Scholars Academic Journal of Biosciences (SAJB) **ISSN 2321-6883 (Online)**
Sch. Acad. J. Biosci., 2015; 3(1A):26-29 **ISSN 2347-9515 (Print)**

(An International Publisher for Academic and Scientific Resources)
www.saspublishers.com **DOI :** 10.36347/sajb.2015.v03i01.005

Research Article

A Study of Depression in Geriatric Population in a Rural Area of North India

Sekhon Harinder*[1], Minhas S[2], Ahmed S[3], Garg R[4]
[1]Chief Medical Officer (Psychiatrist), Composite Hospital, Group Centre, Central Reserve Police Force, Bantalab, Jammu, Jammu & Kashmir, India.
[2]Associate Prof, Dept of Community Medicine, Armed Forces Medical College, Pune, Maharashtra, India.
[3]Resident, Dept of Community Medicine, Armed Forces Medical College, Pune, Maharashtra, India.
[4]Resident, Dept of Psychiatry, Armed Forces Medical College, Pune, Maharashtra, India.

***Corresponding author**
Dr Harinder Sekhon
Email: drharindersekhon@yahoo.com

Abstract: Deteriorating health status in the form of psychological, social and physical health problems are all associated with aging. Geriatric population is challenged by many psychiatric co-morbidities depression being the most predominant. Across India, community based studies have estimated the prevalence of depression amongst the elderly in urban areas, but there are only a few such studies done in rural settings. The purpose of the present research was to study and determine the prevalence of depression amongst the elderly population, 60 years or more of age, in a rural area of north India. This was a cross sectional descriptive study conducted in a rural area in north India. Out of the total population of 5037, geriatric was 554. Out of these 554 people, only 518 met inclusion criteria. House to house survey was done for collection of data by using a pre-designed and pre-validated 15 item Geriatric Depression Scale (GDS), developed by Yesavage JA in 1983. In this study, the overall prevalence of depression in elderly in the study population was estimated to be 62.16%. The most commonly endorsed symptom (83.01%) was a positive response to the question, "Do you feel that your life is empty?"; followed by, "Have you dropped many interests and hobbies?" (75.87%). More than half of the study population endorsed symptoms that they often get bored and helpless. Conclusion: Prevalence of depression in the present study, amongst elderly population in a rural area was found to be high which shows that the quality of health care services to the elderly need improvement.
Keywords: depression, geriatric, India, population, rural

INTRODUCTION

Aging is a continuous and universal process which begins with the first day of life to the last moment of death[1]. Deteriorating health status in the form of psychological, social and physical health problems has a direct impact on health care services and social security[2]. Nevertheless, the advent of better health services and preventive care has raised life expectancy from 32 years in 1947 to 63.4 years in 2002, in India[3]. The worldwide proportion of elderly population is expected to double from the current 6.9% to 16.4% by 2050[4]. The number of elderly population in India is expected to be 179 million by 2031 and 301 million by 2051[4]. India, the 2nd largest country in the world is presently undergoing demographic transition[5] leading to a shift of population from high mortality and fertility to low mortality and fertility respectively. This has lead to an increase in the proportion of elderly population[5].

Geriatric population is challenged by many psychiatric co-morbidities. Depression is the most predominant disorder affecting quality of life in elderly[4]. As estimated by the World Health Organization (WHO), the overall prevalence rate of depressive disorders among the elderly generally varies between 10% and 20% depending on socio-cultural situations[6,7]. As stated by WHO, there is increased risk of depression in the elderly due to factors including genetic susceptibility, pain, chronic disease and disability, frustration with the limitations in activities of daily living (ADL), lack of adequate social support, adverse life events (bereavement, poverty, separation, divorce, social isolation) and personality traits (anxious or avoidant, dependent)[6]. Amongst various consequences are reduced satisfaction and quality of life, loneliness, social deprivation, increased use of health and home care services, impairments in activities of daily living, suicide, cognitive decline, and increase in non-suicide mortality[8].

Depression, though a common disability in elderly population[9] is misdiagnosed and undertreated due to social misconceptions as well as due to somatic presentation of mood features in the form of polysomatic complaints. Nevertheless, industrialization,

urbanization, education, and exposure to Western life styles has led to increasing neglect of elderly population, being economically unproductive[10]. Moreover, the age related disorders like depression determine the capacity for self-care as well as the ability to perform the daily tasks of life and also impose practical and emotional burden on the family members which may lead to heavy investment in domiciliary services[5]. Therefore it is important to diagnose and treat the condition early, so that burden of the disease can be reduced both amongst the elderly and the family members[4].

Across India, many community based studies have estimated the prevalence of depression amongst the elderly in urban areas, but there are only a few such studies done in rural settings. The purpose of the present research was to study and determine the prevalence of depression amongst the elderly population, 60 years or more of age, in a rural area of north India.

