

■ *Original Article*

Psychiatric Morbidity Pattern in a Health Camp in Eastern Nepal

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Abstract

Introduction: Health camp is a strategy of mental health service delivery. The present study was conducted to find out psychiatric morbidity pattern seen in camp in a village of eastern Nepal. **Method:** Information about all relevant variables of the cases seen by a psychiatrist team in a specialty camp were recorded in a particular record-book. We used the ICD-10 for the diagnosis of mental and behavioral disorders. The data recorded were analysed using descriptive statistical measures. **Result:** Of 160 cases analysed, 106 (66.25%) were female. The most common age groups were 35-39 (20%), 20- 24 (11.25%) and 40- 44 (11.25%). The most common psychiatric diagnoses in the Nepalese camp setting were depressive, somatoform and anxiety disorders. Primary headaches and seizure disorders were also common. Four cases (2.5%) were acutely severe and were in the immediate need of intervention. **Conclusion:** Most common psychiatric diagnoses were mood, somatoform and anxiety disorders in Nepalese camp setting. Some require urgent attention and admission. This indicates a need for regular mental health camp programs in our set up.

Keywords: Health camp, mental health service, Nepal, Psychiatric morbidity

Introduction

Psychiatric disorders are common but many of them are underrecognized and undertreated because of various reasons.¹⁻⁴ Psychiatric service and mental health are behind the scene in national health policy and priority in Nepal.⁵⁻⁶ Regular health camp may be one of the useful strategies to reach community with basic minimum mental health services.⁶⁻⁸

There is a paucity of information about psychiatric morbidity pattern in Nepalese camp setting. As a preliminary study, this survey was conducted to find out psychiatric morbidity pattern in a health-camp in eastern Nepal held in April, 2007.

Methods

Along with the other specialties of B. P. Koirala Institute of Health Sciences, Dharan, Nepal upon

the request of the Health Ministry of Nepal, a psychiatrist team (including the author, i.e. consultant and a junior resident) delivered their clinic service at Harinagara, a village of eastern Nepal in April, 2007. A record of all consecutive cases seen by the psychiatrist at the camp was made after consent from the organizing committee authority. The information was kept confidential. Patients; refusing to participate in the study, whose primary diagnosis was not neuro-psychiatric and whose record could not be maintained or whose information was incomplete because of lack of time or occasional crowds, were excluded from the analysis.

Basic demographic information (age, gender, caste) and psychiatric diagnoses were recorded. The psychiatric work up, necessary investigative procedures and referrals possible in the camp setting were done. The psychiatric diagnoses were made according to the International Classification of Diseases-10 (ICD-10) criteria.⁹

Data were entered into a computer and analyzed using 'Statistical Package for Social Studies' (SPSS) - software.

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Results

Among total cases seen by the psychiatrist, 160 consecutive subjects with record of information were analysed in the study. Out of them, 106 (66.25%) were female, with male to female ratio of 0.51:1. (Table 1).

Table 1. Gender Distribution

Gender	Number (%)
Male	54 (33.75)
Female	106 (66.25)

Average age of the subjects was 34.76 years, with age range of 8- 70. Patients of age group (20- 29 year) constituted the largest proportion 26 (43.3%), followed by 30- 39 year 17 (28.3%) and 10- 19 year 10 (16.7%). (Table 2).

Table 2: Age Distribution

Age (in years)	Number (%)
< 15	10 (6.25)
15- 19	12 (7.50)
20- 24	17 (10.63)
25- 29	16 (10.00)
30- 34	15 (9.38)
35- 39	31 (19.37)
40- 44	18 (11.25)
45- 49	14 (8.75)
50- 54	11 (6.87)
≥ 55	16 (10.00)

Ethnicity distribution of the subjects shows a number of castes of 36, majority of which are native Terai ethnic groups. The top 4 castes according to the number of subjects were: Mehata, Khatun, Shah and Yadav. (Table 3).

Table 3: Ethnicity Distributions

Ethnic groups	Number (%)
Alam	3 (1.88)
Ansari	4(2.50)
Bali	1(0.63)
Bhagat	3(1.88)
Chand	1(0.63)
Chaudhari	9(5.63)
Das	9(5.63)
Deo	4(2.50)
Dhamala	1(0.63)
Gupta	3(1.88)
Habib	1(0.63)
Jain	1(0.63)
Jha	4(2.50)

