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## TO FIND OUT THE PREVALENCE OF DIFFERENT TYPES OF PSYCHIATRIC DISEASES IN A TERTIARY CARE HOSPITAL OF A METROPOLIS PRESENTING OVER LAST 3 YEARS IN A DEVELOPING COUNTRY

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### ABSTRACT

To find out the prevalence of different types of major psychiatric diseases in a tertiary care hospital of a metropolis of a developing third world country over a period of 3 years through this retrospective, observational study. The study was conducted at a tertiary care hospital of a metropolis over a period of 3 years. The duration of study will be approximately 03 months (Jan 2019 to Sept. 2021). All the clients presenting at a tertiary care mental health facility diagnosed with psychiatric disorders in last 3 years in a metropolis using WHO ICD-10 criteria. Sampling was done from data available from Hospital Management System (HMS) of a tertiary care hospital of a metropolis over a period of 3 years. Sample Collection was undertaken with inclusion Criteria of all the male clients presenting at a mental health facility diagnosed with a mental disease or disorder during the period under consideration. Exclusion Criteria was for all medically diagnosed patients suffering from any co morbid medical condition. After approval of synopsis from ethical committee of the hospital, access to the data available in hospital management system (HMS) was conducted. Data regarding age, sex, socioeconomic status and period of diagnosis was collected from HMS, which was entered in a specially designed Performa to compile all the data collected. Data collected of 691 patients (indoor and outdoor) at a tertiary care Mental Hospital with relevant diagnosis of some psychiatric disorder using the ICD -10 codes of Hospital Management System (HMS). After collection of required data, analysis of the frequencies and percentage of different variables by using a valid software SPSS version 16.0 showing higher prevalence of Depressive Disorder and Anxiety disorder. Moderate to low rates of Adjustment disorders, Mood disorder and Bipolar affective disorders and negligible rates of prevalence of behavioural disorders. Results showed the total data of 691 male individuals was collected and diagnosed with different psychiatric disorders over a period of last three years. Out of all six selected diseases 369 cases of depression, 190 cases of anxiety, 74 cases of adjustment disorder, 79 cases of mood disorder, 12 cases of bipolar disorder and only 01 case of behavioural disorder was reported in last three-year time period in a tertiary care mental health facility of a metropolis of a third world country.

**KEYWORDS:** Prevalence, Anxiety, Bipolar disorder, Depression, Adjustment Disorder, Behavioural disorder, Mood disorder, Metropolis, ICD-10, Third world country.

### INTRODUCTION

Diseases of the brain, whatever their pathophysiological basis, ultimately affect the behaviour of individuals by altering the functions of brain circuits. Psychiatry is a branch of medicine that is concerned with the diagnosis and treatment of mental, emotional and behavioural disorders. Causes of mental disorders involves both psychological approach (functioning of mind) and biological approach (functioning of nervous system). There are a host of psychiatric disorders that affect the young, adult and the old.<sup>[11]</sup> Molecular genetics has played an increasingly important role in defining the relevant etiologic factors in several neuropsychiatric diseases.<sup>[2]</sup>

Anxiety is apprehension of danger and dread accompanied by restlessness, tension, tachycardia and dyspnea unattached ta o clearly unidentifiable stimulus. Anxiety disorders can be classified into six main types. These includes Generalized anxiety disorder (GAD), Panic disorder, Phobia, Social anxiety disorder, Obsessive-compulsive disorder (OCD) and Post-traumatic stress disorder (PTSD).<sup>[3]</sup> Anxiety may be due to environmental factors, such as stress from a personal relationship, job, school, finances, traumatic event, or even a shortage of oxygen in high-altitude areas, genetics, medical factors, such as the side effects of medicine, symptoms of a condition, or stress from a serious underlying medical condition, brain chemistry,

use of or withdrawal from an illicit substance. Excessive anxiety is most commonly triggered by the stress of day-to-day living and any combination of the above.<sup>[4]</sup>

Depression is the leading cause of disease-related disability among women in the world today. Depression is much more common among women than men, with female/male risk ratios roughly 2:1.<sup>[5]</sup> Depression is a temporary mental state or a chronic mental disorder characterized by feeling of sadness, loneliness, despair, low self-esteem and self-reproach accompanying signs include psychomotor retardation or less frequently agitation, withdrawal from social contact and vegetative state such as loss of appetite and insomnia. According to nosological classification there are three depression states. Somatogenous depression (organic, symptomatic), endogenous depression (bipolar, unipolar. schizoaffective, late depression, neurotic) and psychogenous depression fatigue (reactive, depressions).[6]

