

STUDY ON THE SEVERITY OF DEPRESSIVE DISORDERS IN PATIENTS WITH CHRONIC TENSION TYPE HEADACHE

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Abstract

Background: Headache is one of the most common reason patients seek medical attention every year about 80 percent of population has a least one headache, and 10 to 20 percent go to physician with headache as their primary complaint. Headaches are also a major cause of absenteeism from work and avoidance of social and personal activities. Anxiety and depression are recognized co-morbidities in patients with tension type headache but studies among patients with TTH (tension type headache), have shown variable results, hence the need for further comprehensive studies on chronic TTH. The presence of psychiatric co-morbidity in headache further complicates and makes difficult headache management and portends a poorer prognosis for headache treatment. **Materials and Methods:** Cross sectional study was conducted among 95 patients attending outpatient department of psychiatry in medical college and hospital for 18 months from April 2015 to October 2016. Patients from psychiatric outpatient department complaining of headache in the age group 18 yrs to 60 yrs included in this study after their written consent and after applying inclusion and exclusion criteria. Subjects were recruited on a purposive basis from the OPD of Psychiatry and Medicine Department in Dr. Panjabrao deshmukh Memorial Medical College, Amravati. Recruitment was accomplished by using inclusion and exclusion criterias and consent was taken for the participation in the study. The recruited subjects were diagnosed for chronic tension type headache according to international classification of headache disorder (ICDH) 3rd (beta version). **Result:** Depressive disorder followed by anxiety disorder were most common in chronic tension type headache. The prevalence of anxiety was 16.84% in patient of CTTH and mild degree of anxiety were most common. Depression was found in 52.63% of patient of chronic tension type headache. Mild depression (68%) out of all depressive patient were most prevalent in patient suffering from chronic tension type headache. The comorbidity (anxiety and depression) were more prevalent in unemployed/Housewife patients. **Conclusion:** From the our study findings, it is clearly evident from this study that, the patient with chronic tension type headache have high prevalence of depression and anxiety, the proper psychiatry screening and detail evaluation is required, so that the depression and anxiety detected in early stages and treated which further can improves the prognosis of chronic tension type headache.

INTRODUCTION

Headache is one of the most common reason patients seek medical attention every year about 80 percent of population has a least one headache, and 10 to 20 percent go to physician with headache as their primary complaint.^[1] Headaches are also a major cause of absenteeism from work and avoidance of social and personal activities. Moreover, in any psychiatry disorders, including anxiety and

depressive disorders, headache is frequently a prominent symptoms patient with headaches are often referred to psychiatrist by primary care physician and neurologist after extensive biomedical workups, which often include magnetic resonance imaging (MRI) of the head. Most workups for common headache complaints have negative findings, and such results may be frustrating for both patient and physician. physician not well versed in psychological medicine may attempt to reassure such

