# PREVALENCE OF PSYCHIATRIC DISORDERS IN VINAYAKA MISSION MEDICAL COLLEGE'S HOSPITAL

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*Abstract*
*Background:  Psychiatric disorders such as mild, moderate and severe forms, are highly prevalent in general population and contribute commonly to personal distress and disability, family burden, and social disruption.The objectives were to measure the prevalence of various mental illnesses / disorders in both sexes of Vinayaka Mission Medical College's hospital and to assess socio demographic variables of the patients.*

*Research Design: Normative survey based on the International Classification of Diseases (ICD10) by World Health Organization (WHO) was used for analyzing the inpatients and out patients of the hospital.*

*Measure: The secondary source of new cases/ patients who came to the department of psychiatry for treatment of their mental disorders was taken for a period of five months.*

*Results: Percentage and pie chart were done for the prevalence of various mental disorders and percentage was done for sociodemographic characteristics. The percentage wise distribution of age showed that the male and the female children of 3 to12 years of age  had the highest percentages and that unmarried patients had the more percentages of the males and female than married patients. The male and the female patients from lower class had more percentages in mental illnesses than other classes, and that the male and the female out patients had the highest percentages than the inpatients. The male and the female out patients had the highest percentages of two children i.e., male and female children.*

*Conclusion: The percentage wise distribution of mental illnesses showed that the patients had highest percentage in mood disorders, followed by anxiety disorders, and child psychiatric disorders. The patients had lowest percentage in organic mental disorders and personality disorders.*

*Key Words: Prevalence, Psychiatric Disorders.*

## INTRODUCTION

More than 1 billion people face a myriad health problem in India and nearly 1% of the population suffers from serious mental disorders and 5-10% from moderate disorders which need professional help. The epidemiological studies through meta-analysis estimate 58.2 per 1000 population. The major psychiatric disorders encountered in the community are Organic psychosis 0.4/1000; schizophrenia 2.7/1000; affective disorders 12.3/1000; mental retardation 6.9/1000; neurotic disorders 20/1000 and alcohol related disorders 6.9/1000 (Agarwal, 2004). In India, the Indian psychiatric Interview Schedule (IPIS) and the Indian Psychiatric Survey Schedule (IPSS) were instruments developed based on field experience to ascertain what a psychiatric case is.  There has been no further development of instrument has occurred in the last two decades (APA, 1980; Baxter et al, 2006; Chunilal, Adjit, & Donald, 1970; Davies, 1997; Dutta et al, 2007; Grant et al, 2004; Hansen, Jacobsen, & Arnesen, 2007; Husaini et al, 1999; Jacobi et al 2004; Judd et al, 2002; Kessler et al, 1994; Rob et al, 2003; Vega et al, 1998). In India, psychiatric disorders are highly prevalent in the general population and such disorders commonly contribute to distress, disability, and social disruption. These disorders demand some treatment modalities such as pharmacotherapy and psychotherapy for improvement in mental health. Some mental disorders are a major source of social burden, and people with these disorders who could benefit from treatment do not receive it. But they want to handle their distress by themselves with the suggestions of family members. Such preferences could be influenced by the ignorance of available treatment or fear of stigma or shame. Effective interventions, quality of mental health services, and monitoring mental health program's risk factors are relevant for the care and support of psychiatric cases (Gururaj & Gourie devi 1999; Gelder et al, 1996; Johnstone et al, 2004; Kaplan, & Sadock, 1999; Hales, Yudofsky, & Talbott, 1999).  The present study is to investigate prevalence of mental illnesses in both sexes by International Classification of Diseases (ICD10) in the department of psychiatry, Vinayaka Mission Medical College's Hospital.

**OBJECTIVES:** The objectives were
1. To measure the prevalence of various mental illnesses / disorders in Vinayaka Mission medical college's hospital.
2. To measure the prevalence of mental disorder in male and female patients by    International Classification of Diseases (ICD 10) and ,

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3. to find out pattern of in and out patients of sexes, age, occupation, socioeconomic status, and marital status of patients who had various mental disorders.

**METHOD**
Research Design: Normative survey based on the International Classification of Diseases (ICD10) by World Health Organization (WHO) was used for analyzing the inpatients and out patients of the psychiatric department of the hospital (WHO, 1992).

