



CHANGING TRENDS OF PATIENTS' PROFILE ATTENDING TO TERTIARY HOSPITAL FOR MENTAL CARE - A CASE REGISTRY BASED STUDY.

Psychiatry

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ABSTRACT

Background: Mental disorders constitute a major health problem and contribute to 13% of global burden of disease, measured as disability adjusted life years. Mental disorder ranging anxiety, mood disorders to psychotic illness like schizophrenia. **Aims:** To study the clinical and sociodemographic profiles of patients attending the tertiary care mental hospital during 2011 and 2021, and to observe the changing trends of patients' profile over the decade. **Methods:** This was a descriptive, cross sectional study. All case records of patients attending hospital during 2011 and 2021 were collected manually, analysis of the data was done by using SPSS software. **Results:** A total of 5496 and 5976 patients were collected from 2011 and 2021 respectively. Sample consist of equal male and female patients and also include children below 18 years of age. Majority of patients belonged to rural, Hindu, married, self-employed. In year 2011, most of the patients were mentally retarded visited to hospital for disability certificate. In year 2021, all types of mental illness are reported. **Conclusion:** The study showed change in the trend of clinical profile of patients attending tertiary mental care hospital. Better results would have obtained if all the case profiles were collected without any missed data and if a prospective follow-up study had done.

KEYWORDS

Changing trends, Profiles, Tertiary Hospital, Mental care.

INTRODUCTION

Mental illness is a public health issue all over the world and one of the leading causes of disability worldwide. Mental health problems currently are said to constitute about 8% of the global burden of the disease, and more than 15% of adults in developing societies are estimated to suffer from mental illness^[1]. Low and middle-income countries have a higher burden of mental disorders than economically developed countries^[2,3]. According to the new concept of measuring disability called Disability Adjusted Life Years (DALY), mental illness constitute significant part of total disability adjusted life years (8.1%), more than the disability caused by several well recognized disorders such as cancer (5.8%) and heart diseases (4.4%)^[4]. As per National mental health survey done in India the weighted prevalence for any mental morbidity was 13.7% lifetime and 10.6% current mental morbidity^[5]. The Ministry of Health and Family welfare of India suggested the lifetime prevalence of mental disorders to be nearly 12%, which is likely to increase to almost 15% by the year 2020^[6].

Psychiatric epidemiology is the study of the distribution and determinants of mental illness frequency in human beings, with the fundamental aim of understanding and controlling the occurrence of mental illness. Psychiatric epidemiology deals with important components such as disease/disorder, distribution and frequency of disease/disorder, determinants of disease/disorder, human population and methods employed to control the occurrence of illness [7]. Psychiatric epidemiology has gone through various stages of growth over the past five decades in India; starting from the first psychiatric epidemiological study [9] to the development of tools like the Present Status Examination (PSE) [10] and the Indian Psychiatric Survey Schedule (IPSS) [11]. A major advance in psychiatric epidemiology is the development of reliable and valid diagnostic interviews. Many epidemiological studies conducted in India on mental and behavioral disorders report varying prevalence rates, ranging from 9.5 [12] to 370 per 1000 population [13].

Fifteen epidemiological studies on psychiatric morbidity in India have been analyzed. National all-India prevalence rates for all mental disorders and five specific disorders have been worked out. The national prevalence rates for 'all mental disorders' arrived at are 70.5 (rural), 73 (urban) and 73 (rural + urban) per 1000 population. Prevalence of schizophrenia is 2.5/1000 and this seems to be the only disorder whose prevalence is consistent across cultures and over time. Rates for depression, anxiety neurosis, hysteria and mental retardation are provided. In India Urban morbidity is 3.5 percent higher than the rural rate, but rural-urban differences are not consistent for different disease categories [14]. Surveys in developed as well as developing

countries reported more than 25% of individuals with one or more mental or behavioral disorders, during their life time[15]. A meta-analysis of 13 epidemiological studies of 33,572 persons reported total morbidity of 58.2 per 1000 from India^[16]. Another meta analytical study by Ganguly reports total morbidity of 73 per 1000 population. [14] Among Indian population 20% of them will have one or the other mental health disorder and requires medical attention and intervention from a mental health professional^[8].

