

Migraine Persistence Among University Students - A Case Study of SMBBMU Larkana

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Authors' Contributions

- 1 Conception & Study Design.
- 2 Critical Analysis.
- 3 Data Collection.
- 4 Drafting.
- 5 Data Analysis.

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ABSTRACT

Purpose: The theme of this research is to assess the persistence of migraine among students of SMBB Medical University, Larkana.

Methodology: The descriptive cross-sectional study was carried out at Shaheed Mohtarma Benazir Bhutto Medical University (SMBBMU) Larkana for the duration of 7.3 months from 6th of May 2017 to 9th of December 2017 and migraine persistence was assessed among medical students. A questionnaire was given to them to evaluate the severity of migraine. Students with severe head injury or any other medical complications was excluded were not included in this research.

Results: A contributive sampling techniques was used to collect the data for analysis. Total 213 study subjects had participated in this research including 137 male students and 76 female students. Specific measuring tool was used to identify the severity of migraine with mild, moderate and severe were used as parameters for identification of severity.

Conclusion: Frequency of headache was observed more in feminine gender as compared to male Students. Females were more conscious about life styles and they always had emotional attachment with every event of their life including results, class presentation and dressing or university functions.

Keywords: Migraine, persistence, feminine, severity.

INTRODUCTION

Migraine is type of headache mostly occur from one side of head with severity of pain, nausea and irritation with light [1]. Once it occurs, it remains for 7 to 8 hours with the symptoms of anxiety, stress and valuation. If it is not managed properly on time it may leads to hazardous effects to the human health. Various types of migraine are appraised such as Episodic Migraine, [2, 3] when it happens it will be repeated after 10-15 days with severe cerebral pain whereas Chronic Migraine occurs for longer duration estimated 15-18 days per month for 03 months or some time more [4, 5]. Migraine is sophisticated type of neural problem that conceived as exhausted head torture with majority of medical problems such as Photophobia, Phonophobia and disturbance of

sensory or motor types of nerves [6, 7]. Different researcher worked on the migraine and concluded that this type of headache occurs mostly in females and as far as area is concern it occurs more in urban areas as compared to remote or village sides [8-10] and the factors enhancing this disorder are including gender, age and socioeconomical disturbance, these are general factors besides this there are also serious hazardous factors that are responsible for the migraine are obesity, drug abuse, nicotine or caffeine dependence, sudden sad occasions at their home or working places and sleeplessness [11-13]. People with this type of situation always had lack of confidence and they were unable to perform any social activity even not participated in any public or social event of their life because of their psychological disturbance even patients with other serious disease

can also perform better than person with migraine [14-16]. Headache always impose the bad impact on the human life, it always promotes the Depression and disease related to it. This type of headache always enhances diseases associated depression or stress [17, 18]. The major theme of this research was to make aware the university students regarding perilous aspects that encourage the incidence of migraine [19, 20]. The persistence of migraine can be reduced by adopting modification in life styles. Furthermore, it was noticed that headache always become cause for the root for new disease. The major theme of research was only accomplished the frequency of migraine among students of university [21, 22].

METHODOLOGY

A Cross-sectional study was conducted by using simple random techniques for the data collection from the Shaheed Mohtarma Benazir Bhutto Medical University Students. Data was collected for the period of 7.3 months from 6th of May 2017 to 9th of May 2017. Rao soft online sample size calculator was used to compute the sample size. Both genders were included except those who were having severe head injury or any other related disease like hypertension, diabetes mellitus, tumor or cancer were excluded. In demographic data age, sex and marital status was discussed. Total 213 number of study subjects had participated, students with complain of migraine (headache) and healthy volunteers were guided to fill the questionnaire to know the number of students

with migraine, causes of migraine and the intensity of migraine was being observed. Data was scrutinized with latest statistical software SPSS 24.00 and different parameters were taken in mind to evaluate whole data such as migraine attack per month, intensity of pain during migraine and which gender were having the more migraine.

