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A CROSS-SECTIONAL RESEARCH TO ASSESS THE DEPRESSION AND ANXIETY AMONG MIGRAINE PATIENTS WITH REFERENCE TO GENDER AND AGE

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Abstract:

Objective: This study was aimed to determine the anxiety and depression prevalence among the patients of migraine.

Methods: We conducted this cross-sectional research at the Department of Psychiatry of Mayo Hospital, Lahore from July 2017 to July 2018 (One Year). Research sample consisted male and female patients who were diagnosed with headache and migraine. The diagnosis purely based on the criteria laid by HIS (International Headache Society). Relevant and necessary examination was also conducted on requirement basis. We also applied the Hospital Anxiety and Depression scale on the short-listed patients. Research outcomes were saved in the designated format and researcher also analyzed the outcomes on SPSS software.

Results: In the total research sample there were 37 males and 65 females with respective proportion of 36.2% and 63.8%. The minimum age limit of the migraine patients was eleven years; whereas, maximum age was seventy-one years. Majority of the cases were in the age bracket of (21 – 51) years (76%). A total of 58 patients had psychiatric morbidity (56.8%) with an anxiety and depression score of (11 – 21). Therefore, we did not recommend 44 patients (42.91%) for psychiatric management. In the total of 58 positive cases male and female were respectively 23 and 35. Whereas, 25 patients had anxiety (43%), 18 had depression (31%) and 15 had both (27%). Eighty percent of the patients were in the age bracket of (21 – 50) years.

Conclusion: Undoubtedly, there is a strong association of anxiety and depression with Migraine. Whereas, gender and age may affect the overall prevalence of the correlation between both onsets.

Keywords: *Migraine, Anxiety, Depression and HADS.*

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INTRODUCTION:

Migraine refers to a disease which is episodic in nature and it also features headache with related signs. IT commonly affects the Western countries as twelve percent population is affected by migraine. The state of migraine is heterogeneous and its outcomes are different in different patients. Its disability is a serious economic and social threat. In the presence of this worst scenario the diagnosis, management and recognition are very poor. Migraine is an outcome of electrical, vascular and neurochemical variations occurring in the nervous system. Depression and Anxiety are common in migraine affected people and largely remained unnoticed. The relationship between various psychiatric, migraine and somatic conditions has been reported in the researches. In all age groups, migraine has been observed but more frequently it is between 25 and 55 years of age. In all ethnic groups, it has been widely noticed. The relationship between migraine, anxiety and depression has been systematically reported. Women with migraine had high levels of anxiety (70%) and depression (52%). Shehbaz N et al. A high depression prevalence was reported in the selected subjects. Most studies on population-based have shown a relationship between migraine and major depression. These may show a indirect or direct etiological effect of one condition on another. Several analysis have been performed globally to know the prevalence of depression and anxiety in migraine affected patients. For this purpose, various scales can be used but the findings of the analysis may not be compared to others. This rely on the work design and the environment. In this study, we used the Urdu version of HADS (Depression Scale and Hospital Anxiety). The HADS Urdu version was also used in other locally conducted analysis. This standardized scale facilitates the identification of psychiatric problems in our region. The aim of this analysis was to know the prevalence of depression and anxiety in migraine patients locally.

MATERIALS AND METHODS:

We conducted this cross-sectional research at the Department of Psychiatry of Mayo Hospital, Lahore from July 2017 to July 2018 (One Year). Research sample consisted male and female patients who were diagnosed with headache and migraine. The diagnosis purely based on the criteria laid by HIS (International Headache Society). Relevant and necessary examination was also conducted on requirement basis. Patients were included regardless of gender and age. Patients with any other surgical or medical problems were excluded from the analysis. Patients receiving antidepressants or anxiolytic were also discarded. Only migraine patients who could complete the Urdu form on their own were selected. Hospital Anxiety and Depression Scale was applied to the patients. Based on the interpretation of the HADS score of Snaith and Zigmond, a cut-off value of 11-21 was used to detect both depression and anxiety. We also applied the Hospital Anxiety and Depression scale on the short-listed patients. Research outcomes were saved in the designated format and researcher also analyzed the outcomes on SPSS software.

RESULTS:

In the total research sample there were 37 males and 65 females with respective proportion of 36.2% and 63.8%. The minimum age limit of the migraine patients was eleven years; whereas, maximum age was seventy-one years with a mean age of (36.91 ± 9.04) years (Table – I). Majority of the cases were in the age bracket of (21 – 51) years (76%) (Table – I). A total of 58 patients had psychiatric morbidity (56.8%) with an anxiety and depression score of (11 – 21). Therefore, we did not recommend 44 patients (42.91%) for psychiatric management. In the total of 58 positive cases male and female were respectively 23 and 35. Whereas, 25 patients had anxiety (43%), 18 had depression (31%) and 15 had both (27%).

