

## ORIGINAL ARTICLE

# PSYCHIATRIC AND PHYSICAL COMORBIDITY IN ELDERLY ATTENDING THE GERIATRIC CLINIC OF A PSYCHIATRIC HOSPITAL

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### Abstract

**Background:** Physical comorbidity is quite common in older adults. When psychiatric and medical conditions co-occur, the combination is associated with elevated symptom burden, functional impairment, decreased length and quality of life, and increased costs of treatment. To estimate the proportion and patterns of physical comorbidity in elderly psychiatric patients.

**Methods:** A retrospective observational study was carried out in the Geriatric Clinic of National Institute of Mental Health and Hospital (NIMHH). Patient registry of the clinic was used to collect required information and 113 consecutive older adults with psychiatric disorders who attended the clinic in a three-month period, were enrolled for the study. Psychiatric diagnoses were made by psychiatrists, according to DSM-5 criteria. Medical diagnoses were made by specialist physicians by reviewing physicians' prescriptions. Data analysis was done by using SPSS 23.0. **Results:** Most of the patients (58.4%) belonged to the 7<sup>th</sup> decade. Among 113 patients 90 (79.7%) had only psychiatric illness & 23 had (20.4%) comorbid physical disorders. Depressive disorders (30%) and dementia (22.1%) were the most common psychiatric reasons for consultation. Among the associated physical comorbidities hypertension (43.5%) and diabetes (34.8%) were the most commons. **Conclusion:** Co-occurrence of psychiatric and physical disorder conditions is very common in a clinical setting. Physical comorbidity may influence follow up consultation pattern.

**Keywords:** Psychiatric comorbidity, physical comorbidity, elderly patient, geriatric clinic.

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### Introduction:

Bangladesh is one of the twenty developing countries with largest number of elderly population and by 2050 nearly 1 in every 4 people will be older than 60 years here.<sup>1</sup> Multi-morbidity among aging population is turning into a growing concern day by day and more than 95% of older adults reported experiencing

multiple health problems of which psychiatric association is an important component that is often ignored.<sup>2</sup> Physical-psychiatric comorbidity is defined as the co-existence of physical health and mental health conditions within the same individual, and comorbid health conditions are a significant public health issues.<sup>3</sup> Chronic conditions like endocrine,

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cardiac, neurological, orthopedic problems commonly accompany psychiatric disorders like dementia, depression, anxiety disorders, etc. in older adults. When psychiatric and medical conditions co-occur, the combination is associated with elevated symptom burden, functional impairment, decreased length and quality of life, and increased costs of treatment.<sup>4</sup> Moreover, treating multiple conditions at the same time in older adults presents several challenges given their complex medical needs, frequent polypharmacy, and the limited availability of mental health services in most medical settings.<sup>5</sup> With these concerns in mind, this study was carried out in the OPD with the aim to estimate the patterns of psychiatric and physical comorbidities in older adults. We believed, it would be beneficial for the psychiatrists in their daily patient care and would help policy makers in health planning.

**Methods:**

It was a retrospective observational study carried out in the Outpatient Department of National Institute of Mental Health and Hospital (NIMHH) during August 2019 to October 2019. Patient registry of the Geriatric Clinic was used to collect information. Information of consecutive patients who attended the clinic in the last three months was recorded. Patients who had an age of 60 or more were included and whose diagnosis was not confirmed were excluded from the study. The patient registry book contains information like registration number, name, age, sex, diagnosis and the prescribed treatment for the patient. It is maintained by specialist physicians and medical diagnoses were made by reviewing physicians' prescriptions, clinical notes and laboratory investigations. Psychiatric diagnoses were made by psychiatrists, according to DSM-5 criteria. Following data collection, they were cleaned, coded and analyzed using SPSS 23.0.

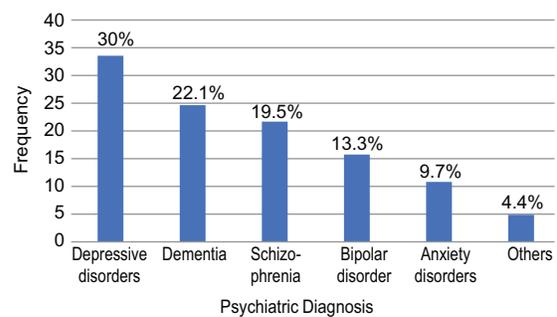
**Results:**

Over the period of 3 months, 113 patients attended the Geriatric Clinic; among them 60 (53.1%) were male patients and 53 (46.9%) were female. Largest group (58.4%) belonged to the 7<sup>th</sup> decade. Among 113 patients 90 (79.7%) had only psychiatric illness & 23 had (20.4%) comorbid physical disorders. Table I shows the characteristics of the patients attended Geriatric Clinic.

