



STUDY OF CLINICAL PROFILE OF PATIENTS WITH CHRONIC HEADACHE IN A TERTIARY CARE HOSPITAL IN CENTRAL INDIA

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ABSTRACT Headache is one of the most common morbidity which affect humans. Developing countries have a lacunae in the study of headache pattern in general population. The present study was conducted to study the etiological and clinical profile of chronic headache patients. The study included 200 patients with complaints of headache for more than 3 months attending the outpatient department of Department of General medicine, L. N. Medical College and J. K. Hospital and Research Centre, Bhopal., India. Patients underwent thorough clinical examination and psychiatric evaluation and clinical investigations were done as and when required. Among the 200 patients with chronic headache, chronic primary headache (73%) was the most common type, with migraine found in 47% of cases, and tension-type headache (TTH) in 20%. Chronic headaches were significantly more common in women and younger age groups. Since most of headaches seen in practice are primary headaches, which are treatable. This study would help in identifying the significant gaps in headache care and in strengthening existing health systems so that they better recognize headache disorders.

KEYWORDS : Chronic headache, Primary headache, Migraine, Tension type headache

INTRODUCTION

World Health Organization (WHO) ranked headache amongst the ten most disabling conditions in the world by.¹ At least 4% of patients complain of headache in general medical practice, accounting for 4% of outpatient physician visits which makes it one of the most common complaints. It is often the most earliest symptoms in a wide spectrum of diseases.²

According to based on general population, around 70% of the individuals experience atleast one headache per year and only about 15% consult a physician.³ The global prevalence of active headache diseases in the adult population is 46%. A headache which lasts more than 15 days/month is considered chronic headache. About 3% of the world's population is affected by chronic headache.^{1,4}

While headache has been an unaddressed cause of morbidity around the world, it has remained largely unrecognized in the developing world.^{1,5} Most clinical and epidemiological studies have originated in developed countries and there is scarce literature to support treatment guidelines or public health interventions to deal with headache in low and middle income countries where 85% of the world's population lives.¹

In spite of the fact that headache is one of the most common of medical complaints, most headaches in practice continue to be under diagnosed and under treated. Even today many treating physicians feel that nothing much can be done for headache patients. And since more than 90% of headaches seen in practice are primary headaches, it is to be realised that matters have come a long way in the last decade and there is now enough evidence to prove that primary headaches are a genuine potentially treatable biological problem.

It is therefore important that clinicians do not err in making the right diagnosis and choosing the correct drug options.⁴ Knowing the headache profile of patients attended to in tertiary care centers may help the preparation of diagnostic and therapeutic processes at the primary and secondary care levels, enabling a more suitable treatment of the cases.⁷

Therefore this study has been done with an aim at documenting the patients presenting with different types of chronic primary headache, their clinical profile.

METHODS

This study was an observational study conducted by Department of General medicine, L. N. Medical College and J. K. Hospital and Research Centre, Bhopal., India. A total of 200 patients were registered in the OPD of general medicine and neuro-psychiatry. Patients with complaints of headache for more than three months were included in

study after obtaining written informed consent. Pregnant mothers were excluded from the study. Detailed history was obtained from all patients and thorough physical examination was conducted.

The questionnaire recorded the duration, frequency, intensity, laterality, character of pain, associated symptoms, aggravating factors and family history. Detailed examination with reference to general condition, refractory error, fundus examination, neck movements and CNS examination. Specialist opinion in ENT, Ophthalmology and Psychiatry was obtained for all the patients. Thereafter International Classification of Headache Disorder II criteria applied to classify headache.

Data were represented as number of patients in different groups along with relative percentage.

RESULTS

A total of 200 patients were registered in the OPD of general medicine and neuro-psychiatry. Females outnumbered males accounting for 77% of the target population. There was a female predominance among the patients with primary as well as secondary headache.

Majority of the chronic headache patients were in the middle age group of 21-40 years. The distribution of different types of chronic headache among the target population is shown in Table 1. Chronic Primary headache was the most common type accounting for 73%.

Table 1: Distribution of number of patients different types of headache

Types of headache	No. of patients	Percentage
Primary headache		
Chronic Migraine headache	72	36
Chronic Tension headache	40	20
Probable Chronic Migraine	12	06
Episodic Migraine With aura transition to chronic migraine	10	05
New daily persistent headache	10	05
Chronic cluster headache	02	01
Secondary headache		
Drug overuse headache	10	05
Post sinusitis headache	20	10
Trigeminal neuralgia	10	05
Post traumatic headache	08	04
Psychogenic headache	06	03
Total	200	100

The most common type of primary headache disorder diagnosed in our study population was Chronic Migraine headache with a total prevalence of 46%.

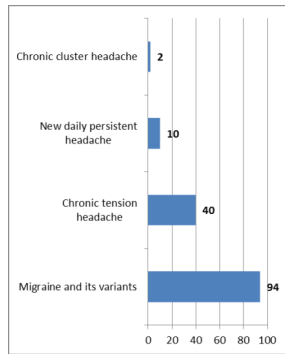


Image 1: Distribution of patients in different types of chronic primary headaches.

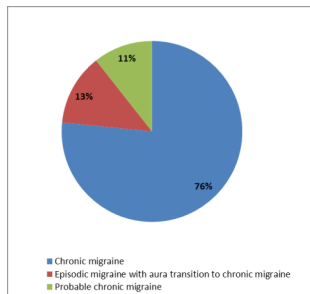


Image 2: Types of migraine headache.