Mental, neurological, and substance use (MNS) disorders constitute 13% of global burden of disease.[17] The burden caused by MNS disorders has increased by 41% from 1990 to 2010 due to population rise.[18] Psychotic disorders that include schizophrenia spectrum disorders as well as bipolar affective disorders are the leading contributors to disease burden globally [19–21]. Schizophrenia was assigned the highest disability coefficient in global burden of disease (GBD) study [22, 23]. National Mental Health Survey (2015–2016) has depicted nearly 5% of Indian total population of is suffering from disorders of substance use.[5] Furthermore, magnitude of substance use in India, 2019, conducted by the National Drug-Dependent Treatment Centre, AIIMS, has stated that a substantial number of people use psychoactive substances in India, and substance use exists in all the population groups.[24]

Psychiatric morbidity, which increases with age, is more prevalent in the geriatric (43.32%) than in the non-geriatric group (4.66%).[25] Psychiatric Disorder among children undergo unnoticed by parents or caregivers due to many issues like overcrowding, poverty, lack of education and awareness. As much as 12% to 29% of the children aged 5-15 years have been found to be suffering from some kind of psychiatric morbidity in different countries including India[26] Literature reports that in India most commonly Psychiatric referral is taken for children in cases of Intellectual disability or Behavioral disorders.[27]

In a country like India where people are less aware about mental health problems, only patients with major mental illness access care and those with minor mental disorders remain in the community without identification and management [8]. Only a limited proportion of patients with psychiatric illness attend to tertiary mental care hospital, and that too when the condition becomes severe only after visiting different types of care providers. There is much need to study the profile of patients attending the tertiary mental care hospital and the present study was an attempt to evaluate the change over a decade in the patient's profiles attending Government Hospital For Mental Care, Visakhapatnam, Andhra Pradesh, India.

AIM

To compare the demographic and clinical profile of patients attending the Government Hospital for Mental Care between the years 2011 and 2021.

METHODOLOGY

The study was a Cross sectional, Retrospective Document Review done at Government Hospital for Mental Care, Visakhapatnam. Appropriate permission was taken from the hospital authority for conducting the present study. The study was approved by Institutional Ethics committee. Data was collected from all case-sheets of patients attending hospital during 2011 and 2021 manually. A structured proforma was used for data collection which included age, gender, religion, level of education, occupation, family background, provisional diagnosis of the disease, duration of illness and mode of treatment given. Provisional diagnosis was made according to International Classification of Disease-10(ICD-10) criteria. A total of 5496 and 5976 patient's profiles were collected during 2011 and 2021 respectively. Statistical analysis was done using SPSS software version 25.0. Data were expressed as mean (standard deviation) for continuous variables and frequency (percentage) for categorical variables.

RESULTS:**Demographic Profile:**

In this study, 11472 patient's profile was analysed, out of which 5496 and 5976 were collected during 2011 and 2021 respectively [table 1]. The mean average age was 34.07 and 37.15 years during 2011 and 2021 respectively. The 2021 group showed lesser number of patients younger than 18 years of age and increased proportion of patients in the age group of greater than 41 years. More interesting is that over the decade, the number of patients older than 60 years increased. The only aspects of patient profile which seem to have remained consistent over a decade were sex and marital status [table 1], males were more than females. It was observed that more married individuals as compared to unmarried individuals with psychiatric illness attended the hospital over the decade. Patients who had visited the hospital were mostly Hindu by religion (2011- 83.8% & 2021-81.2%). In the 2021 sample large number of patients belonged to urban area than 2011 sample, but over the decade patients from rural background visiting the hospital was more than urban background. It was observed that majority of the individuals in the study were unemployed. The percentage of employed patients visiting the hospital increased during 2021(11.6%) when compared to 2011(7.4%) and percentage of unskilled workers and farmers during 2011(30.5%) had decreased to 26.6% during 2021. Over a decade, there was a change in trend seen in educational status of patients attending the Hospital [Illiterates%- 2011(47.8%), 2021(43.3); Graduates%- 2011(8.7%), 2021(11.7%); Postgraduate%- 2011(0.8%), 2021(2.0%)]. Most of the patients belonged to Nuclear type of family, but there was a decrease in percentage of patients living in joint family [2011-33% and 2021-25.5%] attending the hospital.

