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District Mental Health Programme in India: A study of socio-demographic and clinical data of patients attending DMHP Dumka (Jharkhand)

Psychiatry

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ABSTRACT

Aims: To study the socio-demographic and clinical profiles of all cases seen during 2007 to 2012 at District Mental Health Program, Dumka, Jharkhand. QQMaterials and Methods: This is a reterospective chart review of complete data of 6 years at DMHP Dumka.
Results: During the study period, 4578 males (61.5%) and 1832females (38.5%) utilized the psychiatric facilities provided under DMHP. majority of the patients were belonging to age group of 18-24 years, (32.4% males and 23.2% females). Sample consisted 31 % male and 51% female illiterate patients. Most of the patients (over 60%) reported for treatment with duration of illness from 6 months to 5 years and 80% of patients without any prior treatment. Affective psychosis remained the most common (31.1 % and 33.2% for male and female respectively) diagnostic category for this sample.
Conclusions: The present study offers socio-demographic and clinical profiles of major mental disorders at DMHP, Dumka, Jharkhand.

KEYWORDS:

Psychiatric, Prevalence, Clinical Profile, DMHP.

Introduction

In developing countries like India, the awareness in community on mental illnesses is a challenge even in present modern era. The Community Psychiatry is accepted as the "Fourth Pillar of Mental Health". The Government of India initiated the National Mental Health Programme (NMHP) in 1982 with the objective of improving mental health services at all levels of health care (primary, secondary, and tertiary) for early recognition, adequate treatment and rehabilitation of the patients with mental health problems within the community and in the hospitals (3). During the Eighth Plan, National Institute of Mental Health and Neurosciences (NIMHANS) developed a district mental health care model in Bellary District of Karnataka (4) and Tamilnadu (5). The District Mental Health Programme(DMHP) is the part of National Mental Health Programme. DMHP is the Community based Mental Health Programme whose objective is to provide sustainable basic mental health services to the community, to integrate these services with other health services, early detection and treatment of patients within the community itself and to reduce the stigma attached towards mental illness through awareness, change of attitude and public education regarding mental health and illness. A study was conducted by Waraich et al. (6) in 2003 at a DMHP set up in a 50 beded Civil Hospital in suburb of Chandigarh. The aim of the study was to analyze the sociodemographic and clinical data of all cases seen in the first six months and discusses the need of decentralisation of mental health services. A total of 527 patients were seen in the first six months. 52% of the males presented with substance use disorders while a majority of the females (40%) presented with mood disorders. In patients with illness of duration more than one year, upto 51.9% had no past psychiatric treatment and 27.6% were on irregular treatment. It was concluded that decentralisation was a felt need of the community and required not only in rural but urban areas as well.

In order to formulate any plan regarding mental illness, data regarding psychiatric morbidity is important in any state of a country. Besides biological factors, local contexts like social, economic and political turmoil are important contributing factors to make person susceptible to various psychiatric morbidities (7). Hence pattern of psychiatric disorders may vary from one place to another. Organizing mental health services in rural areas is a challenging task and many hurdles have to be overcome. However in a district lacking psychiatric treatment facilities it is probably logical to begin the services at the district hospitals. Dumka is one such district in state of Jharkhand whose population is around 13,00000 mostly residing in rural areas, out of which about 5,70000 i.e. about 43% is tribal population(8). There was no government psychiatric services available to the population apart from Ranchi Institute of Neuropsychiatry and Allied Sciences (RINPAS) located at Kanke, Ranchi which is at a distance of about 450 Km from Dumka. In view of these RINPAS the nodal agency proposed to start the first DMHP in Jharkhand at Dumka. After the necessary sanctions, the DMHP started as an OPD service in the Sadar Hospital, Dumka in the month of February 2006 with one psychiatrist, one psychiatric social worker, one psychiatric nurse, one attendant and one driver. With this aim, present study is conducted to find out demographic and diagnostic profile of patients attending DMHP Dumka, a district of state Jharkhand.

A similar study (9) conducted at DMHP, Shivpuri (M.P.), consisting of a study period of one year and with an objective to find out the pattern of mental disorders among the patients who attended the psychiatric OPD at District Hospital, Shivpuri (MP). It was found that depression was a major mental health problem followed by psychosis. The study indicated that females are more affected than males and the age of 21-30 years were much more vulnerable towards the mental problems. They concluded that both the rural and urban community can be provided with mental health services at lower cost utilizing the similar manpower. In a study (10) conducted in western region of Nepal, sociodemographic chracterstics and diagnostic profile of patients attending psychiatry department of a private hospital was assessed. The study concluded that the commonest age group affected with mental illness is younger age groups and neurotic, stress related & somatoform disorders are the most common psychiatric morbidity followed by mood disorders and substance use disorder.