Khatun	15(9.38)
Mahat	1(0.63)
Mahato	5(3.13)
Malakar	1(0.63)
Mali	1(0.63)
Mandal	2(1.25)
Mehata	34(21.25)
Mochi	1(0.63)
Neupane	2(1.25)
Pal	3(1.88)
Pandit	3(1.88)
Paswan	3(1.88)
Poddar	5(3.13)
Rai	3(1.88)
Raya	2(1.25)
Sedia	1(0.63)
Shah	15(9.38)
Sharma	2(1.25)
Shrestha	1(0.63)
Swarnakar	1(0.63)
Thakur	2(1.25)
Urav	1(0.63)
Yadav	12(7.50)

The most common psychiatric diagnoses were: mood (41, 25.63%) mainly depressive (35, 21.88%), somatoform (30, 18.80%) and anxiety disorders (9, 5.63%). Dysthymia, bipolar affective disorders (BPAD), organic mental, mental retardation, behavioral syndromes associated with physiological disturbances and physical factors were all 3 (1.88%) each. Schizophrenia, stress related and other disorders (dhat syndrome) were 2 (1.25%) each. Primary headaches were present in a remarkable proportion (34.38%). It included migraine (21.25%), tension type (3.75%) and other headaches (10%). Seizure was other common disorder. (Table 4).

Table 4: Psychiatric diagnoses *

ICD code	Psychiatric diagnosis	Male (%)	Female (%)	Total No. (%)
F 0- 09	Organic, including symptomatic	0	3 (1.88)	3 (1.88)
F 10- 19	Psychoactive substance use	1 (0.63)	0	1 (0.63)
F 20- 29	Schizophrenia, schizotypal & delusional	1 (0.63)	1 (0.63)	2 (1.25)
F 30- 39	Mood (affective)	14 (8.75)	27 (16.88)	41 (25.63)
F 30, 31				
F 32,33	Manic episode, Bipolar affective	1 (0.63)	2 (1.25)	3 (1.88)
F 34,38,39				
	Depressive illness	13 (8.13)	22 (13.75)	35 (21.88)
	Dysthymia/ Others	1 (0.63)	2 (1.25)	3 (1.88)
F 40- 42				
F 43F 44	Phobic, other anxiety and	5 (3.13)	4 (2.50)	9 (5.63)
F 45	Obsessive compulsive			
	Stress related/ adjustment	1 (0.63)	1 (0.63)	2 (1.25)
	Dissociative (conversion)		1 (0.63)	1 (0.63)
	Somatoform	5 (3.13)	25 (15.62)	30 (18.75)
F 50- 59	Associated with physiological/ physical factors	1 (0.63)	2 (1.25)	3 (1.88)
F 70- 79	Mental Retardation	3 (1.88)	0	3 (1.88)
	Primary headaches	16 (10.00)	39 (24.38)	55 (34.38)
	Migraine headache	6 (3.75)	28 (17.50)	34 (21.25)
	Tension headache	4 (2.50)	3 (1.88)	7 (4.38)
	Other headaches	6 (3.75)	10 (6.25)	16 (10.00)
	Seizure disorders	2 (1.25)	3 (1.88)	5 (3.13)
	Others/ dhat syndrome	2 (1.25)	1 (0.63)	3 (1.88)

* Multiple response category – One respondent may have one or more responses.

Discussions

Mental and behavioral problems are common ailments in the community more or less uniformly distributed worldwide.¹⁻² Nepal is yet to have a comprehensive community based data of prevalence, severity, burden, service and other important aspects of mental disorders though there are some local data.³ It is estimated that about 15% of the population are suffering from some mental disorders and 1% are in need of immediate intervention.⁸ Mental health and psychiatry is almost out of scenario in the national health policy and priority in Nepal. Resource allocation to this end is negligent. Despite of a growing number of teaching institutes with department of Psychiatry and non-government organizations claiming to work in different psycho-social sectors, Nepal will have to struggle enormously for providing needy people essential mental health services.⁶⁻⁷

In the current context of extreme scarcity of resources (money, manpower, material and management), every possible strategy will have to be utilized to provide basic mental health services. Along with extension of regular clinic, inpatient, rehabilitation services and awareness raising programs; regular mental health camps may prove useful strategy in Nepalese settings as well.⁸ Department of Psychiatry, B. P. Koirala Institute of Health Sciences, Dharan, Nepal took the request of the governmental organizing committee of the Specialist camp in eastern Nepal as an opportunity to provide service in this light. Among different sites of the camp, the author was appointed as a consultant psychiatrist from the department for 5 day Harinagara Specialist camp held in April 2007. Harinagara is a village of eastern Nepal, surrounded by different villages. There is one sub-health post which was devoid of basic health man power like

majority of Nepalese rural health centres. About the mental health service, there were no one to provide it because of lack of necessary training, knowledge, skill in available personnels; essential drugs and integration of the service into main health service system.