TABLE 1: DEMOGRAPHIC DISTRIBUTION

		2011	2021
AGE RANGE		Frequency n (%)	Frequency n (%)
	0-18 years	944 (17.2%)	816 (13.7%)
	19-40 years	2836 (51.6%)	2884 (48.2%)
	41-60 years	1394 (25.4%)	1580 (26.4%)
	>60 years	322 (5.9%)	696 (11.6%)
GENDER	FEMALE	2016 (36.7%)	2152 (36.0%)
	MALE	2692 (49.0%)	3120 (52.2%)
	CHILDREN	788 (14.3%)	704 (11.8%)
MARITAL STATUS	SINGLE	2028 (36.9%)	2198 (36.8%)
	MARRIED	3196 (58.2%)	3390 (56.7%)
	SEPARATED/ WIDOW	272 (4.9%)	388 (6.5%)
EDUCATIONAL STATUS	ILLITERATE	2626 (47.8%)	2588 (43.3%)
	PRIMARY	1260 (22.9%)	1060 (17.7%)
	SECONDARY	732 (13.3%)	1016 (17.0%)
	INTERMEDIATE	356 (6.5%)	484 (8.1%)
	DEGREE	476 (8.7%)	700 (11.7%)
	POSTGRADUATE	46 (0.8%)	120 (2.0%)
OCCUPATION	UNEMPLOYED	1926 (35.0%)	2008 (33.6%)
	EMPLOYED	404 (7.4%)	696 (11.6%)
	STUDENT	170 (3.1%)	294 (4.9%)
	HOUSEWIFE	1322 (24.1%)	1378 (23.1%)

	UNSKILLED WORKERS	1674 (30.5%)	1600 (26.6%)
RELIGION	HINDU	4608 (83.8%)	4852 (81.2%)
	CHRISTIAN	722 (13.1%)	962 (16.1%)
	MUSLIM	158 (2.9%)	148 (2.5%)
	OTHERS	08 (0.1%)	14 (0.2%)
RESIDENCE	RURAL	3628 (66.0%)	3606 (60.3%)
	URBAN	1868 (34.0%)	2370 (39.7%)
TYPE OF FAMILY	NUCLEAR	3680 (67.0%)	4446 (74.4%)
	JOINT	1816 (33.1%)	1524 (25.5%)
TOTAL		5496 (100%)	5976 (100%)

Clinical Profile:**TABLE 2: PROVISIONAL DIAGNOSIS OF THE PATIENTS OVER THE DECADE:**

	2011	2021
	Frequency n (%)	Frequency n (%)
ACUTE TRANSIENT PSYCHOSIS	0162 (02.9%)	0222 (03.7%)
SCHIZOPHRENIA	1798 (32.7%)	1802 (30.2%)
LATE ONSET PSYCHOSIS	84 (01.5%)	234 (3.9%)
BPAD	492 (9.0%)	336 (5.6%)
MDD	494 (9.0%)	522 (8.7%)
NEUROTIC DISORDERS	198 (3.6%)	422 (7.0%)
ALCOHOL USE DISORDERS	698 (12.7%)	708 (11.8%)
MULTIPLE SUBSTANCE USE DISORDERS	068 (01.2%)	160 (02.7%)
MENTAL RETARDATION	1028 (18.7%)	640 (10.7%)
OTHER CHILDHOOD PSYCHIATRIC DISORDERS	0022 (00.4%)	0256 (04.3%)
TOTAL	5496 (100%)	5976 (100%)