patient by telling them that they have no disease. But this reassurance may have the opposite effect – it increases patients anxiety.^[2] Headache is a common neurological disorder that ranks among the top 10 most disabling conditions for both men and women worldwide.^[3,4] Headache patients, especially those with migraine or chronic daily headache, shows reduced quality of life,^[5,6] and the burden caused by any headache is high with regard to lost workdays, lost days with household activities, lost family, social and leisure activities.^[7,8] The association between headache and psychiatric disorders is common with depression, bipolar disorders, and anxiety, and somatoform disorders being the commonest complaints. Psychiatric comorbidity has been also observed in patients with tension-type headache and may be explained by affective distress, personality disorders, and maladaptive coping. Tension type headache (TTH) is one of the most common primary headaches, with a prevalence ranging from 30% – 78% worldwide,^[9-12] and among them majority have infrequent episodic type and 2%-3% patients have chronic type. It is also the least studied type of headache.^[9] Although it is less intense in severity, the burden of disability and the overall cost of chronic tension type headache is greater than that of migraine.^[9,10] Anxiety and depression are recognized co-morbidities in patients with tension type headache. Another study conducted in 2000, on chronic headaches showed that 64% of patients with chronic TTH had psychiatric co-morbidities., among whom 51% had major depression, 8% had dysthymia, 22% had panic disorder and 1% had generalized anxiety disorder.^[13] Further, a study published in 2003, compared the prevalence of anxiety and depression in chronic and episodic types of TTH. It was found that in chronic TTH, anxiety occurred in 44% and depression in 40% of patients, while in episodic TTH, anxiety occurred in 60% and depression in 32%.^[14] The HADAS Study, published in 2011, compared the prevalence of psychiatric co-morbidities in migraine without aura, TTH and combined headache. The study showed that 12.8% of patients with TTH had psychiatric co-morbidities, of whom, 67% had depressive episode, 19.3 had anxiety disorders, 5.5% had panic disorder and 1.1% had obsessive compulsive disorder.^[15] Anxiety and depression are recognized co-morbidities in patients with tension type headache,^[15,16] but studies among patients with TTH, have shown variable results, hence the need for further comprehensive studies on chronic tension type headache. Also there are very few studies on chronic TTH with psychiatric co-morbidities in India. The presence of psychiatric co-morbidity in headache further complicates and makes difficult headache management and portends a poorer prognosis for headache treatment.

Objectives

To study the severity of depressive disorders in patients with chronic tension type headache.

MATERIALS AND METHODS

Cross sectional study was conducted among 95 patients attending outpatient department of psychiatry and medicine department in medical college and hospital for 18 months from April 2015 to October 2016. Patients complaining of headache in the age group 18 yrs to 60 yrs were included in this study after their written consent and after applying inclusion and exclusion criteria.

Inclusion Criteria

- Patients aged >18 and < 60 year.
- Patients diagnosed with chronic TTH as per ICHD-3 (beta version)
- Patients consenting for the study.

Exclusion Criteria

- Patients with severe mental disorders like, dementia, schizophrenia and mental retardation.
- Patients with severe neurological disorders like, space occupying lesions, head injuries, degenerative conditions.
- Pregnancy.

Methods: Subjects were recruited on a purposive basis from the out-patient Department of Psychiatry and medicine in out-patient Department of Psychiatry and Medicine in Dr. Panjabrao deshmukh Memorial Medical College, Amravati. Recruitment was accomplished by using inclusion and exclusion criterias and consent was taken for the participation in the study. The recruited subjects were diagnosed for chronic tension type headache according to international classification of headache disorder (ICHD) 3rd (beta version). All subjects were evaluated using socio-demographic proforma, Composite International Diagnostic Interview Paper & Pencil Instrument (CIDI V-3.0 PAPI V-7.1), (DSM-5) self-related level 1 cross cutting symptoms measure adults apply to every subjects for assessment of mental health domains, subject which are positive in domain of depression and anxiety, then we apply Diagnostic and statistical manual of mental disorders fifth edition (DSM-5) level-2 -depression-adult, and level 2- anxiety-adult also clinical interview for diagnosis. Subjects who were diagnose for anxiety and depression after that we were applied Hamilton Depression rating scale and Hamilton anxiety rating scale respectively. The order of presentation of instruments was kept identical for all subjects.

Data were entered in Microsoft excel sheet and analyzed by using statistical software SPSS version 16 and by using appropriate test of significance.

RESULTS

[Table 1] shows, Out of 95 patients 59(62.10%) patients had at least one comorbidity.

[Table 2] shows distribution of comorbidity(anxiety and depression) in TTH patients according to age group Majority of patients (54.24%) having comorbidity were in the age group of range between 36-50 years followed by 20-35 yrs age group that

(38.98%). Among 59 patients of comorbidity 72.88% (n=43) were female and 27.12% were male. From the above table, we came to know about 44.07% study subjects having comorbidity (anxiety and depression) were either housewife or unemployed persons and only 5.08% person having comorbidity were student. Thus, we can conclude that psychiatric comorbidity (anxiety and depression) is more in the subjects either housewife or unemployed. The discrepancy in observed findings may be due to number of students (n=5, 5.26%) in our study too small to concluded. [Table 3] Study shows association of tension type headache with severity of depression on Hamilton Depression Rating Scale (HAM D). The HAM D scale showed severity of depression was mild in 34 (68%) patients. Severity of depression was moderate in 15(30%) patients. Severity of depression was severe in 1(2%) patient. There was no patient of very

severe depression. The maximum no. of patients of depression were in age group of 36 to 50 yr i.e. 30(60%) and minimum in old age group of 51 -65yrs i. e. 8%.

