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Prospective Observational Study on Prevalance and Management of Migraine

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Abstract: ***Background**: Migraine is a debilitating neurological disorder affecting millions worldwide, yet its prevalence and management remain poorly understood. **Objectives**: To investigate the prevalence, clinical characteristics, and management strategies of migraine in a population - based sample. **Method**: This prospective observational study enrolled 98 adults aged 9 - 45 years, who completed baseline and follow - up questionnaires, and maintained a 5 months migraine diary. **Results**: The 5 months prevalence of migraine was data on distribution of patients on gender 58%0f males & 42% 0f females. Distribution of patients based on age 9 - 12 (16%), 15 - 25 (32%), 25 - 45 (50%).: Distribution based symptoms. Migraine with aura 30%, nausea 26%, vomiting 15%, photophobia 13%, phonophobia 8%. **Conclusion**: This study highlights the significant burden of migraine, inadequate management strategies, and the need for improved diagnosis, treatment, and patient education.*

Keywords: Migraine, prevalence, management, observational study, headache disorders

1. Migraine Headache

A migraine is much more than a bad headache. It can cause debilitating, throbbing, one - head pain that can leave you in bed for days movement, lights, sounds and other triggers may cause symptoms like fatigue, nausea, vision changes, irritability and more. A healthcare provider can help you manage symptoms so migraines do not take over your life.

2. Overview

A migraine is a severe headache that causes throbbing, pulsing head pain on one side of your head. The headache phase of a migraine usually lasts at least four hours, but it can also last for days This headache gets worse with:

1) Physical activity.
2) Bright lights.
3) noises Loud**.**
4) Strong odors.

Migraines are disruptive. They can interfere with your daily routine and affect your ability to meet personal and social obligations. Treatment is available to help you manage migraines.

Types of Migraines

These are several types of migraines. The most common migraine categories are:

- Migraine with aura (classic migraine).
- Migraine without aura (common migraine).

An aura is a phase of the migraine before head pain begins.

Other types of migraines include:

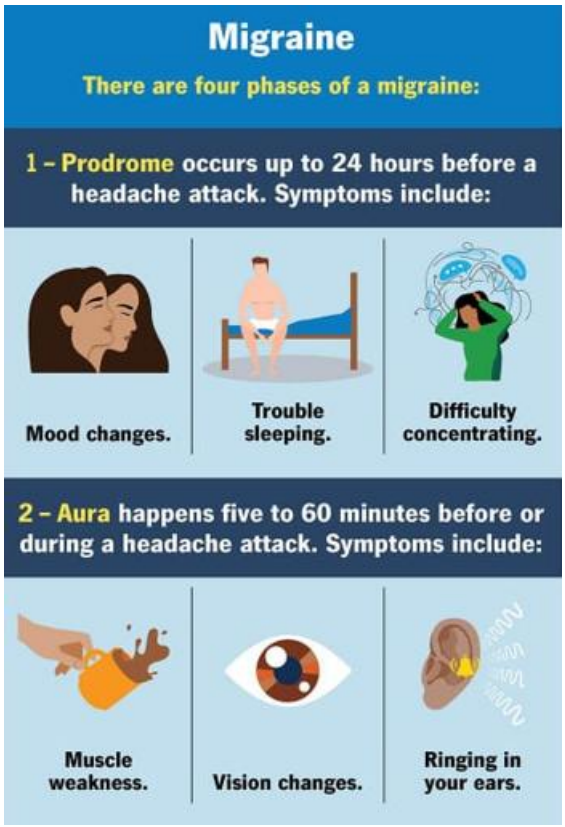
- Migraines in children (abdominal migraine).
- Chronic migraine.
- Hemiplegic migraine.
- Menstrual migraine
- Migraine without headache (silent migraine)
- Retinal migraine (ocular migraine).
- Status migrainosus.

How Common are Migraine

Migraines are common. studies shows that an estimated 12 percentage of people in united stated experience migraine.

