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# EVALUATION OF SOCIODEMOGRAPHIC FEATURES IN PATIENTS OF MIGRAINE – AN OUTPATIENT CLINIC STUDY

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#### ABSTRACT

**Background**: Headache is a major cause of disability and loss of output in any age group. Migraine is a type of headache, classified as primary headache. Extensive study of patients of migraine leads to the conclusion it is actually more a neurological disorder on its own, rather than a type of headache. Aim: This work has been done to elaborate the profile of migraine patients. Sociodemographic classification of migraine cases might help us to pinpoint the etiology and causative factors involved in the disorder and hence also the disease alleviating measures. Methodology: Subjects taken include patients presenting with history of chronic headache. They were diagnosed as migraine patients based on history, clinical and neurological profile and criteria as enumerated by the International Headache Society to diagnose migraine. All were outpatients attending an urban clinic in Punjab, but came from a variety of background. Patients underwent detailed clinical examination and neurological examination. Investigations like CT, MRI were done as required. Results: Majority of patients i.e. 41.8%, came from socioeconomic class III. 64.7% of patients were from rural areas. Majority were females in age group 21 to 30 years. The type of presentation most common was migraine without aura, followed by migraine with aura, tension type headache coexisting with migraine and transformed migraine. Conclusions: Adult females in age group 21 to 30 years from rural areas formed most of the cases. Socioeconomic status does not seem to play a significant role. This is a study exclusively focussing on migraine patients. Further supportive study with larger sample size will be more helpful in concluding the results pioneered by this study. It is also recommended that raising awareness about the clinical and neurological entity of migraine will also be a useful aspect as more patients will seek appropriate treatment.

KEYWORDS: Headache, Migraine, Primary headache, Etiology of migraine, Prevention of migraine.

# INTRODUCTION

Migraine is the most common headache type and the most common headache related and neurologic cause of disability in the world, affecting 15% of women and 6% of men over a 1 - year period.<sup>[1]</sup> Headache itself comprises a large spectrum of disorders. Although disabling, they remain under-recognized and under-treated throughout the world.<sup>[2]</sup> The Global Burden of Disease Survey 2000 (GBD2000), conducted 12 years ago by the World Health Organization (WHO), listed migraine as the 19<sup>th</sup> cause of disability in the world, responsible for 1.4% of all years of life lost to disability (YLDs).<sup>[3]</sup> Headache disorders, including migraine and tension-type headache, are among the most prevalent disorders of mankind. The prevalence studies estimate that half to three quarters of adults aged 18 - 65 years in the world have had headache in the last year. According to these studies, over 10% have migraine, and 1.7-4% of the adult population are affected by headache on 15 or more days every month.<sup>[4]</sup> Migraine is considered as a relatively benign disorder. However, research has shown an association between migraines and stroke, and

especially between migraine with aura and ischaemic stroke. Patients can also suffer from migrainous infarction, a subset of ischaemic stroke.<sup>[5]</sup> Looking forward, and not to end on an impliedly negative note, we remind researchers that further population-based studies are needed to fill the remaining knowledge gaps. Migraine is first cause of disability in under 50s: will health politicians now take notice?<sup>[6]</sup>

This work was designed to study the profile of migraine in patients attending an outpatient clinic in Punjab. This will help in identifying the aetiology of the malady and hence relief measures.

#### MATERIAL AND METHODS

This study was proposed as an observational study in which 51 cases of migraine attending an outpatient clinic in Punjab were taken. Patients were of all ages, gender and socioeconomic background. A record of these factors as well as whether they belonged to urban or rural regions was also made. These patients had headache more than 3 month standing.

Detailed history was taken, along with noting down other concomitant illness and a thorough clinical examination was done to rule out other causes of headache which included specific reference to blood pressure, and other criteria like ocular examination including fundus examination, sinus tenderness, pain on neck movement etc. Diagnosis of migraine was made as per criteria laid down by the International Headache Society. Informed consent was obtained from the patients.

# RESULTS

In this study, 51 cases of migraine were taken. The distribution of various patients as regards migraine was as shown in Table 1.

#### Table 1: Distribution of various migraine types.

Type of migraine	Total	Percentage
Migraine with aura	11	21.57%
Migraine without aura	34	66.67%
Transformed migraine	2	3.9%
Tension type + migraine	4	7.84%

Distribution of age group was as shown in Figure 1. Most patients were in 21 to 30 years age group.

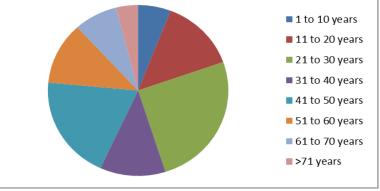


Figure 1: Distribution of age group.

Number of females affected as compared to males was more (72.54%) as shown in the next pie chart i.e. Figure 2.

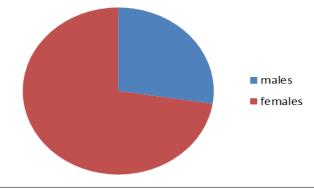


Figure 2: Migraine distribution according to gender.

As far as socioeconomic status was concerned, a preponderance of socioeconomic class III was observed.

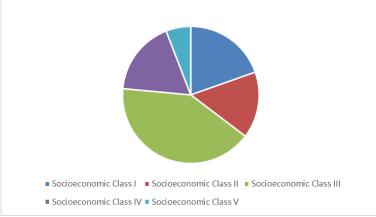


Figure 3: Distribution of migraine patients according to socioeconomic status.

64.7 % of the patients were from rural areas while 35.3% were urban residents as shown in Figure 4.

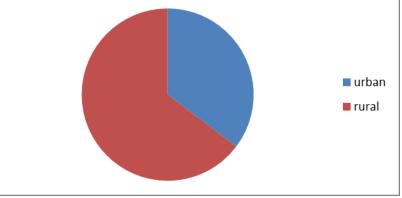


Figure 4: Rural preponderance in migraine cases.

# DISCUSSION

The study group included migraine cases in the age range between 7 to 75 years, with larger number of patients in the age group 21 to 30 years. It is observed as in other studies that female migraine cases are more numerous than male patients.<sup>[7]</sup> A rural preponderance is seen in this study. Socioeconomic status does not seem to play a significant role. Class I individuals may be less numerous as such and class V unable to access private health clinic readily which may account for lower number of cases from these classes.

The burden of migraine cannot be taken lightly. In the age group 15–49 years, migraine is the top cause of YLDs.<sup>[8]</sup> In 2011, WHO's global survey of headache disorders and resources, a Global Campaign project, laid bare the scale and scope of under-treated headache everywhere, and its consequences. WHO wrote, in a message sent inter alia to the world's Ministries of Health: "This first global enquiry into these matters illuminates the worldwide neglect of a major publichealth problem, and reveals the inadequacies of responses to it in countries throughout the world."<sup>[2]</sup>

Thus, migraine cases need to be evaluated further for possible factors predisposing to the disorder. In the present study, more number rural cases have emerged. It is proposed that awareness must be raised about headache disorders and the neurological pathophysiology of migraine. Socioeconomic status does not have a significant role as per the present study. As the study was clinic based, the results cannot be extrapolated to the population. A larger sample size is also needed to explore the socioeconomic profile of migraine patients. To conclude, it is suggested that evaluation of demographic factors and raising awareness about the clinical and neurological entity of migraine will be a useful tool in tackling this burdensome disorder.

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