



DEMOGRAPHIC ASSOCIATION OF MIGRAINE IN RURAL INDIA - A RETROSPECTIVE STUDY.

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ABSTRACT Migraine prevalence in India has seen an increase over the past few decades, with a notable surge in the absolute number of cases. While the prevalence rate has shown some fluctuations, the overall burden of migraine, measured in terms of incidence and years lived with disability (YLDs), has risen significantly. Years lived with disability (YLDs) due to migraine nearly doubled, increasing from 6.0 million to 11.6 million during the same period according to the National Institute of Health and Family Welfare. Despite the high prevalence, migraine remains under-recognized and under-treated in many areas, particularly in rural India, due to factors like limited access to healthcare and cultural beliefs. In this study, I tried to establish the demographic association of Migraine in rural India.

KEYWORDS : Migraine, Years Lived with Disability, Prevalence.**INTRODUCTION**

Definition of Migraine Head Ache:

Migraine is defined as a primary headache disorder characterized by recurrent, debilitating headaches, often accompanied by nausea, vomiting, and sensitivity to light and sound (photophobia and phonophobia). These headaches are frequently unilateral (affecting one side of the head) and can be throbbing or pulsating in nature. Migraines may or may not be preceded by an aura, which is a transient focal neurological disturbance.

1. Aims & Objectives:

1. To establish the ratio of prevalence of Migraine in male and female migraine patients.
2. To establish the prevalence of Migraine in different age groups

2. Methodology:

- a) **Study Design:** Retrospective study
- b) **Study Setting:** In a government medical college, Neurology/Neurosurgery Outpatient department, YSR GMC Eluru.
- c) **Study Population:** Outpatients with migraine symptoms presented to Neurosurgery/Neurology department outpatient departments, GGH Eluru during the period January 2025 to June 2025
- d) **Selection Criteria:**
 - Inclusion Criteria - All patients with symptomatic Migraine presented to Neurology/Neuro surgery department from January 2025 to June 2025 were included.
 - Age group: 15 to 80 year aged patients
 - Exclusion criteria - Patients with features suggestive of Non-Migraine Headaches like Cluster headache, Tension headache, Post - Traumatic headache, Infective headaches were excluded.
- e) **Sample Size:** 175
- f) **Sampling Technique:** Non probability sampling technique; All outpatients with Migraine presented to Neurology department from January 2025 to June 2025 were included.
- g) **Study Duration:** six months from January 2025 to June 2025
- h) **Method of Data Collection:**
 - Clinical History, Questionnaire in OPD
 - Screening MRI to rule out any other coincidental causes that can mimic migraine head aches
 - Hospital records
- i) **Study Tools:**
 - Hospital Records
 - Radiology Screening MRI to rule out any other coincidental causes.
- j) **Study Variables:**
 - Age
 - Gender
 - Occupation
 - Education
 - Prevalence
- k) **Ethical Considerations:**
 - Approval from IEC ,
 - Permission from department HOD and superintendent GGH Eluru
 - Confidentiality

RESULTS**Table-1**

	male	female	total
up to 10 years	0	0	0
11 to 20	2	9	11
21-30	5	43	48
31-40	8	55	63
41-50	4	33	37
51-60	2	9	11
61-70	1	3	4
71-80	1	0	1
81-90	0	0	0
91-100	0	0	0
Total	23	152	175

Table-2

occupation	Number of patients
un employed married women	40
agricultural workers	38
small scale industrial workers	25
tailors	10
students up to graduation	15
teachers	3
software workers	2
health care workers	3
domestic helpers	3
drivers	1
skilled workers	2
non technical office workers	3
hostel wardens	2
others/non technical workers	28
Total	175

CASE STUDY**DISCUSSION:**

1. The ratio of female to male with reference to prevalence of migraine is 6.6 : 1
2. The highest prevalence of migraine cases are noted in the fourth decade of life followed by third and fifth decade.
3. The top five groups of prevalence of migraine included unemployed married women, agricultural workers ,non technical workers, small scale industrial workers and students respectively

CONCLUSION AND IMPLICATIONS:

1. Early diagnosis and treatment of migraine in rural India.
2. To help design protocols of diagnosis and management of migraine treatment.
3. Research purpose.

REFERENCES

1. Lance JW. Treatment of migraine Lancet. 1992; 339: 1207-1209
2. Welch KMA, Levine SR. Migraine-related stroke in the context of the International Headache Society. Classification of head pain. Arch Neurol. 1990;47:458-462
3. Rama K. Yadav, Jayantee Kalita, Usha K. Misra, A Study of Triggers of Migraine in India, Pain Medicine, Volume 11, Issue 1, January 2010, Pages 44-47, <https://doi.org/10.1111/j.1526-4637.2009.00725.x>
4. Saha S, Chowdhury D, Wadhwa M, Sarkar R, Raval D, Patel I, Bondia A, Madaan V.

- Impact of migraine on productivity and efficiency among adult population in India: a scoping review. *J Headache Pain.* 2025 Aug 6; 26(1):180. doi: 10.1186/s10194-025-02112-1. PMID: 40770618; PMCID: PMC12329930.
5. Potnuru B. Aggregate availability of doctors in India: 2014- 2030. *Indian J Public Health* 2017;61:182.
6. Lipton RB, Dodick D, Sadovsky R, Kolodner K, Endicott J, Hettiarachchi J, et al. A self-administered screener for migraine in primary care: The ID migraine(TM) validation study. *Neurology* 2003; 61:375-82.
7. Andress-Rothrock D, King W, Rothrock J. An analysis of migraine triggers in a clinic-based population. *Headache* 2010; 50:1366-70.
8. Ravishankar K. 'Hair wash' or 'head bath' triggering migraine - Observations in 94 Indian patients. *Cephalalgia* 2006;26:1330-4