Phase of Migraine:

In migraine have underlying the various phases of the migraine attack.



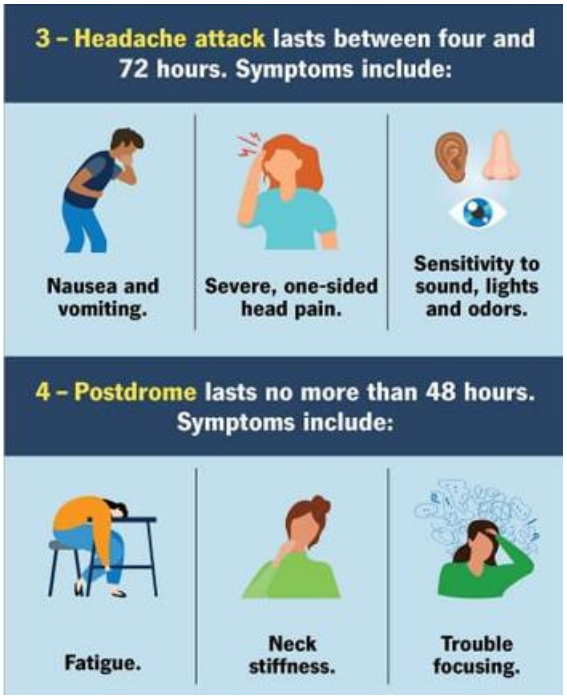


Figure 1: Phase of migraine

Phase 1 Prodrome:
This phase also called as premonitory phase. The interplay between alterations in homeostasis and the onset of migraine. Prodrome phase of migraine as early as 3 days before a migraine headache and allows some patients to correctly predict migraine headache up to 24hours before headache attack.

Phase 2 Aura:
Aura is recurrent attacks. Last minutes before during headache, fully reversible, visual, sensory or other CNS symptoms that develop gradually and are and usually followed by headache and associated migraine symptoms.

Phase 3 Headache:
The characteristic throbbing pain of migraine headache is widely lasts between 4 and 72 hours.
Headache symptoms are include nausea and vomiting severe, one sided head pain, sensitivity to sound, lights and odors.

Phase 4 Postdrome:
In last phase no more than 48 hours,

Symptoms are includes:
- Fatigue
- Neck stiffness
- Trouble focusing.

Epidemology of Migraine:
Migraine affects approximately 15%of global population. sex difference are women are more likely to experience migraines than men with female to male ratio 3: 1. Age is migraine prevalence peaks between 25 - 55 years people are effects.

Etiology of Migraine:
In investigate the occurrence rate of migraine headaches within a population over time, while also examine the current treatment strategies and patterns usd by individuals experiencing migraines.

This would involve following a group of participants for a set period, regularly collecting data on migraine frequency, severity, triggers and the medications or therapies they utilize to manage their attacks.

Aim and Objectives:

Aim
The main aim is prevalence and management of migraine a prospective observational study.

Objectives:
1) To determine the prevalence of migraine in the study population
2) To assess the current management strategies for migraine.
3) To identify the most common triggers and symptoms of migraine.
4) To evaluate the impact of migraine on quality of life.

3. Methodology

Study Design:
Prospective observational study: A longitudinal study that observes participants over a period of time to collect data on migraine prevalence and management.

Study Population:

Inclusion Criteria:
- Age: Aged 9 - 45 years.
- Migraine diagnosis: Participants with a diagnosis of migraine.
- Willingness to participate: participants willing to provide informed consent and participate in the study.
- Ability to communicate: Participants able to communicate in the local language.

Exclusion Criteria:
- Traumatic Brain injury: participants with a history of traumatic brain injury.
- Neurological Disorders: Participants with a history of stroke, multiple sclerosis, or other neurological disorders.
- Pregnancy or Breastfeeding: pregnancy or Breastfeeding women.

