pISSN 2394-6032 | eISSN 2394-6040

Original Research Article

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20205696

A cross sectional study on depression among elderly people living in old age homes in Kurnool city

Persis S. Bathala, Cynthia S. Savolu*

Department of Community Medicine, Kurnool Medical College, Kurnool, Andhra Pradesh, India

Received: 21 September 2020 Revised: 09 November 2020 Accepted: 13 November 2020

*Correspondence:

Dr. Cynthia S. Savolu,

E-mail: drcynthiasubhaprada@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Aging is a normal process, which is associated with physical, social and psychological changes. Depression among elderly is an important public health problem responsible for considerable morbidity and disability. Hence this study was undertaken to estimate the prevalence of depression among inmates of old age homes. The main was to know the prevalence and level of depression and to assess socio demographic factors associated with depression among inmates of old age homes.

Methods: A cross sectional study was done from August 2019 to October 2019 in old age homes of Kurnool city with a sample size of 60 by simple random sampling. Depression was assessed using geriatric depression scale. Data entered in MS Excel version 7 and analysed by SPSS version 21. Chi-square test was applied to test the significance and p value less than 0.05 was considered as statistically significant.

Results: The overall prevalence of depression was found to be 66.7% among inmates and is positively associated with female sex, increasing age, illiteracy, low socio economic status economical dependency and dependency for daily activities.

Conclusions: As the prevalence of depression is more among inmates there is a need to provide emotional support and facilities to engage them in various social activities of the community especially the elder females to prevent them from being depressed.

Keywords: Elderly, Depression, Geriatric depression scale, Old age homes, Socio demographic variables

INTRODUCTION

The number of older population of both developed and developing countries has increased in the 20th century. In India, population over the age of 60 years has tripled in the last 50 years.¹ Census 2011 says that in India 8.6% (10.4 crores) of the people are aged above 60 compared to 7.4% (7.5 crores) in 2001 census.² In old age, it is not the physical aging that affects them but also the challenges they have to face with their mental and social well-being. Geriatric depression can be attributed to a number of causes such as physical problems of aging leading to limitations in daily activities, financial insecurities after retirement, loss of social recognition, physical diseases, psychological illness and adjustment problems and loss of

spouse are quite common during this phase of life. This leads to loneliness and depression.3 According to projections the elderly in the age group 60 and above is expected to increase from 72 million in 2001 to 179 million in 2031 and further to 301 million in 2051. This increasing number and proportion of elderly will have direct impact on the demand for health services.⁴ A study in 2005 done on depression in elderly showed that depression is associated with low socio economic status, psychological adversities, chronic illnesses disabilities in addition to suffering caused by disrupted family relationships.⁵ In India, aged population are very emotional and sentimental and would like to prefer to stay with family members most of the time and their acceptance for old age homes is very less. Hence this

study was conducted to know the prevalence and level of depression among inmates of old age homes. The level of depression was assessed using Geriatric depression scale.⁶

METHODS

The study was a cross-sectional study conducted in the old age homes of Kurnool city during the period of August 2019 to October 2019 with the participants being the inmates of old age homes. Institutional ethical committee clearance was obtained for the study. Permission is taken from the heads of old age homes. Currently, there are four working old age homes in the Kurnool city. Inmates were selected by simple random sampling method. Sample size was calculated using the formula 4pq/d². Prevalence was 66.1% taken from the previous study d=20%, taken 10% as non respondents, the sample size was rounded off $60.4 \times 66.1 \times 33.9/(13.22 \times 13.22) = 51$ rounded off to 60.7Data was collected by interviewing the study subjects after obtaining informed consent after explaining Questionnaire was explained to the participants in their local language.

Study tool: It has two parts 1) Socio demographic profile containing information on age, sex, education, occupation, marital status, sleep duration, socio economic status, economical dependency, depending for daily activities of living and 2) 15-item geriatric depression scale (GDS).⁶

Inclusion criteria

Elderly people aged above 60 years living in old age homes; staying in old age homes since 6 months or more; able to communicate, understand and reply to questions.

Exclusion criteria

Elderly who were not inmates of old age homes and inmates with less than 6 months stay.

Statistical analysis

Data was entered in MS Excel version 2007 and analyzed by using IBM SPSS version 21. Results were expressed as frequencies and percentages. Chi square test was applied to test the significance. P value less than 0.05 was considered statistically significant.

