## **Original Article**

# A Study on Psychiatric Co-morbidity Among the Patients with Migraine

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#### **Abstract**

A cross-sectional retrospective study was done in the 'Headache clinic' of Bangabandhu Sheikh Mujib Medical University (BSMMU) and Dhaka Medical College Hospital (DMCH) comprising a sample of eighty patients with migraine. There were 64(80%), female and 16 male (20%). Among them 19(23.75%) had psychiatric disorder as co-morbidity. In accordance with DSM-IV, the commonest psychiatric illness was major depressive disorder (36.84%). The others were panic disorder (21.05%), obsessive compulsive disorders (15.78%) and dysthymic disorder (15.78%). Considering these findings and observation, it so appears that a substantial psychiatric morbidity is prevalent among the sufferers of migraine and it warrants early recognition and proper assessment with the initiation of an integrated treatment modality.

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## Introduction

Headache is one of the humanity's most frequent afflictions<sup>1,2,3</sup>. Few of us are spared the experience of head pain during our life times; indeed, severe disabling headache is reported to occur at least annually by 40 percent of individuals worldwide. In fact, there are so many vexatious cases of headache that special headache clinics have been established in practically every medical center.<sup>2</sup>

However, headache is usually a benign symptom and only occasionally it is the manifestation of serious illness such as brain tumor, subarachnoid hemorrhage, meningitis or Giant cell arteritis<sup>3</sup>. Even in emergency settings, only 5 percent of patients who present with headache are found to have a serious underlying neurological disorder<sup>3</sup>.

In community studies<sup>4</sup> of UK reveal that, tension headache is five times more common than migraine and often three common headache

syndromes, viz. migraine, migraine plus tension headache (mixed headache) and daily continuous headache (tension headache) dominates clinical practice. In a Bangladeshi study, the tension headache (Muscle contraction headache) was the commonest type (69%) followed by Migraine (26%)<sup>5</sup>.

The prevalence of migraine is worldwide and in various population based studies showed that 4-6% of men and 13-17% of women are suffering.<sup>6</sup> Migraine predominantly affects women in a ratio of 3:2. In 75% of patients the first attack occurs before the age of 20<sup>4</sup>. A family history of migraine is present in up to 90% of the sufferers<sup>1</sup>, migraine with aura occurs in about 25% of patients, but not necessarily in every attack<sup>4</sup>.

In 1937, Wolff, taking into consideration the psychological features of migraine viz. the anxiety, depression and social fears, proposed the

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concept of 'migraine personality', as reported in a follow-up study by Guidetti V. et al<sup>6</sup>.

About 49-84% of depressive patient complaints of headache as one of their primary symptoms, being evident by various studies, done in home and abroad<sup>7,8</sup>. It is also to be stated that in our culture many patients present somatic complaints that are not enlisted as the diagnostic criteria for major depressive disorder in universally accepted area<sup>9</sup>. It is often observed that migraine presentation is multifaceted and symptoms emanate from multiple symptoms, including vascular, neurological, gastrointestinal, endocrine. and visual manifestation<sup>10</sup>. These symptom mav accompanied by a variety of changes in behavior and cognition, including mood alterations and confusion<sup>11</sup>.

Patients with migraine are often referred to psychiatrists by primary care physicians and neurologists after the extensive biomedical work up, which often have negative findings, and such results may be frustrating for both patient and physician. A pioneering author (Kaplan 2007)<sup>12</sup> commented that- "Physician not well versed in psychological medicine may attempt to reassure such patients by telling them they have no disease. But this reassurance may have the opposite effect – it may increase patient's anxiety and even escalate into a disagreement about whether the pain is real or imagined."

So, this observation demands a thorough psychological evaluation of the migraine patients in order to alleviate their hidden miseries.

## **Materials and Methods**

A consecutive series of 80 migraine-patients, attending the 'Headache clinic' of BSMMU and DMCH in 2001, was considered for this cross sectional retrospective study. After thorough assessment by the neurologist, patient went for psychiatric diagnosis, by the employment of DSM-IV criteria. The data's were then tabulated and necessary bio-statistical analysis was done.