MATERIAL AND METHODS

This was a cross sectional descriptive study that was conducted in a rural area in north India for a period of two months between June and August 2013. Out of the total population of 5037 in the village, geriatric population was 554. Out of these 554 people, only 518 were available for the study since the others were either not present there, having been visiting relatives or on some pilgrimage or else they were admitted in the hospital for treatment of chronic ailments. House to house survey was done for collection of data. Every household in this community was visited by the investigator and all elderly persons aged 60 years and above were included in the study, after obtaining informed consent. There were no non-respondents.

In order to assess the depression status of the study population, data was collected using a pre-designed and pre-validated 15 item Geriatric Depression Scale (GDS), which is a self-report scale developed by Yesavage JA in 1983[11]. The scale has three subscales: (a) a generalized anxiety (GA) scale adapted from the CARE schedule, the Present State Examination (PSE)[12] and the Geriatric Mental State (GMS),VI (13) (b) a Phobic (Ph) scale (c) a Panic Disorder (PD) scale. It also screens for seven characteristics of depression in elderly, which are somatic concerns, lower affect, cognitive impairment, feelings of discrimination, impaired motivation, lack of future orientation and lack of self-esteem[4].

The study was conducted after ethical clearance as well as after obtaining permission from the administrative authorities of the area. Data thus collected was analysed using EpiInfo software. Frequency distributions were calculated for each Geriatric depression symptoms based on each age group.

RESULTS

In this study, (Table-1) the overall prevalence of depression in elderly in the study population was estimated to be 62.16%. Table-2 lists individual GDS-H items rank ordered with respect to frequency and percentage of subjects reporting that symptom in the total sample. The most commonly endorsed symptom (83.01% of all subjects) was a positive response to the question, “Do you feel that your life is empty?”. The second most commonly endorsed symptom was a positive response to the question, “Have you dropped many interests and hobbies?” (75.87% of all subjects) which was also the second most common endorsed symptom in the study conducted by Ganguli M et al[14] and was 57.2% in their study. More than half of the study population endorsed symptoms that they often get bored and helpless. Slightly less than half of them but more than 30% endorsed other symptoms like lack of energy, memory problems, feeling of hopelessness, dissatisfaction, unhappiness, feeling of worthlessness etc.

Table 1: Prevalence of depression among the elderly population. (N = 518)

Age group	Subjects with depression N (%)	Subjects without depression N (%)
≥60 to <70	212(66.25)	108(33.75)
≥70 to <80	97(58.79)	68(41.21)
≥80 to <90	11(47.83)	12(52.17)
≥90 to <100	2(25)	6(75)
≥100	0(0)	2(100)
Total	322(62.16)	196(37.84)

Table 2: Frequency of GDS-H items among the elderly population. (N=518)

Depressive symptoms (GDS-H items)	N	%
3. Feel that life is empty	430	83.01
2. Dropped many interests and hobbies	393	75.87
4. Often get bored	357	68.92
8. Often feel helpless	317	61.20
13. (Do not) feel full of energy	233	44.98
15. Think most people are better than you	230	44.40
5. (Not) in good spirits most of the time	226	43.63
10. Have more memory problems than most	205	39.58
14. Feel that your situation is hopeless	202	39.00
1. (Not) basically satisfied with life	187	36.10
11. (Do not) think it is wonderful to be alive now	180	34.75
6. Afraid something bad will happen to you	175	33.78
9. Prefer to stay at home rather than go out and do new things	174	33.59
12. Feel pretty worthless the way you are now	164	31.66
7. (Do not) feel happy most of the time	77	14.86

DISCUSSION

Depression is an important condition in older adults that is often overlooked as a clinical diagnosis and assumed to be a normal response to aging, physical losses or other life events[4]. Serious depressive symptoms were found in 8 – 20% of elderly in community and 37% of elderly in primary care setting (U.S Public health service 1999). Presence of co-morbid depression greatly increases health care cost with decrement in function and well being, that are similar to those associated with chronic medical disease[15].

In this study, the overall prevalence of depression in elderly population was estimated to be 62.16%, almost consistent with another study conducted in urban slum by Pracheth R et al [4]. Our results differed from the studies conducted by Jk W [12], Steffens DC et al [15] where overall prevalence of depression in the elderly was estimated to be 53.7%, 39.04%, 43.32%, respectively. This difference in the prevalence of depression amongst the elderly could be most likely due to the difference in study settings, family composition and support, as well the basic customs and traditions prevalent in the area that influence the support systems in place. The elderly population in rural setting have increased risk of psychiatric co-morbidities especially depression due to lack of awareness and lack of availability of health services. Also, prevalence of depression was highest in the elderly age group 60-70 years similar to the study conducted by Sinha MD et al[9]. Community-based mental health studies conducted in India have revealed a variable prevalence of depressive disorders. The point prevalence of depressive disorders in the elderly Indian population varies between 13% and 25% [16-17]. The most commonly endorsed symptom in our study population was feeling of emptiness in life. Other symptoms were endorsed by less than 50% of the study population due to the misconceptions that this rural community could potentially consider these as aspects of normal ageing[14].

