

ORIGINAL ARTICLE

Prevalence of Migraine in Young Male Patients Presented with Severe Headache

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ABSTRACT

Background and Aim: Migraine is a spiking prime headache disorder that has a significant impact on both patients and society. Migraine and other headache disorders are major causes of misery and frailty on a global scale. The aim of the present study was to determine the prevalence of migraine in young male patients presented with severe headache.

Methodology: This cross-sectional study was carried out on 276 young male patients who presented with severe headache Medicine outpatient department (OPD) at Ayub Teaching Hospital, Abbottabad from August 2019 to July 2020. Criteria of International Classification of Headache Disorders were followed for headache diagnosis. All the patients of age range 15-40 years with severe headaches were enrolled whereas patients of previous chronic medical conditions were excluded. Ethical approval was taken from the institutional ethical committee. All the demographic details were gathered in a pre-designed proforma. SPSS version 24 was used for data analysis.

Results: A total of 276 young adult patients who presented with severe headaches were investigated during the study period. The mean age was 29.38±8.65 years with an age varies from 15 years to 40 years. Most of the patients were in the age range of 31-40 years 132 (47.8%) followed by 21 to 30 years 97 (35.1%). Patients of age 15-20 years were less frequent with a prevalence of 47 (17.1%). The overall prevalence of migraine headache was in 137 (49.6%) patients out of which migraine with and without aura was 5.7% and 43.9% respectively. Tension-type headache being the second common headache was found in 23.7% followed by Cluster headache at 2.8%.

Conclusion: Migraine without aura was the most prominent headache among young male outpatients with severe headache. The findings highlight the socioeconomic factors impact on headache epidemiology and show that excessive use of NSAIDs may have an effect the primary headaches distribution. More multicenter studies are needed to assess headache epidemiology across the country.

Keywords: Severe Headache, Migraine, Prevalence, Tension Type Headache (TTH)

INTRODUCTION

Migraine is a spiking prime headache disorder that has a significant impact on both patients and society. Migraine and other headache disorders are major causes of misery and frailty on a local and global scale. Headache, also known as cephalalgia, is ache anywhere on the head. The term "primary headache" refers to headaches that have no known organic cause. Secondary headaches are headaches that have an organic origin. [1] Migraine, cluster headache, and tension-type headache disorders are examples of primary headache disorders. [2] According to the World Health Organization, headache disorders are among the top ten most disabling conditions in the world (WHO). [3] Primary headache diseases affect 46% of the worldwide adult population. The prevalence of migraine and tension-type headache is 42% and 11% in adults respectively. Primary headache disorders are unaddressed source of illness and disability throughout the world. [4] According to studies, lifetime prevalence of primary headache disorders was 90%. [5]

Migraine affects more than just the physical pain of a migraine attack; it can have a significant impact on many aspects of an individual's life, including day-to-day

functioning [6–9]. According to the findings of the Global Burden of Disease Study, migraine is the second leading cause of years lost due to disability, interfering significantly with occupational, educational, household, family, and social responsibilities [10], as well as the second leading contributor to neurological disease burden, after stroke [11]. The prevalence of migraine in the general population is estimated to be between 5 and 10%. It has been studied primarily in children [12, 13] and women [14, 15] but, to the best of our knowledge, not in a large population of young men. Cluster headache is reported to be 20 to 40 times less common than migraine among selected headache patients [16], but the prevalence rate for a well-defined, homogeneous non-hospital population has not been reported. The current study was conducted to determine the prevalence of migraine in young male patients presented with severe headache.

METHODOLOGY

This cross-sectional study was carried out on 276 young male patients who presented with severe headache Medicine outpatient department (OPD) at Ayub Teaching Hospital, Abbottabad from August 2019 to July 2020. All

the patients of age range 15-40 years with severe headaches were enrolled whereas patients of previous chronic medical conditions were excluded. Ethical approval was taken from the institutional ethical committee. All the demographic details were gathered in a pre-designed proforma. Patients provided informed consent after being informed in simple and understandable language about the purpose of the study, assuring them of confidentiality, and acknowledging their right to withdraw consent at any time, even if no reason was given. The diagnostic criteria of the International Classification of Headache Disorders second edition (ICHD-2) for primary type of headache disorders were used to make the diagnosis, which was based on a comprehensive clinical interview and relevant clinical examination. SPSS 24 was used to analyze the data. Qualitative variables such as headache, occupation, educational status, and marital status and quantitative variables such age were described as frequency and percentage.

RESULTS

A total of 276 young adult patients who presented with severe headaches were investigated during the study period. The overall mean age was 29.38±8.65 years with an age range of 15 years to 40 years. Most of the patients were in the age range of 31-40 years 132 (47.8%) followed by 21 to 30 years 97 (35.1%). Patients of age 15-20 years were less frequent with a prevalence of 47 (17.1%). The overall prevalence of migraine headache was in 137 (49.6%) patients out of which migraine with and without aura was 5.7% and 43.9% respectively. Tension-type headache being the second common headache was found in 23.7% followed by Cluster headache at 2.8%. Demographic details of the patients are shown in Table-I. Age-wise distribution is illustrated in Figure-1. Different types of headache are shown in Figure-2.

