A Study on Screening for Depression among Inhabitants of Old Age Homes in Anand Taluka and Associated Epidemiological Determinants

Uday Shankar Singh[1], Tumul Nandan[2], Hemshree Parmar[2], Aanal A Bhoiwala[3], Aartiben V Jambu[3], Asmitaben J Parmar[3]

[1]Professor and Head, [2]Resident doctors, Department of Community Medicine, [3]Third MBBS Students
Pramukhswami Medical College, Karamsad, Gujarat
Correspondence : Dr. Uday Shankar Singh, E mail: drudayss@gmail.com

Abstract :

Introduction: According to the Global Burden of Disease Study 2015, the age group having the highest percentage of persons living with depression is the elderly, especially between the sixty to eighty year age group. Depression in later age is a very common psychiatric morbidity. A validated screening tool is very helpful to recognize depression in early stages. **Objectives:** To screen for depression among sixty to eighty year old people living in old age homes of Anand taluka and study variables that may be associated with it. **Method:** Inhabitants of old age homes between the age group sixty to eighty years in Anand taluka were included in the study. The participants were screened using the Geriatric Depression Scale-short version. For the associated variables, dichotomous responses were taken. The participants who were found depressed by the scale were referred for further counseling. **Results:** Two- third of the participants screened were found as depressed. Depression was more among females, participants with co-morbidities, participants who are living alone and those who were financially dependent. **Conclusion:** According to our study, females especially in the 60-69 year age group were found to be depressed more than the other age group and gender. It is important to look into other factors which may be associated with old age depression which need to be assessed for each elderly separately.

Key Words : Depression, Screening, Old age

Introduction :

Depression is the leading cause of ill health and disability worldwide. According to the latest estimates from WHO, more than 300 million people are now living with depression, an increase of more than 18% between 2005 and 2015.[1] As estimated by WHO, depression occurs in 7% of the general elderly population.[1]

The WHO has identified strong links between depression and other non-communicable disorders and diseases. Depression is also an important risk factor for suicide, which claims hundreds of thousands of lives each year. It is very important to screen for depression at a very early stage in order to prevent mortalities.

The theme for the 2017 World Health Day was depression. The campaign slogan being –"Depression: let's talk". This implies that there is a need for public awareness in this field. Many efforts are being done in order to make the general public aware of mental health.

India is home to an estimated 57 million people (18% of the global estimate) affected by depression.[3] A systematic review reported a prevalence of 21.9% for depression among the elderly in India. Among the community based studies in the elderly, the prevalence of depression ranged from 3.9% to 47.0% with higher rates among female and urban residents.[4]

Objectives:

To screen for depression among sixty to eighty year olds living in old age homes of Anand taluka and study variables that may be associated with it.

Method:

Ethical clearance for the study was obtained from the Institutimal ethics Committee, PSMC, Karamsad. The permission to carry out the study was obtained

from the heads of old age homes. All individuals participated in the study voluntarily. Informed consent was obtained from all the participants.

The inclusion criteria was 60-80 year old inhabitants of old age homes in Anand taluka. The individuals who were already diagnosed and were on treatment for mental health problems, individuals who were non-cooperative or had severe behavioral problems or cognitive impairment; or had a severe hearing impairment; or known terminal illness were also excluded. 3 old age homes from Anand taluka were included in the study. Collectively in all these three old age homes, fitting to the criteria of inclusion and exclusion, a total of 50 participants were finally screened. The purpose of the study was explained and consent was taken from each participant. All the participants were screened using the Geriatric Depression Scale (GDS-short version).[5] The GDS-short version consists of a set of 15 questions to be answered in a 'yes' or 'no' format. Scoring of the scale was done according to the guidelines. A participant with a score of above 5 was considered depressed according to the GDS-short version. The participants who were found out to be depressed by screening were referred for further evaluation and counseling at the tertiary center.

Results:

Out of 50 participants, 33(66%) were found to have a score above 5 and hence classified as depressed which is shown in Figure 1.

