Research Paper | Medical Science

Psychiatric Co-Morbidity in Geriatric Inpatients in a Teaching Hospital

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ABSTRACT   *Ageing is a universal phenomenon. It has not only social but also economical, political and health-related implications. This ever-increasing age group needs special healthcare. Psychological assessment should be an integral aspect of the comprehensive health assessment and ca re of geriatric patients. In this present study geriatric inpatients in a hospital were assessed on mini mental status examination, psycho geriatric assessment scale and proper psychiatric assessment was done which revealed high psychiatric co morbidity. The most common psychiatric illness (25.0%) was depression followed by adjustment disorders (11%), anxiety disorders (4.6%), dementias (3.4%), delirium (3%) and bipolar disorders (1.0%).*

KEYWORDS : PSYCHIATRIC COMORBIDITY, GERIATRIC INPATIENTS,

INTRODUCTION -

The changing demographic scenario and population projections of India indicate that the growth rate of Indian older adults (aged 60 years and above) is comparatively faster than other regions of the World. Since recent past, due to marked increase in life expectancy, rise in number and proportion of older adults the population of older adults is increasing at a fast pace. In India at present, older adults constitute 7.6% of total population. Within three decades, the number of older adults has more than doubled i.e. from 43 million in 1981 to 92 million in 2011 and is expected to triple in the next four decades i.e., 316 million.[1,2] This clearly reveals that the growth rate of Indian older adults is comparatively faster than in other regions of the World. The life expectancy at birth has also increased from 62.5 years in 2000 to 66.8 years in 2011.[3] Rapid growth in percentage and proportion of older adults in the country is associated with major consequences and implications in all areas of day-to-day human life, and it will continue to be so. As a result, the aged are likely to suffer with problems related to health and health care, family composition, living arrangements, housing, and migration.This segment of population is more vulnerable to health-related problems including mental health problems. Various prevalence studies have reported mental health problems among older adults to be very higher than other age groups.[4-7] The available literature indicates that there are hardly any effort to understand the morbidity and the needs of such elderly people and specific studies related to the issue are hardly available.[8-11] However, in India, only a few studies have explored geriatric health problems, particularly mental health disorders and quality of life. Considering this background, this mental health study was conducted to examine the different domains of quality of life affected by sociodemographic factors in the geriatric population. Viewing it, to assess mental health and other associated morbidities among elderly, a study was planned and carried out at Department of Psychiatry, Rohilkhand Medical College & Hospital, Bareilly, U.P.

MATERIAL & METHODS-

This was a Hospital based cross-sectional, observational study done in department of psychiatry, Rohilkhand medical college and hospital, Bareilly, U.P from 2012-2014. Study was done on geriatric inpatients admitted in non-psychiatric wards. All the patients aged above 60 years were included in study after taking informed consent of the patient and their relative. We have excluded the unconscious, physically unfit patients. All the patients were administered predesigned Performa, DSM-4 criteria for diagnosis , Mini mental status examination for memory and cognitive impairments, psychogeriatric assessment scale for affective and organic disorder. The data were analysed using standard statistical tools.

OBSERVATION & RESULT

This was a hospital based cross-sectional, observational study done in Department of Psychiatry, Rohilkhand Medical College & Hospital, Bareilly, U.P, India between July 2012 to June 2014. Study was done on geriatric in-patients admitted in non- psychiatric wards, which included all the medical and surgical departments of Rohilkhand Medical College & Hospital, Bareilly (U.P), during the study period a total of 500 patients are targeted for recruitment. Psychogeriatric assessment scale, MMSE, DSM IV CRITERIA, GLOBAL FUNCTIONINGA SCALE was applied on 500 patients. A total of 240 patients (49.28%) had psychiatric co-morbidity. The most common psychiatric illness (25.0%) was depression followed by adjustment disorders (11%), anxiety disorders (4.6%), dementias (3.4%), delirium (3%) and bipolar disorders (1.0%).

Table no 1: showing distribution of psychiatric co-morbidity.

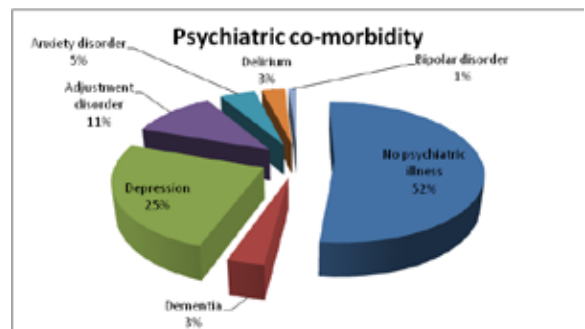| Psychiatric co-morbidity	Frequency	Percent
No psychiatric illness	260	52.0
Dementia	17	3.4
Depression	125	25.0
Adjustment disorder	55	11.0
Anxiety disorder	23	4.6
Delirium	15	3.0
Bipolar disorder	5	1.0
Total	500	100.0