As the camp was organized with multi-specialty service for 5 day duration, it was likely to reduce stigma about mental illness. Prescribed essential medications were distributed free of cost. Hence, there was a likelihood of attracting majority of the needy people. In such a situation, however, some non-needy people may also have visited the health camp. Regarding mental illness, we can also take it positively since many people with mild but longstanding problem such as phobia are also likely to seek help in such a condition. The 5 day duration and the postering about the program in nearby localities might have attracted most of the people in need. So possibly, the service might have touched the needy people of the community despite many lacunae that should be addressed in subsequent similar camps. We assume that the mental health service users of the camp might represent the psychiatric patients of the community to some extent, off course not completely. In the context of extreme lack of community data about psychiatric illness, we therefore, planned to analyse the cases seen then to have some idea about the psychiatric morbidity pattern in Nepalese health camp setting. We strongly believe that it would be a preliminary data which needs to be corroborated with subsequent more meticulous and elaborate studies.

There are few reports of some psychiatry camp from Nepal.^{6,8} With the hope that the present study would open avenues for further larger studies, this camp based survey was carried out. Though the psychiatry team saw around 500 patients, we could maintain record of 160 cases only because of various reasons: we did not enroll patients whose primary diagnosis was not neuro-psychiatric, many occasions with overcrowding hindered record keeping, and loss of some records. Many patients referred by other specialty teams did not have psychiatric problem. The over referral/ reliance of other specialties may reflect both the lack of confidence about handling mental illness and the acceptance of the psychiatric service among non-psychiatrist medical professionals. No patients refused to be enrolled

when explained about the purpose of record and confidentiality. Though we analysed only available data, we believe that it did not dilute our objective achievement of looking into psychiatric morbidity pattern in camp setting. Even then, the results of the study should be interpreted in the light of all these limitations and constraints.

In this study, there were more female subjects. This finding possibly reflects the real community situation with more females suffering from a greater proportion of psychiatric morbidity. In other studies also, it has been seen that more females than males are affected by mental illness. Comparatively, females are affected by milder forms of mental illness, they seek help in need from others and they are more receptive of interventions than male counterparts. Perhaps, the female preponderance of current study is consistent with this fact which will be confirmed by community based prevalence studies. There were fewer representations of child and adolescent patients with mental illness. The remarkable presence was noticed of mental retardation though a variety of disorders have been reported to visit BPKIHS,¹⁰ a nearby tertiary care hospital whose team was providing the camp service.

The ethnicity distribution of this study reflects more or less the population distribution of this region of Nepal. The overwhelming majority of the camp service utilizers in Harinagara were native Terai ethnic groups. Mehata, Khatun, Shah and Yadav were the main service utilizers by number. However, there were people of 36 different castes seeking help from the camp indicating the fact that many ethnic groups reside in and around the village harmoniously. The small number of the disadvantaged groups- Dalits of utilizing the service is probably because of their backwardness and ignorance. Though small in number, Brahmins like Neupane, Sharma; Chhetris; Newars like Shrestha; Mongols like Rai and relatively greater number of Muslims like Khatun and Habib were also service utilizers who were originally immigrants from the places other than Terai region of Nepal.

It is assumed that many of the people with common mental illness must have visited the health camp. There is a chance that the psychiatric morbidity pattern seen in this analysis might reflect the community morbidity pattern to a great extent as discussed. The most common psychiatric disorders

in the camp were: mood, somatoform and anxiety disorders. The most common mental illness seen in this study was mood mainly depressive disorder. Depressive illness has been projected to be among the most common disorders accountable for the greatest DALY lost worldwide.¹ This finding is consistent with other community prevalence studies.³⁻⁴

Somatoform disorders were almost equal to depressive illness in this study. Considering the pretext of multispecialty camp and scope of referral, this finding was expected to be realistic. This is consistent with the pattern seen in the referral study in B P Koirala Institute of Health Sciences, a tertiary care centre catering eastern Nepal.¹¹

Anxiety disorders, inclusive of phobias and obsessive-compulsive disorders are supposed to among the most common mental illnesses as seen in many community based studies.¹² At the same time, majority of them may not assume the problem as a disorder or disease and not seek professional help which is usual story worldwide. In this health-camp study, we had 5.7% of the total cases with this spectrum of illness coming for help. They might have come since the service was doorstep and they might have come for other ailments but revealed during assessment. For example, panic disorder cases were referred from the medical team who were visited by the patients thinking that their palpitations, shortness of breath and other problems were heart and chest related.

