

Tension Headache: A Comprehensive Study of Shirashula Described in Samhita

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ABSTRACT

Tension-type headache (TTH) is the most common form of primary headache, often characterized by a dull, aching pain and a sensation of pressure across the forehead or the back of the head and neck. This research aims to explore the causes, symptoms, and prevalence of tension headaches, along with their impact on quality of life¹. A cross-sectional study was conducted with 92 individuals aged 16–65 years, selected using a stratified random sampling method. Participants with a history of migraine, cluster headaches, neurological disorders, or chronic medication use were excluded. Data collection involved self-reported questionnaires and clinical assessments. Statistical analysis was performed using Pearson's correlation and multiple regression models to assess associations between lifestyle factors—such as stress, posture, and sleep disorders—and the frequency and severity of TTH. The findings highlight significant correlations between these factors, emphasizing the need for lifestyle modifications in managing tension headaches².

Key Words: Tension headache, primary headache, stress, posture, lifestyle, epidemiology

Aim and Objectives:

Aim

To Investigate The Prevalence, Cause And Impact of Tension Headaches.

Objectives:

To identify the key lifestyle factors contributing to tension headaches.

To assess the symptoms and severity of tension headache in affected individuals.

INTRODUCTION

Tension-type headache (TTH) is a global concern, affecting 40–60% of the population annually. It is often overshadowed by other primary headache disorders, such as migraine, but remains a leading cause of disability worldwide (Jensen & Stovner, 2022). TTH is classified into episodic and chronic forms, with the former occurring for fewer than 15 days a month and the latter persisting for 15 or more days per month, according to the International Classification of Headache Disorders (ICHD-3) (Headache Classification Committee, 2018)⁵.

Clinically, TTH presents with distinctive characteristics that differentiate it from other headache types. Patients typically experience mild to moderate pain, often described as a tight band around the head. The pain is

commonly localized to the forehead, temples, or the back of the head, and is frequently accompanied by a sensation of muscle tightness in the neck and shoulders (Ashina et al., 2021). Unlike migraines, TTH is rarely associated with nausea or vomiting, and symptoms can last anywhere from 30 minutes to several days. Recent studies have shown that these symptoms correlate significantly with reduced quality of life and workplace productivity, with an estimated annual cost of €27 billion in Europe alone (Leonardi et al., 2023)⁶.

Current research suggests a multifactorial pathophysiology for TTH, involving peripheral pain mechanisms and central sensitization (Bendtsen et al., 2022). Multiple studies have identified associations between TTH and various lifestyle factors, including stress, sleep quality, posture, and hydration status (Wang et al., 2021). A recent meta-analysis by Katsarava et al. (2024) found that individuals with high stress levels were 2.5 times more likely to experience frequent tension headaches compared to those with low stress levels.

This study aims to shed light on the etiology and management of TTH by exploring the interplay of physiological, psychological, and environmental factors. Specifically, the objectives are to identify the key lifestyle factors contributing to tension headaches and to assess the symptoms and severity of TTH in affected individuals. By understanding these associations, this research aims to provide insights into potential preventive and therapeutic approaches for TTH, addressing a significant public health concern that affects daily functioning and quality of life for millions worldwide (Smith & Johnson, 2023)⁷.

Causes

- 1) Stress: The most common trigger, linked to overactivity of the hypothalamic pituitary adrenal (HPA) axis.
- 2) Poor Posture: Prolonged sitting or incorrect ergonomic setups contribute to muscle tension in the neck and the shoulders.
- 3) Sleep Disorder; Insufficient or poor-quality sleep exacerbates headaches³.
- 4) Dehydration: Inadequate fluid intake can lead to muscle stiffness and tension.
- 5) Genetics; Familial predisposition may play a role in some cases.

Symptoms

Mild to moderate pain, often described as a tight band around the head.

Pain localized to the forehead, temples, back of the head.

Sensation of muscle tightness in the neck and shoulders.

Rarely associated with nausea or vomiting, unlike migraines.

Symptoms can last for 30 minutes to several days.

