

A study on depression in elderly inmates living in old age homes in Gujarat

Narkhede V, Likhari S, Rana A

ABSTRACT

Background: Active ageing aims to extend healthy life expectancy and quality of life for all people as they age, including those who are frail, disabled and in need of care. Globally, and developing countries in particular; measures to help older people remain healthy and active are a necessity, not a luxury.

Objectives: The study was aimed to assess depression among elderly inmates in old age homes (OAH).

Material Methods: A cross sectional study was conducted on 314 elderly residing in 11 OAH of central Gujarat. Socio-demographic factors, physical examination and mental health data was collected and analyzed with SPSS software. Chi-square test was applied to find out association between variables.

Result: Maximum number of inmates (31.9%) was in the age group of 65-69 years. Depression was observed more in not working inmates (65.8%), as well as in those who stayed for shorter duration (64.1%). Also, it was noticeably present in those having visual problem (66.7%), hearing problem (83.3%) and sleeping problem (66.7%). Incidence of depression was less in inmates who were living with spouse (57.7%).

Conclusion: Urbanization and industrialization leads to outward migration of younger peoples away from parents. Prevalence of depression was significantly more with increased age, in females and with hearing and sleeping problem. The prevalence was significantly higher in inmates who stayed for shorter duration in old age homes.

Keywords: activity of daily living (ADL), old age homes (OAH), elderly, depression

INTRODUCTION

A silent revolution has occurred in the last 100 years - unseen, unheard, and yet so close. The biggest achievement of the century is longevity. All over the world life expectancy has risen, leading to a sharp rise in the number of older population.¹ Unrecognized health problems are more common among elderly, and are caused by failure to report symptoms, denial of symptoms, under investigation and poor diagnosis of disease by doctors. Under-recognition of common health problems include incontinence of urine, depression-dementia, visual-hearing impairment and locomotor disability.²

Active ageing aims to extend healthy life expectancy and quality of life for all people as they age, including those who are frail, disabled and in need of care. In all countries and in developing countries in particular, measures to help older people remain healthy and active are a necessity, not a luxury. One of the ways to achieve active

ageing is by diagnosing iceberg diseases in the elderly and this could be achieved by comprehensive geriatric assessment.³ To highlight this priority area of concern WHO has also launched its 2012 World Health Day Theme as 'Ageing and Health' with slogan as 'Good health adds life to years'. On this background present study was undertaken for diagnosing depression prevalent in old age people (>60 years) living in old age homes.

MATERIAL AND METHODS

Study area: Present cross sectional study was conducted among people of more than 60 years of age living in Old-Age Homes (OAH) of Anand and Ahmedabad district of Gujarat, during the period from October 2004 to September 2005. All OAH (11) and their inmates were included in the study in order to obtain findings representative to this region. Together these 11 geriatric homes yielded a population of 314 out of which 301 qualified to be included in the study.

Selection criteria: All inmates of age more than 60 years living in old age homes.

Exclusion criteria: All those who were too ill, suffering from terminal disease and severely demented were excluded from the study.

Data collection: Written permission from the managers of old age homes for conducting study was obtained after explaining the purpose and method of study. Investigator had visited old age homes at least twice in a week at evening hours. The inmates were explained the purpose of interview. The information was recorded on predesigned and pretested proforma. These proforma contains information on demographic profile of the study subject as well as their past occupations.⁴

A comprehensive geriatric assessment was done that included rapid clinical assessment along with the study of available health record to find out the presence of any chronic morbidity. Visual problem was assessed by Snellen's chart for distant vision and Jaeger's chart was used for near vision. Hearing problem was assessed by Whisper test. Subjects were inquired of their current and past exercise status.

Their current occupation and income, type of family, number of surviving children, reasons for stay, and duration of stay in old age homes, social interaction with other inmates and social interaction with family members were enquired. For assessing the mental health, Geriatric Depressive Scale (GDS) (SF-15) was used.⁵ Symptoms of depression were assessed using the GDS. The GDS has been shown to be a good screening instrument for depressive symptoms and has been tested in stroke patients. The GDS includes 15 yes/no questions with one point for each depressive symptom. The total score for the GDS ranges from 0 to 15, with 15 being most depressed. A score of 6 points indicates depression.

Statistical Analysis: Data were analyzed with SPSS software. Chi-square test was applied to find out association between variables.

