

Rapid psychological assessment of depression and its relationship with physical health among urban elderly

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RESEARCH

Please cite this paper as: Cheluvraj P, Nanaware MB, Rao SP. Rapid psychological assessment of depression and its relationship with physical health among urban elderly. AMJ 2016;9(7):211-214.

<http://doi.org/10.21767/AMJ.2016.2634>

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ABSTRACT

Background

Old age is associated with increased occurrence of a wide array of Psychological impairments or losses, which might contribute to physical disabilities. As Depression has been identified as the most common aberration its rapid assessment would be able to identify the quality of individual and family life of the elderly.

Aims

To assess psychological health status with respect to depression among geriatric urban community, and the relationship of depression with health perception and physical health status has been explored.

Methods

A cross-sectional total geriatric population survey consisting of 254 elderly has been carried out at urban field practice area. A standard geriatric depression scale (Short form) has been utilized to assess psychological status. Detailed physical examination and investigations with

special reference to Diabetes, Hypertension and Visual defects was carried out. Data was analyzed to find out the relationship of various socio-demographic factors, physical morbidities with depression.

Results

Out of 254 elderly examined, 32 per cent females and 23 per cent males were found to be suffering from depressive disorders. When assessed for individual health status perception, 25 per cent felt to have good health. Out of 190 geriatric subjects perceiving fair to bad health, 110 were found to be suffering from depression ($p < 0.001$). Depression was also found to be associated with history of hospital admission in the previous year ($p < 0.05$), low vision ($p < 0.05$), diabetes ($p < 0.01$) and hypertension ($p < 0.01$).

Conclusion

Depression among geriatric age group is associated with physical illness and perception of health.

Key Words

Depression, geriatric health perception, psychological impairment

What this study adds:

1. What is known about this subject?

Ageing previously regarded as emerging trend mainly in the industrial countries is now recognized as a global phenomenon.

2. What new information is offered in this study?

The present study was an attempt to rapidly assess the depression among elderly living in the urban slum area utilizing the standard short form geriatric depression scale.

3. What are the implications for research, policy, or practice?

Depression is common psychological entity observed in geriatric age group and to improve the quality of life among geriatric age group is urgent need.

Background

Aging is a universal phenomenon. India is the second largest country in the world, with 72 million elderly persons above 60 years of age as of 2001.^{1,2} Increase in life expectancy is attributed to enhance the proportion of elderly to around 20 per cent by 2025 from the present eight per cent. The rapid changes in social structure, deteriorating joint families and in shattering Indian traditional value system will have tremendous psychological impact on the well being of these senior citizens as well as equilibrium of the society itself.³⁻⁶ Against this backdrop it is reasonable to expect that the mental health problems specifically depression among elderly will grow in the years to come.

However, suitable early assessment and initiation of appropriate management would be able to enhance the quality of life in the elderly people with depression. The present study is an attempt to rapidly assess the depression among elderly living in the urban slum area utilizing the standard short form geriatric depression scale. The results were analyzed to establish relationship of depression if any with physical health status.

Method

A cross-sectional study was carried out in urban field practice area of a medical college in pune. The total population of the area was 6,200. House to house survey was carried out to get the list of people with 60 years and above. A total of 270 geriatric study participants were found out of which information was gathered for 254 subjects. Remaining 16 were not available in the house even after repeated attempts of house visits during the survey period. Data pertaining to demographic profile, personal details and short form geriatric depression scale questionnaire details were collected through individual private interviews. Individuals with scores less than 5 were designated as normal and those with scores ≥ 5 were diagnosed to be suffering from depression.⁷ A thorough physical examination has been carried out to detect the presence of chronic diseases like hypertension, diabetes mellitus and refractive defects.

Results

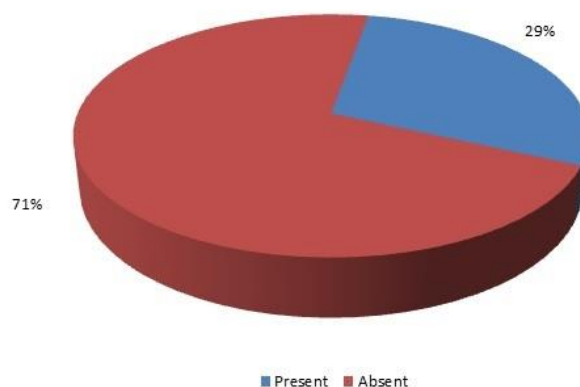
Among the 254 study participants, 73 (29 per cent) were having signs of depression and 181 (71 per cent) were without depression (Figure 1).

