ORIGINAL ARTICLE

Frequency of Classic Migraine among Physiotherapists in Universities of Lahore

Erum Ghaffar[1], Rimsha Tariq[2], Fatima Mazhar[3], Aneeqa Aqdas[4], Mobashra Ibrahim[5], Ayesha Aamir[6]

[1-4,6] Hajvery University, Lahore, Pakistan; [5]Riphah International University, Islamabad, Pakistan

Corresponding Author: Erum Ghaffar, Department of Physical Therapy, Hajvery University, Lahore, Pakistan
Email: erumghaffar851236@gmail.com

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ABSTRACT

Background:
Classic migraine is a type of migraine that is preceded by a warning sign, known as an "aura", which typically occurs 10 to 30 minutes before the headache. The aura can manifest as visual disturbances, such as a small blind spot or flashing, zigzagging patterns of light in one's field of vision. These sensory disturbances can appear as bright, geometric shapes or lines and may signal the onset of a migraine headache.
Objective:
To determine the frequency of Classic Migraine (Migraine with Aura) among physiotherapists in universities of Lahore.
Methodology:
This is cross sectional study. 362 subjects both male and females from between 18 to 30 years were included in the study using purposive sampling method. All the information and data were collected using ID- Migraine using SPSS software prevalence of classic migraine.
Results:
The results showed Mean ±SD for age is 23.83± 3.11. Mean ±SD for BMI is 1.57±0.696. 24.86% male and 75.13% were female included in study. 87% physiotherapists were suffering from migraine for more than 1 year. 59.66% physiotherapists were suffering from moderate intensity of pain, while, 31.76% were with severe intensity of pain. The p-value was 0.001, which means there was significant prevalence of classic migraine among physiotherapist.
Conclusion:
Migraine is moderately prevalent among physiotherapists, particularly females, with common triggers like light and stress. The study suggests preventive interventions and educational programs to increase migraine awareness.

Keywords: *Pain, migraine, stress disorders, headache*

INTRODUCTION

Migraine is disabling neurological disorder characterized by localized, intense throbbing or pulsing sensations in the head. It is one of the most common types of headaches affecting more than 15% people worldwide and considered as the eighth most onerous disease globally.[1] The neurological, Gastrointestinal, and autonomic sensory symptoms, that Migraine appears before or during a Migraine attack, are known as Migraine auras. These signs may include blind patches, tingling in the hands or face, or light flashes. 70% of people with Migraine headaches get migraines without auras.[2] The aura in Migraine with Aura, formerly known as focused or classic migraine, changes with time, often for many minutes; one feature of the aura gets better while another one gets worse. Typically, Visual aura makes diagnosis facile. It can be challenging to tell apart auras that impact sensation, movement, cognition, vestibular function, orconscious from thromboembolism or epilepsy (particularly occipital seizures). People who have just developed MA frequently provide a lengthier history of MO, which is incorrectly labelled as"bilious attacks", "sinusitis", or "normal headaches". Although some patients swear that their visual aura is monocular, raising the likelihood of retinal origin, visual symptoms are positive, homonymous and binocular. Although it can happen at any movement in connection to pain. Aura often occurs before a migraine headache. Aura is not always contralateral to pain.[3]

Aura- related migraine affects ten to fifteen percent of all migraine sufferers. The aura phase for the majority of these individuals includes visual or sensory abnormalities lasting 30 to 60 minutes, and in rare instances, for many hours. Cortical spreading depression (CSD)- Like events in the human occipital cortex could be seen using high field functional magnetic resonance imaging with nearly continuous recording during a visual aura, supporting the idea that the underlying mechanism of migraine aura gives us the

following results: Depolarization, or slowly expanding excitement, is followed by a persistent depression.[4]
There are 46% of people who have headaches on a regular basis worldwide, 42% who experience TTH, 11% who experience migraine, and 3% who experience chronic daily headaches.[5]

International Headache Society (HIS) states that the clinical symptoms of migraine can be heterogeneous and may not include headache or just moderate headache.[6]

