. IAIM 2015;2:1-5.