Chart no 1: pie chart showing distribution of psychiatric co-morbidity

DISCUSSION-

In recent years, problems related to old age are getting recognition. The United Nations General Assembly resolved to observe 1999 as the International Year of Older People. The theme for the World Health Day on 7 April 1999 was 'Active ageing makes the difference'. In our study the mean age was 72.44±8.527 years, mean MMSE score was 22.88±6.9, male and female ratio was 155:345, 72% were illiterate, respectively. We also observe that 52.8% were married and 35.4% were widowed; 78.6% were retirees who no longer worked, while 21.4% were still working or not being retired and 46.4% were of upper lower followed by 32% of lower middle, 11.4% of Upper middle respectively. The average of the MMSE and age in the study population diagnosed was 22.88±6.9 and 72.44±8.527 years respectively. Artza et al.,[12] in a study performed in France with 579 patients with AD with an average age of 77.4 years and average MMSE score of 20.1, quantified the comorbidity with the non-age-adjusted CCI, showing an average of 1.5.Formigaet al.[13] found an average age of 80.6 years, average MMSE score of 13.7.Doraiswamy et al.[14] when evaluating 679 patients with AD of age and severity similar to those of the present study, found an average MMSE score of 11.8 ; thus, not allowing for comparisons between the comorbidities.

In our study male and female ratio was 155:345, males outnumbered females but the rate of psychiatric co-morbidity was more in females as compared with males. This is in conformity with earlier field-based studies of the elderly population in India.[8,15,17,18] Depression, anxiety and adjustment disorders were more common in females as compared with males. These results are contrary to the study carried out by Muller et al.[18] in Germany, in which men were more frequently affected than women.

A total of 240 patients (49.28%) had psychiatric co-morbidity. The most common psychiatric illness (25.0%) was depression followed by adjustment disorders (11%), anxiety disorders (4.6%), dementias (3.4%), delirium (3%) and bipolar disorders (1.0%). In terms of the diagnostic break-up, depression was the most common psychiatric disorder in this study (25% of the total study participants). Tiwari et al.[7] found depression up to the extent of 30.09% in a psychiatrically ill geriatric rural population. Ramchandran et al.[4] estimated the prevalence of mental disorders in those aged 50 years and above and observed that 24.1% had depression. Banerjee and MacDonald[20] in their Lewrisham study found depression in 26% of their sample comprising persons 65 years of age and above. Uwakwe[21] in his hospital-based sample observed that depression was the most common co-morbidity. Muller et al.[18] reported on psychiatric morbidity in elderly inpatients and found depressive disorders in 22%.

Dementia was found in 3.4% of patients in this study. However, it was observed that the primary physician was unaware of the presence of dementia. Depression may also be present early in the course of dementia and it may mimic subacute delirium, thereby complicating the diagnosis. The prevalence of dementia in the Indian population differs greatly from the western population. Muller et al.[18] and Bowler et al.[22] reported the prevalence of dementia in elderly medical/surgical inpatients to be very high, i.e. 26% and 26.8%, respectively. In India, the prevalence of dementia as such was low as reported by earlier field surveys. Nandi et al.[8], Rao and Madhavan,[23] Ramchandran et al.,[4] Shaji et al.[15] reported the prevalence of dementia to be 1.6%, 0.88%, 3.2% and 3.39%, respectively. This fact is also corroborated by White[24] who reviewed cross-cultural research on the epidemiology of dementia and came to the conclusion that estimated rates of dementia were somewhat lower in Asian countries than those reported from Europe and the USA.

In the present study, delirium was found in 3% and most of the patients (1.13%) were suffering from neurological conditions, closely followed by endocrinological conditions (0.94%). However, Bowler et al.[22] reported a very high rate of delirium, i.e. 11.1% as they carried out their study in an acute medical unit for the elderly. The psychiatric disorders are more prevalent in illiterates (52.1%) than in the literate population (46.4%). This could be due to the better comprehension of the illness by the literate people and earlier consultant seeking attitude by them. In India, illiterates may also seek help from other traditional methods which would result in the poor outcome of the disorder with prolonged period of suffering. This finding of increased prevalence of psychiatric illness in illiterates is in accordance with the study in urban population by Seby et al.[25]After comparing the psychiatric illness group with the control group, a worse score in the MMSE was observed when the following characteristics were present: COPD, CVA, CHF, and deterioration in ADLs.

When separating the dementia group into dementia associated with depression and dementia only, a lower score was observed in the MMSE for the dementia group in comparison with the dementia group associated with depression, even when the other variables were controlled.

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