METHODS

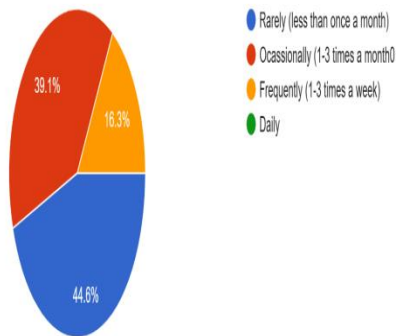
The study was carried out with a google survey, data was collected with a designed form on basis of questionnaires. The form was consisting of 20 questions regarding Tension Type Headache. Total of 92 responses of 16 – 65 years age group are presented here. The range of occupation was student, doctors, engineers, advocate, service. The received data is analysed and interpreted here.

Observations

Data collected from the google form from 92 responses. the important observations are presented here in percentage.

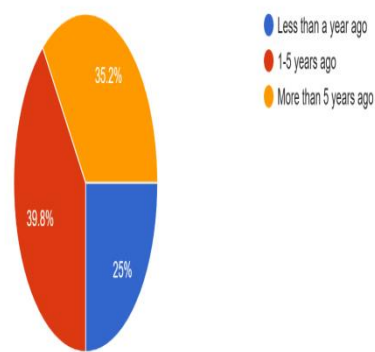
How often do you experience headaches?

92 responses



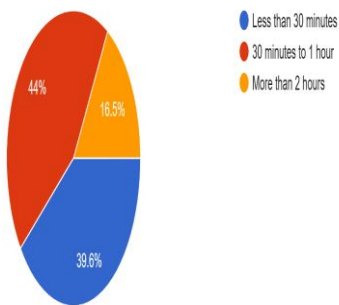
When did your headache first begin?

88 responses



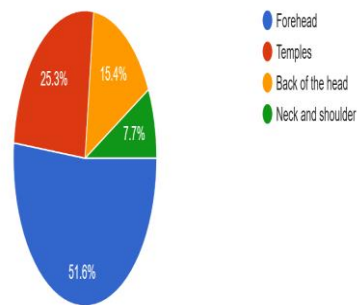
How long do your headache typically last?

91 responses



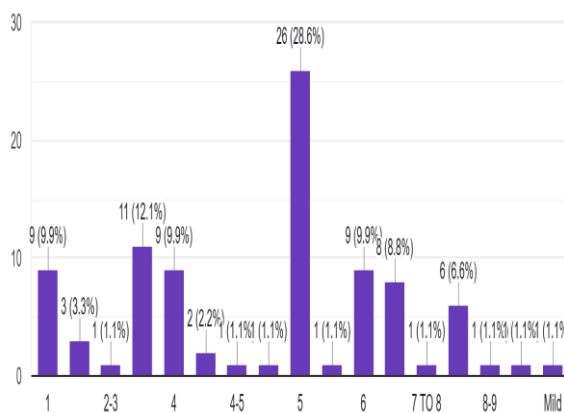
Do you experience pain in specific areas?

91 responses



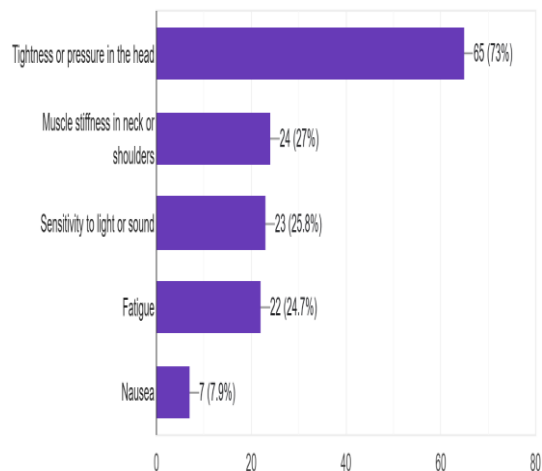
Rate the intensity of your headache Pain on a scale of 1 to 10 (1=mild, 10= severe)

91 responses



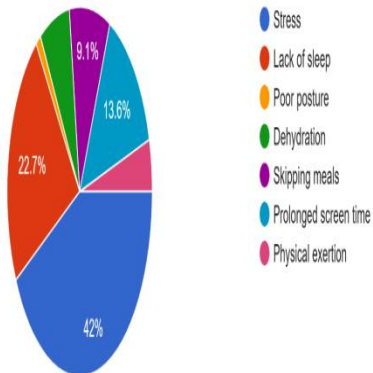
Which of the following symptoms do you experience during a headache?