**Sample:** Secondary data were collected for a period of five months from the patents' register and the patients got the treatment for their disorders in the department of psychiatry. The sample consisted of intake of both inpatients and out patients of the Vinayaka Mission Medical College's hospital.

**CRITERIA FOR INCLUSION OF THE STUDY**
The new cases which came to the psychiatric department were included in the present study. The International Classification of Diseases, 10th revision (ICD-10) by *World Health Organization* (WHO) was used in the present study. These categories (F00-99) include people who have long periods of discomfort, impaired functioning, bizarre behavior, and disruptive behavior and consistently unable to adapt and function effectively in a variety of social conditions.
Statistics – Descriptive statistics - percentage and pie chart- were used for analyzing and interpreting the secondary data and sociodemographic variables.

**RESULTS AND DISCUSSION**
The collected data were presented in the form of tables and figures as per the objectives. Distribution of the detail / prevalence of various mental illnesses and sociodemographic variables are as follow.

**The table 1 shows the prevalence of various mental illnesses in Vinayaka Mission's hospital**

| Classif ication ICD10 | Disorders | | | | | Number of cases | Percent- age |
|---|---|---|---|---|---|---|---|
| F00-99 | Various Psychiatric Disorders | Male | % | Female | % | 844 | 100 |
| F00-99 | Organic Mental Disorders | 3 | 0.36 | 1 | 0.12 | 4 | 0.47 |
| F10 19 | Psychoactive Substance use Disorders | 49 | 5.8 | 0 | 0.0 | 49 | 5.80 |
| F20-29 | Schizophrenias | 40 | 4.74 | 42 | 4.98 | 82 | 9.72 |
| F30-39 | Mood Disorders | 124 | 14.7 | 90 | 10.66 | 214 | 25.36 |
| F40-48 | Neurotic Stress related Somatoform Disorders | 88 | 10.43 | 80 | 9.48 | 168 | 19.91 |
| F49-59 | Behavioral syndrome associated with physiological disturbances and physical factors | 4 | 0.47 | - | - | 4 | 0.47 |
| F60-69 | Adult Personality Disorders | 1 | 0.12 | - | - | 1 | 0.12 |
| F70-79 | Mental Retardation | 15 | 1.78 | 18 | 2.13 | 33 | 3.91 |
| F80-89 | Disorder of Psychological Development | 4 | 0.47 | - | - | 4 | 0.47 |
| F 90-98 | Behavioral and emotional disorders with onset usually occurring in childhood and adolescence | 40 | 4.74 | 165 | 19.55 | 205 | 24.29 |
| F99 | Other unspecified disorders | 33 | 3.91 | 31 | 3.67 | 64 | 7.58 |
| | Other disorders- Seizure Disorders | 9 | 1.06 | 7 | 0.83 | 17 | 1.89 |
| | | 410 | 48.58 | 434 | 51.42 | 844 | 100 |

The table 1 showed the percentage wise distribution of mood disorders (25.36%) and the male and female patients had the 14.7% and 10.66% in mood disorders respectively. The percentage wise distribution of child psychiatric disorders (disorders with onset occurring in childhood and adolescence) was 24.29% and the male and female patients of child psychiatric

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disorders were 4.74% and 19.55% respectively. The percentage wise distribution of neurotic stress related somatoform disorders was 19.92% and the male and female patients had 10.43% and 9.48% respectively. The percentage wise distribution of psychoactive substance use disorders was found only in male patients (5.8%), and schizophrenias showed 9.72% and the male and the female of schizophrenia were 4.74%, and 4.98% respectively.