Figure 1: Percentage of participants screened
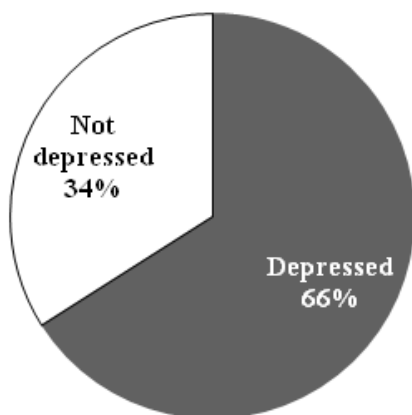
Based on gender, 10 out of the 17 males (59%) and 23 out of the 33 females (70%) were depressed. Based on age group, 12 out of 15(80%) in the age group of

60-69 years and 21 out of 35(60%) in the age group 70-80 years were depressed. 50% of males in 60-69 years age group were depressed as compared to 85% of females in the same age group.60% males were depressed and 60% females were depressed in the 70-80 years age group in our study. Figure 2 shows the prevalence of depression among participants according to age and gender.

Figure 2: Prevalence of depression among participants according to age and gender
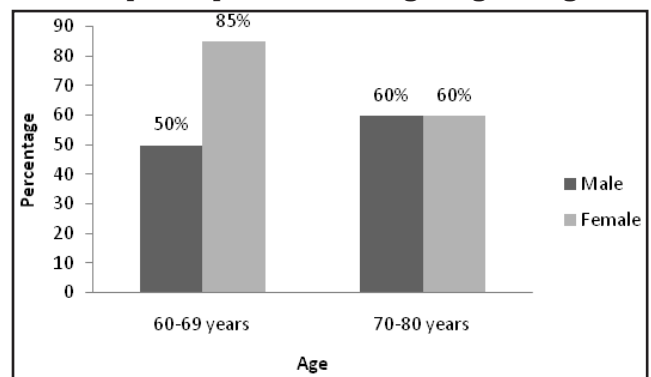
As shown in Table 1, 17 out of 22 (77%) participants who were suffering from Diabetes and/or Hypertension were depressed as opposed to 16 out of 28(57%) who were not suffering from these conditions. 23 out of 32 (72%) participants who were financially dependent were depressed whereas 10 out of 18 (55%) participants who were financially independent were depressed. 20 out of 31 (64%) participants whose spouse was alive were depressed compared to 13 out of 19 (68%) participants whose spouse was not alive. All these above associations were not found to be significant (p>0.05).

Discussion:

This study was conducted to screen sixty to eighty year olds living in old age homes of Anand taluka for depression. A study done in Rajkot, Gujarat by Zalavadia D et al found females to be more depressed as compared to males, a finding similar to our study(although found to be statistically not significant. They also found economic maladies and the presence of chronic ailments as predictors of depression, but both these variables were statistically not significant in current study. [6]

In another study done by Sinha S et al in Tamil Nadu, female sex and widowhood were found to be

Table 1: Presence of depression and association with various independent variables

Variables		Depression		Chi square (P value)
		Yes (%)	No (%)	
Gender	Male	10 (58.8)	7 (41.1)	0.591
	Female	23 (69.6)	10 (30.3)	(0.4419)
Co-morbidities	Present	17 (77.2)	5 (22.7)	2.225
	Absent	16 (57.1)	12 (42.8)	(0.1358)
Financial Independence	Present	10 (55.5)	8 (44.4)	1.367
	Absent	23 (71.8)	9 (28.1)	(0.2423)
Spouse status	Alive	20 (64.5)	11 (35.4)	0.080
	Not alive	13 (68.4)	6 (31.5)	(0.777)

significantly associated with depression. In the present study, there was no significant association between non living spouse and depression.[7]

A study done in Puducherry by Kavithai P et al found being female and widow/single significant factors for risk of depression in contrast to this study where these were found to not be significant.[8] Mohan U et al in their study conducted in Lucknow found out that depression among the elderly living in old age homes is more than the elderly who are living with the family. In contrast to the present study, they found that depression was more prevalent among the elderly who were not financially independent.[9]

A study done by Karthik C et al in old age homes in Bangalore using Geriatric depression scale found out that 63.73% of the elderly were having depressive syndrome which is consistent with the current study.[10] Chalise H et al in their study among elderly living in old age homes in Nepal found out that 57.8% of the elderly people living in old age homes were having depression. A similar finding was found in the current study. [11]

Conclusion and Recommendation:

According to this study, females especially in the 60-69 year age group were found to be depressed more than the other age group and gender. Although we studied some independent variables, they were not found to have significant association.

