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# Original Research

## Prevalence of psychiatric illness among diabetic geriatric patients

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### ABSTRACT:

**Background:** The geriatric population is defined as population aged 60 years and above. Diabetes mellitus (DM) is one of the major health problems of the elderly. Hence; the present study was undertaken for assessing the prevalence of psychiatric illness among diabetic geriatric patients.

**Materials & methods:** A total of 50 geriatric patients within the age range of 65 to 80 years were enrolled. Only those patients were included which had history of diabetes for a minimum of 20 years. Permission of institutional ethical committee was obtained. All the selected patients were administered the proforma containing socio-demographic history, present history and past history of patients of psychiatric illness. Assessment of psychiatric co-morbidity among the patients was assessed. All the results were recorded in Microsoft excel sheet and were analysed by SPSS software.

**Results:** Psychiatric illness was seen in 38 percent of the patients. Depression was seen in 42.11 percent of the patients, while anxiety was seen in 31.58 percent of the patients. Delirium was seen in 15.79 percent of the patients. Non-significant results were obtained while correlating psychiatric illness with age and gender-wise distribution of patients.

**Conclusion:** Anxiety and depression were the most common psychiatric illness among diabetic geriatric patients.

**Key words:** Psychiatric illness, Geriatric, Diabetic

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### INTRODUCTION

The geriatric population is defined as population aged 60 years and above. People aged 60 years and over are expected to constitute 10.2% of the total world population by 2025. The phenomenon of population ageing (defined as increase in the median age of the population) is already a major social and health problem in the developed countries. The life expectancy of an average Indian has increased from 54 years in 1981 to 64.6 years in 2002.<sup>1-3</sup>

Diabetes mellitus (DM) is one of the major health problems of the elderly. Developed countries face an epidemic of Type 2 DM. Healthcare providers should be aware of the frequent coexistence of psychiatric conditions in elderly patients with DM. Dementia, depression, and anxiety are commonly seen in addition to other psychiatric conditions. The relationship between diabetes and psychiatric disorders is complex. Evidence suggests that common

mechanisms may play a role in both the pathogenesis of DM and several psychiatric illnesses.<sup>4-6</sup> Hence; the present study was undertaken for assessing the prevalence of psychiatric illness among diabetic geriatric patients.

### MATERIAL AND METHOD

The present study was undertaken for assessing the prevalence of psychiatric illness among diabetic geriatric patients. A total of 50 geriatric patients within the age range of 65 to 80 years were enrolled. Only those patients were included which had history of diabetes for a minimum of 20 years. Permission of institutional ethical committee was obtained. All the selected patients were administered the proforma containing sociodemographic history, present history and past history of patients of psychiatric illness. Assessment of psychiatric co-morbidity among the patients was assessed. All the results were recorded

in Microsoft excel sheet and were analysed by SPSS software. Chi- square test and student test were used for evaluation of level of significance.

**RESULTS**

Psychiatric illness was seen in 38 percent of the patients. Among these patients, 42.1 percent of the patients belonged to the age group of 76 to 80 years.

31.58 percent of the patients belonged to the age group of 71 to 75 years. 63.16 percent of the patients were males. Depression was seen in 42.11 percent of the patients, while anxiety was seen in 31.58 percent of the patients. Delirium was seen in 15.79 percent of the patients. Non-significant results were obtained while correlating psychiatric illness with age and gender-wise distribution of patients.

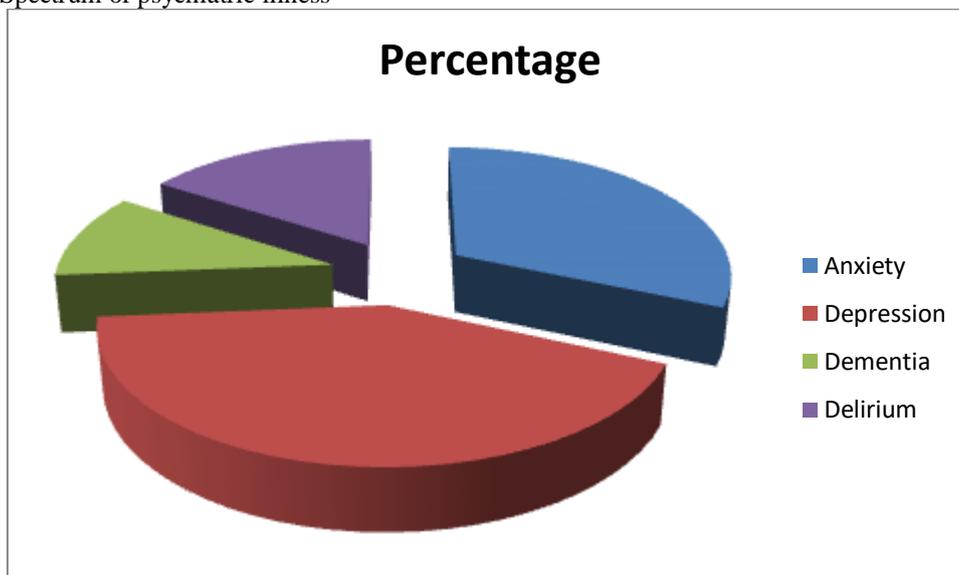
**Table 1:** Prevalence of psychiatric illness