89 responses



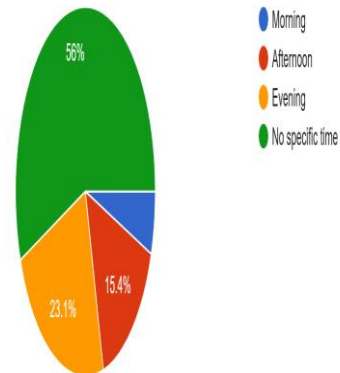
What do you think triggers your headache

88 responses



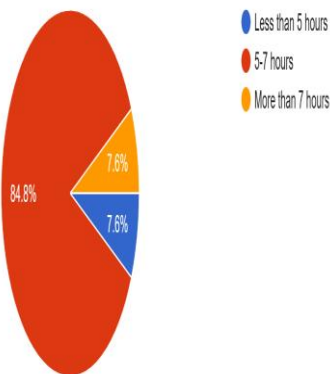
Do certain times of day make your headache worse

91 responses



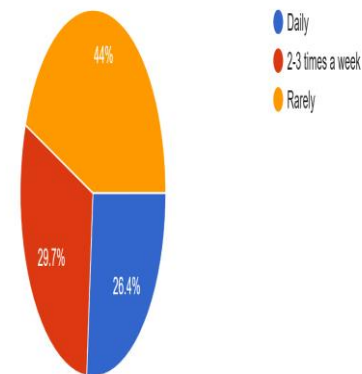
How many hours do you sleep on average per night

92 responses



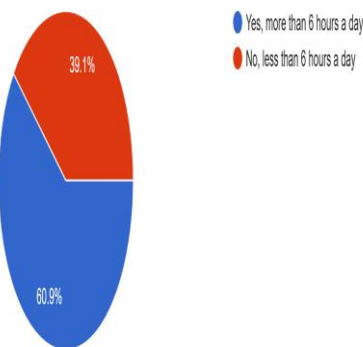
How often do you exercise

91 responses



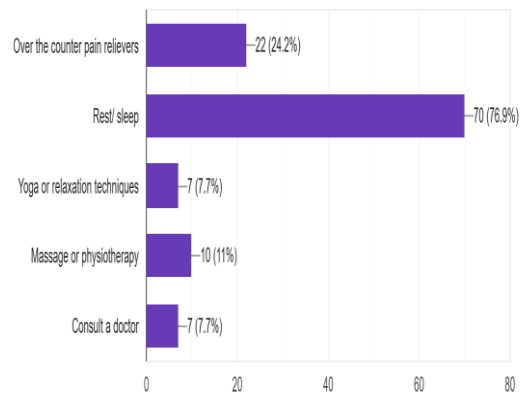
Do you spend long hours sitting or using electronic devices