RESULTS

Socio-demographic profiles revealed maximum number of inmates (31.9%) from age group of 65-69 years followed by 70-74 years (26.2%), and 21.9% from 60-65 years. Males (70%) outnumbered females (30%), ($p < 0.001$). Of 301 inmates, 192 (63.8%) had depression (Table 1). Depression was more frequently observed in not working inmates (65.8%); those who had income (67.6%); and those who stayed for shorter (<3 years) duration (64.1%)(Table 2).

Table 1: Prevalence of depression in relation to age

Variables	Depression					
	Normal		Depression		Total	
	No.	%	No.	%	No.	%
Age (years)						
60-69	72	44.4	90	55.6	162	53.8
70-79	31	31.0	69	69.0	100	33.2
> 80	6	15.4	33	84.6	39	13.0
Chi-square value = 13.25, p = 0.001						
Gender						
Male	43	47.8	47	52.2	90	29.9
Female	66	31.3	145	68.7	211	70.1
$\chi^2 = 7.43, p = 0.006$						

Table 2. Relationship between depression and current occupation and income

	Normal		Depression		Total	
	No.	%	No.	%	No.	%
Occupation						
Not working	89	34.2	171	65.8	260	86.4
Working	20	48.8	21	51.2	41	13.6
Chi-square value = 3.24, p = 0.072						
Current income						
No income	63	39.6	96	60.4	159	52.8
Have income	46	32.4	96	67.6	142	47.2
$\chi^2 = 1.69, p = 0.19$						
Duration of stay						
< 3 years	77	38.5	123	61.5	200	66.4
3 - 5 years	28	34.1	54	65.9	82	27.2
> 5 years	4	21.0	15	79.0	19	6.3
$\chi^2 = 2.49, p = 0.28$						

Surprisingly, depression was seen slightly more (64.7%) among those who were not addicted to any substance, $\chi^2 = 1.69, p = 0.19$. Prevalence was higher in inmates who were not living with spouse (67%), $\chi^2 = 2.55, p = 0.11$; as well as among those who were not doing any exercise (66.7%), $\chi^2 = 1.03, p = 0.31$. Prevalence was also high among inmates with

visual problems (66.7%), $\chi^2 = 2.61$, $p = 0.106$; hearing problems (83.3%) $\chi^2 = 12.39$, $p = 0.00$; and sleeping problem (66.7%), $\chi^2 = 4.25$, $p = 0.03$. Out of the 281 who responded that they interact with fellow inmates, 64% had depression; $\chi^2 = 0.30$, $p = 0.58$. Similarly of the 148 inmates whose family members were visiting regularly, 64.2% had depression; $\chi^2 = 0.020$, $p = 0.88$.

DISCUSSION

Prevalence of depression in our study was 63.8% (GDS score > 5). Mean Geriatric Depression Scale score was 6.86 (± 0.17), which is higher than a study conducted at New Delhi.⁶ Reason for higher prevalence might be that the institutionalized aged feel more lonely and depressed as they lack social network support and do not feel “the level of kinship” felt by non-institutionalized aged.

Prevalence of depression was significantly associated with increased age ($p = 0.001$); in females ($p = 0.006$); and with hearing and sleeping problem ($p = 0.003$). Prevalence was also more in inmates who stay for longer (>5 years) duration (79%) as compared to those staying for shorter (<3 years) duration (61.5%), but statistically not significant. Rationale behind increased prevalence with increasing duration of stay could be due to feeling of isolation from outside world.

Prevalence of depression in our study was more in inmates who were not visited by family member or friends than those who were visited, but it was not

statistically significant. This correlates well with a study by Bondevik and Skogstad.⁷

CONCLUSION

Prevalence of depression was significantly more with increased age, in females and with hearing and sleeping problem. The differences in prevalence of Depression were minimal in inmates who were not working currently, who had some source of income, who did not consume any addictive substances, and who had visual problem. The prevalence was significantly higher in inmates who stay for shorter duration in Old age homes. The extent of depression was slightly more in inmates who were not visited by family members or friends.

AUTHOR NOTE

Vinod Narkhede, Associate Professor,
Contact - 91-9893308482 (M),
E-mail: drvinod72@rediffmail.com

(Corresponding Author)

Department of Community Medicine,
Chirayu Medical College & Hospital, Bhopal.

Swarnakanta Likhari, Associate Professor,
Department of Community Medicine,
Peoples College of Medical Sciences & Research
Centre, Bhopal.

Aniket Rana, SMO, NPSP, Sitamarhi, Bihar.

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