

Research Article

Psychiatric co morbidities in Patients with Tension Type Headache

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DOI: <https://doi.org/10.24321/2581.5822.202004>

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How to cite this article:

Bansal P, Jiloha RC. Psychiatric Comorbidities in Patients with Tension Type Headache. *J Adv Res Psychol Psychother* 2020; 3(1): 19-23.

Date of Submission: 2020-01-24

Date of Acceptance: 2020-03-20

A B S T R A C T

Background: Contemporary literature focuses on Tension type headache as highly prevalent and debilitating which can lead to various psychiatric co morbidities.

Aim: 1) To assess the prevalence of tension type headache (both chronic and episodic). 2) To assess the psychiatric comorbidities. 3) Association between types of headache and severity of depression, severity of anxiety and severity of somatic complaints.

Materials and Method: Two hundred eighteen patients were assessed and classified according to international headache society classification (IHS). Depression, anxiety and physical somatic complaints were assessed by using Hamilton rating scales for depression anxiety and Patient Health Questionnaire Physical Symptoms (PHQ-15). The data was analyzed using the statistical software SPSS version 20.

Result: Our study showed mean age of participants with headache to be 33 years, 76% are females and 3/4th of the samples are married hailing from lower socioeconomic status. Around half of the participants are housewives and 21% are employed and 12% are students. Mild levels of anxiety and physical somatic symptoms were exhibited by patients with both episodic and chronic tension type headache.

Conclusion: In this study we found that anxiety and physical somatic symptoms are co-morbid with tension type headache as compared to depression and slightly higher prevalence in female participants who suffered from episodic headaches and male participants were diagnosed with chronic tension type headache.

Keywords: Tension Type Headache (Episodic and Chronic), Depression, Anxiety, Physical Somatic Symptoms

Introduction

Tension Type Headache (TTH) is the most prevalent type of headache across all groups worldwide. TTH is disabling and associated with both psychiatric and medical co morbidities,

impacting the quality of life. The disease burden is higher in those with chronic TTH (at least 10 previous episodes, >15/month lasting for 30 minutes to 7 days) as compared to episodic TTH (<15days/month) form.¹

TTH is associated with notable impairments in daily functioning and with reduction in work efficiency. It is one of the most common primary headaches with life time prevalence of 78% and global prevalence of 38%, where in the prevalence is slightly higher in females with an average range of onset between 30-39 years of age. More commonly seen in Europe and in Asia.²

Higher rates of psychiatric disorders are also observed in patients with Tension type headache especially higher with chronic TTH. Patients suffering from headaches usually complaint of numerous accompanying symptoms both somatic and behavioural, which may partially relate to depression or anxiety.³ It is studied that chronic daily headache and depression share a common pathophysiology and it seems to be bidirectional. Most commonly seen co morbidities seen are generalised anxiety, panic attacks followed by mood disorder and increased suicidal ideation especially in middle aged females.

In general, persons with chronic TTH report increased levels of affective distress, also anger and hostility with more social impairment. Several studies have examined the personality traits showing increased rates on neurotic triad (including hypochondriasis, hysteria and depression) who are highly conforming, preoccupied with bodily concerns, pessimistic and passive.

Studies have revealed in general, persons with TTH experience more daily stressors as compared to others. It was found that patients with recurrent TTH used maladaptive coping strategies such as avoidance, wishful thinking, catastrophizing.⁴

Therefore the current study with investigate the psychiatric co morbidities in patients with tension type headache.

Materials and Method

This is a cross sectional, single assessment study, conducted in department of psychiatry, Hamdard medical college and research centre, New Delhi for a period of one year. Samples were obtained from the patients who came for psychiatric evaluation in the outpatient department and who were referred for psychiatric consultation from medicine department. A total of 218 patients were assessed and diagnosed with episodic and chronic headache according to International headache society classification and ethical approval was obtained.

Inclusion Criteria

- Males and females between 18 and 65 years of age.
- Individuals who were willing to give consent for the study.

Exclusion Criteria

- Patients who were not willing to give the consent for the study.

- Patients with other neurological conditions.
- Patients already taking psychiatric treatment.