The demographic and socio-economic profile of both these groups is shown in Table 1. The demographic profile of age and sex showed equal affection of depression among the

elderly. Other factors like socio-economic status, living in a joint or nuclear family and the status of spouse presence also showed equal preponderance. The difference in the number of people of affected with depression in all the above categories showed no statistical significance. However, factors like self health perception and history of hospitalization in the previous one year showed statistically significant difference.

The relationship of physical ill-health (Low vision, Diabetes and hypertension) with psychological depression is shown in Table 2. Visual acuity at the time of survey is correlated with the detection of depression among the elderly. Seventy three people were found to be suffering from depression. When analyzed for visual acuity status psychological status of depression showed significant association with low vision. Similarly diabetes with or without hypertension also showed statistically significant association (Odds Ratio: 6.27 CI=1.22-43.09). Presence of hypertension showed no significant relationship with depression.

Figure 1: Status of depression among study population



Discussion

The present study finding of 29 per cent prevalence of depression among elderly aged ≥ 60 years coincides with the reports from other parts of India and Maharashtra¹. This study also brings out the lack of gender difference for depression among the elderly living in urban slum.⁸ Earlier studies showed female predilection for psychological disorders like depression among elderly in general.⁹ However, compulsion for work and equal occupational status among urban area might be responsible for equal affection of depression.¹⁰

Unlike earlier reports, depression was not found to be associated with marital status. This finding suggests that urban elderly psychological status is not being influenced by

the marital status and/living alone or in a joint family. Engagement in occupation for livelihood and financial independence might be responsible for this finding.

When analyzed for self-perception of health status, it was found that those who assess their health as bad were found to be suffering more from depression compared to those who feel good about their health status. Earlier reports also suggested that depression to be strongly associated with self-feelings,¹¹ this finding is significant. Previous hospitalizations indicate poor health is associated with depression. Individuals with poor health/previous hospitalizations were more prone to suffer from psychological disorders like depression.

The relationship of diabetes, low vision and diabetes with hypertension showed significant association with depression. Hypertension alone is not associated with psychological status as disease per se is symptomless in majority of the cases.¹² Diabetes and low vision being interfering with routine daily activities were found to be associated with psychological state of depression^{1,11} As the present study was cross sectional study in which the relationship between causative factors for depression and outcome was not studied in detail and case control study would be ideal for the same. As per aim of the study depression was significantly associated with history of hospital admission in the previous year, low vision, diabetes and hypertension.

Conclusion

Depression is still major psychiatric illness among the geriatric population among the other psychological variants. As the elderly population is likely to increase in future, and there is definite shift in the disease pattern i.e., from communicable to non communicable, it is high time that the health care system gears itself to growing health needs of the elderly in an optimal and comprehensive manner. The concept of Active and Healthy Ageing needs to be promoted not only among the elderly but the younger age groups as well, which includes promotional and preventive and rehabilitative aspects of health.

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PEER REVIEW

Not commissioned. Externally peer reviewed.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

FUNDING

None

ETHICS COMMITTEE APPROVAL

The present study got approval from B J Medical College and Sassoon General Hospital Ethical Committee.

Table 1: Comparison of demographic and socio-economic profiles between those suffering with or without depression

	Number of elderly suffering from Depression		P value (CI)	Sig
	Yes (%)	No (%)		
Men	15	43		
Women	58	138		
Age <70 years	43	101	1.14 (0.63 – 2.04)	NS
>70 years	30	80		
Spouse living	35	96		
Living alone	38	85		
Living in a Joint Family	36	106	0.69 (0.38 – 1.23)	NS
Living in Nuclear Family	37	75		
SE Status			0.93 (0.46 – 1.87)	NS
Low	16	42		
Middle	57	139		
Self-Health Perception			9.4 (4.85 – 18.4)	P<0.05
Good	50	34		
Bad	23	147		
Hospital Admission within last 1 year			2.5 (0.97 – 6.44)	P<0.05
Present	11	12		
Absent	62	169		

Table 2: Relation of chronic diseases and Depression among study participants

	Number of elderly suffering from Depression		P value (CI)	Sig
	Yes (%)	No (%)		
Vision Low (Less than 6/18)	42	79	1.75 (0.97 – 3.15)	P<0.05
Normal Vision (More than 6/18)	31	102		
Hypertension			1.1 (0.60 – 2.04)	NS
(>140 Systolic/or >90Diastolic)	25	58		
(<140 Systolic/or <90Diastolic)	48	123		
Diabetes			8.92 (3.64 – 22.4)	P<0.001
(Fasting BS > 126)	23	9		
(Fasting BS < 126)	49	171		
Diabetes & Hypertension			6.27 (1.22 – 43.0)	P<0.001
Present	10	2		
Absent	63	79		