

**ORIGINAL RESEARCH ARTICLE****STUDY OF PSYCHIATRIC MORBIDITY OF PATIENTS ATTENDING FREE MENTAL HEALTH CHECK UP CAMPS IN FAR WESTERN RURAL NEPAL**CP Sedain<sup>1\*</sup><sup>1</sup> Department of psychiatry, Chitwan Medical College, Bharatpur, Chitwan, Nepal.**\*Correspondence to:** Prof Dr C P Sedain, Department of Psychiatry, Chitwan Medical College Bharatpur, Chitwan, Nepal. Email: [drcpsedai@yahoo.com](mailto:drcpsedai@yahoo.com)**ABSTRACT**

The hilly area of far western development region is the most remote area of Nepal. This is the region of less health facility. The aim of the study was to find out psychiatric morbidity of patients attending free check up clinic of far western development region Nepal. A prospective cross-sectional study comprised of all consecutive patients attending free check up psychiatric clinic of far western development region Nepal. All the patients attending the free clinics for four days were taken as case. The study was performed in the month of June, 2013. Demographic data and disease profile of 287 patients attending the clinic were analyzed. The ratios and proportions were used for statistical analysis. Most of Patients attended of far western development region free mental health clinic were farmer of age group 20-29 years. The commonest incidence of psychiatric illness was depressive disorder and (tension/migraine) headache.

**Key words:** BPAD, Diagnosis profile, Socio-demographic characteristics.

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**INTRODUCTION**

The hilly area of far western development region is the most remote area of Nepal. This is the region of less health facility. The majority of people of this region are poor. The psychiatric problems in the far western development region are high as compare to other part of the country. HIV positive cases are found in Acham, Doti and Bajura districts. These people still believes traditional healers. The free mental health check up was done in Daduldhara, Doti, Acham and Bajura districts. Many patients came from neighboring districts for free check up. Most of the patients were poor, low educational status. No single psychiatrist posted in these areas. Most of the people go to India for treatment of mentally ill patients.

The Far Western Region covers 19,539 sq km, comprises two zones, the Seti and Mahakali. The Far Western Region is remote and developmentally challenged. Forty four percent of people in the Far West Hills and 49% in the Himalayan districts live beneath the poverty line. The region has limited access to basic services and increasing services is

challenging due to the difficult topography. Major Challenges are prevalence in this region like gender and caste based discrimination, lack of employment and high seasonal migration to India, high prevalence of HIV/AIDs among migrants, a legacy of socio-economic exploitation, such as bonded labour and the kamaiya/haliya systems, widespread child labour etc.<sup>1</sup>

Studies on psychiatric morbidity are scarce in Nepal. The pattern of psychiatric illness has been described to similar across the country. Regmi et al found that majority of cases were neurotic stress related and somatoform disorder (42.46%) followed by mood disorder(37.23%).<sup>2</sup> There are few studies on mental illness e.g. by Nepal et al, Wright, Shrestha and Sharma. About half of the patients in all studies were of the age group 20-40 years and more than half were males. However, the diagnostic distribution differed among the studies. Nepal et al found that the patients mainly suffered from neurotic and related disorders. Majority of the patients in Wright's study were epileptic (32%), while Shrestha found

most of the patients were suffering from psychosis (63%), however Sharma described as many as 41% suffered from depression. The inconsistencies may be because of the difference in the setup, population studied and the criteria used. Shrestha studied the patients attending a Mental Hospital valley; Sharma conducted the study in private clinic setup in Pokhara, whereas Wright studied the patients attending the health posts in a rural community. Thus despite the inconsistencies in the diagnostic distribution, the findings in the different setup have their own importance.<sup>3</sup> The Quality Adjusted Life Year (QALY) losses in primary care is highest in pain related physical condition followed by mood disorder.<sup>4</sup>

Major depression was the most common psychiatric problem seen in primary care. Prevalence figures for major depression vary substantially between surveys.<sup>5</sup> Depression was more common among the unemployed, divorced, medical illness. These conditions can act as non-specific stress, which may lead to mood disorder in predisposed subject. The present study was conducted to find out psychiatric morbidity of patients attending far western development region of Nepal. The free mental health check up camp was performed four places Dadeldhura, Doti, Achham and Bajura district.