In Table 2, it was observed that Schizophrenia was the most common diagnosis among the patients attending the hospital, but the percentage of patients diagnosed of schizophrenia was decreased during 2021(30.2%) compared to 2011(32.6%). Followed by mental retardation (18.7%) in the 2011 and alcohol dependence syndrome (11.8%) in the year 2021 were common. But in 2021, the percentage of alcohol dependence syndrome (11.8%) was lesser than in 2011(12.7%) [Figure 1]. The diagnosis of Mental retardation was 18.7% in 2011 and 10.7% in 2021, but there was an increased percentage of diagnosis of childhood disorders (ADHD, AUTISM, ODD) from 0.4% to 4.3% over the decade. The percentage of Bipolar Affective Disorder diagnosis was 9.0% and 5.6% in 2011 and 2021 respectively. The percentage of patients with the diagnosis of Major Depressive disorder almost remained same over the decade. Diagnosis of other neurotic disorders (Anxiety, Phobia, Panic disorder, Dissociative disorder) was doubled and it was found to be 2.5% in 2011 and 5.3% in 2021. Similarly the diagnosis of late onset psychosis was more than double as observed in table 2. Organic psychosis (10.0%) was found to be fourth most common diagnosis in the year 2021. Sleep and Eating disorders; Personality disorders were the least diagnosed among the patients attending the hospital in both the years.

Among the patients, as compared to males more female patients were diagnosed with Acute and transient psychosis, Depression, Neurotic disorders, and Late onset psychosis. More males were diagnosed with Schizophrenia, mental and behavioural disorders due to psychoactive substance use, Bipolar affective disorder compared to females.

Family History Of Mental Illness:

Maximum number of the patients attending the hospital in the both years had no family history of mental illness [Table-3]

TABLE-3: FAMILY HISTORY OF MENTAL ILLNESS

FAMILY HISTORY	2011	2021
	FREQUENCY n (%)	FREQUENCY n (%)
PRESENT	1150 (20.9%)	1474 (24.7%)
ABSENT	4346 (79.1%)	4502 (75.3%)
TOTAL	5496 (100%)	5976 (100%)

Duration Of Illness:

In the study, we found that most of the patients in the 2011 group (21.9%) had duration of illness greater than 10 years and in the 2021 group (20.9%) had duration of illness 2 to 5 years. In the year 2021 (11.6%) there was increase in percentage of patients with duration of

illness of less than 1 month when compared to year 2011. But in both the groups it was found that the least number of patients who attended the hospital had duration of illness, of less than 1 month. From the data, it was observed that larger number of the patients with longer duration of illness attended the hospital.

TABLE-4: DURATION OF ILLNESS OF THE PATIENTS:

DURATION OF ILLNESS	2011	2021
	FREQUENCY n (%)	FREQUENCY n (%)
<1MONTH	450 (8.2%)	692(11.6%)
1-6MONTHS	892 (16.2%)	1144 (19.1%)
6-12MONTHS	836 (15.2%)	904 (15.1%)
2-5YEARS	1030 (18.7%)	1250 (20.9%)
5-10YEARS	1086 (19.8%)	1072 (17.9%)
>10YEARS	1202 (21.9%)	914 (15.3%)
TOTAL	5496 (100%)	5976 (100%)

Mode Of The Treatment:

In the year 2011, among 5496 patients who attended the hospital 1270 patients had received in-patient mode of the treatment whereas, in the year 2021, out of 5976 patients 2130 patients had received in-patient mode of the treatment.

DISCUSSION:

Present study was an attempt to evaluate the change over a decade in the demographic and clinical variables of the patients attending the Government Hospital for Mental Care, Visakhapatnam, Andhra Pradesh. Our Hospital is 300 bedded hospital, people also come from different states for the treatment. In this study, one of the major findings was that there had not been a major change in the profile of patients presenting to the hospital over the decade similar to the study Sood M et al^[56]. The sample size in both years 2011 and 2021 was almost same. The reason might be due COVID as the people could not access to Hospital due various factors in year 2021 or lack of awareness about the illness and treatment services, or mental-illness related stigma in the society due which people were reluctant to visit government mental hospital. It was observed that psychiatric morbidity was common in younger age group and middle age group patients as compared to old age group individual in the year 2011 and 2021, which was consistent with previous Indian studies (Nissar Ahmad Kosigi et al.2017, Karim et al.2006, Pradeep Bodke et al.2014,^[28,29,30]). Earlier studies have reported a strong association between gender and mental illness, with the female gender being the most prominent of the risk factors in certain psychiatric disorders.^[31,32] Males had a higher prevalence of mental disorder as compared to females in our study might be attributed to the prevailing gender bias in the society, where the illness of male is taken more seriously than that of female ones, which was similar to a study performed by (Deswal et al., 2012, Lahariya, et al 2010.)^[33,34]. In our study most of patients were male, married and unemployed, these findings were similar to the study of Vineet et al, found 73.2 % patients were male, 55.6% patients were married and 64.1% were unemployed. The reason might be individuals who are unemployed face poorer physical health, loss of sense of purpose, family tensions, negative self-attitudes, feelings of degradation, laziness, boredom, lower ambition, social isolation. But in the study of Sunil Nayak et al^[35] found 59.9 % patients were males, 32% patients belonged to laborer group followed by unemployed (26%) and 65.5% were married. Patients who had visited the hospital were mostly Hindu by religion as major of population belongs to the religion Hindu similar to the study Pradeep Bodke et al.2014."Unlike high income countries, in India persons with mental illnesses travel long distances to seek psychiatric help due to paucity of mental health professionals, stigma at visiting a nearby facility and non-availability of services"^[36]. Over the decade more patients from rural background visiting the hospital than urban background similar to the study Vikesh Gupta et al.^[37], contrast to the results of the study done by A.K.Kala et al. ^[38]. Compare to 2011, number of patients from urban background had visited to the hospital this might be due to the patients belonging to urban region shifting from the private clinics to government hospital for the treatment. In this study more than half of the patients belonged to Nuclear type of family similar to the study Sood et.al, but over the decade there was a decrease in percentage of patients living in joint family attending the hospital. Contrast to the study by Noreena Kausar et al;^[39] - majority of the psychiatric patients were living in joint family.

The percent of Family history of mental illness was increased over decade, it was found to be 20.9% in the year 2011 and 24.7% in the year

2021, similar to the study by Ghosh P et al,^[39] in which family history of mental illness was present in 44.34% of patients. There was a remarkable increase in the number of patients with short duration in the 2021 group. Patients in less than one month duration category showed an increase in percentage compared to 2011 group similar to the study A.K.Kala et al. ^[38]. About half of the subjects had been ill for more than 2 years had visited the hospital in the both the groups which reflects the absence of psychiatric awareness in the society, these were consistent with the findings of the previous study Sood M et al^[36]. Comparison of diagnoses in the 2011 and 2021 groups showed marked differences similar to the study A.K.Kala et al. ^[38]. The proportionate number of schizophrenics attending to the hospital were more than others over the ten years period. An increased number of acute psychotics, being brought for treatment might be as a result of awareness. One fact which emerges clearly is that the number of psychotics being treated in the psychiatric hospital has increased remarkably over the years. In the study by Ghosh P et al; also showed that the most commonly diagnosed mental disorders were schizophrenia and other psychotic disorders.

There is increased trend in the admission rates from 2011 to 2021. COVID is the illness that had impact across different domains of life with significant impact on mental health. During COVID times there were chances of less access to mental health care, which can lead to poor medical compliance and can increase the severity of illness and in-patient admission rates.

CONCLUSION:

Study shows that the percentage of patients seeking early treatment is increasing.

The relative dominance of major psychiatric disorders shows that people with minor mental health problems do not prefer mental hospitals.

Limitations:

Our study was done based on document review in single hospital setting, a prospective longitudinal multi-centered setting might be appropriate.

Provisional Diagnosis was not made by a single doctor to all the cases taken in the study, many were involved.