Parameter	Number of patients	Percentage
Psychiatric illness	19	38

**Table 2:** Age and gender-wise distribution of patients with psychiatric illness

Parameter		Number of patients	Percentage
Age group (years)	65 to 70	5	26.32
	71 to 75	6	31.58
	76 to 80	8	42.1
Gender	Males	12	63.16
	Females	7	36.84

**Graph 1:** Spectrum of psychiatric illness



**DISCUSSION**

Common mechanisms of psychiatric illness involving brain-derived neurotrophic factor, insulin resistance, and inflammatory cytokines are throwing new light that these psychiatric illnesses could be due to the complications of Type 2 DM. Periodic screening should be done in DM patients to identify the psychiatric complications. Healthcare professionals should routinely screen for psychiatric complications of DM in addition to the microvascular and macrovascular complications of DM. It is important to screen all diabetic elderly patients for mental health issues as these may interfere with self-care and the overall management of DM.<sup>7-9</sup>

There are also anxieties unique to diabetes, including fear of complications, hypoglycemia, and invasive procedures. Worry about the possibility of serious, long-term complications is often rated as the most

distressing aspect of both T1D and T2D. Anticipatory fear of hypoglycemia is also a common concern. Hypoglycemia, defined as blood glucose levels significantly below the normal range (i.e., <70 mg/dl) is physically unpleasant as it involves a counter regulatory hormonal response (e.g., adrenalin) and temporary cognitive impairments. Insufficiently treated hypoglycemia may result in diabetic coma or death.<sup>9</sup> Hence; the present study was undertaken for assessing the prevalence of psychiatric illness among diabetic geriatric patients.

In the present study, Psychiatric illness was seen in 38 percent of the patients. Among these patients, 42.1 percent of the patients belonged to the age group of 76 to 80 years. 31.58 percent of the patients belonged to the age group of 71 to 75 years. 63.16 percent of the patients were males. Tiple P et al explored the sociodemographic profile and clinical characteristics

of patients aged 60 years and above. For the screening of psychiatric patients at Mumukshu Bhavan the Indian Psychiatric Survey Schedule was used. Depressive disorders were the most common psychiatric illnesses. Many patients had associated physical illnesses and among them hypertension was the most common. Family jointness was adequate for most of the patients. Objective social support was moderate for the majority of patients but perceived social support was poor. Depressive disorder was the most common psychiatric illness and among the physical illnesses hypertension was the commonest.<sup>10</sup> In the present study, depression was seen in 42.11 percent of the patients, while anxiety was seen in 31.58 percent of the patients. Delirium was seen in 15.79 percent of the patients. Non-significant results were obtained while correlating psychiatric illness with age and gender-wise distribution of patients. Seby K et al studied the frequency and pattern of psychiatric morbidity present and the association of physical illness with psychiatric morbidity in an elderly urban population. All the consenting elderly persons in a municipal ward division (n=202) were enrolled after surveying a total adult population of 7239 people. Psychiatric illnesses were detected in 26.7% while physical illnesses were present in 69.8% of the population surveyed. Predominant psychiatric diagnoses were depressive disorders, dementia, generalized anxiety disorder, alcohol dependence and bipolar disorder. The most common physical illness was visual impairment, followed by cardiovascular disease, rheumatic illnesses, pulmonary illnesses, hearing impairment, genitourinary diseases and neurological disorders. Presence of dementia was associated with increased age, single/widowed/separated status, nuclear family, economic dependence, low education, cardiovascular disorders, rheumatic disorders and neurological disorders. Depression was associated with female sex, single/widowed/separated status, staying in nuclear families, economic dependence on others and comorbid physical illnesses, specifically cardiovascular disorders and visual impairment.<sup>11</sup>

## CONCLUSION

Anxiety and depression were the most common psychiatric illness among diabetic geriatric patients.

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