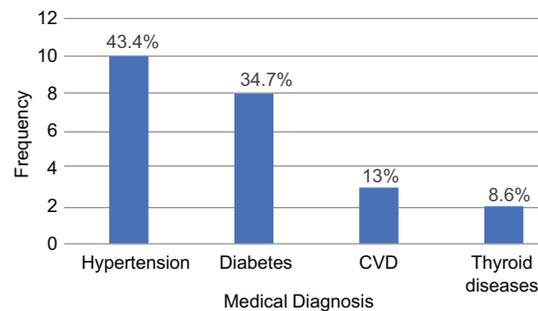
**Table-I**  
*Characteristic of patients attended Geriatric Clinical of NIMHH (N=113)*

Characteristic	Frequency (n)	Percentage (%)
Age		
60-69	66	58.4
70-79	42	37.1
≥80	5	4.4
Gender		
Male	60	53.1
Female	53	46.9
Diagnosis		
Only psychiatric diagnosis	90	79.7
Both psychiatric and medical diagnosis	23	20.3

Depressive disorders were the commonest psychiatric condition (30%) found in older adults and 13.7% patients were presented with features of major depressive disorder with or without psychotic features (Figure 1). Few of them were noted for suicidal thought & attempts. Among the associated physical comorbidities hypertension (43.5%) and diabetes (34.8%) were the most commons (Figure 2).



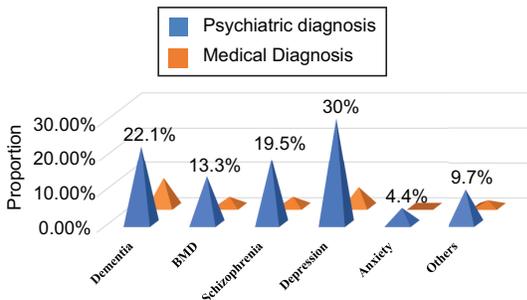
**Fig.-1:** Patterns of psychiatric diagnoses in geriatric clinic patients (N=113)



**Fig.-2:** Patterns of medical diagnoses in geriatric clinic patients (n=23)

Depression Dementia was the most frequent condition associated with comorbid illness (30%).

Dementia was found more commonly with hypertension and diabetes. No single psychiatric or physical illness showed extreme dominance in this outpatient clinic (Figure 3).



**Fig.-3:** Comorbidity of psychiatric and medical disorders

### Discussion:

Various epidemiological studies have reported prevalence figures of around 5-10% for depressive disorder and 1-5% for major depressive disorders in older adults.<sup>6,7</sup> anxiety disorders include generalized anxiety disorder, agoraphobia, panic disorder, OCD, social and specific phobia and have reported prevalence of 6-12% in people aged 65 years and older.<sup>6,8</sup> Prevalence of dementia ranges from 1.7% to 10% in older adults and psychotic disorders like schizophrenia have prevalence of around 1%.<sup>9-11</sup> Psychotic symptoms in the absence of dementia are quite rare.<sup>12</sup> In this study older adults who sought help were suffering from depression, dementia, schizophrenia, bipolar disorder and anxiety disorder in descending order; which indicated help seeking pattern of psychiatric disorders might not reflect true prevalence of the disorder in community settings.

Many factors associated with mental disorders increases with age, including loss of family members and relatives, social network, previous status in society, sensory functions, functional ability, and health. Different organic factors, such as brain atrophy, cerebrovascular disease, changes in the heart, lungs and muscular system, underactivity of serotonergic transmission, hypersecretion of cortisol, and low levels of testosterone, also increases. All these factors make old age vulnerable to psychiatric and medical disorders.<sup>13</sup> But old age may also have positive dimensions, with freedom of time, less stressors of work, and less competition.<sup>13</sup>

In US NCS-R, it was found that physical comorbidity is the rule rather than an exception in older adults and more than 68% elderly psychiatric patients had

comorbid medical condition.<sup>14</sup> The most common physical comorbidity reported were cellulitis, chronic obstructive pulmonary disease, liver disease, diabetes, hypertension, circulatory heart conditions, epilepsy, and hypothyroidism.<sup>15-17</sup> It is widely found that older psychiatric patients have an increased risk of morbidity and mortality due to physical disorders.<sup>16</sup> Compared to an individual without psychiatric disorders, a severe psychiatric disorder can result in patient's losing up to four years of life.<sup>18</sup> Suicide, cancer, accidents, liver disease, and septicemia increase premature mortality among persons with serious and persistent mental disorder.<sup>19</sup>

### Conclusion:

Co-occurrence of psychiatric and physical disorder conditions is very common in a clinical setting. Physical comorbidity may influence follow up consultation pattern and readmission in the hospital.

### Limitations:

Limitations include small sample size and single center design of study. Also, there could be underreporting of physical disorders as diagnoses were only made from clinical notes and prior prescriptions provided by the patients.

**Conflict of interest:** We have no conflict of interest.

**Ethical consideration:** was approved by the Intuitional Review Board of NIMHH before starting this study

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