A study done by Korte J[18] concluded that depression in elderly is evitable and can be prevented by addressing the risk factors leading to depression. As depression frequently manifests with somatic symptoms like tension, headache and heaviness, etc., most of the elderly persons visit non -psychiatry outpatient services seeking relief for their symptoms[19]. Hence, there is an urgent need for greater awareness of geriatric depression, both among community members as well as the health personnel to prevent misdiagnosis of the condition.

CONCLUSION

Prevalence of depression in the present study, amongst elderly population in a rural area was found to be high – 62.16%. Another study has already been started to find out the factors that may be responsible for this depression. But obviously, the present study shows that the quality of health care services to the elderly population in this area should be improved in order to reduce the burden of diseases and disabilities. It would be best done by education and awareness of the family members as well as the grassroot health workers.

REFERENCES

1. Singh A, Misra N; Loneliness, depression and sociability in old age. Industrial psychiatry journal, 2009;18(1):51.
2. Sandhya G; Geriatric Depression and Related Factors-A Cross sectional Study from a Rural Community in South Kerala. Journal of The Indian Academy of Geriatrics, 2010;6(2):61-3.

3. Economic UNDo. World Population Prospects: The 2004 Revision. Sex and age distribution of the world population: United Nations Publications; 2005.
4. Pracheth R, Mayur SS, Chowti JV; Geriatric Depression Scale: A tool to assess depression in elderly. International Journal of Medical Science and Public Health, 2013;2(1):31-5.
5. Seby K, Chaudhury S, Chakraborty R; Prevalence of psychiatric and physical morbidity in an urban geriatric population. Indian journal of psychiatry, 2011;53(2):121.
6. Rangaswamy SM; The World Health Organization (WHO). World Health Report: Mental Health: New Understanding New Hope. Geneva, Switzerland: World Health Organization. 2001.
7. Wig NN; World Health Day 2001. Indian journal of psychiatry. 2001;43(1):1.
8. Steffens DC SI, Norton MC, Hart AD, Tschanz JT, Plassman BL, et al.; Prevalence of depression and its treatment in an elderly population. The Cache County study. Arch Gen Psychiatry, 2000;57:601-607.
9. Sinha S, Shrivastava S, Ramasamy J. Depression in an Older Adult Rural Population in India. MEDICC review, 2013;15(4):41.
10. Vishal J, Bansal R, Swati P, Bimal T; A study of depression among aged in Surat city, 2010.
11. Yesavage JA, Brink T, Rose TL, Lum O, Huang V, Adey M, et al.; Development and validation of a geriatric depression screening scale: a preliminary report. Journal of psychiatric research. 1983;17(1):37-49.
12. Jk W. A technique for studying psychiatric morbidity in in-patient and out-patient and in general population samples. Psychol Med, 1976;6:665-71.
13. Copeland JR KM, Kellett JM, Gourlay AJ, Gurland BJ, Fleiss JL,, al. el;. A semi structured clinical interview for the assessment of diagnosis and mental state in the elderly: The Geriatric Mental State Schedule. I: Development and reliability. Psychol Med, 1976;6:439-49.
14. Ganguli M, Dube S, Johnston JM, Pandav R, Chandra V, Dodge HH; Depressive symptoms, cognitive impairment and functional impairment in a rural elderly population in India: a Hindi version of the geriatric depression scale (GDS-H). International Journal of Geriatric Psychiatry, 1999;14(10):807-20.
15. Steffens DC, Hays JC, Krishnan K; Disability in geriatric depression. The American Journal of Geriatric Psychiatry, 2000;7(1):34-40.
16. Nandi DN AS, Ganguli H, Banerjee G, Boral GC, Ghosh A, et al.; The Incidence of mental disorders in one year in a rural community in West Bengal. Indian J Psychiatry, 1976;18:79-87.
17. Ramachandran V MS, Arunagiri S; Socio-cultural factors in late onset depression. .Indian J Psychiatry, 1982;24:268-73.
18. Korte J, Bohlmeijer ET, Smit F; Prevention of depression and anxiety in later life: design of a randomized controlled trial for the clinical and economic evaluation of a life-review intervention. BMC public health, 2009;9(1):250.
19. Dowrick C KC, Peveler R, Lloyd H; Somatic symptoms and depression: diagnostic confusion and clinical neglect. Br J Gen Pract, 2005; 55(20):829–30.