Bipolar disorder is a severe psychiatric disorder that affects approximately 1% of the world's population. It is characterized by extreme swings in mood between mania and depression. Mania is accompanied by euphoria, grandiosity, and increased energy, decreased need for sleep, rapid speech, and risk taking. Depression is associated with low mood, low energy and motivation, insomnia and feelings of worthlessness and hopelessness. Psychosis can occur in either state, and there is a 17% lifetime risk for suicide. The etiology is currently unknown, but epidemiological studies argue for a strong genetic component. The mode of genetic transmission is unclear. Although some studies have supported the presence of autosomal dominant major loci<sup>[3,4]</sup>, it has also been argued that bipolar disorder is oligogenic with multiple loci of modest effect.<sup>[7]</sup> Bipolar disorder is commonly diagnosed during adolescence or early adulthood, but onset can occur throughout the life cycle.<sup>[8]</sup> Adjustment disorder also known as situational depression are states of subjective distress and emotional disturbance usually occurs when a person is unable to cope or adjust with a major life event or a particular stressful situation such as marital or financial conflicts, trauma in family, personnel tragedy, jobless or failure to attain a personal goal, sexual issues or any health related problems.<sup>[9,10]</sup> Adjustment disorder can be categorized into six main classes namely adjustment disorder with depressed mood, adjustment disorder with anxiety, adjustment disorder with mixed anxiety and depressed mood, adjustment disorder with disturbance of conduct, adjustment disorder with mixed disturbance of emotions and conduct and adjustment disorder unspecified.<sup>[11]</sup> Adjustment disorders usually begin within a month of the precipitating event, and in most cases resolve within six months.<sup>[12]</sup>

Behavioural disorders known as disruptive behavioural disorders are the most common reasons that parents are told to take their kids for mental health assessments and treatment. Behavioural disorders involve a pattern of disruptive behaviours in children that last for at least 6 months and cause problems in school, at home and in social situations. Behavioural disorders are also common in adults.<sup>[13]</sup> If left untreated in childhood, these disorders can negatively affect a person's ability to hold a job and maintain relationships. Nearly everyone shows some of these behaviours at times, but behaviour disorders are more serious. Some biological causes may include physical illness or disability, malnutrition, brain damage and hereditary factors. Other factors related to an individual's home life may contribute to behaviours associated with a behavioural disorder includes divorce or other emotional upset at home, unhealthy or inconsistent discipline style, poor attitude toward education or schooling drug use and criminal activity.<sup>[14]</sup> Behavioural disorders include attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), conduct disorder, Emotional disorders and Pervasive developmental disorders.<sup>[15]</sup>

Mood disorders are a category of illnesses that describe a serious change in mood. Illness under mood disorders include major depressive disorder, bipolar disorder (mania - euphoric, hyperactive, over inflated ego, unrealistic optimism), persistent depressive disorder (long lasting low grade depression), cyclothymia (a mild form of bipolar disorder), and SAD (seasonal affective disorder). Mood disorder is considered to have heterogeneous etiologies.<sup>[16]</sup> Mood disorder is a more specific complication of stroke than simply a response to the motor disability.<sup>[17]</sup> Mood disorders can increase a person's risk for heart disease, diabetes, and other diseases. Emotional symptoms of mood disorders are not the same for all people, it includes thoughts of and attempts of suicide, loss of interest in activities that were pleasurable in the past, unvielding anxiety, sadness or feelings of emptiness, feelings of worthlessness, helplessness or guilt, feelings of hopelessness or pessimism. Physical symptoms of mood disorder may differ from one person to the next. Physical symptoms may include decreased energy or fatigue, headaches, body aches, pains, cramps or digestive problems, difficulty remembering details, making decisions or concentrating, loss of appetite or overeating and excessive sleeping or insomnia.[18]

### Significance of Study

Psychiatric disorders were diagnosed using IDC-10 coding and criteria. In the individuals these diagnoses results in impairment of efficiency at the level of organization. These disorders may cause the patients to either create problems for both the institute in which they render their jobs and services and also for themselves or apply for long sick leaves and reduced professional outputs resulting in incurring financial loss to the institutions.