Significant progress has been achieved in defining migraine as a brain condition and identifying function evolution in various baring regions over the various phases of an attack.[7]

Positive symptoms are spawned by neurons in the CNS that are actively discharged. Unfavorable symptoms are caused by absence or loss of function.[8] Typically, migraine is polygenic. Signal gene abnormalities account for uncommon migraine variations including familial hemiplegic migraine and CADASIL. These diseases are not only concomitant to headache; they are neurodegenerative.[9] Visual aura symptoms (VASs) accounts for 98-99% of MAs and are by far the most prevalent, while sensory and linguistic disorders only accounts for 36% and 10%, respectively, of auras.[10]

According to neuroimaging data, 1) migraine aura is linked to a CSD-like phenomenon in MSA patients; 2) spreading phenomena resembling a CSD may occur in MWoA, indicating that either CSD can be asymptomatic, that symptomatic aura depends on factors other than CSD, or that CSD in MWA is fundamentally different from the spreading oligemic found in MWoA; and 3) visual aura most likely begins at visual cortical areas like V3A.[11] The goal of migraine prophylaxis is to stop frequent episodes and the growth of the long term for abortive therapy.[12]

Childhood periodic syndromes that may be precursors to or associated with migraine.[13] The emergence of new treatment targets and therapies illustrates the bright future for migraine management.[14] The frequency of Classic Migraine (Migraine with aura) among physiotherapists is a crucial area of research in treatment strategies. It may be possible to reduce the impact of classic migraine on the health and well- being of Physiotherapist.

METHODS

This is a cross- sectional study conducted at Hajvery University, Riphah International University,University of South Asia, University of Management and Technology and University of Lahore, spanning a six-month data collection period following approval of study synopsis. The sampling method employed was non- probability convenient sampling technique, with a targeted population consisting of individuals aged 18-30 years diagnosed with Migraine. This study was conducted from 17 May 2013 to 17 November 2013 after the approval of synopsis. The sample size of 362 participants was determined. The participants were selected after the researchers got to know those students that suffered from headaches by collecting student data forms, that were circulated by them in all the concerned universities. The participants were informed beforehand, about all the research procedure and research data was collected after their given consent. The researchers gave them a pamphlet in which all information regarding the experimental procedure was written to give them assurance. The experimentation was performed after the participants signed the consent form.
Inclusion criteria for participants encompassed age eligibility, a confirmed diagnosis of classic migraine both males/ females aged 18-30 years[13], undergraduate, graduate and post graduate physio-therapists, who confirmed having headache for more than 1 year[16], who were suffering from Visual changing, nausea, vomiting, confusing and poor concentration.[10]
Exclusion criteria included cases of secondary headaches (tension-type headache, cluster headache, cervicogenic headache[17], dehydration headache, sinus headaches, medication-overuse headache), patients with other chronic diseases (temporo-mandi-bular joint dysfunction, cervical radiculopathy and brain tumor) and students who are unwilling to participate.
Data collection was performed using standardized assessments and tools. The ID- Migraine Questionnaire (for demographic data), Visual Analogue Scale (for pain intensity). Data was analyzed using statistical package of social sciences (SPSS). Descriptive statistics inform of frequency and percentages was presented

RESULTS

The results showed Mean ±SD for age is 23.83±3.11. Mean ± SD for BMI is 1.57±0.696. Mean±SD for VAS among male is 3.95±0.79 and for females is 6.69±1.10. 24.86% male and 75.14%are female included in the study. 87% physiotherapists were suffering from migraine for more than 1 year. 59.66% physiotherapists were suffering from moderate intensity of pain while 31.76% were with severe intensity of pain, 50.8% are with family history of migraine, 9.7% haveunknown cause and 39.5% are with bi family history. 76.8% have intense migraine while 32.2% don't have intense or frequent migraine. 81.8%have headache that usually lasts more than 4 hourswhile, 18.2 have headache that usually lasts less than 4 hours. 58.3% participants usually suffer from nausea when have headache while 41.7% have not suffered from nausea. 89.5% showed noise and light bothered them while 10.5%

showed no effect of light on headache. 40.3% have monthly frequency of migraine while 3.3 have 4-6 days per week frequency of migraine. 216 Physiotherapists were suffering from moderate intensity of pain while 114 were with severe intensity of pain. 88.4% showed participants, having stress while 14.2% don't complain stress at study/work. 90.3% showed participants have lack of sleep while 8.7% don't lack of sleep factor and p-value was 0.001 which means there were significant prevalence of classic migraineamong physiotherapists.