Chronic tension type headache (CTTH) was the second most common type with a prevalence of 20%. Among secondary headaches, the most common type was the post sinusitis headache followed by the headache caused by drug overuse and trigeminal neuralgia.

Table 2: Clinical characteristics of patients with chronic primary headache.

	Migraine (N=94)	Tension (N=40)	NDPH (N=10)
Character			
Pulsating/throbbing	94 (100%)	0	01 (10%)
Pressing	0	38 (95%)	09 (90%)
Others	0	02 (5%)	0
Headache intensity			
Moderate	04 (02%)	22 (55%)	04 (100%)
Severe	90 (98%)	18 (45%)	01 (20%)
Site of pain			
Unilateral	61 (65%)	03 (08%)	0
Bilateral	33 (35%)	37 (92%)	10 (100%)
Headache location			
Frontal	16 (17%)	04 (10%)	0
Frontotemporal	47 (50%)	28 (72%)	05 (50%)
Frontooccipital	12 (13%)	03 (08%)	03 (30%)
Occipital	09 (10%)	02 (05%)	02 (20%)
Temporal	06 (06%)	0	0
Temporoparietal	04 (04%)	02 (05%)	0
No of days of Headache/month			
15-20	79 (84%)	36 (90%)	02 (20%)
20-25	11 (12%)	04 (09%)	01 (10%)
25-30	04 (04%)	0	07 (70%)
Duration of headache in hours			
4-8	60 (64%)	37 (92%)	02 (20%)
9-16	19 (20%)	01 (03%)	02 (20%)
17-24	09 (10%)	02 (05%)	06 (60%)
>24	06 (06%)	0	0

Image 1 shows the distribution of patients with different types of chronic primary headaches. Among the 94 patients with migrainous

headache, 72 patients (76.6%) presented with chronic migraine followed by 12 patients (12.77%) with probable chronic migraine and the remaining 10 patients had transition from migraine with aura to chronic migraine (Image 2). Of the 40 patients with CTTH, 2 patients presented with pericranial tenderness accounting for 5%. Clinical characteristics of patients with chronic primary headache are shown in Table 2. Majority of the Migraine headache retains its pulsatile / throbbing quality whereas majority of patients with tension and NDPH had headache of pressing quality. Intensity of headache was more severe in patients with migraine (90%) type of headache (75%).

Among the migraine patients, 65% presented with unilateral headache and the remaining 35% with bilateral headache whereas most of the patients with tension headache and NDPH presented with bilateral headache accounting for 92% and 100% respectively.

Fronto temporal area was the most common site. Other common locations were frontal and frontooccipital. Least common is temporoparietal side. Majority of chronic headache patients suffers from headache around 15-25 days/month. However in NDPH patients had headache throughout the month. Most of the migraine and tension headache patients presented with headache for a duration of 4-8 hours. However majority of NDPH persisted for 17-24 hours.

Stress was the most common aggravating factors in patients with chronic migraine (83%) as well as chronic tension headache (74%). Other aggravating factors such as noise, smell and lighting are commonly associated with migraine headache Cough and cold are the major aggravating factors in patients with post sinusitis headache (100%) whereas washing face, chewing acted as trigger factors for patients with Trigeminal neuralgia (100%).

DISCUSSION

Majority of the patients who sought treatment were between 21 and 40 years of age, the most productive age group. Most of the patients were women. A comparable sex ratio was seen in different previously reported studies. Similarly, this study indicates the fact that headaches are more common in women.¹¹⁻¹³

In the present study, out of 200 patients with headache, primary headache was the predominant type accounting for 73% as compared to Secondary headache seen only in 27%. Consistent with our finding, AP Jain et al showed primary headache as the predominant type with a prevalence of 92.5% and remaining 7.5% with secondary headache.¹² According to our results, Chronic Migraine (and its variants) headache was the most common type of headache with a prevalence of 47% followed by Chronic tension headache diagnosed in 20%. This was lower migraine in an earlier study done by Chakravarthy et al, who reported that 82% of the patients suffered from Migraine followed by 16% from CTTH whereas in contrast Ravi et al has reported CTTH as the most prevalent type.^{13,14}

Several studies have reported a different prevalence of headache types, which might be due to different cultural and population characteristics of the studied patients. The frequency of the types of headache diagnosed in the overall population differs from that verified in tertiary care centers, possibly due to the higher or lower level of morbidity caused to individuals, which influences the demand for medical assistance.¹¹

Epidemiological evidence from around the world suggests TTH is the most common cause of primary headache.¹⁴ This variance is attributed to self-treatment of tension type headaches by the general population. Nonetheless, the higher prevalence of migraine is evident and reflects its clinical importance to seek medical assistance. Stress is the most commonly reported trigger of migraine headache. Population based and subspecialty clinic based studies have reported that a stressful event or situation was trigger of migraine headache in 36% to 42% and 62% to 72%.^{15,16}

CONCLUSION

Headache in India is neglected neurological symptom. Most common cause of headache falls in primary category although secondary causes should be ruled out. Most patients suffered from primary chronic headache requiring only clinical evaluation. To prevent misconceptions among doctors and to promote research, headache must be given greater importance in the medical curriculum.

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