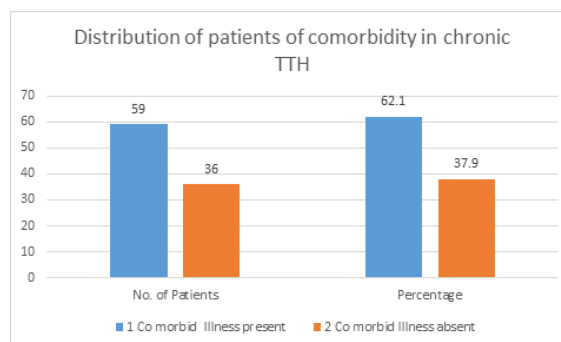


Table 1: Distribution of Patients of anxiety and depression in chronic TTH

Sr. No.	Comorbidity present	No. of Patients	Percentage
1.	Co morbid Illness	59	62.10
2.	No co morbid Illness	36	37.9
	Total	95	100%

Table 2: Age, sex, occupation wise distribution of comorbidity (anxiety and depression) in chronic TTH patients

Age	Comorbidity present	No Psychiatry comorbidity
20-35	23(38.98%)	22(61.11%)
36-50	32(54.24%)	13(36.11%)
51-65	4(6.78%)	1(2.78%)
TOTAL	59(100%)	36(100%)
Sex	Comorbidity present	co morbidity not present
Male	16 (27.12%)	18 (50%)
Female	43 (72.88%)	18 (50%)
Total	59 (100%)	36 (100%)
Occupation	Comorbidity present	No psychiatry comorbidity
Labourer/Farmer	20(33.9%)	08(22.22%)
Service	10(16.95%)	19(52.78%)
Student	03(5.08%)	02(5.56%)
Unemployed/Housewife	26(44.07%)	07(19.44%)
Total	59(100%)	36(100%)

Table 3: Age & Severity wise distribution of co morbid Depression in chronic TTH

Age	Mild depression	Moderate depression	Severe depression	Total
20-35	13(81.25%)	2(12.5%)	1(6.25%)	16(100%)
36-50	20(66.67%)	10(33.33%)	0	30(100%)
51-65	1(25%)	3(75%)	0	4(100%)
Total	34(68%)	15(30%)	1(2%)	50(100%)

DISCUSSION

As the concept of 'General Hospital Psychiatry' or better put 'consultation liaison psychiatry is gaining around, more and more researches focusing on psychiatric aspects of medical diseases is coming forth. This study was undertaken to contribute to the growing body of literature in neuropsychiatry especially as data in this respect is limited for Indian population. This study was cross sectional in design; subjects were recruited on a purposive basis from the out-patient Department of Psychiatry and Medicine in Dr. Panjabrao deshmukh Memorial Medical College, Amravati. The study subjects were recruited on a purposive basis. The majority of patients in our study were

similar in age group of 20-35 years and 36-50 years(47.4%). It is noticeable that patients aged more than 36 years of age shows high rate of psychiatry morbidity, this finding was congruent with the findings of Russell et al,^[17] study shows CTTH is rare in persons 12-14 years old, and the prevalence of CTTH increased until age 39 and then declined in both sexes. The recruited subjects in our study 35.8% (n=34) were male and 64.2% (n=61) were females, the prevalence of psychiatric co morbidity in male was 16(17.12%) and among females were 43(72.88%). Singh, Ajai Kumar et al,^[18] study done on Indian population shows CDH accounted for 28% of all headache patients. The mean age of presentation was 30.2 ± 10.3 years, male: Female ratio of 28:64 and mean duration of 4.56 ± 0.56 years

