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Research Article

**A CROSS SECTIONAL STUDY ON THE COMORBIDITY OF  
MIGRAINE AND DEPRESSION**<sup>1</sup>Dr. Arva Zainab, <sup>2</sup> Dr. Iram khan, <sup>3</sup> Dr. Fatima Maham Iqtidar<sup>1</sup>Quaid -e- Azam Medical College, <sup>2</sup>Army Medical College Rawalpindi<sup>3</sup>Quaid -e- Azam Medical College**Abstract**

**Objectives:** The aim of our research work is to study & compare the rate and causes of coexisting depression in diagnosed cases of migraine.

**Material and Methods:** This research work is a decline review of Patient at Bahawal Victoria hospital Lahore from October 2017 to October 2018. In this research we study two type of patient 1<sup>st</sup> is Migraine with Depression cases (MWD) and 2<sup>nd</sup> is Migraine without depression as controls (MC). We compare our research study with International Headache Society criteria and Urdu version of Hospital Anxiety and Depression Scale.

**Results:** one hundred were the all participants of this research work forty migraines patients were study in MWD and other forty were study in the MC. In both cases the female patients are common: in MWD seventy-two percent were female patients in MC cases seventy-eight percent is female patient. the average age of fifty-two percent patients between thirty-one to forty-year-old. Female patients compared to MC the maximum age of fifty-eight percent patients were 21-30-year-old. The maximum age of male patient in both cases of MWD & MC belonged to 22-30 year and forty-six and fifty-six percent respectively. MWD reported that 50% patients suffered from migraine attacks on the other hand only eighteen percent patients of MC suffered for ten year or more respectively. (P-value = <0.01). 90% (n=36) of MWD reported maximum disorder during the headache as compared to the sixty-two point five percent of MC. the sixty-two point five percent of MWD patient had four or more attacks per month compare to fifty-five percent of MC having only one attack per month or no attack. (P-value = 0.001).

**Conclusions:** Migraines with long history and high frequency might benefit from psychiatric evaluation and addition of antidepressant drugs to their therapeutic regimen.

**Key Words:** Migraine, Depression, Diagnosed, Disconsolate, Disconsolate, International Headache Society, Antidepressant Drugs, Therapeutic Regimen

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## INTRODUCTION:

According to our research work the entire neurologist suggest that Migraine is a common neuro disorder, eighteen percent females & six percent males suffered from it. Migraine patient used medicine for relief that ways he/her make economic burden on society. Depression problem of migraine patient usually started in early life. In all patients the depression is frequent term in migraine. In our past research study on the same theory found that more than ten percent patient had disconsolate personality, if the mental disorder and physical illness occur in same time then the symptoms of illnesses increases, the treatment of such patient were defecated and west money on unnecessary investigations and referral. Treatment of both migraine and depression conditions increase the burden of migraine socially and economically. The aim of this research work to study the impact of depression and migraine on the Headache disorder.

## MATERIAL AND METHODS:

The treatment of patients was developed on the basis of international headache society (HIS) criteria for the treatment of migraine patients. For the analysis of depression Urdu version (validated for the Pakistani population) of Hospital Anxiety and Depression Scale was employed. This scale was commonly used for patients with physical illness. Further anxiety and a depression are divided in subscale; there are 7 items in each sub scale and 4 choices is present for each items. There are three deferent stages of migraine 1<sup>st</sup> if score value is seven or less showed normal cases and score of eight to ten consider indefinite case the score eleven or above indicate definite cases. This research work is a decline review of Patients at Bahawal Victoria hospital Lahore from October 2017 to October 2018. According to international headache society one hundred patients were suffer from migraine out of all patients. According to our survey all patients belong to poor family and due to financial problem they all suffer from migraine. We select that patient for our research study which have constant headache in one location. In indefinite cases the patient has recommended for CT Scan/MRI.

Such a migraine patient which followed the symptom of international headache society then they repaired to the Urdu version of HADS. The first responsibility of patient to understand the question. Repetition are not acceptable understand the question of questionnaire and answering it carefully. May patient did not understand the meaning of question and filled the proforma themselves, little patient know the real meaning of question. All the patient is divided in three groups 1<sup>st</sup> group are that which score is less

than seven were consider as control (MC) and 2<sup>nd</sup> those having greater than ten consider definite case and 3<sup>rd</sup> are those patients which between in eight and ten score such patient is remove from study. Forty migraine cases is uniformly divided in three groups on the basis of age limit 1<sup>st</sup> groups: 11-20 years; 2<sup>nd</sup> is 21-30 years and 3<sup>rd</sup> is 31-40 years.