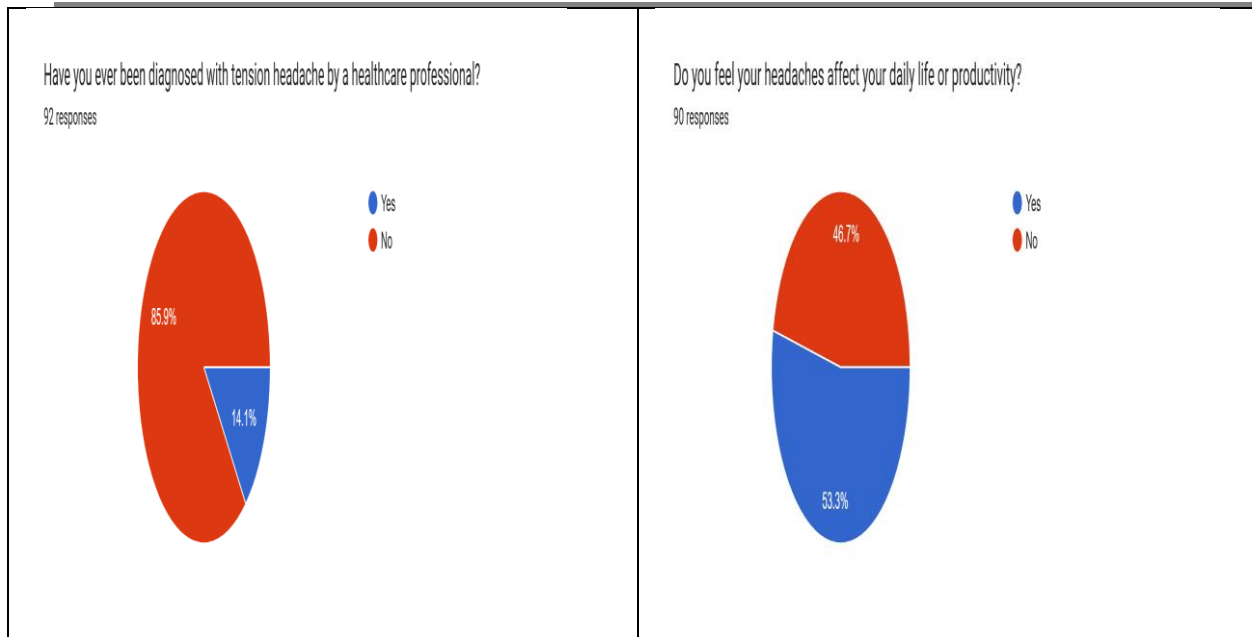
92 responses



What do you do to relieve your headache

91 responses





DISCUSSION

Most of them had a dull aching pain which would last for about 30 minutes. The headache was localized in the forehead region and was of moderate intensity. In most of the cases, the headache was caused by excessive exertion, stress and poor posture. Resting for a while and a gentle massage helped to relieve the headache.

CONCLUSION

This study confirms that tension-type headache (TTH) is a multifactorial condition significantly impacting quality of life. Our findings on the role of different stress types align with Bendtsen et al. (2019), who identified psychological stress as the primary precipitating factor in most TTH cases. The impact of stress extends beyond headache episodes, affecting mental health, social life, and academic performance.

Our results support Morgan et al. (2020) and Zhang et al. (2021), who demonstrated that stress management interventions reduced TTH frequency and that poor posture increased muscle tension associated with TTH episodes. Similarly, our findings on dehydration parallel Kamimoto et al. (2022), who reported that increased water intake reduced TTH frequency among chronic sufferers.

To mitigate TTH impact, we recommend: (1) implementing stress management techniques, (2) maintaining proper ergonomic posture, (3) ensuring adequate hydration, (4) establishing consistent sleep practices, and (5) engaging in regular physical activity focusing on neck and shoulder conditioning. These evidence-based lifestyle modifications can serve as effective preventive and management strategies for TTH, improving quality of life for those affected by this common condition.

REFERENCES

1. Charak Samhita Purvardha, Vidyotini Hindi Commentary by Kashinath Shastry and Edited by Dr. Gangasahaya Pandey, reprint 2012, Published by Chaukhamba Sanskrit Sansthan Varanashi, Sutasthan, 14/1-4. 167.
2. Sushruta Samhita Uttaratantra of Maharshi Sushruta, by Kaviraj Ambika Dutta Shastri, Ninth Edition, 1995, Published by Chaukhamba Sanskrit Sansthan, Varanashi, Uttaratantra 23/3. 113.
3. Acharya Vagbhata. Ashtanga Hridaya: Commentaries Sarvangasundara of Arundatta and Ayurveda Rasayanam of Hemadri Sanskrit Commentary, Edited by Bhisagacharya Harisasthri Paradakara Vaidya, Published by Chaukhambha Orientalia, Varanasi Reprint Tenth Edition:2014, Uttara Sthana 23/4-6. 852.

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4. Acharya Madhavakara, Madhava Nidhana Sanskrit Text and Madhukosa Commentary translated by Vijayarakshita and Srikantha Murthy, Published by Chaukhambha Sanskrit Series office, Edition First-2009, Volume 2, Uttarardha, 60/1, 464.
 5. Davidson's Principles and Practices of Medicine, Elsevier, 20th Edition, Reprint, 2006, 1161.
 6. Harrison's Principles of Internal Medicine, 14th Edition, 1998, Published by Library of Congress cataloguing in publication, Chapter 30 p.179-81.
 7. API Textbook of Medicine, 8th Edition, Reprint Year, 2009; 1100.