Aim

To study the socio-demographic and clinical profiles of all cases seen during 2007 to 2012 at DMHP Dumka.

Methodology

This is a reterospective chart review of complete data of 6 years at DMHP Dumka.

Results

During the study period, 4578 males (61.5%) and 1832females (38.5%) utilized the psychiatric facilities provided under DMHP which represents 2.2% percent of the patients who sought treatment from the Sadar Hospital, Dumka during the same period. 16.5% males and 14.5% females were less than 19 years old Around 70% of patients were referred by old patients & NGO and only 12% by genral practitioners. About 17% patients traveled more than 50km to reach the DMHP centre while 40% were within 10 km radius. More than 70% patients were from the same district (table 1).

A significant number of the females (50%) were illiterate. More than 40% were only primary educated. Although the difference between male patient family income and female patient family income were not significant, but majority (70%) patients were from the family with income less than Rs. 30,000 per year. 58.2% patients belonged to nuclear family and rest come from joint families. Most of the male patients (56%) were laborers, farmers or unemployed. Majority of female patients were house wives. 61% patients were married and 34% were unmarried. Out of 6.1% widowed patients, 5.1% were females (table 2).

Table 3 shows the source from which patients came to know about the availability of psychiatric services at DMHP, Dumka. There is obvious delay in initiating psychiatric treatment in this population is evident from the fact that about 60% patients seen more than one year duration of illness (table 4), and among them only about 20% of patients had received treatment for their illness prior to consulting DMHP Dumka (table 5).

Only 5% patients reported that their family members were also suffering from psychiatric disorders (table 6).
Significant difference between male and female patients on diagnostic break-up was noted. This group was represented mainly by either affective or non affective disorders. Our study sample was represented mainly by the patients with affective (32.2%), non-affective disorders (18.8%), and epilepsy (15.9%). Only 11.3% (males 412 and females 274) and 8.9% patients (males 315 and females 221) were labeled as having anxiety disorders and headache respectively (table 7).

Discussion

This is a retrospective study which included all patients registered for psychiatric treatment at DMHP, Dumka from jan 2007 to dec. 2012. Socio-demographic and clinical details were recorded on a self made proforma. Diagnosis was made according to ICD-10 criteria by the psychiatrist in-charge of the DMHP.

In this study data of consecutive five years were studied and analyzed. This center was started in February 2006 with about 1000 patients being treated in very first year. Initially the attendance at the center was rather low. In order to create awareness in the community, multimodal techniques were used including pamphlet distribution, news items on local cable television network, and news paper articles. Thereafter attendance has gradually improved and there were demands to make these facilities available at more areas. There was increase in total number of patients attending the center in first three years of its opening, followed by gradual decline in number of patients in subsequent years. The reason for gradual decline may be due to stoppage of multimodal techniques that were earlier used for initial two to three years to impart awareness among community.

A high prevalence of morbidity in the less than 18 years age group may be due to inclusion of epilepsy and mental retardation, both being disorders having an early age of onset. This is in concordance with the study done in other setting in India (11) and also in neighbouring country such as Nepal (12,13). The awareness or concern of parents towards this age group for mental and neurological disorders might also have contributed to this observation. Approximately 70% males and 60.2% females were of less than 35 years of age. This is followed by a gradual decline. Similar tendency was reported by earlier workers also (14). Psychiatric morbidity among male (61.5%) is significantly more than females (38.5%) in the present study. Dube (11) in his field survey in Uttar Pradesh found a high prevalence of mental morbidity in females than in males. Nandi et al (15) corroborated this finding of high psychiatric morbidity in their study in Bengal. In a study by Khan et al. (16) Psychiatric morbidity was almost equal among male and females. These are in contrast to the findings of our study. This may be due to tribal dominate study group and social role of women in the tribal societies is certainly different from non-tribal societies. That women in tribal communities are less vulnerable to mental illness than their men folk might be a reflection of their gender role characteristic to these societies (17). However two studies conducted in Nepal in 1999 shows high prevalence of psychiatric morbidity among males compared to females (18,19), which is in accordance of present study finding.

One of the objectives of DMHP is to provide services to unreached population of the state so that people can easily access them. About 40% of subject were from a distance of 10 km from the centre. Similarly 78.5% of patients attending NIMHANS extension clinic were from a distance of 20 Km (20). As expected most of the subjects were from rural areas of Jharkhand but preponderance of nuclear family was high. The increased preponderance of nuclear family among the population shows that the joint family system in the rural segment is also under disintegration. This findings is similar to the earlier study conducted at RINPAS (7).