In our research work we also calculate the duration of headache of a patient on the basis of duration we divided the patient in three groups 1<sup>st</sup> those patient having headache for five year or less 2<sup>nd</sup> those patient having it for six to nine years and 3<sup>rd</sup> those having tin year or more. For migraine it is important to do regular physical activities to decrease the frequency of headaches, the frequency of headache is defriend in patients: some patient four or more attacks per month, two or three attacks per months, and some patient having one attack per month or less.

## RESULTS:

In our research work we study one hundred patients on the basis of HADS the forty patients were (MWD) and 40 patients were Migraine Controls (MC). in forty cases of MWD seventy-two percent females and twenty-eight percent male patients. In MC seventy eight percent were females and twenty two percent were males. The age of all patients was 16 to 40 year.in MWD fifty two percent females under the age of 31 to 40 year old and tarty one percent under the ages of 21 to 30 year old and seventeen percent female under the ages of 11 to 20 year old. Relative numbers for MC were 58%. All the male patients of both groups of MWD & MC under the age of 22 to 30-year-old: forty-six percent and fifty-six percent respectively. The second groups of MWD tarty four percent of patient under the age of 31 to 40 year old and eighteen percent of MC under the age of 11 to 20 year old. The duration of headache fifty percent of MWD had suffer for 10 year or more than tin as compare to MC which had only 18 percent Only fifteen percent of MWD patient are those who had suffer for five or less year headache .

According to MWD report 90% of patients feel more sickness during headache as compared to MC which is sixty-two percent. Only tin percent of MWD patient feel less sickness during headache the frequency of attack is more in MWD as compared to MC sixty-two percent of MWD patient suffer one time or more attack in week defend on a p value twenty-five percent patient had two or more attack per month and only 12 percent of patient one attack per months the ratio of attack is less in MC as compared to MWD. In this research work we study one hundred patients in these patients sixty-seven

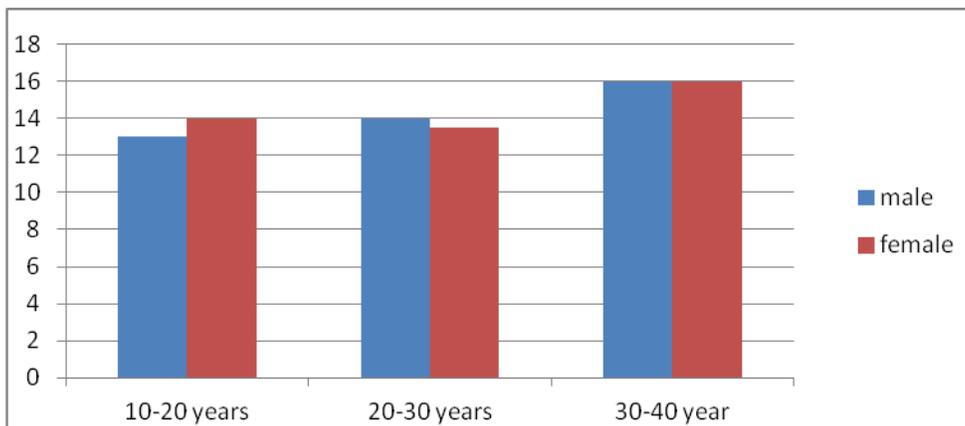
have follow the criteria for migraine without mood, twenty-four migraines with mood nine patients had mix figure the rest of seven patients in both group of with mood and without mood patients the relation between migraine with mood and without mood; we study two patients respectively from each one with ophthalmologic migraine and second occasional attacks of migraine with mood and mood without headache. Seventy five percent patients were change the side of headache. Other Seventy five percent patients have feel sadden headache during attacks and

ninety percent suggest that stress had the cause of attacks. Thirty eight percent patient had belong to good family also suffer from recurrent headache.

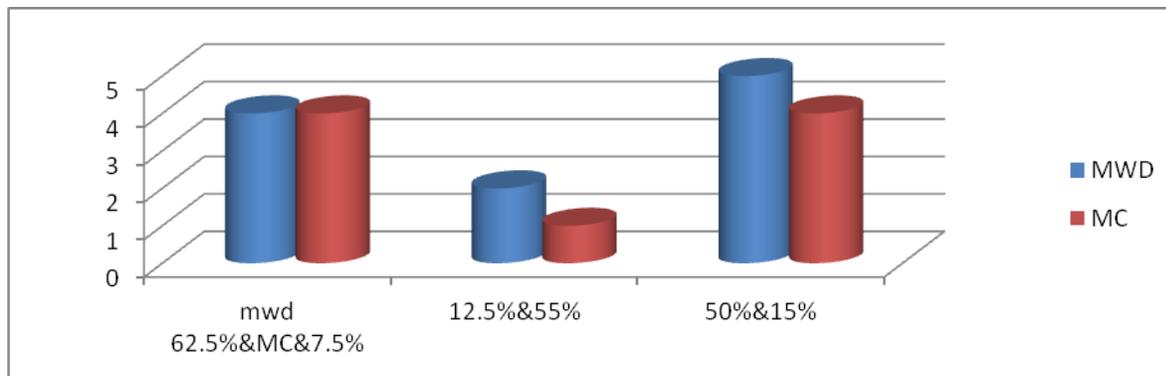
According to HADS depression subscale MWD, score for males was lower than females. The average HADS score for females was fifteen point two and for males was fourteen point five for MWD cases the average score was  $15 \pm 1$ . And  $6 \pm 1$  was average depression score for MC, with minor change for females and males.