All patients who fulfil the inclusion criteria were explained about the purpose of the study and a written informed consent were obtained. Patients demographic data was collected through a semi structured proforma. The patients were evaluated by a trained psychiatrist and the clinical picture was assessed. They were diagnosed with tension type headache under International Headache Society classification (IHS). The patients were assessed for mild to severe depression and anxiety according to the scoring of Hamilton depression rating scale, Hamilton anxiety rating scale. The somatic and physical symptoms were assessed using Patient Health Questionnaire Physical Symptoms (PHQ-15). The data was analyzed by using 'descriptive' and 'inferential' statistics like Chi square test. The data was analyzed using the statistical software SPSS version 20.

Result

Table I. Socio demographic profile of patients

Socio Demographic Variables	n= 218 n=number of patients frequency(%)/ Mean±SD
Age	33.54 ± 11.47
Sex	
Male	51 (23.4%)
Female	167 (76.6%)
Religion	
Hindu	86 (39.4%)
Muslim	130 (59.6%)
Christian	2 (0.9%)
Others	0
Marital status	
Single	34 (15.6%)
Married	175 (80.3%)
Divorced/ Seperated	9 (4.1%)
Occupation	
Employed	47 (21.6%)
Unemployed	15 (6.9%)
Student	28 (12.8%)
Housewife	128 (58.7%)
Socioeconomic status	
Upper	7 (3.2%)
Middle	62 (28.4%)
Lower	149 (68.3%)

Table 2. Prevalence of tension type headache

Types of Tension Type Headache	n= 218 n= number of patients frequency (%)
Episodic	126 (57.8%)
Males	29 (56.8%)
Females	97 (58%)
Chronic	92 (42.2%)
Males	22 (43.1%)
Females	70 (41.9%)

Table 3. Assessment of severity of depression

Total Score and Severity	n=218 n=number of patients frequency (%) / Mean±SD
HAMD Scale	7.0±5.02
Sub clinical	136 (62.4%)
Mild	57 (26.1%)
Moderate	22 (10.1%)
Severe	3 (1.4%)

Table 3(I). Assessment of severity of anxiety

Total Score and Severity	n= 218 n=number of patients frequency (%) / Mean ± SD
HAMA Scale	9.02±6.45
Mild	198 (90.8%)
Moderate	20 (9.2%)

Table 4. Association between type of headache and severity of depression

Type of tension type headache	Distribution				Chi square value	p-value
	Sub-clinical	mild	moderate	severe		
Episodic	89	27	10	0	11.2	.010
Chronic	47	30	12	3	11.2	.010

*association is significant at p-value<0.05

**association is significant at p-value <0.005

***association is significant at p-value <0.001

Table 4(I). Association between type of headache and severity of anxiety

Type of tension type headache	Distribution		Chi square value	p-value
	mild	moderate		
Episodic	118	8	2.86	.091
Chronic	80	12	2.86	.091

*association is significant at p-value<0.05

**association is significant at p-value <0.005

***association is significant at p-value <0.001

Table 3(2). Assessment of severity of physical somatic symptoms

Total Score and Severity	n= 218 n=number of patients frequency (%) / Mean±SD
PHQ Scale	4.26±3.77
Minimal	130 (59.6%)
Low	59 (27.1%)
Medium	26 (11.9%)
High	3 (1.4%)

Table 1, depicts the Socio-demographic variables of patients. As shown the mean age of the current study participants is 33 years (Mean±SD: 33.54±11.47). Majority of our study samples are females (76%), while males contribute 23%. Nearly 3/4th of our study participants are married (80.3%) and about 15.6% are single. More than half of our participants hail from lower middle (68 %) and 28% from middle economic status and 3% from upper. Nearly half of the patients (58 %) are housewives, 21% are employed, 12 % are students pursuing their studies and only 7 % patients are unemployed. More than half of the participants belong to muslim religion, 39% are hindus.

Table 2, depicts the prevalence of tension type headache both episodic and chronic in males and females. As shown more than half of our participants were diagnosed with episodic tension type headache (57.8%) out of which 58% were females and 57% were male participants. About 42% were diagnosed with chronic tension type headache out of which 43% were males and 42% were female participants.