### MATERIAL AND METHODOLOGY

This retrospective study was conducted at a tertiary care mental health facility in a metropolis from June, 2022 to August, 2022. Study was approved by the concerned competent authorities at the institute after approval and evaluation of initial synopsis. The data was retrieved from a medical managing computer system called Hospital Management System (HMS) at the tertiary care mental health facility with prior permission from the Ethical Committee of the institution. Last three years data (Jan, 2019 to August, 2021) of employed individuals with psychiatric diseases was collected. The data collected from HMS consisted of 691 patients of various psychiatric disorders with ICD-10 criteria. The analysis of data was performed using SPSS-16 and Microsoft Office. coding with different psychiatric disorders over a period of previous three years. The data was entered under different tabs in SPSS software and then results were analysed on yearly basis comparison of each psychiatric disorders and their occurrence and prevelence. The results of the study are hereby presented below in the form of tables, graphs and pie charts. Results showed the total data of 691 male individuals was collected and diagnosed with different psychiatric disorders over a period of last three years. Out of all six selected diseases 369 cases of depression, 190 cases of anxiety, 74 cases of adjustment disorder, 79 cases of mood disorder, 12 cases of bipolar disorder and only 01 case of behavioural disorder was reported in last three year time period in a tertiary care mental health facility of a metropolis of a third world country.

### RESULTS

Total data of 691 male employed individuals was collected diagnosed using WHO ICD-10 criteria and

	Figure 1	: Yearly p	revalence of	f psychiatric	: disorders in ຄ	a tertiary o	care mental	health facility	in a metropolis.
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SNO	No of cases of Psychiatric Disorders (Jan, 2019 to Aug, 2021)						
<b>5.NU</b>	Disorder	2019	2020	2021			
01.	Depression	138	123	108			
02.	Anxiety	75	63	52			
03.	Adjustment disorder	41	19	14			
04.	Mood Disorder	22	32	25			
05.	Bipolar Disorder	03	05	04			
06.	Behaviour Disorder	-	01	-			



Figure 2: Graphical representation of the prevalence of Depressive disorders presenting year wise in a tertiary care mental care hospital.



Figure 3: Graphical representation of the prevalence of Anxiety disorders presenting year wise in a tertiary care mental care hospital.



Figure 4: Graphical representation of the prevalence of Adjustment disorders presenting year wise in a tertiary care mental care hospital.



Figure 5: Graphical representation of the prevalence of Mood Disorders presenting year wise in a tertiary care mental care hospital.

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Figure 6: Graphical representation of the prevalence of Bipolar Affective Disorders presenting year wise in a tertiary care mental care hospital.



Figure 7: Graphical representation of the prevalence of Behavioural Disorders presenting year wise in a tertiary care mental care hospital.





#### DISCUSSION

The tendency of psychiatric disorders among employed institutional personnel is increasing day by day. Various factors may be involved which according to literature review suggests that employed male service personnel have to move away from their families and surroundings from time to time, also have to face critical and life threatening situations at various situations, strict institutional service rules and regulations and may have some concomitant financial issues.

This study reveals that most of the employed personnel having psychiatric issues are usually from the lower socioeconomic strata, only two cases of executives reported with a valid ICD-10 psychiatric diagnosis. Out of 691 male gender cases 369 cases were of depression, followed by anxiety reporting 190 cases, adjustment disorder 74 cases and others are also reported. The presence of these psychiatric conditions in male gender considered in this study may predominantly influences their occupational functioning due to which it is given utmost importance once these individuals present with it.

### CONCLUSION

Since the mid-twentieth century, psychiatry has undergone revolutionary changes in how psychiatrists diagnose patients, how they treat them, and how they evaluate whether a treatment works. These changes have brought with them major advances, especially in the neurosciences. But this history also suggests that psychiatry has lost something as it has narrowed its focus mainly to the brain and psychotropic drugs. Psychiatry, long charged with caring for those suffering from largely chronic conditions, has become focused on the diagnosis and cure of disease. This focus may someday bear therapeutic fruit, but until true cures are actually forthcoming it is important that the role of care not be lost. These disorders if may not be treated in time may lead to severe conditions and can worsen their efficiency which can in turn affect the organization.

**Conflict of Interest:** None. Authors declare no conflict of interest.

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### **Ethical Considerations**

This study was approved by the institutional ethical committee. Researchers have complied with the Declaration of Helsinki Research Ethics in the treatment and interaction of the study participants and their data.

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