### Results

The patients selected from the study place, were mostly female (80%), when male were only 20% (Table I). The age range was 20-40yr (Table II).

72.5% were less than 20 years old, 22.5% were in between 21-30 year and only 5% were in the range of 31-40 year. Table III, depicted the psychiatric diagnosis among the respondents. Majority had the major depressive disorder (36.84%). Panic disorder was 21.05%, and both dysthymic disorder and obsessive compulsive disorder were 15.78% each. Again, each one (5.26%) was suffering from Bipolar Mood Disorder (depressed) somatoform disorder. In short, 23.75% had the psychiatric co-morbidity, which remain unaddressed and under-diagnosed.

**Table I:** Sex distribution of patients with migraine

Sex	Number	Percentage
Male	16	20
Female	64	80
Total	80	100

**Table II:** Pattern of age among the respondents

Age	Number	Percentage
< 20	58	72.5
21 - 30	18	22.5
31 - 40	04	5

**Table III:** Distribution of psychiatric disorders among the patients with migraine

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Psychiatric disorder	Number	Percentage		
Major depressive disorder	7	36.84		
Bipolar mood disorder, most recent episode depressed	1	5.26		
Panic disorder	4	21.05		
Obsessive compulsive disorder	3	15.78		
Somatoform disorder	1	5.26		
Dysthymic disorder	3	15.78		

## **Discussion**

This study was carried out in the 'Headache clinic' of Bangabandhu Sheikh Mujib Medical University and Dhaka Medical College Hospital in 2001. Among 80 respondents 20% were male and rest 80% were female. The age range reflected that most (72.5%), were less than 20 yr. Among the others 22.5% were in between 21-30 year and only 5% were in the range of 31-40 year. The overall psychiatric morbidity was 23.75%, when major depressive disorder was the commonest (36.84%) diagnosis. The other disorders were panic disorder (21.05%), dysthymic disorder (15.78%), obsessive

compulsive disorder (15.78%), bipolar mood disorder, depressed (5.26%) and somatoform disorder (5.26%).

M. Gelder et al. 16 in their text book, commented that many of the chronic ENT and Eye diseases, presented with the feature 'headache' were found to have psychiatric disorders, as co-morbidity like those of the migraine and tension type headache.

Karim and Mullick<sup>17</sup>, noted 'headache' as an important somatic symptom in psychiatric disorders. Similar study by Nahar et al.<sup>9</sup> revealed 15 patients to be with headache among 52 patients.

In a Bangladeshi study (Habib et al. 2001)<sup>5</sup>, 37% of headache patients were below the age of 18 years, 40.27% were within the range of 18-29 years and only 3.32% were above 50 years. Ziegler DK et al. <sup>18</sup> in their study at Kansas noted 8% subjects to be in 15-24 age group and 30% were in the range of 25-39 years.

In a clinic based study done by Habib et al, represents 33.31% male and 66.69% females showing preponderance of females in both Migraine (80%) and Tension type of headache (62.75%).

Referring the study of Monzon and Lainez, Wig  $NN^{20}$  noted that migraine was among 82.3% females and 17.7 males, which almost parallels the present findings viz. 80% females and 20% males respectively. In the same Indian study<sup>20</sup> of headache, females represented 56% and that of male was 44%.

Dawn A. Marcus<sup>15</sup>, on evaluating 127 consecutive patients with headache attending a university headache clinic of Pittsburgh, noted 21% Migraines, 16% tension type and 32% combined one.

Breslan and Davis<sup>14</sup> in their study specifically among Migraineurs, found 34.4% major depression, 10.9% panic disorder, 8.6% obsessive compulsive disorder, and 10.2% generalized anxiety disorder, which is somewhat close to our observation. They in their discussion elucidated Kil-Dih Juan et al.,<sup>28</sup> when the later found 57% major depression, 11% dysthymia, 30% panic

disorder and 8% generalized anxiety disorder among the patients with migraine.

So, considering the different observation it is rightly appraised that, migraine patients bear significant association with psychiatric morbidity. As such the present study would provoke an insight into such a complaint, which we happen to come across in our everyday clinical scenario.

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