Most of the male subjects are laborers or farmers while majority of females are house wives involved in household work. This is understandable from the fact that the persons who visits DMHP mostly belongs to rural population who are predominantly illiterate. Majority of the subjects are married. Marriage is a social norm in rural population in India and no persons can become a full member of the society especially in tribal society unless he/she is married. In the present study we found a very low prevalence of divorce or separation. Whether this is due to greater amount of tolerance among these families or strong social support is a matter of further study. Similar low percentage of persons being seperated or divorced was also found in a study by Khan et al.(16).

Analyses of the source of information revealed that majority of the patients were referred by old patients (37.3%) who have benefited from treatment at RINPAS or at this centre. About 18.5% (21% male and 15% females) needed some kind of help from NGOs. This may be due to lack of recognition, lack of knowledge of the available services or due to misconceptions regarding the illness. Suprisingly only 12.5% were referred by general practitioners. The reason for the general practitioners not referring the patients is that they themselves treat the patients and referral to the DMHP means a loss of income even though the general practitioners totally lack the knowledge to treat these adequately. This not only underlines the urgent need for including psychiatry as a separate examination at undergraduate level as is the practice in most countries but also stressing the need for improving knowledge of medical ethics in the curricula. Cases referred from RINPAS were those patients who are from the places near to the center but are unaware of the facility or were admitted in RINPAS and were referred to this center for follow up.

Out of the total patients studied, 18.3% were diagnosted as having non affective psychoses which included acute psychosis, schizophrenia, scizotypal, and delusional disorders. 32.2% (1423 males and 608 females) were diagnosed as suffering from affective psychoses (major depressive disorders and bipolar disorders). 33.2% females in our study suffered from mood disorders and 15% from anxiety disorders as compared to 31.1% and 9% in males. 9.5% and 15.4% of our sample were suffering from headache and epilepsy respectively. 5.5% had mental retardation. Only 3.2% male patients presented with substance abuse as their primary diagnosis compared to 0.27% in female. In Sakalwara, Karnatka (22)from 1977 to 1980, a total of 71% were epileptics, and 7.7% has acute psychosis and 7.8% manic depressive psychoses. The Raipur Rani study (23) reported schizophrenia in 11%, MDP in 18%, epilepsy in 13.8%, anxiety neurosis in 22%, depressive neurosis in 21%. Study conducted in the year 1999 at western regional hospital (government run hospital) in Pokhara, mood disorders emerged as the largest group (29%), followed by neurotic, stress-related and somatoform disorders (24.2%), schizophrenia, schizotypal and delusional disorders (10.5%) and mental and behavioral disorders due to psychoactive substance use (7.3%) (19). Waraich et al had found 6.8% nonaffective psychosis, 40.3% females were suffering from mood disorders and 29.7% from anxiety disorders, 2.4% were suffering from epilepsy (6). The studies conducted in the out-patients

in other parts of the world are rather similar to the findings of present study, in which most of the patients were suffering from psychotic disorders, and less were suffering from neurotic disorders (24,22).

The preponderence of psychotic disorders in the study sample is due to the fact that these disorders are disruptive and therefore the patients are brought for treatment. It is likely that with increasing awareness more patients with neurotic and other psychiatric disorders will report for treatment.

More than 64.1% patients had history of illness exceeding six months. Of these more than 80% presented for the first time to the clinic. Out or remaining 20% only 7.4% were on regular treatment. In an indian study by Warriach et al (6) 51% patients were with illness more than one year that had no prior psychiatric treatment. The reasons for such high treatment gap are lack of awareness for psychiatric illness, misconception on the illness, unavailability of psychiatric clinic in nearby places, poverty and illiteracy. In the Sakalwara experience upto 46.7% of epileptics and 23% of schizophrenia patients had no history of prior psychiatric treatment. In corroboration with the Sakalwara(22) experience present study also confirmed that number of patients are neglected and not getting any treatment. Not only severely mentally ill patients are present in villages for several years with significant disability in personal, social and vocational spheres.

Conclusion

The present study offers robust evidence for both the feasibility and effectiveness of psychiatric treatment of major mental disorders on outpatients basis in DMHP. Both the rural and urban community can be provided with mental health services at lower cost utilizing the similar manpower. The present survey indicated that the age of less than 35 years were much more vulnerable towards the mental problems. Majority of the mental disorders have a good prognosis, suggesting the need for early identification and prompt management. Awareness program in public about mental disorders will definitely be of help. The clear and obvious benefits of psychiatric treatment have resulted in increasing popularity and increasing demand for the services.