Data Collection:

Baseline Questionnaire: Participants will complete a baseline questionnaire to collect data on demographics, migraine characteristics, and management strategies.

4. Results and Discussion

Results: Data on Distribution of Patients on Gender:

S. NO	Gender	No. of Prescription	Percentage
1	Male	57	58
2	Female	41	42
3	Total	98	100

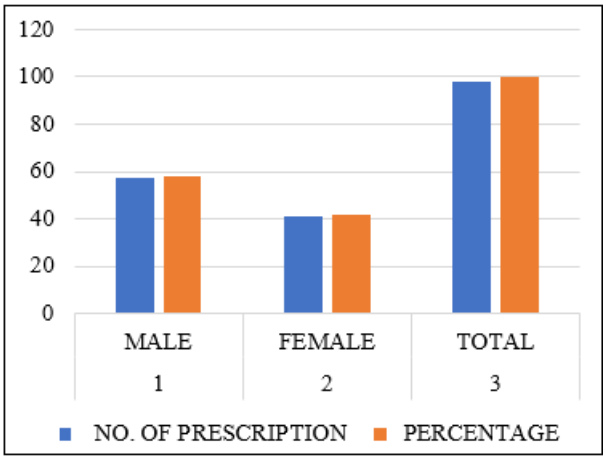


Figure 2: Distribution of patients based on gender.

Data on Distribution of Patient Based on Age:

S. No	Age	No. of Prescriptions	Percentage
1	9 - 12	13	16
2	15 - 25	30	32
3	25 - 45	46	50

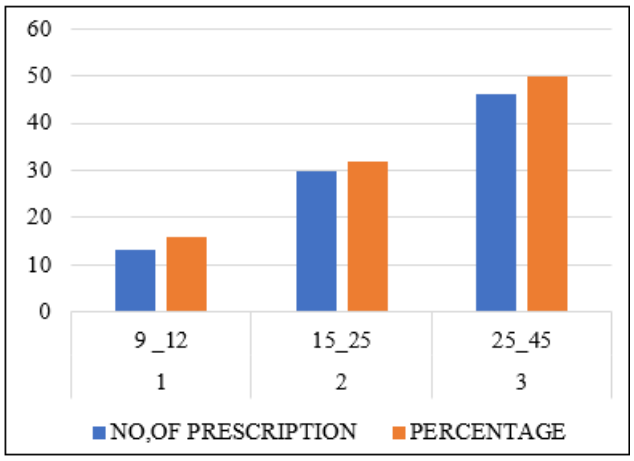


Figure 3: Distribution of patients based on age,

Data Distribution on Aura in Gender

S, NO	Age	Aura in Male	Aura in Female	Percentage
1	20 - 30	43	24	67
2	32 - 47	21	52	33

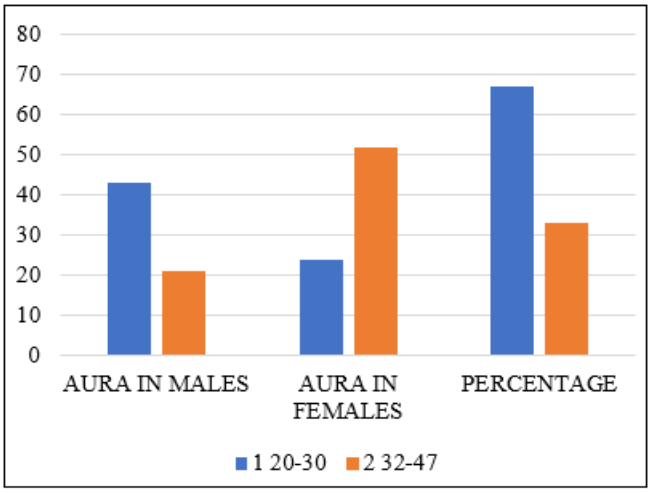


Figure 4: Distribution on aura in gender.