The percentage wise distribution of other unspecified disorders was 7.58 and the male and the female patients of these disorders were 3.91% and 3.67%.  Organic  mental disorders and behavioral syndrome associated with physiological disturbances and physical factors had low percent (0.47%) and(0.47%) respectively and the  personality disorders had lowest percent (0.12%).The percentage wise distribution of seizure disorders was 1.89% and the male and the female had 1.06%, and 0.83% respectively. The percentage wise distribution of other unspecified disorders was 7.58% and the male and the female had 3.91%, and 3.67% respectively.
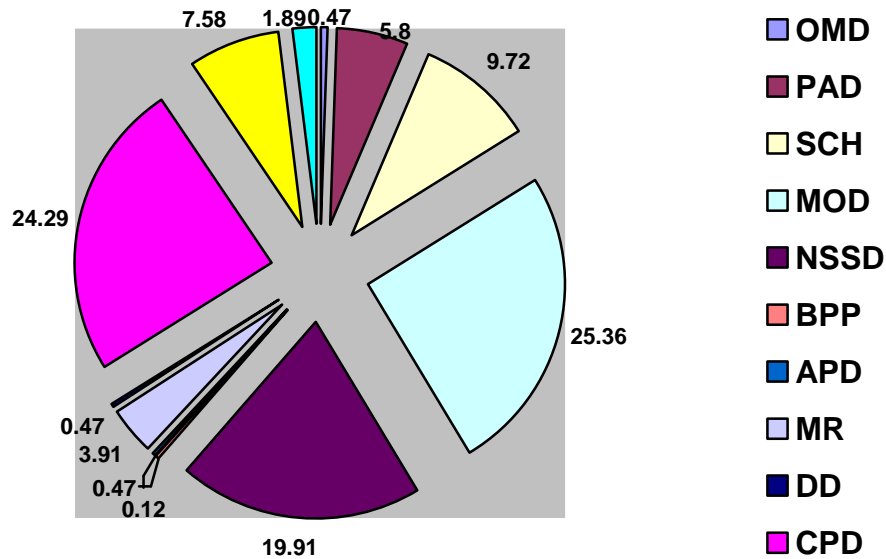


The pie diagram

OMD- Organic Mental Disorders, PAD- Psychoactive Substance use Disorders, SCH- Schizophrenias, MOD- Mood Disorders,NSSD- Neurotic Stress related Somatoform Disorders,BPP- Behavioral syndrome associated with physiological disturbances and  physical factors,APD- Adult Personality Disorders, MR- Mental Retardation, DD- Disorder of Psychological Development

The pie diagram showed the prevalence of various psychiatric disorders as per ICD 10, which were found for a period of five months in the department of psychiatry in Vinayaka Mission Medical College's Hospital.

**The table 2 shows the percentage wise distribution of the age of the patients**

| Classification | Age | Male | % | Female | % |
|---|---|---|---|---|---|
| F00-99 | 3-12 years | 83 | 16.94 | 85 | 10.07 |
| | 12-19 years | 36 | 4.27 | 52 | 6.16 |
| | 20-40 years | 114 | 11.14 | 131 | 11.97 |
| | 41-60 years | 145 | 13.63 | 148 | 17.54 |
| | Above 60 | 32 | 3.79 | 18 | 2.13 |

The table 2 showed the different age groups of the patients who had various psychiatric disorders as per ICD 10. The percentage wise distribution of age showed that the male and the female children with 3 to12 years of age had the highest percentages (16.94%), and (10.07%) respectively, followed by the male and the female adults in the age group of 20-40 years (11.14%), and (11.97%) respectively. The lowest percentages of the male and the female adults of above 60 years were 3.79%, and 2.13% respectively.

**The table 3 shows the percentage wise distribution of the marital status of the patients**

| Classification | Marital status | E | % | Female | % |
|---|---|---|---|---|---|
| F 00-99 | Married | 201 | 23.82 | 198 | 23.46 |
| | Unmarried | 209 | 24.76 | 236 | 27.96 |

The table 3 showed the percentage wise distribution of marital status of the patients showed that the highest percentages of the males (24.76%) and the female (27.36%) were unmarried, followed by the highest percentages of the males (23.82%) and female (23.46%) were married. It is noted that more number of people had mental illness either before marriage or more number of people prefer to seek treatment.

**The table 4 shows the percentage wise distribution of the occupation of the patients**

| Classification | Occupation | Male | % | Female | % |
|---|---|---|---|---|---|
| F 00-99 | Coolie | 80 | 9.48 | 96 | 11.37 |
| | Construction worker | 62 | 7.35 | 93 | 11.02 |
| | Weaver | 104 | 12.32 | 103 | 12.20 |
| | Student | 126 | 14.93 | 98 | 11.62 |
| | Others | 38 | 4.50 | 44 | 5.21 |

The table 4 showed the percentage wise distribution of occupations of the patients. The male students had the highest percentages (14.93%), followed by weavers (12.20%). the female weavers had 12.32%, followed by male students 11.62%. The male and the female workers who did other works had the lowest percentages of 4.5%, and 5.21% respectively.