The frequency and percentage of 362 participants of frequent or intense migraine. 76.8% have intense migraine while 32.2% don't have intense or frequent migraine (Table-1).

The frequency and percentage of 362 participants with migraine history. 50.8% are with family history of migraine, 9.7% have unknown cause and 39.5% are with no family history (Table-2).

Table 1: *Descriptive Statistics of Frequency Migraine*

Do you have intense or frequent Migraine?	Frequency	Percent%
Yes	278	76.8
No	84	23.2
Total	362	100.0

Table 2: *Descriptive Statistics of Family History of Migraine*

Family history of migraine	Frequency	Percent%
Yes	184	50.8
No	143	39.5
Unknown	35	9.7
Total	362	100.0

Table 3: *Descriptive Statistics of Duration of Migraine*

Duration of migraine	Frequency	Percent%
≥24h	109	30.1
≥1 hour≤24h	200	55.2
≤1h	53	14.6
Total	362	100.0

The frequency and percentage of 362 participants of duration of migraine. 55.2% have duration of migraine ≥1h and ≤24h while 14.6% have ≤1h duration of migraine. (Table-3).

The frequency and percentage of 362 participants of frequency of migraine. 40.3% have monthly frequency of migraine while 3.3 have 4-6 days per week frequency of migraine (Table-4).

Table 4: *Descriptive Statistics of Frequency of Migraine*

Frequency of migraine?	Frequency	Percent%
1-3day/week	73	20.2
4-6day/week	12	3.3
Biweekly	131	36.2
Monthly	146	40.3
Total	362	100.0

DISCUSSION:

A cross-sectional study was performed in 2019 to check the prevalence of migraine(headache) among physio-therapists students and its impact on daily activities. The sample size of this studywas 260. Data was collected by using The Migraine Disability Assessment Test (MDAT) and Headache Impact Test (HIT). The migraine was found more in women than men.

Study, social and working activities were moderately affected by migraine.[18]

Another result of the study conducted in 2021 among college and university students showed that migraine pain is prevalent in variable percentages. It is more in females than males. Light- headedness, Visual disturbances were the most common complaints. Migraine pain affects QOLand has negative effect on the academics.[19]

According to a 2022 study, migraines are widespread among North Sichuan Medical College medical students, and they are even more common among female students. Future research should concentrate on preventing and treating different migraine subtypes, as the most frequent triggers include staying up late, stress, influenza, and sleep difficulties. Further research is possible by investigating factors like genetic predisposition to classic migraines, including the identification of potential biomarkers that may predict frequency and identity. Medical schools and universities should ought to provide pertinent training on how to prevent and treat migraines as well as how to intervene and treat the condition during attacks.[20]

Limitation during study was cooperation of participants for recording values. Study was only conducted on university students. This study only estimated prevalence of migraine with aura among medical students, which make its representation to some extent.

CONCLUSION:

Migraine is moderately prevalent among physiotherapists, particularly females, with common triggers like light and stress. The study suggests preventive interventions and educational programs to increase migraine awareness and due to low BMI and Modify ID migraine scale there were significant prevalence of classic migraine among physiotherapist.

ETHICAL PERMISSION: The Ethical Review Committee, Hajvery University, Lahore approved this study vide Notification No. HU/FAHS/ECRB/23/46.

CONFLICT OF INTEREST / DISCLOSURE: Nil.

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AUTHORS' CONTRIBUTION:

EG: Acquisition of data, manuscript writing, final approval of manuscript.

RT: Data analysis and interpretation

FM: Drafting of article

AA: Acquisition of data

MI: Analysis and data interpretation

AA: Conception & Design

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