ISSN: 0975-3583, 0976-2833 VOL11, ISSUE1, 2020

Original Research Article

TO STUDY THE PREVALENCE AND PATTERN OF PSYCHIATRIC DISORDERS IN RURAL POPULATION

Dr. Rishabh Pratap Singh Yadav[1] (Assistant Professor), Dr. Ashutosh Singh[2] (Associate Professor), Dr. Vaibhav Chaturvedi[3] (Assistant Professor), Dr. Sagar Mudgal[4] (Senior Resident), Dr. Samir Desai[5] (Professor)

Dept. of Psychiatry, Amaltas Institute of Medical sciences, Dewas[1,2&4]
Dept. of Psychiatry, Index Medical College Hospital & Research Centre, Indore, M.P.[3&5]

Corresponding Author: Dr. Ashutosh Singh

Abstract

Background & Methods: The aim of the study is to study the prevalence and pattern of psychiatric disorders in rural population. The study objective favoured this design due to the fact that current and life time occurrence of various psychiatric disorders together with their socio-demographic and clinical states could be assessed simultaneously.

Results: 79.6% of people reported typical response with GHQ-12 scoring. Psychological distress was found in 14.6% with GHQ-12 scoring 15-20. Severe distress was found in 5.8% of the population with GHQ-12 score >21. Overall prevalence of 282 per 1000 was found in the study population.

Conclusion: It is the first psychiatric epidemiological study in central India; it has covered the major psychiatric disorders, all age groups and a large population in rural area. The psychiatric disorders were more common in males and in the age group of 40-59 years, separated/divorced participants followed by married participants, in low income groups, in farmers, in illiterates, in persons living alone followed by participants of nuclear families. The findings were statistically significant. The prevalence of 282/1000 was found higher than the general national data, mainly due to higher rates of substance use in the society.

Keywords: prevalence, pattern, psychiatric & disorders.
Study Design: Observational Study.

1. Introduction

Psychiatric epidemiology attempts to find out total number of persons suffering from psychiatric disorders at a point or during a period of time. It is significant for mental health care delivery in terms of hospital and community services, augmentation of specific services, man power development changes in medical curricula and planning, programming, implementing and evaluating mental health services[1]. Thus, psychiatric epidemiology has

ISSN: 0975-3583, 0976-2833 VOL11, ISSUE1, 2020

academic and administrative applications and directs both policy makers and professionals for further refinement and improvement[2].

Indian psychiatric epidemiological studies (focusing on all mental disorders) can be broadly classified as cross-sectional studies, interval studies, longitudinal studies, studies adopting the case–control approach, systematic reviews and meta-analysis[3]. Macro-economic commission report of 2005 considered prevalence rate of 65/1000 population (average of two meta-analyses) and projected the prevalence rate for the next two decades[4].

Incidence of mental disorders is on rise. There was hardly any research data available on mental health in India at the time of independence. Sir Joseph Bhore and Dr. A.L. Mudaliar have made observations in their reports about non availability of data on psychiatric morbidity in India. ICMR has initiated projects on mental health research at a significant level[5]. Dr. M. V. Govindaswamy was the first person to consider psychiatric epidemiology in India. It failed to make any significant impact due to methodological errors. The first major survey on psychiatric problems in India was undertaken by Professor K.C. Dube in Agra. A series of epidemiological studies on psychiatric disorders were subsequently undertaken during 1960's and 1970's in south, north, eastern, and western parts of the country. ICMR organized a multi-centric collaborative study on Severe Mental Morbidity at 4 centres – Bangalore, Baroda, Calcutta and Patiala[7]. This was the beginning of ICMR task force projects on mental health research.

2. Material and Methods

Present study was conducted at Amaltas Institute of Medical Science, Dewas from July 2018 to December 2019 on 500 cases. With the help of comprehensive interview schedules and door to door surveys, the prevalence and pattern of psychiatric disorders were assessed in the above mentioned rural population.

The study objective favoured this design due to the fact that current and life time occurrence of various psychiatric disorders together with their socio-demographic and clinical states could be assessed simultaneously. A prospective longitudinal study design could be helpful in observing the incidences psychiatric disorders over a time span.

Inclusion Criteria

1. All males and females, of age 1 year and above and of any caste or religion.

Exclusion Criteria

1. Age below 1 year.

3. Result

Table 1: Gender distribution of screened population

Gender	No.	Percentage
Male	281	56.2
Female	219	43.8
	500	100

ISSN: 0975-3583, 0976-2833 VOL11, ISSUE1, 2020

Table shows that among the screened group (281) 56.2% constituted male and (219) 43.8% were female.

Table 2: Income distribution in screened population

Income	**No.**	**Percent**
Rs.1000 and below	07	1.4
Rs.1000-5000	71	14.2
Rs.5000-10000	227	45.4
Above Rs.10000	195	39
Total	**500**	**100**

Population distribution according to income. 07 people (1.4%) belonged to below Rs.1000 income group, 71 (14.2%) belonged to 1000-5000 income group, 227 (45.4%) to Rs. 5000-10000 income group and 195 (39%) to above Rs. 10000 income group.

Table 3: Marital Status of the screened population

Marital Status	**No.**	**Percent**
Unmarried	191	38.2
Married	278	55.6
Separated/Divorced	04	0.8
Widowed	27	5.4
Total	**500**	**100**

The marital status of the peopple screened. Among them 278 (55.6%) were married, 04 (0.8%) were separated/divorced, 27 (5.4%) were widows and 191 (38.2%) were unmarried.