Data Distribution based on Symptoms:

S. NO	Symptoms	No. of Prescriptions	Percentage
1	Migraine with aura	62	30
2	Nausea	54	26
3	Vomiting	31	15
4	Photophobia	28	13
5	Phonophobia	18	8

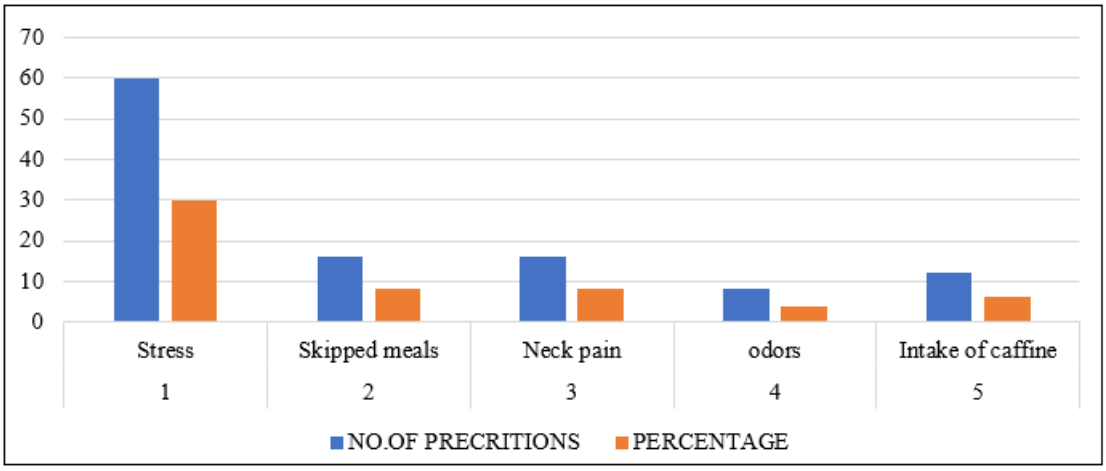


Figure 5: Distribution based symptoms.

Data Distribution based on Risk Factors:

S. NO	Risk Factors	No. of Prescriptions	Percentage
1	Stress	60	30
2	Skipped meals	16	8
3	Neck pain	16	8
4	odors	8	4
5	Intake of caffeine	12	6

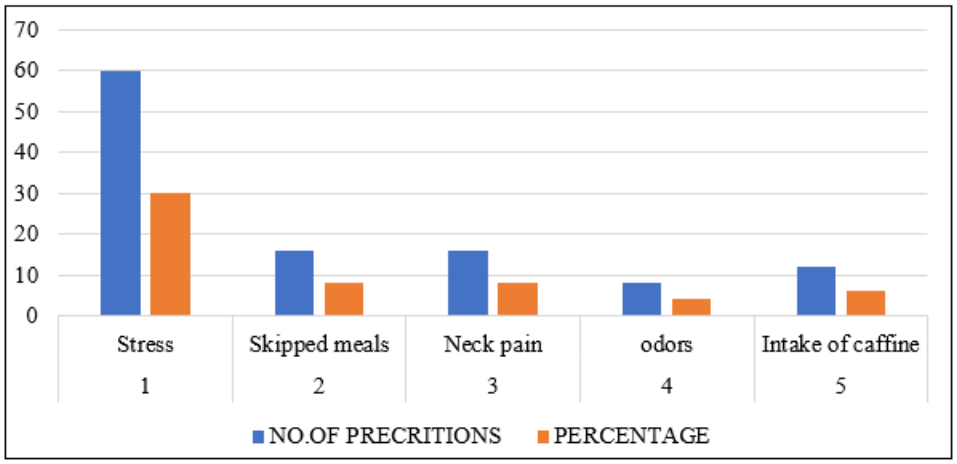


Figure 6: Distribution based on risk factors

Data Distribution based on Investigations No. of Patients Diagnosed:

S. NO	Investigations	No. of Patients Diagnosed
1	CT - SCAN	47
2	MRI - BRAIN	31
3	BLOOD TEST	17
4	NCS	5

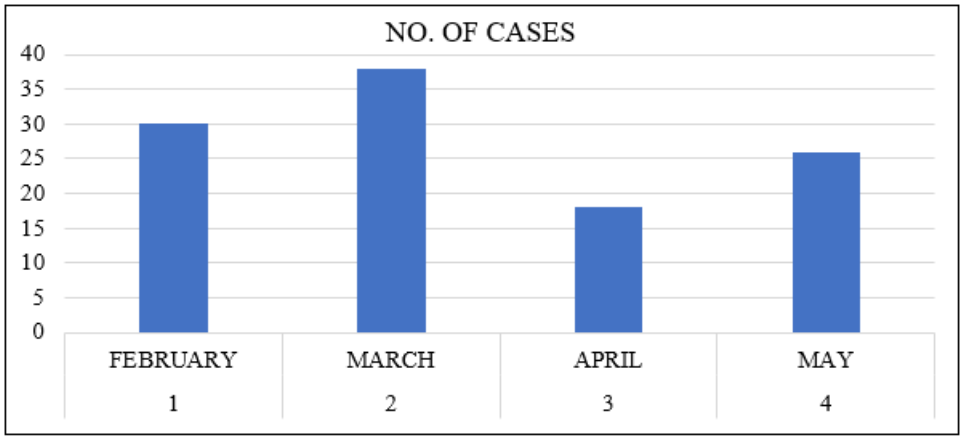


Figure 7: Distribution based on investigations no of patients diagnosed.

Data Distribution Prescription Branded Drugs:

S. NO	PRESCRIBED BRANDS	NO. OF TIMES PRESCRIBED
1	NAPROXEN	10
2	PROVONOL PLUS	31
3	NEUROBIAN FORTE	10
4	VOMIKIND	15
5	FLUNARAPROP	25

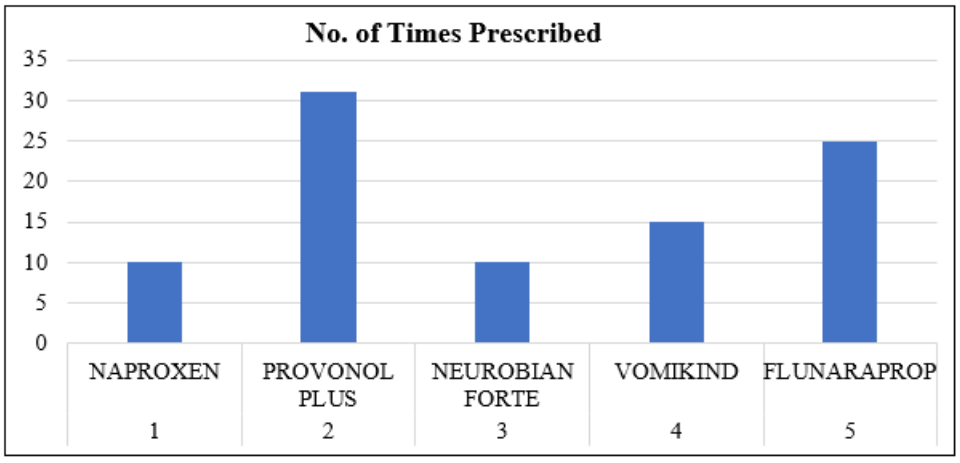


Figure 8: Data distribution prescription brands.