RESULTS

There are four old age homes in Kurnool city. A total of 60 elderly people were selected in the study by simple random sampling method. Participants were divided into young old (60-69 years), old old (70-79) and oldest old (>80) (Figure 1).

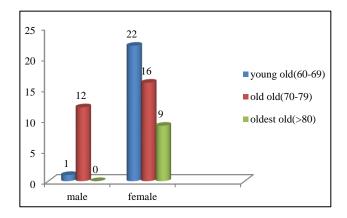


Figure 1: Age distribution among study participants.

G • 1 1 1 1 1 1		Gender		T (1 (N) (0)
Socio demographic details		Male (N=13, 21.7%)	Female (N=47, 78.3%)	Total (N=60)
Age	Young old (60-69	01(4.34%)	22(95.7%)	23(38.33%)
	Old-old (70-79)	12(42.9%)	16(57.14%)	28(46.7%)
	Oldest old (>80)	-	09(100%)	09(15%)
Education	Illiterate	7(17.07%)	34(82.9%)	41(68.3%)
	Primary	3(23.07%)	10(76.9%)	13(21.7%)
	Secondary	3(50%)	3(50%)	6(6%)
Marital status	Married	12(100%)	-	12(20%)
	Never married	1(16.67%)	5(83.3%)	6(10%)
	widowed	0(0%)	42(100%)	42(72%)
Economical dependency	Yes	2(11.7%)	15(88.2%)	17(28.3%)
	No	11(25.6%)	32(74.4%)	43(71.6%)
Socio economic status	III	12(100%)	0(0%)	12(20%)
	IV	0(0%)	42(100%)	42(70%)
	V	1(16.7%)	5(8.3%)	6(10%)

Table 1: Socio-demographic profile.

Out of them majority were in the age group of 70-79 years (46.7%) with the mean age of 71.23±5.57 years. Majority of them were females (78.3%), illiterates (68.3%) and widows (70%). Prevalence of depression in the present study was 66.7% (Table 1). Prevalence was found to increase with increasing age. It was 38.3% among 60-69 years, 46.7% among 70-79 years and this difference was statistically significant with p value 0.036 (Table 2). Chi square statistic with Yates correction is 16.804, p value 0.00041, significant. GDS scale score 0-5 considered normal. >5 considered as depression present.

Table 2: Age-geriatric depression score.

Age	Depression absent	Depression present	Total
Young old (60-69)	04	19	23
Old old (70-79)	14	14	28
Oldest old (>80)	02	07	09
Total	20	40	60

Prevalence of depression was more in females (63.3%) when compared to males with significant p value (<0.0004) (Figure 2). Among illiterates, 31.0% had depression and 11% in those who studied up to primary education and this was statistically significant (p value <0.049). Depression was found to be more in widowed inmates (70%) when compared to married inmates living with their spouse (20%) and this was statistically significant with p value <0.0001. It was more in inmates of low socio economic status who belong to class IV (70%) and was significant with p value<0.001.

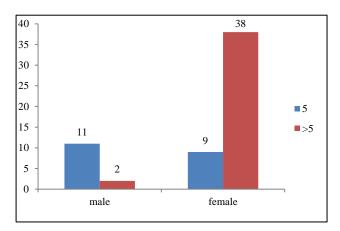


Figure 2: Geriatric depression scale score.

DISCUSSION

Majority of the old age home residents were aged between 70-79 years which is similar to the study done by Tiwari et al.⁸ Most of them were females, illiterates and widows which is similar to the study done by Ramachandran et al and Tiwari et al.^{8,9} In studies by Wijeratne et al, Maulik et al depression was not found to be significantly associated with marital status.^{10,11} But in this study depression is associated with marital status and

is increased in widows and is similar to the study done by Chong et al.¹² In the present study there is increase in the prevalence of depression as the age increases which is similar to the study done by Radhakrishnan and Nayeem.¹³ The overall prevalence of depression in the present study is 66.7% where as it is 53.7% in a study done by Goud et al.¹⁴ Majority of the females (88.2%) were economically dependent which is similar to Tiwari et al study. In a study by Hoffman et al and Mubeen et al statistically significant association was present between depression and duration of sleep which was not consistent with the present study. 15,16 In the present study depression was more in low socio economic status belonging to class IV which is similar to the study done by Ramachandran et al.⁹ Similarly Lowenthal (1967) in San Fransisco observed that mental illness was negatively related to current income and level of education.¹⁷

The present study was carried out in a limited time period of time on a small sample of old age home inmates thus results may not be generalized on general population.