Dysthymia, bipolar affective disorders (BPAD), and mental retardation were all 3 (1.88%) each of total cases. Schizophrenia was found in 2 (1.25%) cases. Proportionwise, this pattern is consistent with other community prevalence studies.^{1,3} Considering the ongoing political conflicts and natural disasters in the area, the stress related disorders like adjustment and post-traumatic stress disorders (PTSD) were less representing in this study. Possibly, many of these patients already might have depressive or somatoform disorders. Classical PTSD symptoms were reported by few patients in the camp like in another study carried out in BPKIHS among psychiatric patients with armed conflict related stressors.¹³

Many patients had headache as their presenting complaints. Primary headache was the most common diagnosis made in 34.38% subjects seen by the psychiatrist in Harinagara health camp. Migraine

headache was a common diagnosis. Many had mixed and other headaches and some had tension-type headache. Diagnosis of Seizure disorder/ epilepsy was made in 3.13%.

One case of acute mania with psychotic features, one case of severe depressive episode with psychotic symptom and two cases of psychotic disorders were brought in the camp. They were in the need of immediate intervention and referred as psychiatric emergencies to better centre, BPKIHS with 24 hour-psychiatric emergency service.¹⁴

These health-camp findings about psychiatric morbidity pattern in this region need validation with further community based studies.

Conclusion

Most common psychiatric diagnoses were mood, somatoform and anxiety disorders in Nepalese camp setting. Some require urgent attention and admission. This indicates a need for regular mental health camp programs in our set up.

Needy community people may visit health camp service provided in their access and vicinity. Regular mental health camps may prove a useful strategy for providing doorstep service to community.

Acknowledgements

The investigator expresses thanks to the organizing committee of the Harinagara Specialist camp, Ministry of health of Nepal, Prof. PM Shyangwa, Head, Dr. Mohan, Department of Psychiatry, BPKIHS, Dharan and all those from Harinagara who cooperated during the camp and the study. Last but not the least, my thanks are due to Mrs. Rajani Shakya who has been a great help in the data entry and manuscript write-up of this work.

References

1. Murray CL, Lopez AD. The Global Burden of Disease: a Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk Factors in 1990 and Projected. Cambridge, Mass: Harvard University Press; 1996.
2. Satcher D. Mental Health: A Report of the Surgeon General. Washington, DC: Government Printing Office, 1999. [available online at www.surgeongeneral.gov]

3. Upadhyaya KD, Pol K. A mental health prevalence survey in two developing towns of western region. *J Nepal Med Assoc.* 2003;42:328-30.
4. Wang PS, Aguilar-Gaxiola S, Alonso J, et al. Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys. *Lancet.* 2007, 370:841-50.
5. Shakya DR. Mental health in New Nepal. In: *Souvenir of the 24th All Nepal Medical Conference (ANEMECON); April 2009.* Pp 62-64.
6. Jha A, Adhikari SR. Mental Health Services in New Nepal – Observations, Objections and Outlooks for the Future. *J Nepal Med Assoc* 2009;48(174):185-90.
7. Shangwa PM, Jha A. Nepal: trying to reach out to the community. *International Psychiatry.* 2008, 5(2):36-8.
8. Jha A. Nepalese psychiatrists' struggle for evolution. *Psychiatric Bulletin.* 2007, 31:348-350.
9. World Health Organization. *The ICD-10 Classification of Mental and Behavioral Disorders Diagnostic Criteria for Research.* Geneva: WHO; 1993.
10. Shakya DR. Psychiatric morbidity profiles of Child and adolescent Psychiatry out-patients in a tertiary-care hospital. *J Nepal paediatr soc.* 2010, 30(2):79-84.
11. Shakya DR, Pandey AK, Shyangwa PM, Shakya R. Psychiatric morbidity profiles of referred Psychiatry OPD patients in a general hospital. *Indian Medical Journal.* 2009 Dec; 103(12): 407- 411.
12. Pine DS and McClure EB. Anxiety Disorders: Clinical features. In: Sadock BJ and Sadock VA, editors. *Comprehensive Textbook of Psychiatry.* 8th Ed. Philadelphia: Lippincott, Williams and Wilkins; 2005. p. 1768-80.
13. Shakya DR, Lamichhane N, Shyangwa PM, Shakya R. Nepalese Psychiatric patients with armed-conflict related stressors. Paper presented in the 1st World Congress of Asian Psychiatry, August, 2007, Goa, India.
14. Shakya DR, Shyangwa PM, Shakya R. Psychiatric emergencies in a tertiary care hospital. *J Nepal Med Assoc.* 2008 Jan- Mar; 47(169): 28-33.