A Survey on the Impact of Food, Stress and Environmental Factors on Triggering Migraine in Dhaka City

[A dissertation submitted to the Department of Pharmacy, Faculty of Allied Heath and Sciences, Daffodil International University, Dhaka. This report presented in partial fulfillment of the requirements for the degree of Bachelor of Pharmacy.**]**

Submitted To

The Department of Pharmacy

Faculty of Allied and Health Sciences

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May, 2023

APPROVAL

This project paper, a survey on **"A Survey on the Impact of Food, Stress, and Environmental Factors on Triggering Migraine in Dhaka City,"** submitted to the Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Pharmacy and approved as to its style and contents.

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DECLERATION

I hereby announce that I am carrying out this thesis study under the supervision of "Mr. Galib Muhammad Abrar Ishtiaque Lecturer", Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, and Impartial Compliance with the Bachelor of Pharmacy Degree Requirement (B. Pharm). This project, I declare, is my original work. I also state that neither this project nor any part thereof has been submitted for the Bachelor award or any degree elsewhere.

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ACKNOWLEDGEMENT

First and foremost, I'd like to express my profound gratitude to Allah, the Almighty, for granting me the capacity to finish my project work and the opportunity to focus on this topic [Alhamdulillah].

I'm also grateful to Mr. Galib Muhammad Abrar Ishtiaque, Lecturer, Department of Pharmacy, Daffodil International University, for his brilliant guidance and consistent supervision, as well as for providing critical information about the challenge and his assistance in completing it.

I'd like to extend my heartfelt greetings to Dr. Muniruddin Ahmed, Professor and Head of the Department of Pharmacy at Daffodil International University.

I would also like to express my gratitude to all of the teachers at Daffodil International University's Pharmacy Department, as well as to the other members, for their wonderful cooperation. Finally, I'd like to express my gratitude to my family members for their consistent support and drive in assisting me with this effort.

Dedjcation

My Parents

The persons who always encourage me in every sphere of my life.

My teacher

The persons who guided me in this process and the committee who kept me on track.

Abstract

A migraine headache usually affects only one side of the brain and can be incredibly painful, throbbing, or pulsating. The frequency of migraines is increasing locally and internationally, particularly among persons living in different cities, which may increase the adverse effects on daily activities, including work performance. This study will investigate the frequency of migraine among Dhaka citizens and its associations with sociodemographic and socioeconomic factors, and health factors. This is done to determine the causes of migraine headaches. This study includes more than 150 participants. According to this survey, 60% of these participants had migraine headaches at some point. 33% of people have a family history of migraine pain. 59% of them had an aura, while close to 41% of the students had migraines without an aura. Severe throbbing pain in one side of the head was most common in 25% of participants. In this study, 25% of the participants got migraines after taking salty foods, and around 16% got migraines after taking chocolates. Most 72% of students were feeling migraine headaches under stressful conditions. Loud noise has found as a significant environmental triggering factor for migraine headaches. Most people have taken NSAIDs and analgesics as self-medication for the treatment of migraine.

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Chapter One

Introduction

INTRODUCTION

The primary headache disorder known as migraine has two main subtypes: migraine without aura and migraine with aura [1]. It is an episodic headache condition characterized by a variety of neurologic, gastrointestinal, and autonomic symptoms [2]. The clinical appearance of a migraine attack varies significantly among persons, including the severity of the discomfort and the pattern of accompanying symptoms like photophobia, phonophobia, osmophobia, nausea, vomiting and movement sensitivity [3]. In other instances, the headache is preceded by focal neurological abnormalities (or "aura"), which include particular motor (weakness or paralysis) and/or focal neurological (scintillating scotoma) symptoms, followed by the headache (classical migraine) [4,5]. Headaches can be caused by a variety of factors. The majority of headaches are caused by basic headache diseases such as migraine, cluster, and tension-type headaches. Secondary headaches, which have underlying pathologic causes, are a less common form of headache. Chronic migraine sufferers have frequent, acute episodes with varying symptoms from one attack to the next, and frequently within the same patient. There are several neurologic and non-neurologic symptoms associated with migraine disease. The International Headache Society has produced diagnostic guidelines for migraines with and without aura [6].

