J. Dhaka National Med. Coll. Hos. 2021; 27 (01): 24-27

Original Article

Level of Disabilities among Migraine Patients at Neurology Outpatient Department in a tertiary hospital in Dhaka South City

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Abstract:

Background: Migraine is the most common cause of headaches that are responsible for different kinds of disabilities. There will be loss of work due to disabilities. This was an effort to obtain such information regarding the level of disabilities due to migraine.

Materials and Methods: The current study was cross-sectional type of descriptive observational study conducted from 1st June, 2017 to 30th may 2018. The study included the patients attending at Neurology Outpatient Department of Dhaka National Medical Institute Hospital. Data were collected by face-to-face interview. Collected data were computed and analyzed.

Results: Mean age of respondents 29.9 years with SD 14.28 ranging from 9.16 to 62.58 years. Among them about two-thirds (64%) of the respondents were female. More than one-third of the respondents (42%) were students. More than two-third of the respondents (68%) had interruption during sleep. More than two-third of the respondents (68%) felt pain for 2-3 hours. More than one-third of the respondents (34%) were overweight or obese. More than half (52%) of the respondents had severe disability.

Conclusion: Most of respondents were female and were students. They had impairment in their function and found severe disabilities. So, there was no scope to treat migraine as a simple way.

Key words: migraine, severe disabilities, female patients.

Introduction

There is nobody who does not suffer from headache. One of the most important causes of headache is migraine. Migraine is the first commonest disease among all the neurological diseases and is the sixth burdensome disease in the world.[1] Migraine was in 19th position in Global Burden of Disease 2000; and became seventh in 2010.[2] It is the 12th leading cause of disability among female.[3] It significantly reduces the quality of life of migraine sufferers. So, the productivity of a person decreases day by day. So, it is very important to measure the level of disability of a migraine patient and it will be helpful for treatment plan of a migraine patient. The current study was done for assessing the level of disability of migraine sufferers attending outpatient department in Dhaka National Medical Institute Hospital.

Methodology

This was a descriptive cross-sectional study done within one year from 1st June, 2017 30th may 2018. The study included the diagnosed patients of migraine came to the Neurology Outpatient Department in Dhaka National Medical Institute Hospital. The respondents were selected by convenient type of non-probability sampling. The pretested semi structure interviewer administered questionnaire was used comprised of (Migraine Disability Assessment) MIDAS scale developed by Professor Lipton RB. The questionnaire included questions based on the performance in defined roles and categorizes severity into four grades such as Grade I or little or no disability, Grade II or mild disability, Grade III or moderate disability and Grade IV or severe disability.[3,5] Descriptive statistics and chi-squire test were done.

Results

The average age of the four hundred respondents was about 30±14.2 years; ranging from 9.1 to 62.5. More than half of the respondents (64%) were female. The average age of the male and female were 28.4 and 30.9 years respectively.

Table-I: Mean age of the respondents by sex

Gender	Mean age (years)	N	SD
Male	28.4	144	15.0
Female	30.9	256	13.7

Half of the respondents (50%) had severe disability due to migraine. Chi-square (χ 2) test showed significant difference ($p < 0.01$) between male and female.

Sex of respondents	Level of disability; [N (%)]				p-value
	Little or no disability	Mild disability	Moderate disability	Severe disability	
Male	8 (5.6)	0 (0)	56 (38.9)	80 (55.6)	< 0.01
Female	8 (3.1)	16 (6.3)	104 (40.6)	128 (50)	

Occupation

More than one-third of the respondents (42%) were students and about one-quarter (24%) respondents were service holders.

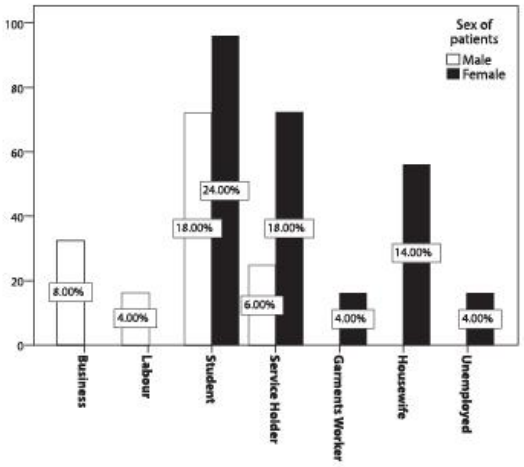

Figure-I: Main occupation of the respondents

Sleeping patterns

More than two-third of the respondents (68%) had interruption during sleep. More than half of respondents (62.5%), having continous sleep, sleept for 6 hours at night.