RESULTS

Total number of 213 study subjects were analyzed, from demographic data 137 (64.3%) participants were male whereas 76 (35.6%) were females with the age from 18 to 26 years as mentioned in Table 1 and 2. The number of marital status was 24 (11.2%) married and 189 (88.7%) were unmarried which are mentioned in Table 3. The frequency of students with migraine attacks per months were 149 whereas 64 patients didn't respond for the same as described in Table 4. Statistical data for the presence of migraine at the time of research was 34 (15.9%) students respond with complain of migraine and 179 (84%) students were not having any sort of headache. As far as intensity of pain was concerned a measuring scale with parameters of mild, moderate and severe, was used to differentiate the intensity. 73 (34.2%) students were reported with mild intensity, 58 (27.2%) were respond to moderate whereas 82 (38.4%) participants were represented with severity of pain and clearly described in Table 5. Various reasons were recorded for the migraine pain among students of SMBBMU University which are mentioned in Table 6.

Table 1. Gender wise distribution of the participants.

Gender	Number	Frequency
Males	137	64.3%
Females	76	35.6%

Table 2. Age wise distribution of the participants.

Age wise distribution					
		Frequency	Percent	Valid Percent	Cumulative Percent
	18	7	3.3	3.3	3.3
	19	28	13.1	13.1	16.4
	20	27	12.7	12.7	29.1
	21	23	10.8	10.8	39.9
Valid	22	18	8.5	8.5	48.4
Vallu	23	34	16.0	16.0	64.3
	24	34	16.0	16.0	80.3
	25	27	12.7	12.7	93.0
	26	15	7.0	7.0	100.0
	Total	213	100.0	100.0	

Table 3. Marital status of students.

Marital Status	Number	Frequency
Married	24	11.26%
Un-married	189	88.7%

Table 4. Frequency of migraine attacks per month.

Migraine Attack	Number	Frequency
Yes	149	69.9%
No	64	30%

Table 5. Intensity of migraine among university students.

Intensity	Number	Frequency
Mild	73	34.2%
Moderate	58	27.2%
Severe	82	38.4%

Table 6. Reason for migraine pain among university students.

Reasons for Migraine	Number	Frequency
Stress	96	45%
Examination	37	17.3%
Failure	19	8.9%
Personal Issue	39	18.3%
Family Problem	22	10.3%

DISCUSSION

A lumpy estimation regarding headache was 19.8%, which was being observed in previous studies and preponderance level gradually augmented and it was concluded that headache was common among males [6]. According to consequences of research study that migraine was found more among medical students with various age group. Whereas recent study didn't follow the same demographic data for analysis of headache [3]. Healthy volunteers with migraine were included except those who had severe head injury or critical medical condition such as tumor, cancer or

hypertension [8]. Patients with pain in either part of cerebral were not included and ID-Head test was used as diagnostic tool for selection of the study subjects. ID-Head test was used to differentiate the headache and migraine and also intensity of pain was being observed by this test. A study suggested that to concise the supremacy of head ache among teen agers various factors were involved that enhance the frequency of head ache among school kids and colleges students [4]. According to another study it was concluded that persistence of migraine was common among females up to 76% and in males 24% only. Severe headache was considered as self-torture disorder in which person was unable to

perform any work at that particular college [2]. Kuwaiti researcher also concise his research on migraine as number of aspects were responsible for elevation of migraine persistence including family and social issue that alter the personal life. The same scenario was also resembled with current study, factors which were observed during this research were stress, examination pressure, failure in exams or love, personal & family issues were the factors for severe migraine. A cross-sectional study was conducted to evaluate the frequency with intensity [7].

CONCLUSION

This study revealed that the intensity of migraine was observed more in female students because they had emotional attachment with every event of university life further females were more conscious about the grades and marks that initiate the frequency of migraine among them. As far as males students were also involved in the situation with solid cause such as failure in exams or any other related problem.