**The table 5 shows the percentage wise distribution of the socio- economic status of the patients.**

| Classification | Socioeconomic status | Male | % | Female | % |
|---|---|---|---|---|---|
| F 00-99 | Upper middle | 10 | 1.12 | 8 | 0.95 |
| | Middle | 88 | 10.4 | 102 | 12.1 |
| | Lower upper | 140 | 16.6 | 161 | 19.07 |
| | Lower | 172 | 20.38 | 163 | 19.31 |

The table 5 showed the percentage wise distribution of socio- economic status of the patients. The male and the female patients of lower class had the highest percentages of 20.38%, and 19.31% respectively, followed by the male and the female lower upper class (16.6%), and (19.07%) respectively. The male and the female upper class had the lowest percentages (1.12%) and (0.95) respectively.

**The table 6 shows the percentage wise distribution of the in patients and out patients**

| Classification | Disorder | Male | % | Female | % |
|---|---|---|---|---|---|
| F 00-99 | Inpatients | 104 | 12.30 | 117 | 13.86 |
| | Outpatients | 306 | 36.26 | 317 | 37.56 |

The table 6 showed the percentage wise distribution of in patients and out patients showed that the male and the female out patients had the highest percentages (36.36%), and (37.56%) respectively, followed by the male and the female inpatients (12.30%),and (13.86%) respectively.

The **table 7 shows the percentage wise distribution of the number of patients' children**

| Classification | Children | Male/ Female | % |
|---|---|---|---|
| F 00-99 | One either male or female | 118 | 13.98 |
| | Two | 381 | 45.14 |
| | Three | 314 | 38.20 |
| | No child | 31 | 3.67 |

The table 7 showed the highest percentage of patients had two children 45.14%, followed by three children 38.20%. one child and no children were 13.98 % and 3.67% respectively.

**The table 8 shows the percentage wise distribution of the inpatients and outpatients**

| Classification | Disorder | Male | % | Female | % |
|---|---|---|---|---|---|
| F 00-99 | Inpatients | 102 | 12.08 | 123 | 14.57 |
| | Outpatients | 316 | 37.44 | 31i | 36.85 |

The table 8 showed the percentage wise distribution of inpatients and outpatients showed that the out patients had the highest percentages i.e., 37.44%, and 36.85% and the inpatients had the lowest percentage i.e., 12.08% and 14.57% respectively.

**The table 9 shows the percentage wise distribution of the inpatients and out patients recovered from illness.**

| Classification | Disorder | Male | % | Female | % |
|---|---|---|---|---|---|
| F 00-99 | Inpatients | 95 | 11.26 | 116 | 13.74 |
| | Outpatients | 316 | 37.44 | 311 | 36.85 |

The percentage wise distribution of male and female inpatients recovered was 11.26% and 13.74 % and out patients recovered were 37.44% and 36.85% respectively.

**The table 10 shows the percentage wise distribution of the treatment satisfaction of the patients.**

| Classification | Treatment | Patients | % |
|---|---|---|---|
| F 00-99 | Pharmacological and Psychological | 831 | 98.46 |

The table10 showed the percentage wise distribution of mental illnesses showed that the pharmacological and psychological therapy had satisfaction of 98.46%. This did not include the chronic cases of psychiatric illness.

**CONCLUSION**
The percentage wise distribution of mental illnesses showed that the male and female patients had highest percentage in mood disorders, followed by anxiety disorders and child psychiatric disorders. The patients had lowest percentage in organic mental disorders and personality disorders.

The percentage wise distribution of age showed that the male and the female children with the age of 3 to 12 years had the highest percentages and that unmarried patients had the highest percentages of the males and females. The male and the female patients from lower class had the highest percentages in mental illnesses, and the male and the female out patients had the highest percentages. The male and the female out patients had the highest percentages and that the highest percentage of had two children i.e., male and female children.

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