REFERENCES:

1. World Health Organization, (1992) the ICD – 10 Classification of Mental and Behavioral Disorders, World Health Organization, Geneva.
2. Bass JK, Bornemann TH, Burkey M, Chehil S, Chen L, Copeland JR, et al. A United Nations General Assembly Special Session for mental, neurological, and substance use disorders: The time has come. *PLoS Med* 2012;9:e1001159
3. Hock RS, Or F, Kolappa K, Burkey MD, Surkan PJ, Eaton WW. A new resolution for global mental health. *Lancet* 2012;379:1367-8.
4. World Bank, (1993) World Development Report, Oxford University Press Washington.
5. National Mental Health Survey of India, 2015-2016 Prevalence, Patterns and Outcomes, Supported by Ministry of Health and Family Welfare, Government of India, and Implemented by National Institute of Mental Health and Neurosciences (NIMHANS) Bengaluru: In Collaboration with Partner Institutions; 2015-2016.
6. World Health Organization 2015. International public health hazards: Indian legislative provisions. Available at URL: [http://www.who.org. indian/ legis/pub.healthaz/en].
7. Aschengrau A, Seage GR. Essentials of Epidemiology in Public Health. Boston, MA: Jones and Bartlett Publishers; 2003
8. Math SB, Srinivasaraju R. Indian psychiatric epidemiological studies: learning from the past. *Indian J Psychiatry*. 2010;52:95- 103
9. Dube KC. A study of prevalence and biosocial variables in mental illness in a rural and an urban community in Uttar Pradesh, India. *Acta Psychiatr Scand*. 1970;46(4):327-59
10. Reddy MV, Chandrasekar CR. Prevalence of mental and behavioural disorders in India: A meta-analysis. *Indian J Psychiatry* 1998; 40 :149-57.
11. Wing JK, Cooper JE, Sartorius N. The Measurement and Classification of Psychiatric Symptoms. Cambridge: Cambridge University Press; 1974.
12. Kapur RL, Kapur M, Carstairs GM. Indian Psychiatric Survey Schedule. *Soc Psychiatry*. 1974;9:71-6.
13. Surya NC. Mental morbidity in Pondicherry. Transaction-4, Bangalore: All India Institute of Mental Health. 1964;50-61.
14. Carstairs GM, Kapur RL. The Great Universe of Kota: Stress Change and Mental Disorder in an Indian Village. Berkeley, CA: University of California Press; 1976.
15. Ganguli HC. Epidemiological findings on prevalence of mental disorders in India. *Indian Journal of Psychiatry*. 2000;42(1),14-20.
16. Almeida-Filho N et al. Brazilian multicentric study of psychiatric morbidity. Methodological features and prevalence estimates. *Br J Psychiatry* 1997; 171 :524-9.
17. Reddy MV, Chandrasekar CR. Prevalence of mental and behavioural disorders in India: A meta-analysis. *Indian J Psychiatry* 1998; 40 :149-57.
18. World Health Organization. The Global Burden of Disease: 2004 Update. Geneva, Switzerland: WHO press; 2008.
19. Patel V, Chisholm D, Parikh R, Charlson FJ, Degenhardt L, Dua T, et al. Addressing the burden of mental, neurological, and substance use disorders: Key messages from Disease Control Priorities, 3rd edition. *Lancet* 2016;387:1672-85.
20. Hyman S, Parikh R, Collins PY, Patel V. Adult Mental Disorders.
21. Ruggeri M, Leese M, Thornicroft G, Bisoffi G, Tansella M. Definition and prevalence of severe and persistent mental illness. *The British Journal of Psychiatry*. 2000; 177(2):149-55.
22. Association AP. DSM 5: American Psychiatric Association; 2013.
23. Ro'ssler W, Salize HJ, van Os J, Riecher-Ro'ssler A. Size of burden of schizophrenia