Certain problems in this age group may be subjecting, therefore qualitative studies should be carried out to understand the depth of the problem and to ascertain reasons for their depressed state. It is important to look into other factors which may be associated with old age depression which need to be assessed for each elderly separately. Therefore, it is imperative to have a holistic approach to health for the elderly. Associated socio-economic variables need to be addressed in order for them to have a better quality of life.

Acknowledgement:

Declaration:

References:

1. world health organization. andquot;Depression: let's talkandquot; says WHO, as depression tops list of causes of ill health [Internet]. 2017 [cited 2019 Jan 21]. Available from: https://www.who.int/news-room/detail/30-03-2017--depression-let-s-talk-says-who-as-depression-tops-list-of-causes-of-ill-health

2. world health organization. Mental health of older adults [Internet]. 2017 [cited 2019 Jan 21]. Available from: https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults

3. Depression [Internet]. 2017 [cited 2019 Jan 21]. Available from: http://www.searo.who.int/india/depression_in_india.pdf

4. Barua A, Ghosh M, Kar N, Basilio M. Prevalence of depressive disorders in the elderly. Ann Saudi Med. 2011;31(6):620–4.

5. Marc LG, Raue PJ, Bruce ML. Screening Performance of the 15-Item Geriatric Depression Scale in a Diverse Elderly Home Care Population. Am J Geriatr Psychiatry [Internet]. 2008 Nov [cited 2019 Jan 22];16(11):914–21. Available from: http://www.ncbi.nlm.nih.gov/pubmed/18978252

6. Zalavadiya DD, Banerjee A, Sheth AM, Rangoonwala M, Mitra A, Kadri AM. A Comparative Study of Depression and Associated Risk Factors among Elderly Inmates of Old Age Homes and Community of Rajkot: A Gujarati Version of the Geriatric Depression Scale-Short Form (GDS-G). Indian J Community Med [Internet]. 2017 [cited 2019 Jan 22];42(4):204–8. Available from: http://www.ncbi.nlm.nih.gov/pubmed/29184319

7. Sinha SP, Shrivastava SR, Ramasamy J. Depression in an older adult rural population in India. MEDICC Rev [Internet]. 2013 Oct [cited 2019 Jan 22];15(4):41–4. Available from: http://www.ncbi.nlm.nih.gov/pubmed/24253350

8. Kavithai P, R. A, S. B, M. P. A cross sectional study on screening for depression among elderly in rural areas of Puducherry, India. Int J Res Med Sci. 2018;7(1):46.

9. Mohan U, Gupta A, Singh S, Tiwari S, Singh V. Study of Depression in Geriatric Population: Old Age Home and Community in Lucknow India. Int J Epidemiol [Internet]. 2015 Oct 1 [cited 2019 Jan 22];44(suppl_1):i97–i97. Available from: https://academic.oup.com/ije/article/2573052/Study

10. C. K, G. V, Shobha S, S. R, P. S. A study to estimate the prevalence of depression among the inmates of select old age homes in Bangalore city, India. Int J Community Med Public Heal [Internet]. 2016 Dec 28 [cited 2019 Jan 22];3(7):1803–6. Available from: http://ijcmph.com/index.php/ijcmph/article/view/302

11. Chalise HN. Depression among elderly living in Briddashram (old age home). Adv Aging Res [Internet]. 2014 Feb 6 [cited 2019 Jan 22];03(01):6–11. Available from: http://www.scirp.org/journal/doi.aspx?DOI=10.4236/aar.2014.31002