Table 4: Distribution of psychological distress

Psychological distress	**No.**	**Percent**
Typical	398	79.6
Distress	73	14.6
Severe Distress	29	5.8
Total	**500**	**100**

79.6% of people reported typical response with GHQ-12 scoring. Psychological distress was found in 14.6% with GHQ-12 scoring 15-20. Severe distress was found in 5.8% of the population with GHQ-12 score >21.

ISSN: 0975-3583, 0976-2833 VOL11, ISSUE1, 2020

Table 5: Psychiatric diagnosis and total prevalence

Psychiatric disorders	**No.**	**Percent**
Present	141	28.2
Absent	359	71.8
Total	**500**	**100**

Overall prevalence of 282 per 1000 was found in the study population.

4. Discussion

There is a sharp rise in morbidity rate after the age of 60. Increased psychiatric morbidity with advancing age has been reported in many studies[8]. In this study, no such sharp rise present and psychiatric morbidity of 44/1000 found in >60 years population which was lesser in number but comparable to 40-59 years age group after comparison between tables 4.22 and 4.23. In this, about 45% of >60 years population was found with a psychiatric illness and about 46% of 40-59 years aged population was found with a psychiatric illness[9].

In this study, highest number of people with psychiatric disorders belongs to Rs.5000-10000 income group (47.6%) followed by above Rs.10000 income group (32.3%). 18.4% of people with psychiatric disorders were having income in the range of Rs.1000-5000 and only 1.5% were earning < Rs.1000 per month. It is supposed to be due to enhanced earning capacity of people in the society and so, greater part of population falls in Rs.5000-10000 income group[10].

But, on looking each income group compared with corresponding population in table 4.25, in people having income Rs. 1000-5000, there were 36.5% of psychiatric patients followed by Rs <1000 income group, about 31% of people of this group have a psychiatric disorder. This is in agreement with many earlier studies which say that there is a positive relationship between the social class and mental illness, with a higher morbidity in the poorer class[11].

The prevalence of psychotic disorders in the current study was found as about 13/1000 (1.3%) with predominance of people affected with schizophrenia but included other psychotic disorders also. There were no significant difference between males and females. Various studies have been undertaken regarding schizophrenia prevalence and pattern in different communities and regions of India and the world. The studies measured prevalence of schizophrenia from 1.1 to 4.3 in different populations in India[12].

5. Conclusion

It is the first psychiatric epidemiological study in central India; it has covered the major psychiatric disorders, all age groups and a large population in rural area. The psychiatric disorders were more common in males and in the age group of 40-59 years, separated/divorced participants followed by married participants, in low income groups, in farmers, in illiterates, in persons living alone followed by participants of nuclear families.

ISSN: 0975-3583, 0976-2833 VOL11, ISSUE1, 2020

The findings were statistically significant. The prevalence of 282/1000 was found higher than the general national data, mainly due to higher rates of substance use in the society.

6. References

1. Park K., Park's Textbook of Preventive and Social medicine. 19th Edition, Jabalpur. Banarsidas Bhanot 2007.
2. Wing J K, Mann SA, Leff JA, Nixon JM. The concept of a case' in psychiatric population surveys. Psychol Med 1978; 8: 203-217.
3. Philip S. Wang, Mauricio Tohen, Evelyn J. Bromet, Jules Angst, Ronald C. Kessler Psychiatric Epidemiology The Scope of Inquiry in Psychiatry, Third Edition. Edited by Allan Tasman, Jerald Kay, Jeffrey Lieberman, Michael B. First and Mario Maj. © 2008 John Wiley & Sons, Ltd.
4. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EW: Prevalence, severity, and Co-morbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005; 62:617.
5. Kessler RC, Ustun TB: The World Mental Health Survey Initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). Int J Meth Psychiatr Res 2004; 13:93.
6. Mezzich Juan, Ustun T B, Epidemiology in Sadock BJ, Sadock UA. 8th Edition Comprehensive textbook of psychiatry USA: 2005 Lippincot H. Williams and Wilkins. Page no 655-671.
7. WHO World Mental Health Survey Consortium: Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization. World Mental Health Surveys. JAMA 2004; 291:2581.
8. The NIMH Collaborative Psychiatric Epidemiology Surveys initiative: Designs, Methods, and Instrumentation. International Journal of methods in psychiatric research, Volume 13, Number 4, 2004.
9. Compton WM, Thomas YF, Stinson FS, Grant BF Prevalence, correlates, disability, and Co-morbidity of DSM-IV drug abuse and dependence in the United States: results from the national epidemiologic survey on alcohol and related conditions. Arch Gen Psychiatry 2007 May; 64:566-76.
10. Math SB, Srinivasaraju R. Indian psychiatric epidemiological studies: Learning from the past. Indian J Psychiatry 2010;52:95-103
11. Nandi DN, Banerjee G, Mukherjee SP, Ghosh A, Nandi PS, Nandi S. Psychiatric morbidity of a rural Indian Community. Charges over a 20 year interval British J. Psychiatry 2000; 176:351-356.
12. Poongothai S, Pradeepa R, Ganesan A, Mohan V. Prevalence of depression in a large urban South Indian population The Chennai Urban Rural Epidemiology Study (CURES70) PloS One. 2009;4:E7185.