1.1 Epidemiology:

Migraine epidemiology focuses on the occurrence and prevalence of migraine. While incidence refers to the rate at which new cases of migraine appear in a population over a given time period, prevalence refers to the percentage of a population that suffers from migraine [7]. In Western countries, one-year prevalence rates of migraine in the entire population range from 4% to 9% in males and 11% to 25% in women. Non-Western countries' figures are lower. Men's incidence rates range from 1.5 to 6 per 1000 person-years, whereas women's rates range from 3 to 24 per 1000 person-years [8]. Around 23–30% (33–43% of all women and 13–18% of all males) will experience repeated attacks of migraines during their lives, with a female-to-male prevalence ratio ranging from 1.5:1 to 3.3:1 overall [9]. According to the Global Burden of Disease Study, migraine was the fourth largest cause of years lived with disability in women in 2015 and the eighth leading cause in men [10,11].

1.2 Etiology:

Migraine trigger factors are defined as circumstances that, alone or in conjunction with other situations, produce a migraine attack in susceptible persons [12]. While the cause of migraine is unknown, there is evidence that dietary variables may play a role in a range of processes [13]. In their research, Hoffmann and Recober (2013) found that food and drinks are the most frequently reported migraine triggers [14]. Several foods and drinks, such as chocolate, coffee, milk, cheese, and alcoholic drinks, have been recognized as prevalent migraine triggers [15,16]. Just 10% of migraine patients identified alcohol as a migraine trigger frequently, but one-third of migraine patients said it occasionally or always brought on their attacks. According to some studies, red wine is the main cause of migraines, but other research indicates that white wine or other beverages may be more responsible [17]. Caffeine is an adjuvant to various analgesics and has an antinociceptive effect at large doses. Overdosing on caffeine may prolong some primary headaches and raise the risk of drug overuse headaches in the long run [18]. Patients with migraines frequently claim that specific variables might cause their headaches, with chocolate being the most common food-based trigger [19]. MSG can bring on a migraine headache due to its interference with acetylcholine production [20]. Foods containing pharmacological substances like tyramine are well-acknowledged as potential migraine triggers [21].

The most frequent self-reported migraine trigger is stress, and much research has revealed a relationship between persistent stress, pain, migraine, and catastrophic thinking [22,23]. Poor sleep quality is widely mentioned as a migraine trigger, and sleep also aids in the management of migraine episodes in many patients [24]. According to a study, sleep disturbances caused migraines in 50% of participants [25]. Intense migraine attacks can also be brought on by bright or flickering lights, bright sunlight, glare, excessive computer use, loud noises, pollution, and strong smells such as perfume, gasoline, chemicals, smoke-filled rooms, different food odors, travel-related stress, high altitude, flying, and sudden changes in the weather [26]. Furthermore, numerous migraine sufferers claim that several environmental factors cause their migraines. Climate changes, sensitivity to intense lights, higher elevations, smoke, and specific smells are the most typical causes [27].

1.3 Pathophysiology:

Because it is a complex disorder, it involves a number of pathophysiological pathways, such as hypothalamic dysfunction manifested by a disruption in chronobiology and maybe a hyper dopaminergic state [28]. Hypothalamic dysfunction has been proposed in both episodic and chronic migraine based on deviations from typical circadian patterns of hormones such as prolactin, cortisol, and melatonin. A large proportion of patients in the single trial of chronic migraine suffered from insomnia, and the hypothalamus is undoubtedly involved in sleep problems [29]. Once thought to be solely a blood vessel disorder, compelling evidence has led to the realization that migraine is a highly choreographed interaction of major inputs from both the peripheral and central nervous systems, with the trigeminovascular system and the cerebral cortex playing key roles. [30]. The investigation of the anatomy and physiology of pain-producing structures in the skull, as well as the central nervous system modification of the input, has led to the finding that migraine comprises alterations to the subcortical aminergic sensory modulatory systems, which have a wide influence on the brain [31].