TABLE I:
AGE DISTRIBUTION (n=102)

Age	n	%
10-19 yrs	11	10.8
20-29 yrs	22	21.6
30-39 yrs	19	18.6
40-49 yrs	34	33.3
50-59 yrs	11	10.8
60-69 yrs	04	3.9
>70 yrs	01	0.9
Total		102

Psychiatric morbidity, psychiatric dependence, Urdu Anxiety Scale and Hospital Depression were used in anxiety and depression in 58 patients (56.8%) with a cut-off value of 11-21. The remaining 44 patients (43.1%) had no psychiatric problems. Of the 58 patients with positive psychiatric evaluation, 23 (40%) and 35 (60%) were male (Table II).

TABLE II:
SEX DISTRIBUTION OF PATIENTS (n=102)

Male Female Distribution	Patients with psychiatric morbidity	Patients without psychiatric morbidity	Total number of patients
Males	23(62.1%)	14(37.8%)	37
Females	35(53.8%)	30(46.1%)	65
Total	58 (56.8%)	44(43.1%)	102

Of these, 25 (43%) had anxiety, 18 (31%) had depression and 15 (26%) had anxiety and depression. There were 65 patients with migraine, 35 (53.85%) comorbidity, 37 male migraine, and 23 (62.16%) comorbidity. Among the migraine patients suffering from anxiety, 60% (15/25) and 40% (10/25) were female. Of the patients with depression, 12/18 (66.6%) had 6/18 men and 32.93% women. Of the patients with depression and anxiety, 7-15 were men (46.6%), and 8 women (15.3%) (52.93%) (Table III).

TABLE III:
SEX DISTRIBUTION AND PSYCHIATRIC MORBIDITY IN PATIENTS OF MIGRAINE (n= 102)

Sex Wise Distribution	Patients of migraine with Anxiety alone	Patients of Migraine with Depression alone	Patients of Migraine with both Anxiety & Depression	Patients of Migraine without Anxiety or Depression	Total number of patients
Females	15	12	8	30	65
Males	10	6	7	14	37

The patient's distribution of age with migraine with psychiatric treatment is presented in Table IV.

TABLE IV:
AGE DISTRIBUTION PATIENTS WITH POSITIVE PSYCHIATRIC CASENESS (n=58)

Age	n	%
10-19 yrs	3	5.2
20-29 yrs	13	22.4
30-39 yrs	11	19.0
40-49 yrs	22	38.0
50-59 yrs	2	10.3
60-69 yrs	6	3.4
>70 yrs	01	1.7
Total	58	100

Eighty percent of the patients were in the age bracket of (21 – 50) years.

DISCUSSION:

Clinical outcomes of migraine versatile with varying presentation and features. The state of migraine is heterogeneous, and its outcomes are different in different patients. Its disability is a serious economic and social threat. In the presence of this worst scenario the diagnosis, management and recognition are very poor. Migraine is an outcome of electrical, vascular and neurochemical variations occurring in the nervous system. Migraine patients also pose anxiety and depression which is most of the time not recognized. Different authors have also reported the association of somatic and psychiatric condition with migraine. Several studies have been performed globally to know the prevalence of depression and anxiety in migraine patients. In this study, we used the Urdu version of HADS. The HADS benefit as a diagnostic tool in a local psychiatric setting has been confirmed. 102 total patients with migraine included in the study with 64 women (64.08%) and 38 men (35.92%). 11 years was the minimum age, the highest age was 71 years and the mean age was 36.91 ± 9.04

years. Table 1 shows the differentiation of these patients according to their age. The maximum number of patients (34) (33.3%) was between 40-49 years of age. Most of the patients (76%) may be between 21 and 51 years of age. Therefore, the prevalence of psychiatric comfort was higher in males than in others. Other employees reported higher prevalence in women. but; The results may differ from one analysis to another depending on the study design, clinical setting, population studied and sample size. The prevalence of psychiatric morbidity, reported as panic disorder, is higher in men than in women suffering from migraine. Therefore, the increase in the frequency of psychiatric morbidity in men supports our study results. Therefore, any sexual superiority may not be known. Most of the migraine patients (76%) were between 20 and 51 years. In the 25-50 age group, Migraine was commonly observed. In this study, approximately 80% of patients with anxiety and depression were between 20 and 50 years of age. On the other hand, these data appear to be close to previous studies. It is easy to understand that depression and anxiety have a strong relationship with migraine. The prevalence of depression and anxiety in our analysis was 57%. Of these, 25 (43%) had anxiety, 18 (31%) had depression and 15 (26%) had anxiety and depression. Workers from around the world gave information to the association in a systematic way. Breslau et al found that in addition, migraine patients were found to be more prone to affective disorders such as major depression. According to Shehbaz et al. migraine patients posed higher rates of depression (41%). Therefore, there is a presence of disorder like state of comorbidity. Other regions of the world also reflect the same state.

CONCLUSION:

Undoubtedly, there is a strong association of anxiety and depression with Migraine. Whereas, gender and age may affect the overall prevalence of the correlation between both onsets. Larger sample studies are suggested to probe the possible relationship in detail. Common onset of headache may lead to depression, impaired life quality and anxiety. Therefore, the psychological disorders assessment is also recommended for such patients.

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