

Study of Prevalence of Headache and its Various Facets among 200 Medical Students of SBKS MI RC Sumandeep Vidyapeeth

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Abstract

Aim: The aim of study is to study the prevalence of headache and its various facets among 200 medical students of SBKSMI & RC.

Objectives: 1) To find out the common causes of headache among medical students. 2) To find out gender difference in prevalence of headaches among medical student. 3) To determine the severity and frequency of headache. 4) To find out various relieving factors used by medical students for headache

Materials and Methods: Cross-sectional study was carried out among 200 medical students of SBKS MI & RC. The questionnaire forms were distributed among 200 medical students studying in 2nd year, 3rd year or Final year MBBS. They were asked to fill up the forms with their consent and then were collected. Data analysis was done and results and conclusions were reported in the report.

Results: Our study demonstrated headache prevalence among 200 medical students of which 110 were male and 90 were female. Prevalence of headache was at least 2 days per month in 37.5% students (75 students). From these students 55.5% (111 students) take medications for relieving. Most common type of headache seen among medical students was Tension type headache in 55% students (110 students) due to exams.

Conclusion: The result in this study demonstrate that most common type of headache among medical students of SBKSMI & RC was Tension type headache due to exams and more than half of the students take medications to relieve headache and most of the students suffer headache at least 2 days a month.

Keywords: Headache, Medical students, Prevalence.

1. Introduction

Headache is one of the most common complaints during medical curriculum and it occurs due to numerous psychological and physical stressors, which are more common in medical students than general population [1]. Frequent and severe headache have a major impact on academic performance and quality of life, and may bring about limitation in daily activities and work [2-5]. The problem may also influence the students' future job performance, causing a large burden for individual and the society, considering the role of medical students in improving the community's health [5]. On the other hand, since the mechanisms of migraine and tension-type headache (TTH)

are still elusive, epidemiological studies on specific populations are needed to help clinicians and researchers find the origin of pain and the factors influencing the frequency of headache [6,7].

Several epidemiological studies have shown a high prevalence of headache among medical students. Several studies have been performed on medical students as the target population. Considering this and also scarcity of the data on headache epidemiology in our society, the current study was conducted as the first epidemiological study to evaluate the frequency of different types of headache and its associated factors among medical students in SBKSMI & RC.

Headache disorders are among the most common disorders of the nervous system. Headache is a painful and disabling feature of a small number of primary headache disorders namely migraine, tension-type headache, and cluster headache. Headache can also be caused by or occur secondarily to a long list of other conditions, for example medication overuse headache. Globally, it has been estimated that prevalence among adults of current headache disorder (symptomatic at least once within the last year) is 47%. Half to three quarters of the adults aged 18–65 years in the world have had headache in the last year and among those individuals, more than 10% have reported migraine. Headache on 15 or more days every month affects 1.7–4% of the world's adult population. Despite regional variations, headache disorders are a worldwide problem, affecting people of all ages, races, income levels and geographical areas. Not only is headache painful, but also disabling. In the Global Burden of Disease Study, updated in 2004, migraine on its own was found to account for 1.3% of years lost due to disability (YLD).

Headache disorders impose a recognizable burden on sufferers including sometimes substantial personal suffering, impaired quality of life and financial cost. Repeated headache attacks, and often the constant fear of the next one, damage family life, social life and employment. The long-term effort of coping with a chronic headache disorder may also predispose the individual to other illnesses. For example, depression is three times more common in people with migraine or severe headaches than in healthy individuals [8].

- Most common types of headaches are of migraine type, TTH (Tension-type headache) and medication-overuse headache.
- TTH is the most common primary headache disorder.
- Episodic TTH is reported by more than 70% of some populations; chronic TTH affects 1-3% of adults.
- TTH often begins during the teenage years, affecting three women to every two men.

These factors are thought to contribute to tension headaches:

- Stress - an Italian study found that stress factors are among the major triggers of headaches and migraines in children.
- Depression
- Anxiety
- Bad posture
- Staying in one position for a long time
- Working in an awkward position for a long time
- Clenching one's jaw
- Caffeine - individuals who drink large amounts of coffee tend to get more headaches than those with low consumption or people who never drink coffee, Norwegian researchers reported in the *Journal of Headache Pain*.

2. Materials and methods

2.1 Study Design:

A questionnaire based cross-sectional study was conducted among cohort group of 200 medical students of SBKS MI & RC.

2.2 Study Location

SBKS MI & RC College, Piparia, Waghodia

2.3 Study Population

200 students studying in SBKSMI & RC.

Inclusion criteria: Medical Students studying in SBKS Medical College and having headache.

Exclusion criteria: Medical students not having headache.

2.4 Resources

Manpower, Investigators (8)

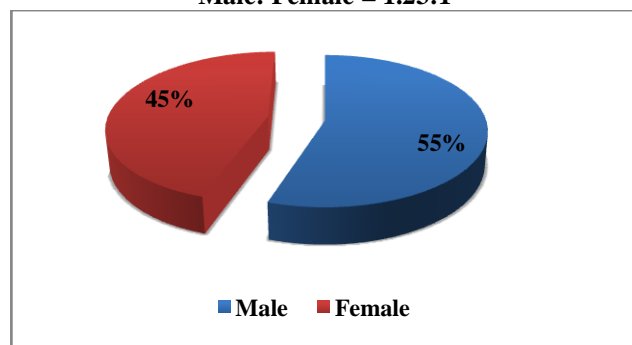
2.5 Materials

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3. Results

A total of 200 students were chosen who were having headaches. Students were from 2nd, 3rd and final year MBBS. They were given questionnaire forms for headache and its various facets and asked to fill it up with their consent sign taken. Of 200 students 110(55%) were male and 90(45%) were female.