## METHODS

A prospective cross-sectional study comprised of all consecutive psychiatric patients attending far western development region of Nepal. All the patients attending the psychiatric free check up clinics were taken as case. The study was performed month of June 2013. A brief explanation about the study was offered to the subjects and written or verbal consent was obtained either from them or guardians. A continuous sequential number was given to each subject and available necessary information was kept confidential in a separate file. The socio demographic profile which contains name, age, sex, caste, address, marital status, occupation, and other information also filled. The diagnosis was done on the basis of I.C.D. - 10 diagnostic research criteria.<sup>6</sup> Data were entered in to a computer and analyzed using Statistical Package for Social Studies (SPSS) software. The free psychiatric patients check up camp was completed in four days.

## RESULTS

A total of 287 patients were included in the study. Out of them male were 151(52.61%) and female were 136 (47.39%). Data shows highest numbers of patients were age group 20-29 (N-68, 23.69%) followed by age group 30-39 (N-63, 21.95%). Data shows highest numbers of patient were married (N-191, 66.55%) and most of cases were farmer (N-162, 56.44 %). Distribution on the basis of ICD 10 diagnosis, highest number of cases were depressive disorder (N-98, 33.45 %) followed by tension/migraine headache (N-44, 15.33%), epilepsy (N-25, 8.01 %) and alcohol use disorder (N-24, 7.67 %). Similarly Schizophrenia (N-19, 5.92 %), anxiety disorder (N-18, 5.57 %), somatoform disorder (N-16, 5.57 %), mania/BPAD (N-15, 4.52 %) and conversion disorder (N-7, 2.44 %) were found .

**Table 1: DISTRIBUTION ON THE BASIS OF AGE GROUP**

AGE	N	%
10-19	43	14.98
20-29	68	23.69
30-39	63	21.95
40-49	53	18.47
50-59	36	12.54
60-69	20	6.97
70-79	4	1.39
<b>TOTAL</b>	<b>287</b>	<b>100</b>

**Table 2: DISTRIBUTION ON THE BASIS OF SEX**

SEX	CASE	
	NO	%
MALE	151	52.61
FEMALE	136	47.39
<b>TOTAL</b>	<b>287</b>	<b>100</b>

**Table 3: DISTRIBUTION ON THE BASIS OF MARIETAL STATUS**

MARITAL STATUS	NO	%
MARRIED	191	66.55
UNMARRIED	77	26.83
WIDOWED	19	6.62
<b>TOTAL</b>	<b>287</b>	<b>100</b>

**Table 4: DISTURIBUTION ON THE BASIS OF OCCUPATION**

OCCUPATION	N	%
FARMER	162	56.44
BUSINESSMAN	13	4.53
SERVICE HOLDER	24	8.36
HOUSEWIFE	27	9.41
LABOUR	28	9.76
UNEMPLOYED	17	5.92
STUDENT	16	5.57
<b>TOTAL</b>	<b>287</b>	<b>100</b>

**Table 5: DISTURIBUTION ON THE BASIS OF DIAGNOSIS (ICD-10 DCR)**

DIAGNODIS-ICD,10	MALE	FEMALE	TOTAL	%
DEPRESSIVE DISORDER(F32)	36	62	98	33.45
SCHIZOPHRENIA (F20)	11	8	19	5.92
EPILRPSY (G40)	12	13	25	8.01
MANIA/BPAD (F30-31)	10	5	15	4.52
ANXIETY DISORDER (F40-41)	6	12	18	5.57
ALCOHAL USE DISOR- DER (F10)	21	3	24	7.67
SUBSTANCE USE DISOR- DER (F11-19)	1	1	2	0.69
CONVERSION DISOR- DER (F44)	2	5	7	2.44
ADHD	1	1	2	0.69
PTSD (F43)	3	0	3	1.04
SOMATOFORM DISOR- DER (F45)	9	7	16	5.57

ORGANIC PSY DISOR- DER	2	4	6	2.09
MENTAL RETARDATION (F70-79)	2	2	4	1.39
(TENSION/MIGRAINE) HEADACHE (G43-44)	33	11	44	15.33
OTHER	2	2	4	1.39
<b>TOTAL</b>	<b>151</b>	<b>136</b>	<b>287</b>	<b>100</b>

## DISCUSSION

Far western region lacks of basic health services and high malnutrition. They has low literacy rate, insufficient school facilities and limited access to quality education. The Far West also has high maternal and child mortality rates and a high prevalence of HIV/AIDS. Hygiene and sanitation in the region are poor. More than 70% of people living in the region do not have access to toilets but use 'open defecation areas'. There is also a strong preference, particularly among those living in rural areas, to visit religious healers (Dhami, Jhakri) when they are sick, rather than visit formal health institutions.

