Prevalence of Migraine (Headache) Among Physiotherapy Students and Its Impact on Daily Activities

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Abstract-The objective was to check the Prevalence of migraine (headache) among physiotherapy students and its impact on daily activities. The cross sectional observational study was conducted on physiotherapy students at University of Lahore. The sample size of this study was 260. Convenient sampling technique has been used in this study to collect the data. Verbal questioning and consent form were used for data collection by using The Migraine Disability Assessment Test - (MDAT) and Headache Impact Test (HIT). 8.1% (21 respondents) prevalence was found of migraine in the 260 students of university of Lahore. 3 respondents had mild, 11 had moderate and 7 respondents had highly affected in study of migraine. 8 respondents had mild, 6 had moderate and only 7 respondents had highly Intensity to lie down. 9 out of 21 respondents had mild, 5 had moderate and 7 respondents had highly losing concentration by migraine. The prevalence of migraine was found to be 8.1%. The migraine was found more in women than men. Study, Social and working activities were moderately affected by migraine. Migraine was mildly affected on intensity to lying down and severely affected on losing concentration and feeling too tired.

Keywords: Prevalence of Migraine, Physiotherapy Students, Male Female, Daily Activities.

1. INTRODUCTION

A migraine is a major headache disorder characterized by moderate to severe recurrent headache (1). Typically, the headache affects the half of the head, vibrates and lasts from two to 72 hours. Migraine can be a few hours or a few days and is often described as a violent shaking, throbbing headache that causes nausea, vomiting and light, noise, sound or odor, and even mobility(2). Pain usually worsens with physical activity. One third of people have an atmos phere: typically a brief period of impairment of vision, which indicates that headache will occur soon (3).

Sometimes, an aura may appear shortly after headache or headache. Migraines are believed to be a mixture of environmental and genetic factors (4). About two-thirds of the cases are found in families. Because migraine affects women a little more than men. Changing hormone levels may also play a role. The risk of migraine often decreases during pregnancy. The underlying mechanisms are not fully known. Along with this, it is thought to include nerves and blood vessels in his head (5).

The first recommended treatment is simple pain relievers such as ibuprofen and paracetamol (acetaminophen) for the prevention of headache, nausea and triggers (6). In cases where simple painkillers are not effective, specific drugs such as triptans or ergotamine may be used. Caffeine can be added also. A number of medications are useful to prevent attacks such as metoprolol, valproate and topiramate (7). Physical-therapy also can help to reduce pain, at least temporarily, especially if used at the onset of the attack. Mostly active and passive technique are used in this condition.

Passive therapy includes massage, heat, ice-pack, ultra sound, steroid scream and low voltage electrical current for relief. Active physical therapy are stretching, range of motion and pain relief exercises, strengthening exercises and low impact aerobic (8).

Migraines typically manifest themselves as self-limiting, recurrent severe headaches associated with autonomic symptoms (9). Pain intensity, headache durations and attack frequency vary. The migraineous condition that is longer than 72 hours is called migrenosus (10). There are four possible stages of migration, but not all stages are necessarily experienced: Prodrome occurring hours or days before headache (11), Aura just before headache (4), Pain phase, also known as head pain phase, Effects after postmortem, after the end of migraine (12).

Migraines are associated with major depression, bipolar disorder, anxiety disorders and obsessive compulsive disorder. These psychiatric disorders are about 2-5 times more common in non-auric people and 3-10 times more common in auras (13, 14).

Many things are known when it comes to migraines. There is a long list of potential triggers from specific gains to hormones. Migraines affect the body in different ways. Genetic or environmental factors may arise and this painful condition is worst. People can help identify triggers, to understand what is difference between in the migraine headache and headache, and help in the treatments. Different studies focus on specific aspects of cause and effect of migraine(8).

3. METHOD AND MATERIAL

This cross sectional study was conducted on physiotherapy students at University of Lahore. The study procedure took roundabout 3 months to complete and the sample size of this study was 260. Convenient sampling technique was used for this study. Verbal questioning and consent form were used for data collection by using Migraine Disability Assessment Test (MIDAT)" (15) and "Headache Impact Test (HIT)"(16). Visual Analogue Scale (VAS) was use to check the intensity of migraine (headache) among physiotherapy students.

3. RESULTS

Prevalence of Migraine

	Frequency	Percent
no	239	91.9
yes	21	8.1
Total	260	100.0

Explanation: Here the question was asked about Testing of prevalence of migraine. Here only 21 out of 260 respondents said that they had migraine. The other 239 out of 260 respondents said that they did not felt any migraine. The mean value of the respondents was 0.08 and this means that only 8% respondents had migraine. The minimum value was 0 and maximum was 1.