Table 1: Demographic details of all the patients

Parameters	Frequency n	Percentage %
Marital status		
Single	154	55.8
Married	122	44.2
Educational Details		
Uneducated	87	31.5
Matric level	94	34.1
Intermediate	68	24.6
Graduate	27	9.8
Occupation details		
Students	37	13.4
Professional	29	10.5
Jobless	197	71.4
Business	13	4.7

DISCUSSION

Based on reliable statistics from previous studies, this study updated the prevalence of migraine and severe headache. Over many years, pervasiveness appraisals have persisted oddly established. Migraine is still a communal, disabling medical condition that upsets 22.7% of the population each year. In Pakistan, the 1-year prevalence of migraine is 22.7%, with the age group between 40 and 49 years being the most affected [17]. It is one of the most common diseases and the third leading cause of disability in people under the age of 50 [18].

Consistent with previous research, we discovered that younger age population is more susceptible to migraine affects and disproportionately several other historically disadvantaged groups [19]. A high burden of migraine was observed in young adults who were unemployed, lower social status, and part time workers. These inhabitants are having less access to headache treatment and health care, as well as being more susceptible to factors that cause headache. It is abruptly becoming significant for headaches disorders such as migraine which shift away from symptoms based treatment to new anti-CGRP antibodies like expensive treatment [20]. It is critical to comprehend the prevalence of headache in various divisions of the inhabitants which make sure that treatments are provided to those peak need.

The majority of our study participants were between the ages of 15 and 40 [21]. Previous research has shown that there are age and gender differences in the prevalence of TTH and migraine. Primary headache decreased with age, whereas secondary headache appeared to increase significantly in older patients due to more underlying diseases, which is consistent with Loder 's et al. findings [22]. As expected, the peak prevalence of cluster headache was between the ages of 31 and 40. According to our findings, more than 49.6% of our patients had primary headaches, with migraine (with and without aura) being the most common type (43.9%), followed by TTH (23.7%).

Our findings show that the prevalence of primary headaches is significantly higher in lower socioeconomic levels, whereas secondary headaches are mostly found in higher socioeconomic levels, which is explained by the prevalence of underlying diseases, particularly cerebrovascular events, in this group. This finding is consistent with the findings of other studies [23]. In terms of patient occupation, we discovered that jobless male had the highest prevalence of primary headache, most likely

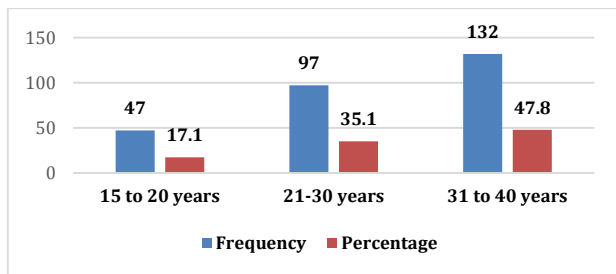


Figure 1: Age-wise distribution (n=276)

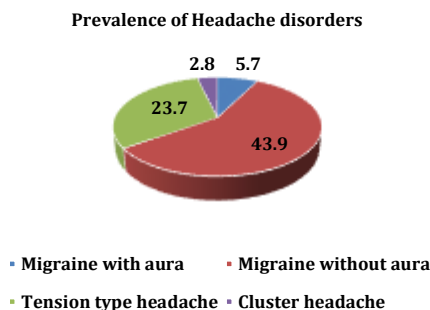


Figure 2: Prevalence of different headache disorders

because the majority of our patients were married. Those involved in more complex intellectual and physical activities, such as university students, workers, and employees, were found to have significantly more primary headaches than those in other occupations, such as self-employment, retired, or unemployed [24]. Other studies have found a high prevalence of primary headaches in such groups, with a greater emphasis on school and university students [25, 26].

Higher educational levels were found to have a significantly increasing pattern in the prevalence of primary headaches and a decreasing pattern in the prevalence of secondary headaches, likely due to more intellectual activity and work pressure in this group, as well as the fact that the majority of patients with higher education are young, with primary headaches being more common. More emphasis on self-care in this group also leads to a lower possibility of underlying headache causes and, as a result, a lower prevalence of secondary headaches. As previously mentioned in other studies, these findings highlight the impact of socioeconomic factors on headache epidemiology, particularly in developing countries [27, 28].

CONCLUSION

Migraine without aura was the most prominent headache among young male outpatients with severe headache. The findings highlight the socioeconomic factors impact on headache epidemiology and show that excessive use of NSAIDs may have an effect the primary headaches distribution. More multicenter studies are needed to assess headache epidemiology across the country.

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