



PSYCHIATRIC COMORBIDITY IN HEADACHE PATIENTS IN A TERTIARY CARE HOSPITAL OF EASTERN INDIA

Neurology

Dr. Krishna Kumar Singh

Associate Professor, Dept. of Psychiatry, IGIMS, Patna, Bihar

Dr. Abhay Ranjan

Associate Professor, Dept. of Neurology, IGIMS, Patna, Bihar

Dr. Niska Sinha*

Assistant Professor, Dept. of Psychiatry, IGIMS, Patna, Bihar *Corresponding Author

ABSTRACT

Background: Headache is one of the commonest symptoms present in patients attending hospitals and has a high prevalence in community settings as well but very few studies have looked into concurrent psychiatric manifestations.

Aim: The current study aims to investigate the socio demographic, clinical profile as well as psychiatric co-morbidity in patients presenting with headache.

Methodology: This study was conducted in patients attending the psychiatric outpatient department of Indira Gandhi Institute of Medical Sciences, Patna, Bihar, a tertiary care hospital in Bihar. It was a cross-sectional study using a purposive sampling with a sample size of 120 patients of primary headaches diagnosed using International Headache Society criteria II. MINI International Neuropsychiatric Interview Schedule PLUS (MINI PLUS) was used to assess various comorbid psychopathology present.

Results: Out of 120 patients consenting for study, 48 (40 %) were males and 72 (60%) females with age range 18 years to 60 years (34.8 ± 6.4 years). Most common type of headache was Tension- type headache (43%) followed by migraine (36%). Study found significant psychiatric co-morbidity with headache, as high as 51% of which commonest were mixed anxiety-depressive disorders followed by major depressive disorder in about 15 % of these patients.

Conclusion: The study highlights high prevalence of psychiatric morbidity in headache patients which needs to be addressed while managing such cases as they might have an impact on treatment outcomes, and headache-related disability.

KEYWORDS

Headache, Anxiety, Depression, MINI PLUS, Psychiatric comorbidity

INTRODUCTION:

Headache is one of the most common complaints occurring in patients attending outpatient clinics of hospital. Prevalence of headache in general population has been reported to be as high as 46 % and life-time prevalence of about 64 %.¹

Global burden of diseases show tension type headache and migraine as the second and third most prevalent disorders worldwide.^{2,3} In majority, despite extensively investigated, no organic cause is found. Also a very strong relationship has been found between primary headaches and psychiatric disorders but despite this it still remains poorly understood in terms of its clinical presentations and its relationships with various psychopathology as there exists a complex interaction and the dilemma whether psychopathology is the cause or a consequence.⁴

Existence of psychiatric co-morbidity in headaches complicates the management often leading to poor prognosis and its assessment is crucial in maintenance of disorder, headache facilitating the psychiatric co-morbidity and vice versa.⁵ Hence, understanding the clinical patterns of headache and its association with psychiatry disorders is crucial in planning integrated treatment.⁶

This study aims to explore the socio-demographic patterns, clinical presentations and psychiatric co-morbidity in the patients presenting with primary headache from tertiary care hospital in Bihar which has been poorly explored in past and would help in understanding of this important and prevalent clinical construct.

AIM OF STUDY:

The current study aims to explore the sociodemographic profile, headache presentation subtypes and prevalence of psychiatric comorbidity in those suffering from headache coming to clinical settings.

MATERIALS AND METHODS:

Settings:

This study was conducted in patients attending the psychiatric outpatient department of Indira Gandhi Institute of Medical Sciences, Patna, Bihar, a tertiary care hospital in Bihar.

Study design:

It was a cross-sectional descriptive study using a purposive sampling technique with a sample size of 120 patients.

METHODOLOGY:

This study was carried out at outpatient department of psychiatry of a tertiary care hospital of Eastern India after obtaining ethical clearance for the study. The study sample was collected using purposive sampling technique on a sample of 120 patients who gave written consent for the study. Study was done in those patients with headache coming to outpatient department during March 2016 to May 2016 and diagnosed to be suffering from primary headache as per International Headache Society criteria-II. Patients of age range between 18 to 60 years of age of both sexes were taken. Patients with secondary headaches, major physical, major psychiatric disorders and those who did not consent were excluded from the study sample. Socio-demographic details, clinical profile were recorded using a semi-structured performa. MINI International Neuropsychiatric Interview Schedule PLUS (MINI PLUS) was used to assess various co-morbid psychiatric psychopathology present.

