

Anxiety and depressive disorders in adult patients with chronic tension type headache at a tertiary care hospital

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Abstract

Objective: Anxiety and depression are recognised co-morbidities in patients with tension type headache. To estimate the frequency of depression and anxiety in tension type headache patients reporting at a tertiary care Psychiatric facility of psychiatric OPD. **Methods:** This descriptive cross-sectional study was carried out from December 2017 to May 2018 with 100 patients ages of 18-60 years in the Department of Psychiatry of a tertiary care facility, Viswabharathi Medical College and Hospital, Kurnool, Andhra Pradesh. All underwent detailed assessments which included physical examination, demographic profile assessment, and Hospital Anxiety and Depression Scale (HAD). The data were analyzed using SPSS version 21.0. **Results:** Majority of patients were young, formally educated, rural residents, married, employed, having no family history of mental illness and presented via out-patients to department. In the present study HAD scale analysis revealed that out of 100 patients 78% were had depression and 72% were had anxiety co-morbidities in TTH. Both anxiety and depression scores were clinically significant in majority of patients. **Conclusion:** Our study showed substantially high rates of depression (60%) and anxiety (56%) in tension type headache patients. Limitations of the study include small sample size and patients were not followed up further to elucidate possible perspective.

Key Word: Anxiety, Depression, and Tension Type Headache.

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INTRODUCTION

Tension type headache (TTH) is one of the most common primary headaches, with a prevalence ranging from 30% – 78% worldwide^{1,4}, and among them majority have infrequent episodic type and 2%-3% patients have chronic type. 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^{1,2}.

Tension type headache typically presents with mild to moderate intensity pain, which is bilateral, pressing, tightening in quality, and occurs either in episodes of variable duration or may occur continuously. No worsening with routine work is noted, vomiting is not seen, but either photophobia or phonophobia may occur.^{1,4} Anxiety and depression are recognised co-morbidities in patients with tension type headache^{1,5}, 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. So we performed a study on anxiety and depressive disorders in adult patients with chronic tension type headache at Psychiatry department of Viswabharathi Medical College and Hospital, Kurnool, Andhra Pradesh.

MATERIALS AND METHODS

After Ethical clearance, this cross-sectional study was conducted on 100 adult patients with chronic tension type

headache attending psychiatric OPD of Viswabharathi Medical College and Hospital, Kurnool, Andhra Pradesh. The diagnosis of chronic TTH was established criteria as per International Classification of Headache Disorders, 2nd edition. Psychiatric co-morbidities were assessed using Structured Clinical Interview for DSM-IV Axis-1 diagnosis (SCID-1)⁶. Hamilton rating scales for depression and Hamilton rating scale for anxiety was used to assess severity of depression and anxiety⁷. Patients aged >18 and < 60 years and those who are fulfilling criteria for chronic TTH as per ICHD-2, from December 2017 to May 2018 after obtaining the consent form all the patients were included in the study. Patients with severe

mental disorders like, dementia, schizophrenia, mental retardation, neurological disorders like, space occupying lesions, head injuries, degenerative conditions, diagnosed as conversion disorder and those who are not willing to participate in the study were excluded.

The data was analyzed using a computerized Software Programme Statistical Package for the Social Sciences (SPSS version 21.0 for Windows). Descriptive statistics was used to describe the socio demographic variables. Independent Student t-test, ANOVAs was used to analyze the association between the various independent variables.

RESULTS

Table 1: Showing the Demographic characteristics of study population.

Demographic factors		Total number of patients
Age in years	18-28	33
	29-38	41
	39-60	26
Education status	Formal education (primary, middle, secondary, intermediate, graduation or post-graduation)	86
	Illiterate	14
Residence	Rural	78
	Urban	22
Gender	Male	50
	Female	50
Marital Status	Married	50
	Unmarried	25
	Others (separated, divorced, widow)	25
Employment status	Employed	65
	Unemployed	35
Family history of mental illness	Yes	26
	No	74
Mode of presentation	OPD	79
	In-Patient	21

Table no. 1 showing that the 41 no of 29- 38Age group, 86 Formal educated, 78 Rural residents, 65 employed persons are attending the tertiary care hospital with anxiety and depressive disorders in adult patients with chronic tension type headache.

Table 2: showing the Hospital anxiety and depression scale-depression score.

Total score	Frequency	Percentage
0-7 (no depression)	22	22
8-10 (borderline)	18	18
More than 10 (clinically significant)	60	60
Total	100	100

Out of 100 patients 60 patients were showing the Hospital anxiety and depression scale-depression total score is more than 10 it's a clinically significant.