Table 1. Year wise distribution of patients attending DMHP

year	total
2007-08	1462
2008-09	1511
2009-10	1303
2010-11	925
2011-12	1209
2007-12	6410

Table -2 Socio -demographic profile of patients attending DMHP

Age	Male	Female	Significance
< 18	778 (17%)	275 (15%)	
18-24	1483 (32.4%)	425 (23.2%)	X^2 =20 df=5 P=<0.001
25-34	801 (17.5%)	414 (22.6%)	
35-44	778 (17%)	423 (23.1%)	
45-54	366 (8%)	183 (10%)	
> 54	372 (8.1%)	112 (6%)	
Education			
Illiterate	1419 (31%)	934 (51%)	
Primary	1025 (22.4%)	421 (23%)	
Matriculate	952 (20.8%)	238 (13%)	
Intermediate	549 (12%)	165 (9%)	
Graduate	522 (11.4%)	55 (3%)	
Post graduate	111 (2.4%)	19 (1%)	
Income (Rs)			
<3000	3204 (70%)	1383 (75.5%)	
3000-49000	503 (11%)	179 (9.8%)	
50000-99000	506 (11.1%)	183 (10%)	
100000-149000	188 (4.1%)	60 (3.3%)	
> 150000	177 (3.8%)	27 (1.4%)	
Family Type			
Nuclear	2655 (58%)	1117 (61%)	
Joint	1922 (42%)	715 (39%)	
Occupation			
Labour/Farmer	1510 (33%)	164 (9%)	
Student	732 (16%)	174 (9.5%)	
Unemployed	1053 (23%)	133 (7.3%)	
House Wife	----------	1157 (63.2%)	
Shopkeeper	435 (9.5%)	33 (1.8%)	X^2 = 511.276 Df = 11 P<0.01
Govt/pvt class IV	252 (5.5%)	60 (3.3%)	
Clerical workers	92 (2%)	5 (0.3%)	
Officers	92 (2%)	37 (2%)	
Professionals	229 (5%)	5 (0.3%)	
others	183 (4%)	64 (3.6%)	
Marital Status			
Married	2576 (56.3%)	1263 (68.9%)	
Unmarried	1890 (41.3%)	432 (23.6%)	
Widowed	50 (1.1%)	92 (5%)	
Divorced	13 (0.3%)	27 (1.5%)	X^2 =50.71, df = 6 P<0.01
Separated	26 (0.6%)	18 (1%)	
Remarried	23 (0.5%)		

Table 3 Source of information about DMHP

Source of information	Male	Female	Total
Old patient	1510 (33%)	824 (45.%)	2334 (36.4%)
Private physician	549 (12%)	238 (13%)	787 (12.3%)
RINPAS, KANKE	206 (4.5%)	55 (3%)	261 (4.1%)
NGO	961 (21%)	274 (15%)	1235 (19.2%)
Others	1352 (29.5%)	441 (24%)	1793 (28%)

Table 4 Duration of illness

Duration of illness	Male	Female
< 1 month	686 (15%)	344 (18.8%)
1-6 month	824 (18%)	366 (20%)
6month - 2years	1323 (28.9%)	557 (30.4%)
2years - 5years	1700 (37.1%)	542 (29.5%)
> 5years	45 (1%)	23 (1.3%)

Table 5 Prior psychiatric consultation

Psychiatric consultation	N (%)
On regular treatment	341 (7.4%)
On irregular treatment	581 (12.6%)
No prior treatment	3688 (80%)
Total	4610 (100%)

Table 6 Family History

Family history	Male	Female	X2 = 191 df =4 NS
Without family history	4340 (94.8%)	1740 (95%)	

Non affective disorders	73 (1.6%)	14 (0.8%)	
Affective disorders	87 (1.9%)	27 (1.5%)	
Neurotic disorders	27 (0.6%)	14 (0.8%)	
Substance use disorder	27 (0.6%)	7 (0.4%)	
Others	24 (0.5%)	30 (1.6%)	

Table 7 Diagnostic breakup

Diagnosis	Male	Female	
Non affective psychosis	924 (20.2%)	298 (16.3%)	
Affective psychosis	1423 (31.1%)	608 (33.2%)	
Neurotic disorders	412 (9%)	274 (15%)	
Headache	315 (6.9%)	221 (12.1%)	
Epilepsy	764 (16.7%)	267 (14.1%)	$X^2 = 41.9$ df =11 P<.01
Other neurological disorders	109 (2.4%)	33 (1.8%)	
Substance use disorders	146 (3.2%)	5 (0.27%)	
Mental retardation	283 (6.2%)	88 (4.8%)	
Childhood psychiatric disorders	73 (1.6%)	18 (1%)	
Personality disorders	13 (0.3%)	9 (0.5%)	
Other psychiatric disorders	78 (1.6%)	5 (0.27%)	
Co morbid disorders	38 (.8%)	6 (0.33)	

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