Tools Used:

International Headache Society criteria II:

The International Classification of Headache Disorders (ICHD) is a detailed hierarchical classification of all headache-related disorders published by the International Headache Society. It is considered the official classification of headaches by the World Health Organization, and, in 2004 International Headache Society criteria II was introduced for clinical diagnosis of various types of headaches.⁷

MINI International Neuropsychiatric Interview Schedule Plus (MINI PLUS):

MINI Plus is short and efficient diagnostic interview and is used in clinical as well as diagnostic settings. It has good clinical validity and reliability and is easy to administer.⁸

Statistical methods:

Descriptive statistics was used to report the socio-demographic characteristics of the patients. Statistical analysis was done using SPSS software version 16.0. Chi-square was used to assess association between categorical variables and a p-value of significance $p \leq 0.05$.

RESULTS:

A total sample of 120 patients of primary headache were studied. Socio-demographic and clinical characteristics showed that there were 48 (40 %) males and 72 (60%) females. The study included age range between 18 to 60 years in the sample and mean of 34.8 ± 6.4 years.

Majority of patients were in the age group of 31-40 years (39%), followed by 21-30 years (28%). 88 (73%) of the patients were literate, 80(66%) were married and majority i.e 90 (75%) belonged to middle socio-economic status. 48(40%) of the participants were employed, 34(28%) were unemployed and 38(32%) were homemaker.

Most common type of headache was Tension-type headache (43%) followed by migraine (36%) and cluster headache in 7.5 % of the patients. (Table 1) Study also revealed significant psychiatric comorbidity in patients presenting with headache, as high as 51% of which commonest were mixed anxiety-depressive disorders in 20 % of these patients followed by major depressive disorder in about 15 % of these patients. Other psychiatric diagnosis present were dysthymia, panic disorders and generalised anxiety disorders. (Table 2)

Table 1: Type Of Headache As Per International Headache Society Criteria II

Type of Headache	No.(Percentage)
Tension type headache	52(43.33%)
Migraine	44(36.66%)
Cluster Headache	9(7.5%)
Trigeminal autonomic cephalgias	7(5.83%)
Others	8(6.66%)

Table 2: various Psychiatric Diagnosis Present In Patients Of Headache:

Psychiatric diagnosis:	Number (N)	Percentage (%)
Overall presence of Psychiatric comorbidity	62	51.66
Break up of various Psychiatric diagnosis present:		
Major Depressive Disorder	18	15
Generalised Anxiety Disorder	4	3.33
Dysthymia	6	5
Panic Disorder	5	4.16
Suicidality	1	0.83
Substance dependence	4	3.33
Mixed Anxiety depressive disorder	24	20

DISCUSSION:

Headache is one of the most common but disabling complaint in those attending primary care centres and majority of them have primary headaches. Like other pain disorders, headache pain has multiple and diverse etiologies. The absence of other signs and symptoms often puzzle us with the mysteries of the unknown in search of a rational explanation and hence, a thorough evaluation of various psychological factors is important in this widely prevalent entity.

Mean age in this study was 34.8 years which supports the earlier studies which have found headache to be more common among middle aged individuals. Females were more in the study sample and hence headache being more common presentation in females of many types of headaches as found by many earlier studies.⁹

Large number of patients present to health care providers with headache as predominant complaint in this part of region but very few studies have been conducted in Bihar to study the psychiatric morbidity in various types of headache. The present study was planned keeping these facts in view. The strength of this study includes diagnosis of cases using MINI PLUS scale, which has a good reliability and validity. Also, diagnosis was further confirmed by taking detailed history, where ever needed. Headache is a common somatic complaint by psychiatric patients.

It is observed in previous studies that major depressive disorder is more frequent psychiatric comorbidity in headache patients.^{10,11} The current study however has showed mixed anxiety depressive disorder to be more common. Depression and anxiety disorders have integral relationship with each other through common biological and mental pathways. Hence, early identification of psychiatric comorbidity in headache patients is of vital importance in planning its effective management. The findings of high rates of depression and anxiety in patients of primary headache in the current study are in accordance with earlier conducted studies.

Sample in this study was taken from cases referred or reporting to psychiatric outpatient might have contributed to high co-morbidity of psychiatric disorders in these patients. Tension-type headache was the

most common headache type observed by other researchers as well. Headache presents as somatic symptom in patients of various psychiatric disorders like depressive and anxiety disorders.