Data Distribution based on Prescribed Drug Categories No. of Time Prescribed

S. NO	DURG CATEGORIES	NO. OF TIME PRESCRIBED
1	NSAIDS	22
2	TRIPTANS & BETA BLOCKERS	31
3	ANTI EMETICS	19
4	NON OPIOD ANALGESIC	10

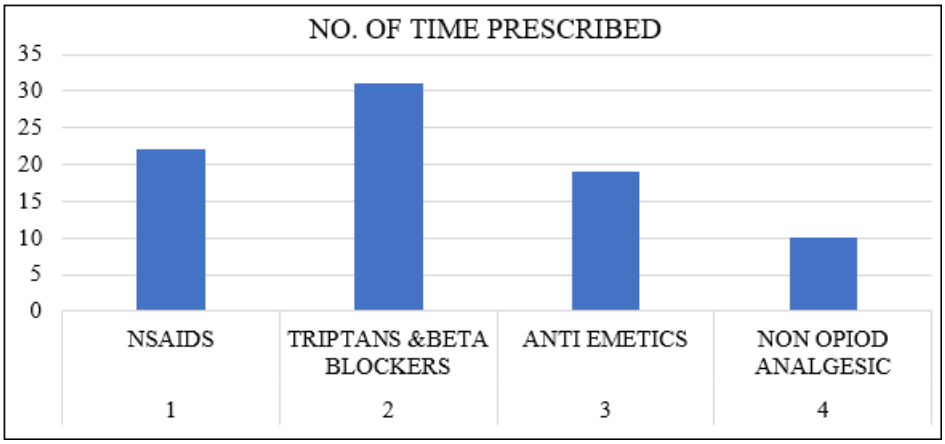


Figure 9: Distribution based on prescribed drug categories no. of time prescribed.

Prevalence of Migraine

S. NO	Months	No. of Cases
1	February	30
2	March	38
3	April	18
4	May	26
5	June	18

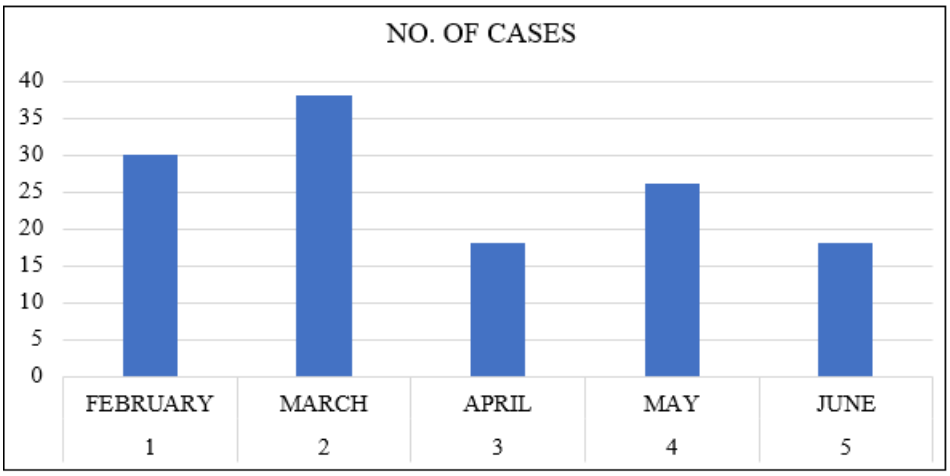


Figure 10: No. of Cases

5. Conclusion

- Management of a migraine patient will require the effort of interprofessional healthcare team. The interprofessional care provide to the patient must use an integrated care pathway combined with an evidence - based approach to planning and evaluating all joint activities.
- Pharmacists can aid the team in checking for appropriate dosing and determining drug interactions, especially if the patient is treated for chronic migraine. Nursing must coordinate activities between the various disciplines and often serve as initial contact points for patients and other team members.
- All interprofessional team members must document any changes in patient status as they observe them and notify the appropriate other parties on the healthcare team so additional diagnostic or therapeutic measures can occur if necessary. Open communication among team member is crucial to optimal patient care.
- An interprofessional team that provides an integrated approach to patient care can help achieve the best possible outcomes. Collaboration, shared decision - making, and communication are crucial for a good result.

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