Chi-Square Tests For Prevalence of Migraine and Working Activities

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	260.000(a)	3	.000
Likelihood Ratio	145.935	3	.000
Linear-by-Linear Association	225.992	1	.000
N of Valid Cases	260		

a 4 cells (50.0%) was expected count less than 5. The minimum expected count is .16. In the Chi-Square test also showed that variable is significant because the value of Sig is less than 5%.

Chi-Square Tests for Prevalence of Migraine and Effect on study

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	260.000(a)	2	.000
Likelihood Ratio	145.935	2	.000
Linear-by-Linear Association	235.030	1	.000
N of Valid Cases	260		

a 3 cells (50.0%) was expected count less than 5. The minimum expected count is .24. In the Chi-Square test also showed that variable is significant because the value of Sig is less than 5%.

Chi-Square Tests for Prevalence of Migraine and Intensity of pain while Lying down

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	260.000(a)	3	.000
Likelihood Ratio	145.935	3	.000
Linear-by-Linear Association	215.258	1	.000
N of Valid Cases	260		

a 3 cells (37.5%) was expected count less than 5. The minimum expected count is .48. Chi-Square test also

showed that variable is significant because the value of Sig is less than 5%.

Effect of Migraine on ADL

Parameters	Severity	Total	
Affect on Study	Mild	3	21
	Moderate	11	
	Severe	7	
Affect on Losing concentration	Mild	9	21
	Moderate	5	
	Severe	7	
Pain Intensity while lying Down	Mild	8	21
	Moderate	6	
	Severe	7	
Affect on working activity	Mild	8	21
	Moderate	11	
	Severe	2	
Total		**260**	**260**

Here 21 out of 260 respondents had affected by migraine. 8 respondents had mild, 11 had moderate and only 2 respondents had highly affected by migraine. 3 respondents had mild, 11 had moderate and 7 respondents had highly affected in study of migraine. 8 respondents had mild, 6 had moderate and only 7 respondents had highly Intensity to lie down. 9 out of 21 respondents had mild, 5 had moderate and 7 respondents had highly losing concentration by migraine. 6 respondents had mild, 7 had moderate and 8 respondents had highly affected on social activity due to migraine.

4. DISCUSSION

The prevalence of migraine was studied on students of physiotherapy at University of Lahore. The calculated prevalence of migraine was 8.1% in both genders in current study but the study of Fatima.et al (2017) prevalence was found 31.2% of students had migraine. In addition, findings showed that stress, sleep deprivation, reading and fasting were the main trigger factors of migraine in physiotherapy students of University of Lahore. In this study researcher used cross table comparing with prevalence of migraine to migraine affect on daily activities. Here 21 out of 260 respondents had affected by migraine. 8 respondents had mild, 11 had moderate and only 2 respondents had highly effect daily activity. On the other hand Tonini (2012) showed that only 4 respondents had mildly and 22 respondents had moderately effect on daily activities.

The study results were based on the International Headache Society (IHS) criteria. Literature was shown difference in prevalence of migraine at different population, but no previous research has been conducted on migraine prevalence in physiotherapy students.

The prevalence of migraine in this study was found to be 8.1% but according to Yusefy prevalence of migraine was 11.01% in Iran medical students. This variety of results can be a consequence of different stressors or different fields (17).

The results of this study were different from those research studies which were conducted by Ojini FI and colleagues (2009) that migraine prevalence in medical students at Lagos University, Nigeria was 14.1%. The current results were different due to socioeconomic, climatic, nutritional habits or stress that may cause migraine headache factors on physiotherapy students in these two countries. In addition, Kurt in 2013, showed that the students of Gaziosmanpaşa University in Tokat has 17.89% prevalence of migraine which were quite different results compared to what was conducted at University of Lahore(18). This may be due to the different Stressors that affect the students of medical. Kurt S and Abott assessed the prevalence of migraine and headache in all students of medical and different students academy courses at Gaziosmanpaşa University (19).

It is reported that migraine is higher in women than men (20).

In addition, the results of current study were different from the study of Deleu et.al (2011), itt was found which was a descriptive epidemiological study on headache at the physiotherapy students of Sultan Qaboos University in Oman (21), and the migraine frequency in that study was reported to be 12.2% but on the other hand in current study prevalence was found 8.1%. Headache migraine among physiotherapy students at University of Lahore could be different in the result of the geographical location from the other universities and the effects on socio-economic conditions.

5. CONCLUSION

The prevalence of migraine was found to be 8.1%. The migraine was found more in women than men. Study, Social and working activities were moderately affected by migraine. Migraine was mildly affected on intensity to lying down and severely affected on losing concentration and feeling too tired.

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