The life style is becoming complex day by day, thus the patients consulting the psychiatrist is increasing. Depressive disorder is the commonest psychiatric disorders worldwide. A review of anxiety disorder surveys in different countries found that average lifetime prevalence estimates of 16.6%, with women having higher rates on average.<sup>7</sup> A review of mood disorder surveys in different countries found that lifetime rates for major depressive disorder was 6.7% , while 0.8% for Bipolar disorder. In the United States the frequency of disorder was found anxiety disorder (28.8%), mood disorder (20.8%), impulse-control disorder (24.8%) or substance use disorder (14.6%).<sup>8</sup> A 2004 cross-Europe study found that approximately one in four people reported met criteria in some point in their life for at least one of the DSM-V psychiatric disorders assessed, which included mood disorders (13.9%), anxiety disorders (13.6%) or alcohol disorder (5.2%). Approximately one in ten met criteria within a 12-month period. Women and younger people of either gender showed more cases of disorder. A 2005 review of surveys in 16 European countries found that 27% of adult Europeans are affected by at least one mental disorder in a 12 month period.<sup>9</sup> Psychiatric disorder like schizophrenia, BPAD, alcohol & drug addiction

problems are also equally challenging to us. A ten-year prospective study in Zurich, estimated the life time prevalence of major depression is about 16 percent. The rate of depressive disorder seemed to be higher in industrialized countries.<sup>10</sup> They were consistently increased in women across different cultures. Nepal et al and Regmi et al reported that patients attending to psychiatric OPD of TUTH were commonly neurotic and stress related disorder. Similarly Sharma's study shows 41% patients were depressive disorder, similar to our finding. Pokhrel et al reported mood disorder (35%) followed by schizophrenia and related disorder (28%) and neurotic and stress related disorder (17 %) respectively as major psychiatric disorders. Depression is more common among the unemployed and divorced people. Depressive illness was observed more among the patients of SLC and intermediate education level in our study. All medical illnesses and their treatment can act as non-specific stress factors which may lead to mood disorder in predisposed subjects. Prevalence of psychiatric disorders among the general hospital population is higher than in the community. Sedain found depressive disorder is the commonest psychiatric disorder (18.93%) free mental health check up clinic Simara, Bara, Nepal.<sup>11</sup>

## REFERENCES

1. Far-western regional health directorate Dipayal, Nepal, annual report 2014.
2. Pokhrel et al. Sociodemographic characteristics and diagnostic profile of patients admitted in psychiatric ward of TUTH, Katmandu. *Nepalese Journal of psychiatry* 1992;(2):13-17.
3. Regmi et al. Studies of sociodemographic characteristics and diagnostic profile in psychiatric outpatient of TUTH. *Nepalese Journal of psychiatry* 1999;1:26-33.
4. Fernandez A, Sammeno JB, Printo-Meza A, Luciano VJ, et al. Burden of chronic condition and mental disorder in primary care, *British journal of psychiatry* 2010;196:302-309.
5. Smith AL, Weissman MM, Smith. Cross national epidemiology of major depression and bipolar disorder. *Journal of American medical association* 1992.
6. World Health Organization. International Classification of disease and related health problems, Tenth revision: Clinical description and diagnostic guideline; Geneva: World Health Organization. 1992
7. Kessler RC, Berglund P, Demler O, Jin R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Arc Gen Psychiatry* 2005;62(6):593-602.
8. Waraich P, Goldner EM, Somers JM, Hsu L. Prevalence and incidence studies of mood disorders: a systematic review of the literature. *Can J Psychiatry* 2004;49(2): 124-38.
9. Alonso J, Angermeyer MC, Bernert S, et al. Prevalence of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatr Scand Suppl* 2004;109:(420):21-7.
10. Angst J. How recurrent and predictable is depressive illness. In long term treatment of depression, eds S. Montgomery and F Rouillon. Wiley, Chichester; 1992:1-3 .
11. Sedain CP. study of psychiatric morbidity of patients attending free mental health check up camp, Simara, Bara district of Nepal. *JCMC* 2012;3:15-17.