Table 4(2). Association between type of headache and physical somatic symptoms

Type of tension type headache	Distribution				Chi square value	p-value
	minimal	low	medium	high		
Episodic	84	30	11	1	6.93	.07
Chronic	46	29	15	2	6.93	.07

*association is significant at p-value<0.05

**association is significant at p-value <0.005

***association is significant at p-value <0.001

Table 3-3.2 depicts the total score and severity of depression, anxiety and physical somatic symptoms. As shown mean score for depression is 7, suggesting sub clinical depression and found that more than half of the participants in the study exhibit symptoms of depression mild in severity. Mean score for anxiety was 9, suggesting mild anxiety and physical somatic symptoms questionnaire depicts a mean score of 4, suggesting of minimal complaints, exhibiting almost 59% of participants falling under the category, while 27% exhibit low levels of physical somatic symptoms.⁵

Table 4-4.2 In our study chi square test was used to compare the statistical association between type of headache and depression, anxiety and somatic complaints. The results have no significant association between them.

Discussion

While more studies have explored the impact of migraine, the disability attributable to TTH is larger worldwide than that due to migraine. TTH has a greater socioeconomic impact due to its higher prevalence. Patients with TTH, account for a greater total loss of workdays per year, psychological stress and a higher percentage of decreased social and occupational and work effectiveness. The disease burden of TTH is higher in those with Chronic TTH compared to Episodic TTH, However ETTH can also cause little disability, which can significantly impact quality of life.

In our study majority of participants are housewives (58%), it may be due to various domestic problems such as inharmonious relations with the in-laws, invalidating husband, increased arguments with the husband which results in incompatibility, poorer communication between each other and increasingly destructive conflicts (such as avoiding discussion, fleeing the home, no respect for personal space) which provides a situation where women feel that they have nowhere to vent out their pent up emotions. 21% are employed, the nature of their work had not yield them enough money to cover the expenses to run their families. In addition they would also have significant pressure from their employers, discordance with the boss or difficulty in coping with the work environment, resulting in a hostile work environment, therefore were also insecure about their jobs leading to significant stress.⁶

In general, persons with CTTH have been reported increased levels of affective distress, such as depression, anxiety, and anger, also report more headache-related disability. Greater depressive symptomatology in TTH patients is particularly common in women, older persons, and those with more extensive headache histories. However, depression is also clinically related to psychological states such as anger and hostility, constructs that have been examined in several TTH studies. Persons with TTH experienced more stressful events, particularly more daily stressors, than did non-headache controls and as the number of stressors increase there is a disproportionately greater levels of stress than might be reported by non-TTH persons. Patients use maladaptive coping strategies, such as catastrophizing, avoidance, withdrawal, and more often than non-headache controls⁽⁶⁾.

For mostly there are various events that occur in people's life that might be stressful in presence of these stressors they are not able cope and adjust to the environment. Depressive and anxiety symptoms are more severe or frequent in headache sufferers than in the general population according to many studies. Chronic headaches lead to decreased quality of life, but so does episodic headaches. In our study it was found that females have more episodic headaches and males have chronic type headaches. Men and women differ in their roles, responsibilities and these socially constructed differences interact with biological differences to contribute to these distinctions. Males have more responsibilities to support their family, traditionally adopting the role of primary breadwinner, which contributes to their stress levels forcing them to take more stress. Women on the other hand have multiple responsibilities and role to play. Sometimes its difficult to vent out the stress related to their family especially living in the joint family. The societal norms and stigma attached earlier about women being a widower or who has had a divorced has decreased, women empower in terms of their knowledge and education and are at par to men in the recent years, this has given them a sense of independence, therefore being separated or taking divorce are increasing which increases the psychological stress.

Somatic symptoms are also with people with headaches, especially associated with anxiety or depression. According

to various studies done in past shows that people suffering from headaches >2days/ week have more somatic symptoms as compared to other people. Patients with chronic tension type headache had more significantly complained of stomach pain, difficulty in falling asleep, dizziness and indigestion and musculoskeletal complaints⁽⁸⁾. Psychological distress is well known to be associated with increased physical symptoms, which represents a somatic expression of psychological distress.

Consent

It was taken from the patient and the attenders.

Ethical Clearance

It was taken from of Hamdard Medical College and research institute, block D, hamdard nagar, New Delhi 110062.

Source of Funding: Self-funded

Conflict of Interest: None

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