REFERENCES

- Delfan B, Bahmani M, Hassanzadazar H, Saki K, Rafieian-Kopaei M. Identification of medicinal plants affecting on headaches and migraines in Lorestan Province, West of Iran. Asian Pac J Trop Med 2014; 7(S1): S376-9.
- Balarabe S, Yunusa MA. Prevalence of migraine among medical students in Sokoto, North-Western Nigeria. Eur J Pharm Med Res 2016; 3(12): 604-8.
- Morillo LE, Alarcon F, Aranaga N, Aulet S, Chapman E, Conterno L, et al. Prevalence of migraine in Latin America. Headache 2005; 45(2): 106-17.
- Bigal ME, Lipton RB. Modifiable risk factors for migraine progression. Headache 2006; 46(9): 1334-43.
- Passchier J, De Boo M, Quaak HZ, Brienen JA. Health-related quality of life of chronic headache patients is predicted by the emotional component of their pain. Headache 1996; 36(9): 556-60.
- Naegel S, Holle D, Desmarattes N, Theysohn N, Diener HC, Katsarava Z, et al. Cortical plasticity in episodic and chronic cluster headache. Neuroimage Clin 2014; 6: 415-23.
- 7. Nesbitt AD, Marin JCA, Tompkins E, Ruttledge MH, Goadsby PJ. Initial use of a novel noninvasive

- vagus nerve stimulator for cluster headache treatment. Neurology 2015; 84(12): 1249-53.
- Silberstein SD, Calhoun AH, Lipton RB, Grosberg BM, Cady RK, Dorlas S, et al. Chronic migraine headache prevention with noninvasive vagus nerve stimulation: the EVENT study. Neurology 2016; 87(5): 529-38.
- Headache Classification Committee of the International Headache Society. The International Classification of Headache Disorders, 3rd edition (beta version). Cephalalgia 2013; 33(9): 629-808.
- Al-Hashel JY, Ahmed SF, Alroughani R, Goadsby PJ. Migraine among medical students in Kuwait University. J Headache Pain 2014; 15(1): 26.
- Tfelt-Hansen P, Pascual J, Ramadan N, Dahlöf C, D'Amico D, Diener HC, et al. Guidelines for controlled trials of drugs in migraine: third edition. A guide for investigators. Cephalalgia 2012; 32: 6-38.
- Tepper S, Ashina M, Reuter U, Brandes JL, Doležil D, Silberstein S, et al. Safety and efficacy of erenumab for preventive treatment of chronic migraine: a randomised, double-blind, placebo-controlled phase 2 trial. Lancet Neurol 2017; 16: 425-34.
- 13. Headache Classification Subcommittee of the International Headache Society. The International Classification of Headache Disorders: 2nd edition. Cephalalgia 2004; 24 (Suppl 1): 9-160.
- 14. Hansen JM, Thomsen LL, Olesen J, Ashina M. Calcitonin gene-related peptide does not cause the familial hemiplegic migraine phenotype. Neurology 2008; 71(11): 841-7.
- 15. Norris S, Atkins D, Bruening W, et al. Selecting observational studies for comparing medical interventions. In: Agency for Healthcare Research and Quality. Methods Guide for Comparative Effectiveness Reviews [posted June 2010]. Rockville, MD. Available at: http://www.effectivehealthcare.ahrq.gov/ehc/products/196/454/MethodsGuideNorris_06042010.pdf.
- Higgins J, Green S, editors. Cochrane handbook for systematic reviews of interventions. Version 5.1.0. London: The Cochrane Collaboration; 2011.
- Chou R, Aronson N, Atkins D, Ismaila AS, Santaguida P, Smith DH, et al. AHRQ series paper 4: assessing harms when comparing medical interventions: AHRQ and the effective health-care program. J Clin Epidemiol 2010; 63(5): 502-12.
- Higgins JP, Altman DG, Gøtzsche PC, Jüni P, Moher D, Oxman AD, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. BMJ 2011; 343: d5928.

- van der Velde G, van Tulder M, Côté P, Hogg-Johnson S, Aker P, Cassidy JD, et al. The sensitivity of review results to methods used to appraise and incorporate trial quality into data synthesis. Spine (Phila Pa 1976) 2007; 32(7): 796-806.
- Herbison P, Hay-Smith J, Gillespie WJ. Adjustment of meta-analyses on the basis of quality scores should be abandoned. J Clin Epidemiol 2006; 59(12): 1249-56.
- 21. Ad Hoc Committee on Classification of Headache. Classification of headache. JAMA 1962; 179(9): 717-8.
- 22. Treadwell JR, Uhl S, Tipton K, Shamliyan T, Viswanathan M, Berkman ND, *et al.* Assessing equivalence and noninferiority. J Clin Epidemiol 2012; 65(11): 1144-9.



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