Table 3: Showing Hospital anxiety and depression scale-anxiety score

Total score	Frequency	Percentage
0-7 (no anxiety)	28	28
8-10 (borderline)	16	16
More than 10 (clinically significant)	56	56
Total	100	100

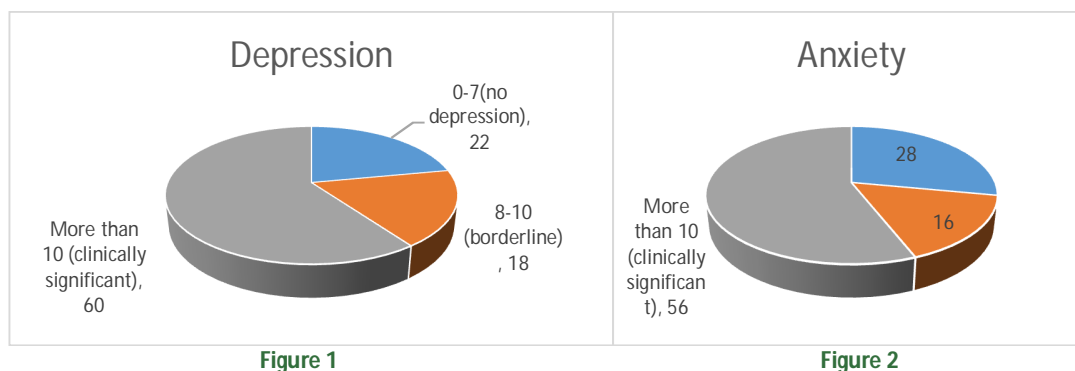


Figure 1

Figure 2

Figure 1: Showing the Hospital anxiety and depression scale-depression score

Figure 2: Showing Hospital anxiety and depression scale-anxiety score

DISCUSSION

According to International Classification of Headache Disorders (ICDH), tension type headache is classified on the basis of headache frequency into the following three types: Infrequent episodic TTH- headache (occurs 1 day a month or less), Frequent episodic TTH- headache (occurs more than 1, but less than 15 days a month) and Chronic TTH- headache (occurs 15 days or more per month).⁴

Diagnostic criteria (4) (ICDH):

- Headache occurring 15 days or more per month on average for more than 3 months and fulfilling criteria B-C
- Headache is bilateral, pressing/tightening (non-pulsating) quality, mild/moderate intensity lasts for hours and is not associated with nausea/vomiting, photophobia, phonophobia; not affected by physical activity
- Not attributed to another disorder.

In present study 29-38 age group people were more suffering with TTH, this incidence decreases slightly with age (Table-1), this is correlating with previous finding. (1,8) More than 80% of the patients who sought treatment were between 21 and 40 years of age, the most productive age group. Majority of these patients were women. Similar gender distributions have been reported previously. Consistent with other studies, this study reflects the fact that headaches are more common in women.^{9,11}

Hospital anxiety and depression scale analysis revealed that both anxiety and depression scores were clinically significant in majority of patients (Table- 2, 3). In the present study showed out of 100 patients 78% were had depression and 72% were had anxiety, in that 60% patients had depression, and 56% patients had anxiety which was showed total Score more than 10 (clinical significant), in borderline 18% were depression, 16% were anxiety in borderline co-morbidities in TTH. Puca F *et al.* found that generalised anxiety disorder (83.3%) and dysthymia (45.6) were the most frequent psychiatric co-

morbidities in TTH (12). Juang KD *et al.* conducted 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 generalised anxiety disorder¹³. The HADAS compared the prevalence of psychiatric co-morbidities in migraine without aura, TTH and combined headache. Beghi E *et al.* 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 disorder¹⁴. AP Jain *et al* showed primary headache as the predominant type with a prevalence of 92.5% and remaining 7.5% with secondary headache.¹⁰

Several studies have reported a different prevalence of headache types, which might be due to different methodologies used, as well as cultural and population characteristics of the studied patients. The frequency of the types of headache diagnosed in the overall population differs from that verified in tertiary care centres, possibly due to the higher or lower level of morbidity caused to individuals, which influences the demand for medical assistance.⁹

Epidemiological evidence from around the world suggests TTH is the most common cause of primary headache. (15,16) This variance is attributed to self-treatment of tension type headaches by the general population. Nonetheless, the higher prevalence of migraine is evident and reflects its clinical importance to seek medical assistance. Stress is the most commonly reported trigger of migraine headache. Population based and subspecialty clinic based studies have reported that a stressful event or situation was trigger of migraine headache in 36% to 42% and 62% to 72%.^{17,18}

Current study showed that high proportion of patients had clinically significant rates of anxiety and depression, that may have some important implications for the clinical course of primary disorder in terms of

presentation, duration, and response to different treatment modalities. The limitations of this study were the chances of information bias as the screening instrument was administered by different researchers. Psychiatric illnesses other than anxiety and depression should have been studied to find out the burden of psychiatric co morbidities associated with chronic tension type headache. The study was conducted in a size too small to generalize the conclusion.

CONCLUSION

Tension type headache typically presents with mild to moderate intensity pain, which is bilateral, pressing, tightening in quality, and occurs either in episodes of variable duration or may occur continuously. Anxiety and depression are recognised co-morbidities in patients with tension type headache. In the present study substantially high rates of depression (60%) and anxiety (56%) in patients presenting at Psychiatric facility of a tertiary care facility. Further research involving larger sample size and longitudinal follow up is required to elucidate the possible perspective.

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