- A number of genetic, hormonal and neurochemical factors interact and result in dysregulation of cortical and brainstem excitability.
- A concept called cortical spreading depression (CSD) is thought to be associated with migraine.
- CSD is characterized by a wave of significant cortical activation followed by sustained inhibition of activity
- This excitability leads to cortical activation via neuronal and glial activation, which in turn is associated with nociceptive activation and vascular changes including enhanced blood brain barrier permeability.
- Nociceptive activation, through the release of various neurotransmitters and neuromodulators, leads to central sensitization.
- The cortical activation spreads to the brain stem via trigeminal pathways further enhancing central sensitization.
- The central sensitization increases pain perception (migraine).

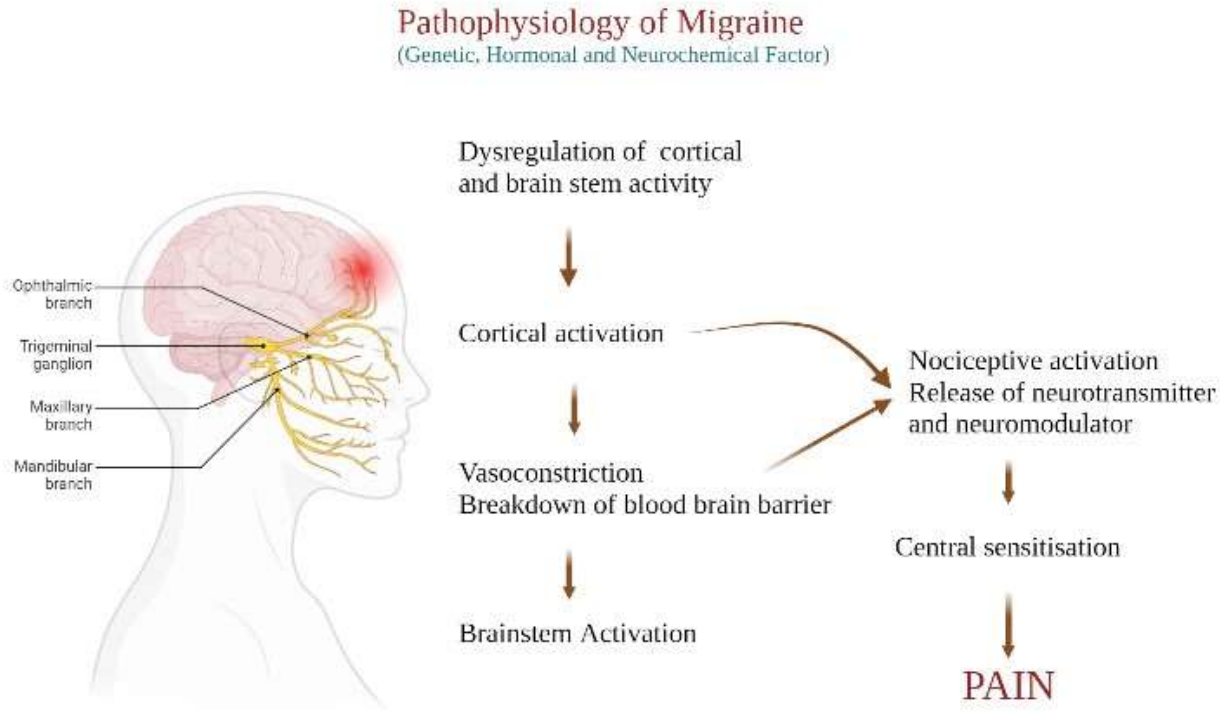

Figure 21: Pathophysiology of Migraine

1.4 Diagnosis:

Migraine has frequently been under recognized and undertreated, despite its prevalence and association with considerable impairment [32]. Despite 96% of migraineurs using medicines to treat their headaches, the majority (59%) used over-the-counter medications rather than prescription treatments (37%) [33]. Effective guidelines for the diagnosis and treatment of migraine are expected to improve symptom alleviation, improve quality of life, and minimize the economic burden of the condition [34].

