

# FREQUENCY OF DEPRESSION IN MIGRAINE PATIENTS

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## ABSTRACT

**Background:** Migraine is a common cause of headache. Depression is one of common finding in these patients. The purpose of this study was to diagnose depression in patients of migraine to help the clinician for the better management of migraine.

**Material & Methods:** We interviewed after informed consent 102 patients for study.

**Results:** Out of 102 migraine patients, depression was documented in 60 patients; male 17 (28.33%) and female 43 (71.66%).

**Conclusion:** There is a strong association between migraine and depressive illness. Females are more commonly affected from depression than males with migraine.

**Key words:** Migraine, Depression, Headache.

## INTRODUCTION

Migraine is a mysterious disorder characterized by pulsating headache (feeling of weightiest, fullness over forehead), usually restricted to one side, which comes in attacks and is often associated with nausea, vomiting, sensitivity of light, and sound, vertigo, loose motions and other symptoms.<sup>1</sup> Migraine is very common type of headache, with a prevalence of 10-12%, ranks 19th among disease.<sup>2</sup> It is a complex disorder in which many psychological, environmental, biochemical, neurophysiologic, and genetic factors play a role to trigger attacks. The diagnosis is based on headache and associated symptoms specified by International Headache Society.<sup>3,4</sup>

There are two types of migraine headaches. The first migraine without aura (previously called common migraine) is severe, unilateral, pulsating headache that typically lasts from 2 to 72 hours. In the second type migraine with aura, the headache preceded by neurological symptoms which can be visual, sensory, and or cause speech or motor disturbances. Women are three fold more likely to experience migraine than men.

In migraine, there is family tendency, and it occurs in cluster. Tension-type migraine usually develops - under stress, and bilateral, characterized by dull persistence type.<sup>5</sup>

The association between migraine and depression is well established, but the mechanism is

uncertain. Depression may mean the symptom of feeling sad, melancholic or low in spirit, or it may mean the syndrome of depression as characterized by low mood, lack of enjoyment, reduced energy and changes in appetite, sleep and libido loss.<sup>6</sup> Clinically significant depression is often referred to as major cause of disability and suicide. Medically unexplained symptoms that may result from depression include chronic fatigue, chronic wide spread pain, weight loss and cognitive impairment (depressive pseudo dementia). Depression co-morbid with a medical condition magnifies any associated disability, diminishes adherence to medical treatment and rehabilitation, and may even shorten the life expectancy.<sup>7-9</sup>

The purpose of this study was to diagnose depression in patients of migraine so to help the clinician to treat depression for better management of migraine.

## MATERIAL AND METHODS

After informed consent, we interviewed 102 patients of migraine, whom reported at Medical and Psychiatric Outpatient Department at Muhammad Medical College Hospital Mirpurkhas, Sindh, from March 2007 to April 2008.

These patients were screened for the presence of depressive symptoms. Depressive symptoms were measured by Hamilton Depression Rating (HDR) scale.<sup>10</sup>

**Table 1: Gender distribution of migraine patients with depression.**

Depressive Patients				p-value
Male (n=38)		Female (n=64)		
-ve	+ve	-ve	+ve	
21(50%)	17(28.33%)	21(50%)	43(71.66%)	< 0.05 Significant

**HAMILTON DEPRESSION RATING SCALE – 24 items**

(HDR maximum score= 15)

- 0-4: Normal
- 5-8: Mild
- 8-11: Moderate
- 12-15: Severe

**RESULTS**

Total number of patients with migraine examined were 102; males 38 (37.25%) and females 64 (62.75 %). Depression was observed in 60 patients; out of whom 17 (28.33%) were males and 43 (71.66%) females.

**DISCUSSION**

Throbbing migraine headaches and major depression may be related. In fact having one may increase the occurrence of the other. Migraine sufferers were five times more likely than the headache-free individuals to develop major depression in the study conducted by the Henry Ford Health System.<sup>11</sup>

Researchers survey of 949 women with migraine about their history of abuse, depression and headache characteristics, 40% of woman had chronic headache more than 15 times in month, and 72% reported very severe headache related disability. The study found woman with migraine who had major depression were twice as likely as a child. In abused woman with migraine, depression was five times more common.<sup>12</sup>

Major depression increased the risk of migraine as well. This bidirectional association, with each disorder increasing the risk for onset of other, was not observed in relation to other severe headaches; both were considered directly proportional to each other.<sup>13</sup>

Another study found women with chronic headache were four times more likely than those with episodic headache to report symptoms of major depression.<sup>14</sup>

Shehbaz N et al<sup>15</sup> reported depression, when it is co-morbid with migraine, not only increases the duration, frequency and severity of this primary headache disorder but also makes it more resistant to treatment.<sup>17</sup> This study also suggested psychiatric evaluation of migraine patient for better control of migraine.

Migraine and depression were highly co-morbid (adjusted prevalence ratio 2.7, 95% CI 2.1 to 3.5) in a study by Lipton RBS et al.<sup>16</sup>

Migraine is two to three times more common in women than in men, with peak prevalence occurring during mid-life in both sexes. Significant associations have been reported between migraine and certain psychiatric disorders, epilepsy, and stroke in women under the age of 45.<sup>17</sup>

Our results are consistent with above mentioned reports of association between migraine and depression.

The association is likely to be explained by overlapping etiological risk factors.<sup>18</sup>

**CONCLUSION**

There is a strong association between migraine and depressive illness. Females are more commonly affected from depression than males with migraine.

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