Table-III: Sleeping patterns of the repondents

Sleeping patterns	Duration of patient's sleep at night (hours); [N (%)]				
	4	5	6	7	8
Continous	0	0	80(62.5)	40 (31.3)	8 (6.3)
Interrupted	24 (8.8)	8 (2.9)	64 (23.5)	64 (23.5)	112 (41.2)

Duration of feeling pain

More than two-third of the respondents (68%) felt pain 2 to 3 hours.

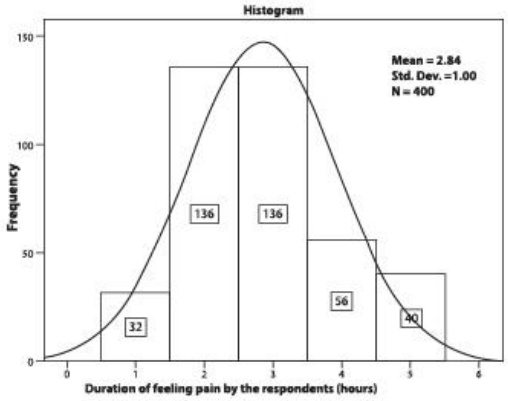

Figure-II: Duration of feeling pain

Frequency of migraine attack

Two-third of the respondents (66%) had migraine attack once per week.

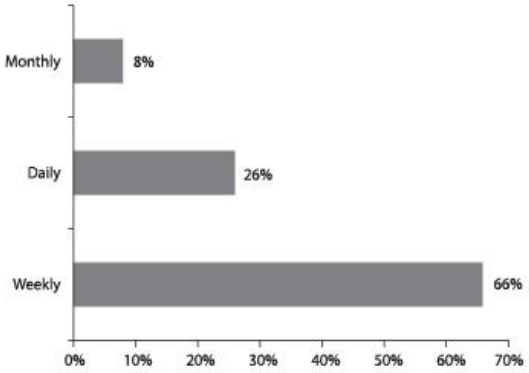

Figure-III: Frequency of migraine attack

Interpretation of MIDAS scale

More than half (52%) of the respondents were severely disable (MIDAS Grade IV), next to it (40%) were moderately disable (MIDAS Grade).

Table-IV: Interpretation of MIDAS scale

MIDAS Grade	MIDAS Definition	MIDAS Score	Frequency (%)
I	Little or No Disability	0-5	16(4.0)
II	Mild Disability	6-10	16(4.0)
III	Moderate Disability	11-20	160(40.0)
IV	Severe Disability	21+	208(52.0)

Discussion

More than half of the respondents (64%) were female in our study. Chowdhury MI et.al. (2012) and Amin MN et.al. (2012) conducted two separate studies in Bangabandhu Sheikh Mujib Medical University (BSMMU); found female patients 72.7% and 71.3% respectively.[6,7] Migraine prevalence was three times more in female.[8] A study done in Greece found the average age was 40 years, ranging from 20 to 64 years.[9] Chowdhury MI et.al. (2012) and Amin MN et.al. (2012) found the average age of 25.5 and 25.6 years; from 12 to 50 years and 20 to 30, respectively.[6,7] The current study revealed similar finding; i.e., average age of the respondents was 30 years, ranging from 9 to 62.5 years. Kelman L (2006) found than migraine pain triggered between 30 to 49 years of age.[10] More than one-third of the respondents (42%) were students in this study. Housewives and students constitute 80% in the study done by Amin MN et.al. (2012). 7 Oikonomidi (2018) found that more than three-quarters were students (76.7%). 9 The study done in Peshawar found that 40.2% of headaches among the medical students having headache were due to migraine. Researches showed that stress was one of the main causing agents of migraine.[11] Kelman L and Rains JC also mentioned as short sleepers who slept for 6 hours. They found that more than one-third (38%) were short sleepers.[12] The finding was similar to the findings of this present study, 36% were short sleepers. More than two-third of the respondents (68%) did not have continous sleep. Sleeping disturbance was common in migraine patients affecting 30% to 50% of cases.[13] The present study showed that more than half had severe disability (52% for grade IV). Similar finding was revealed in a study, 58.3% had severe disability (grade IV).[9] Similar picture was depicted in a study where more than two-third of the respondents (73%) had severe migraine disability.[3]

Conclusion

The study included a greater number of patients with severe disability. They had impairment in their function and found severe disabilities. So, there was no scope to treat migraine as a simple way.

Acknowledgement

Thanks to Professor Lipton RB as he made the MIDAS open access.

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