1.5 Treatment:

Neurogenic Dural plasma extravasation, dilation of certain cranial arteries or arteriovenous anastomoses, or a combination of these mechanisms may all contribute to migraine headaches. These behaviors are stopped by sumatriptan, a brand-new 5-hydroxytryptamine-like receptor selective agonist [35]. Although sumatriptan has not been studied in children, it is a highly effective treatment for migraine in adults [36]. NSAIDs produced statistically significant benefits in the treatment of acute migraine [37].

Chapter Two

PURPOSE OF THE STUDY

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This study aims to examine the frequency of migraine among the people in Dhaka city and its relationships to socio-demographic, social, and health factors. This is also conducted to identify the triggering factors of migraine headaches. To evaluate the symptoms which can easily indicate the presence of migraine with aura and without aura among the people. To investigate the treatment strategy for migraine headaches and ensure safe, effective medication.

Chapter Three

METHODOLOGY

METHODOLOGY

A cross-sectional survey using questionnaires was conducted among the people in Dhaka city. The study took place between January 2023 and March 2023. After people answered a questionnaire describing their symptoms, the severity of the migraine was determined. The things that cause migraine were also evaluated. They were given questionnaires about personal data, lifestyle, family history, food habits, different stressful situations and environmental factors, and symptoms. Symptoms were evaluated for diagnosis of migraine aura and without aura. This has included some important information about migraine, which was collected from Google scholar, Springer link, Annals of internal medicine.

Chapter Four

RESULT AND DISCUSSION

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1. Gender –

This study was conducted among the people of Dhaka city in Bangladesh to examine the prevalence of migraine pain and the triggering factors of migraine. In this study, most participants were male, 61% were male, and 39% were female.

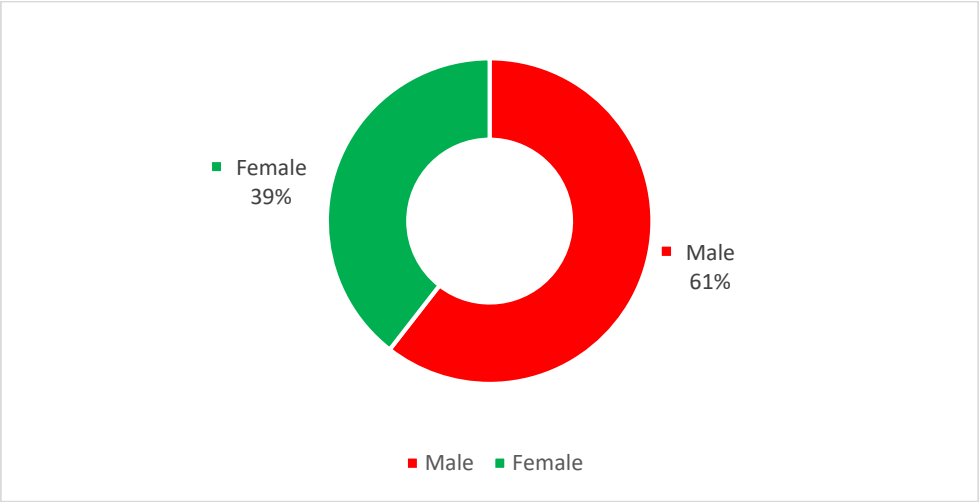

Figure 01: Gender

2. Age -

51% of the participants were 16 to 24 years old. More than 34% of the participants were 25 to 34 years old, and only 15% had an age range between 35 to 45.