	%	Age limit		%	Age limit
MC female	58%	21-30 years	MWD male	46%	22-30 years
MWD female	52%	31-40 years	MC male	56%	22-30 years

Showed Maximum Depression According to Score		
Age groups	Score for male	Score for female
10-20 years	13	14
20-30 years	14	13.5
30-40 year	16	16



MWD& MC Duration of attack		
MWD in percent	MC in percent	Duration of attack
62.5%	7.5%	4 time in month
12.5%	55%	2 or 1 time in month
50%	15%	5 or less time in month



### DISCUSSION:

According to our research study we conclude that forty percent of patients Migraine due to depression, because the entire patient follows IHS criteria and HADS. W. Juang et al worked on the same results he had found that fifty seven percent patients suffer from headache due to depression disorders and Devlen in 20% of his migraine patients. Lipton et al study the many patients determined that forty seven percent of migraine suffers experienced depression, compared to 17% of people without migraine. Sial finally reach the main reason of migraine patients he studies fifty-two present patients the main problem of migraine attack is depression and cites psychological factors. The cause of recurrent headache was MWD. 50% of MWD patients had these attacks for ten year or more than ten years compared to eighteen percent of MC. According our hospital case control study it cleared that the duration of headache and frequency of attacks per month were more in MWD as compared to MC. The above table shows that the frequency of attack and duration & intensity of attacks had more in MWD if we compared it to MC. 90% of MWD patient feel more incapacitated during their headache as compared to the MC patients which had sixty percent. According to the sial observation on eighty percent of his patient he given the result from his study that all patients of migraine attacks did not doing their routine activity. During the age of 40 year the frequency of depression is increase in life because it is the best period for men to stable their economy. The main reason of sudden headache is not only the depressions there are many other terms like the surrounding beavers of people and economic problem is also the cause of migraine. Hu observation about migraine patients was reported that both male and female under the aged of tarty to forty nine year suffer from migraine as compared to younger or our age patients. USA entrepreneur per year costs on the migraine patients is exceeded from 13 billion dollars because due to migraine disorder they did not work properly. Per year medical cost of migraine patients

were one billion dollars approximately hundred dollars had spent on per patient.

According to our research study 38% patients had repeated headaches that type of patient also migraine. Nasrullah enlightened found many other vascular headaches in the family of margarine like cluster headache; Mortimer reported from his research that maternal depression and migraine was increase the intensity of abdominal migraine and repeated abdominal pain in children. According to our hospital base study seventy-five percent patients could feel trigger for their attacks and ninety percent reported that stress as a cause, and some other factors. According to the Robbins report sixty two percent patients suffer from migraine due to stress or anxiety and thus such patient feel trigger for their attacks.

MWD patient taking long time for anti-migraine treatment but an anti-depressant was combining to their therapeutic regimen. All most all patient use medicine to control their migraine it also increase the cause of headache, such type of headache called analgesic rebound headaches, and also of hemicranias continua. Vasconcellos study 98 pediatric and young patients all that patient suffer from rebound headaches in forty seven percent with thirty of them using medicine on daily bases. According to Rapoport reports that all patients suffer from analgesic rebound headache all most all patients under the aged of 31 to 40 years. Now a day many medicines is used to control rebound headache for the treatment of rebound headache at is necessary to take medications for 6 months on daily bases. It is not easy for patient to understanding and education it. Many patients follow the instruction of uneducated society and used various non-medical treatments for rebound headache. Migraine is not only mind stress for patient it also increase the stress of family member. It should not be omitted that migraine could even lead to dangerous predisposition and dangerous attacks.

**CONCLUSION:**

When depression, combines with migraine, it increases the duration, frequency and hardness of this primary headache disorder due to this reason the treatment take long time. This headache disorder also effects the life of affected person. When the duration of headache and frequency increase such patient suffering from migraine with overdose medicine might asset from psychiatric opinion and apparently increasing of antidepressant drugs to their therapeutic regimen.

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