illness. In our study About 40.7% subjects having psychiatric morbidity were educated upto primary & secondary level, while only 22% subjects having psychiatric morbidity were uneducated. About 44% subjects having depression in chronic TTH were educated upto Primary + Secondary level. Also, 24% subjects having depression were uneducated. About 50% subjects having anxiety in the chronic TTH patients were educated upto graduation + Higher secondary while, only 18.8% subjects having anxiety were uneducated. this may be attributed to the influence of increase stressors and factors such as searching of job/ service, increase level of competition, expectation from family members, busy schedule and competitive exams increase burden of study which creates tension. Schramm et al. study showed that patients with CTTH had a higher intake of alcoholic beverages and a lower education.^[19]

This study was supportive to many previous study results which stating higher prevalence of psychiatry co morbidity especially depression and anxiety in chronic tension type headache patients. We found 62.1% (n=59) patient had either of anxiety or depression, where 37.9% (n=36) did not had any comorbidity. In our study we found out of 95 patients of chronic tension type headache 50(52.63%) patients have depression and 45(47.37%) patients do not have depression. Also, we found 16.84% (n=16) patients had anxiety and 83.16% (n=79) patients did not have any anxiety. This prevalence estimate was consistent with previous study Zebenholzer et al,^[20] which was done in eight Austrian headache centre shows significantly higher prevalence of anxiety and depression in CTTH that is 64% then episodic headache (41%). A recent study by Bhuvana R.C. et al,^[21] on Indian population found 74% of psychiatric comorbidity in patients of chronic daily headache and depression were most prominent. But Lampl et al,^[22] found that anxiety was weakly co morbid with tension type headache patients and depression was not present or not co-morbid with tension type headache.

Lampl C. et al,^[22] found that anxiety was weakly co morbid with tension type headache patients and depression was not present or not co morbid with tension type headache. This study also further divided patients according to degree of severity of depression by applying HAM –D scale depression is plotted in mild, moderate to severe depression, severe depression. Study shows association of tension type headache with severity of depression on Hamilton Depression Rating Scale (HAM D). The HAM D scale showed severity of depression was mild in 34 (68%) patients. Severity of depression was moderate to severe in 15(30%) patients. Severity of depression was severe in 1 (2%) patient. There was no patient of very severe depression. The maximum no. of patients of depression were in age group of 36 to 50 yr i.e. 30(60%) and minimum in old age group of 51 -65yrs i. e 8%(n=4). This study included relation of severity of depression which was not found to be studied commonly in previous studies. This study further

divided patients according to degree of severity of anxiety by applying HAM-A scale. According to HAM-A scale anxiety is plotted in mild, mild to moderate, moderate to severe, and very severe form. The patients with co morbid anxiety (16 patients) were divided and we found mild degree was more prevalent (n=8, 50%), than mild to moderate anxiety which is further more prevalent than moderate to sever degree of anxiety, there was not found any patient of very severe anxiety. The HAM A scale showed severity of anxiety was mild in 8(50.0%) patients. Severity of anxiety was mild to moderate in 3(18.75.%) patients. Severity of anxiety was moderate to severe in 5(31.25%) patient. Total 10 patients of anxiety disorders were found in patients belonging to age group of 20 -35 yr, of which 30% patients had mild anxiety and 30% patients mild to moderate anxiety. Total 5 patients of mild anxiety disorders were found in age group of 36-50 yrs,. This study included relation of severity of anxiety which was not found to be studied commonly in previous studies.

CONCLUSION

From the observation and discussion it is clearly evident from this study that, the patient with chronic tension type headache have high prevalence of depression and anxiety, the proper psychiatry screening and detail evaluation is required, so that the depression and anxiety detected in early stages and treated which further can improves the prognosis of chronic tension type headache. Mild depression (68%) out of all depressive patient were most prevalent in-patient suffering from chronic tension type headache

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