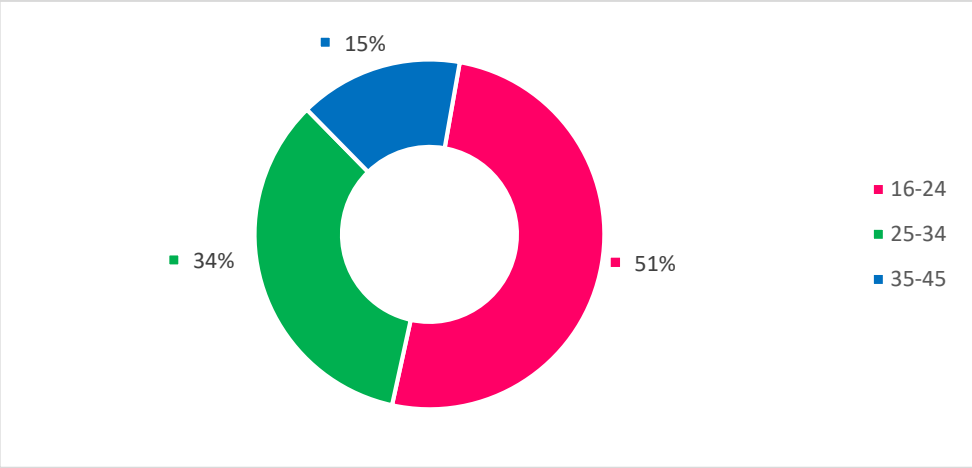

Figure 02: Age

3. Have you ever experienced migraine headaches?

More than 150 people in different parts of Dhaka city participated in this study. This study found the majority of 65% of the people had experienced a migraine headache. 20% of those participants didn't feel migraine pain, and the remaining 15% were unsure about the migraine attack or whether they had been attacked.

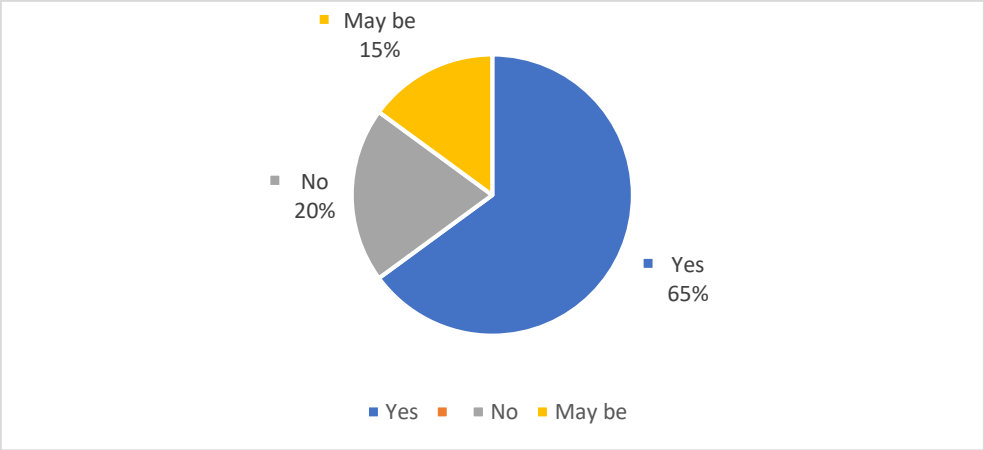

Figure 03: Prevalence of Migraine

4. Do you have any family history of migraine?

Among the migraine patients, 33% of the participants have a family history of migraine pain. The majority, 47% of the participants, have no family history record. The remaining 20% were not sure about this Question.