- and psychotic disorders. *European Neuropsychopharmacology*. 2005; 15(4):399–409. <https://doi.org/10.1016/j.euroneuro.2005.04.009> PMID: 15925493
23. Salomon JA, Vos T, Hogan DR, Gagnon M, Naghavi M, Mokdad A, et al. Common values in assessing health outcomes from disease and injury: disability weights measurement study for the Global Burden of Disease Study 2010. *Lancet*. 2012; 380(9859):2129–43. [https://doi.org/10.1016/S0140-6736\(12\)61680-8](https://doi.org/10.1016/S0140-6736(12)61680-8) PMID: 23245605.
 24. Magnitude of Substance Use in India, 2019. National Survey on Extent and Pattern of Substance Use in India. New Delhi: Ministry of Social Justice and Empowerment, Government of India; 2019.
 25. Prakash JJ. Aging, disability, and disabled older people in India. *J Aging Soc Policy* 2003; 15:85–108.
 26. mhGAP: Mental Health Gap Action Programme : scaling up care for mental, neurological and substance use disorders. World Health Organization 2008. http://www.who.int/mental_health/mhgap_final_english.pdf.
 27. Shakya DR. Psychiatric Morbidity Profiles of Child and Adolescent Psychiatry Out-Patients in a Tertiary-Care Hospital. *J. Nepal Paediatr Soc*. 2010;30:79-84.6.
 28. Nissar Ahmad Kosigi et al. Clinical Profile of Patients Attending A Psychiatry Opd Clinic: at A Tertiary Care Setting Over A Period of 6 Months. *Indo American Journal of Pharmaceutical Research*. 2017;7(02).
 29. Karim E, Alam MF, Rahman AHM, Hussain AAM, Uddin MJ, Firoz AHM. Prevalence of Mental illness in the community. *TAJ*, 2006. 19(1):18–23.
 30. Pradeep Bodke, Rama Bhosle. Study of demographic profile of psychiatric patients of rural Maharashtra *MedPulse – International Medical Journal*, April 2014; 1(4): 145-148.
 31. Rosenfield S. Gender and mental health: do women have more psychopathology, men more, or both the same (and why)? In: Horwitz AV, Scheid TL, ed. *A Handbook for the Study of Mental Health: Social Contexts, Theories, and Systems*. New York, NY, US: Cambridge University Press; 1999. pp. 348–360.
 32. Bagadia VN, Ayyar KS, Lakdawala PD, et al. Psychiatric morbidity among patients attending medical outpatient department. *Ind J Psychiat* 1986;28(2):139.
 33. Deswal BS, Pawar A. 2012. An epidemiological study of mental disorders at Pune, Maharashtra. *Indian J Community Med*. 2012; 37:116-21.
 34. Lahariya C, Singhal S, Gupta S, Mishra A. Pathway of care among psychiatric patients attending a mental health institution in central India. *Indian J Psychiatry* 2010;52:333-8.
 35. Sunil Nayak, Sonaliya K.N. Morbidity patterns of patients attending psychiatry OPD in tertiary care hospital in Ahmedabad. *National Journal of medical research* 2011 Vol.1 Issue 1: 2449-4995
 36. Sood M, Ranjan R, Chadda RK, Khandelwal SK. Changing pattern of clinical profile of first-contact patients attending outpatients services at a general hospital psychiatric unit in India over the last 50 years. *India J Soc Psychiatry* 2017;33:213-8.
 37. Gupta V, Pathak S, Kumar V. Clinico-epidemiological profile of patients attending psychiatry outpatient department at state hospital of mental health and rehabilitation, Himachal Pradesh: a northern state of India. *International Journal of Research and Review*. 2020; 7(6): 152-155.
 38. A. K. Kala, R. Kala, J.C.Bathia. Changing sociodemographic and clinical profile of patient attending a general hospital psychiatric clinic: some indications of community acceptance.
 39. Noreena Kausar, Sidra Maqsood, Areeba Ikram; Profile of Psychiatric Patients, Visiting Outdoor of Psychiatric Department at Aziz Bhatti Shaheed Teaching Hospital, Gujrat; *Pakistan Social Sciences Review* September 2020, Vol. 4, No. III [337-350].
 40. Ghosh P, Doley M, Gogoi A. The Sociodemographic and Clinical Profile of Patients Attending a Private Psychiatry Clinic in Assam, India. *Ind J Priv* 2019;13(2):52–57.