In Indian culture, where low mood is not often considered a disease, people often manifest it in the form of somatic symptoms as a form of verbalization of low mood in such patients. Moreover, psychiatric disorders can be risk factors for both the onset and chronicity of primary headache and can affect both their course and outcome.^{12,13} Evidence suggests that patients with psychological symptoms are more likely to seek medical help hence more robust findings can be obtained from study sample from general population with headache. Psychiatric comorbidity often complicates management of headache and leads to poor prognosis.^{14,15} Thus, health professionals need to be sensitised to screen psychiatric symptoms in patients presenting with headache and alert them to pay more attention to assess the various psychological aspects of headache.¹⁶

Limitations of study are that sample size is very small, owing to which generalization of the findings is not possible; randomized sampling instead of purposive sampling as in this study would have been better. Most studies conducted in clinic settings have inherent bias and hence current study being from a tertiary care hospital, thus findings need to be confirmed by more elaborate population-based studies with larger sample size in future and taking control group. However despite these limitations, the present study still throws some light on this quiet prevalent clinical entity whose importance cannot be overlooked.

CONCLUSION:

There is high prevalence of psychiatric morbidity in patients presenting with headache which needs to be addressed while managing these patients as it has an impact on treatment outcomes. Also headache may present as somatic symptom in patients with psychiatric disorders. Hence, clinicians should be alert in accessing the various comorbid psychiatric disorders while treating for effective and wholesome management of such cases.

Financial Support And Sponsorship: Nil.

Conflicts Of Interest: There are no conflicts of interest.

REFERENCES:

- Manzoni GC, Stovner LJ (2010) Epidemiology of headache. Handbook of Clinical Neurology 97:3-22.
- Stovner LJ, Hagen K, Jensen R, Katsarava Z, Lipton R, Scher A et al. The global burden of headache: a documentation of headache prevalence and disability worldwide. Cephalalgia 2007;27(5):403-13.
- Rasmussen BK, Jensen R, Schroll M, Olesen J. Epidemiology of headache in a general population-a prevalence study. J Clin Epidemiol 1999;44:1147-57.
- Lipchik GL, Penzien DB. Psychiatric comorbidities in patients with headache. Sem Pain Med 2004;2:93-105.
- Sheik S, Raheel M, Rayees A, Tasleem Arif et al. Recognising Risk of Psychiatric Comorbidity in Headache: Looking for Symptoms of Anxiety and Depression in Headache: A Study from General Hospital in Kashmir (India). Journ Depress Anxiety 2014; SI:006.
- Verri A, Proietti C, Galli C, et al. Psychiatric co-morbidity in chronic daily headache. Cephalalgia 1998;18: 45-49.
- Headache Classification Subcommittee of the International Headache Society (2004) The International Classification of Headache Disorders: 2nd edition. Cephalalgia 24: 9-160.
- Meuldijk D, Giltay EJ, Carlier IV, Van Vliet IM, van Hemert AM, Zitman FG. A Validation Study of the Web Screening Questionnaire (WSQ) Compared With the Mini-International Neuropsychiatric Interview-Plus (MINI-Plus). JMIR mental health. 2017;4(3):e35.
- Shah PA, Nafee A (1999) Clinical profile of headache and cranial neuralgias. J Assoc Physicians India 47: 1072-1075.
- Lake AE 3rd, Rains JC, Penzien DB, Lipchik GL (2005) Headache and psychiatric comorbidity: historical context, clinical implications, and research relevance. Headache 45: 493-506.
- Mitsikostas DD, Thomas AM (1999) Comorbidity of headache and depressive disorders. Cephalalgia 19: 211-217.
- Wang SJ, Juang KD (2002) Psychiatric comorbidity of chronic daily headache: impact, treatment, outcome, and future studies. Curr Pain Headache Rep 6: 505-510.
- Goadsby PJ, Raskin NH (2008) Headache. In: Fauci AS, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, Loscalzo J, editors: Harrison's Principles of Internal Medicine. 17th edn. McGraw-Hill Companies, United States of America, Inc. p. 95-107.
- Serrano-Duenas M. Chronic tension-type headache and depression. Rev Neurol 2000;30:822-6.
- Mitsikostas DD, Thomas AM. Comorbidity of headache and depressive disorder. Cephalalgia 1999;19:211-7.
- Marazziti D, Toni C, Pedri S, Bonuccelli U, Pavese N, Nuti A, et al. Headache, panic disorder and depression: Comorbidity or a spectrum? Neuropsychobiology 1995;31:125-9.