CONCLUSION

The prevalence of depression was found to be high among inmates. Early intervention is required to prevent the morbidity and disability. Better utilization of social security measures of the government and services of the voluntary agencies would enhance institutional support and care of the elderly.

ACKNOWLEDGEMENTS

The author takes this opportunity to thank Principal Dr. P. Chandra Sekhar, MD; DM (CARDIO), Dr. A. Sreedevi, Professor and HOD, Department of Community Medicine, Kurnool Medical College, Kurnool, The heads of old age homes and the study participants.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Akbar S, Tiwari SC, Tripathi RK, Kumar A, Pandey NM. Reasons for living of elderly to in old age homes: An exploratory study. Int J Indian Psychol. 2014;2(1).
- 2. World Health Organization (WHO) (2005). World Health Report 2005. Available from: https://www.who.int/maternal_child_adolescent/doc uments/report_2005/en/.
- 3. Narkhede V, Likhar S, Rana A. A study on depression in elderly inmates living in old age homes in Gujarat. Indian J Res Rep Med Sci. 2012;2:21-3.
- 4. Sandhya GI. Geriatric depression and related factors-a cross sectional study from a rural

- community in South Kerala. J Indian Acad Geriatr. 2010;6(2): 61-3.
- 5. Alexopoulos GS. Depression in the elderly. Lancet. 2005;365(9475):1961-70.
- 6. Sheikh JI, Yesavage JA. Geriatric Depression Scale (GDS): recent evidence and development of a shorter version. Clin Gerontol. 1986;5(1/2):165-73.
- 7. Kumar PBA, Udayar SE, Sravan S, Arun D. Depression and anxiety among the elderly persons from institutional and noninstitutional settings in the field practice area of a tertiary-care institute, Andhra Pradesh: A comparative study. Int J Med Sci Public Health. 2016;5(11):1-4.
- 8. Tiwari SC, Pandey NM, Singh I. Mental health problems among inhabitants of old age homes: a preliminary study. Indian J Psychiatr. 2012;54:144-8.
- Ramachandran V, Sarada M, Arunagiri S. Sociocultural factors in late onset depression. Indian J Psychiatr. 1982;24(3):268-73.
- Wijeratne MDM, Wijerthne SA, Wijesekara SG, Wijesingha I. Prevalence of depression among institutionalized elders in Colombo district. Student Med J. 2008;1(1):27-31.
- 11. Maulik, S. and Dasgupta, A. Depression and its determinants in the rural elderly of West Bengal- a cross sectional study. Int J Biol Med Res. 2012;3:1299-302.

- 12. Chong MY, Chen CC, Tsang HY, Yeh TL, Chen CS, Lee YH, et al. Community study of depression in old age in Taiwan: prevalence, life events and socio-demographic correlates. Br J Psychiatr. 2001;178(1):29-35.
- 13. Radhakrishnan S, Nayeem A. Prevalence of depression among geriatric population in a rural area in Tamil Nadu. Int J Nutr Pharmacol Neurol Dis. 2013;3:309-12.
- 14. Goud AA, Nikhade NS. Prevalence of depression in older adults living in old age home. Int Arch Integrat Med. 2015;2(11):1-5.
- 15. Hoffmann EJ, Ribeiro F, Farnese JM, Lima EW. Depressive symptoms and associated factors among elders dwelling in a community in the North of Minas Gerais state, Brazil. J Bras Psiquiatr. 2010;59:190-7.
- Mubeen SM, Henry D, Nazimuddin Qureshi S. Prevalence of depression among community dwelling elderly in Karachi, Pakistan. Iran J Psychiatr Behav Sci. 2012;6:84-90.
- 17. Lowenthal MF, Berkman PL. Aging and mental disorder in San Francisco: A social psychiatric study. Jossey-Bass; 1967.

Cite this article as: Bathala PS, Savolu CS. A cross sectional study on depression among elderly people living in old age homes in Kurnool city. Int J Community Med Public Health 2021;8:217-20.