Figure 1: Male-Female Prevalence of headache among medical students. Ratio of male to female prevalence is Male: Female = 1.23:1



3.1 Common causes of headache:

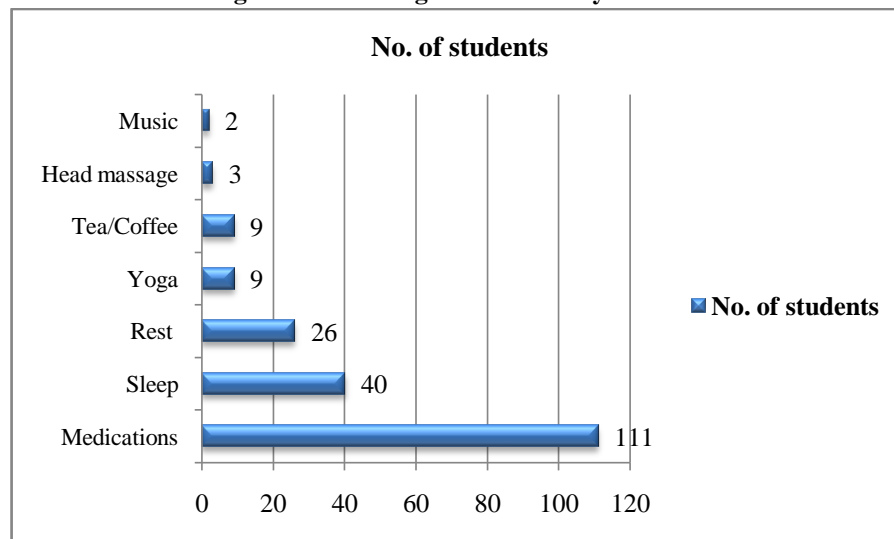
It was seen that majority of students (n=110) i.e. 55% of students were having TTH –Tension type headache due to exams. Followed by other most common cause was Stress and sleep disturbance (n=83) i.e. 41.5%. 3rd most common cause in this study was found missing a meal (n=71) i.e. 35.5%. Other causes which were found are Weather changes, certain smells and menstrual cycle disturbances in 18%, 8% and 2.5% students respectively.

Table No 1: Common causes of headache among medical students

Causes	No. of students
Tension type headache because of exam tension	110
Stress sleep disturbance	83
Missing a meal	71
Weather changes	36
Certain smells	16
Menstrual cycle	5

3.2 Relieving factors used by students:

The study shows that most of the students do use medications for relieving headache (n=111) i.e. 55.5 %. Other relieving factors used by students are sleep by (n=40) 20% of students, rest by (n=26) 13% of students, Yoga by (n=9) 4.5% of students, tea/coffee by (n=9) 4.5% of students, head massage by 3 and music by 2 students i.e. 1.5% and 1% respectively.

Figure 2: Relieving factors used by students**3.3 Frequency of headache:**

Frequency of headache was studied by knowing the number of days headache occurs in 1 month. Results were 34% (n=68) students were having 1 day in a month, 37.5% (n=75) were having 2 days in month. Others are as follows:

Table 2: Frequency of headache

Days/month	No. of students
1	68
2	75
3	17
4	13
5	15
6	9
7	3

4. Discussion

Headache is one of the most common complaints in medical practice. To our knowledge, headache has not been the subject of investigation in medical students in SBKSMI & RC.

No local data are available regarding its prevalence, frequency, different patterns and associated features. In current scenario of increasing prevalence of headache in students, most of them have been found to practice self-medication leading to inappropriate management and sometimes analgesic overuse causing treatment refractoriness. Problem of headache also causes sleep

disturbances, reduced concentration in studies and affects daily routine activities.

Our study showed high prevalence of headache amongst males in SBKSMI & RC compared to females. In study done in Nigeria by Ojini *et al*, Neurology Dept. On Prevalence and clinical characteristics of headache in medical students of the University of Lagos, Nigeria showed that headache prevalence was common in men than in women studying in their college. Similar study done Headache among medical and psychology students by Luis Carlos showed that prevalence of headache was more in females than in males with ratio male: female= 1:1.27.

In a study done by Ruchika *et al* on Prevalence of headache among medical students in North America showed practice of self medication among 88.2 % students while our study showed practice of self medication in SBKS MI & RC students as 55.5%. Other study done in Nigeria by Ojini *et al*, Neurology Dept. on Prevalence and clinical characteristics of headache in medical students of the University of Lagos, Nigeria showed that 68.2% student practice self medication.

The most common type of headache in our study among medical students showed was TTH- Tension type headache in 55% students. In other study done Headache among medical and psychology students by Luis Carlos showed 59 % students having Tension type headache. In study done in Nigeria by Ojini *et al* on Prevalence and clinical characteristics of headache in medical students of the

University of Lagos, Nigeria showed 68% students having tension type headache.

5. Conclusion

- From this study at the end it is concluded that prevalence of headache among males is common than in females in SBKS MI & RC.
- More than half of the students take self medication and special attention has to be given towards it. Most of the students are having Tension type headache because of exams.
- Frequency of headache is in most of the students headache occurs at least 2 days per month.
- Problem of headache also causes sleep disturbances, reduced concentration in studies and affects daily routine activities.
- As medical students are subjected to stress regarding their exams, high level performance, many years of education and the implicit responsibility to the courses, we aimed at determining the prevalence of headache among our medical students of SBKSMI & RC.

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