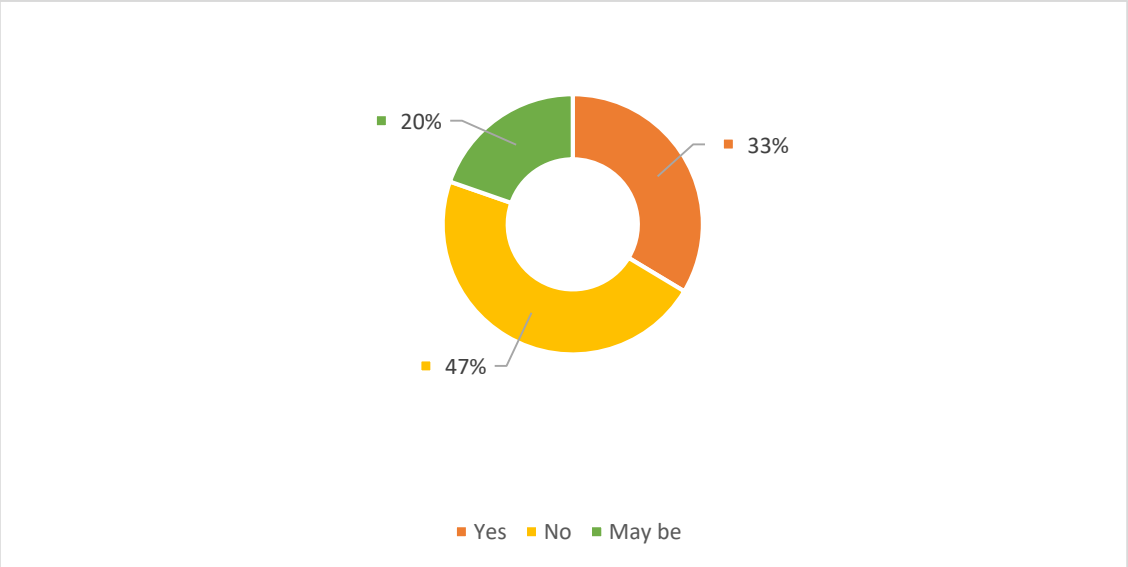

Figure 04: Family History

5. How frequent do you get affected by migraine?

The frequency of migraine attacks is higher among the patient affected once a week. 55% of the participants got affected once a week. 30% were affected once a month, and the remaining 15% were affected yearly.

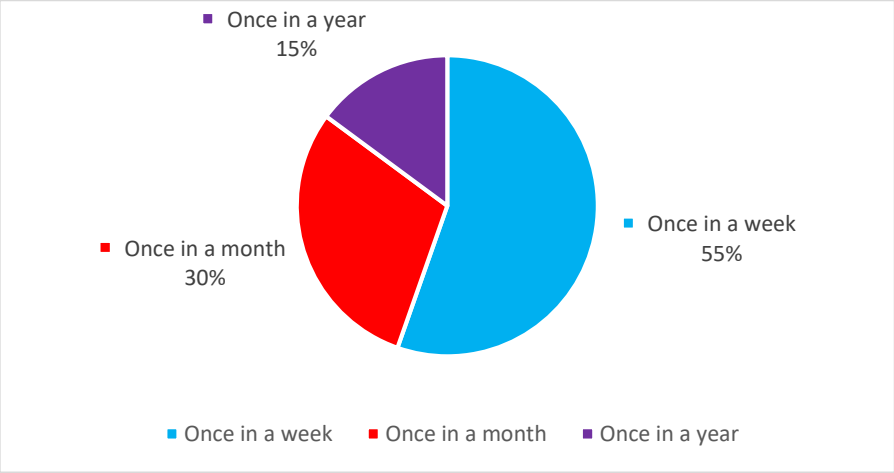

Figure 05: Frequency of Migraine Attack

6. How much time does this migraine headache stay?

This study has found different types of migraine based on the duration of migraine attacks. About 41% of the students had migraines without aura, and the majority suffered from the aura.

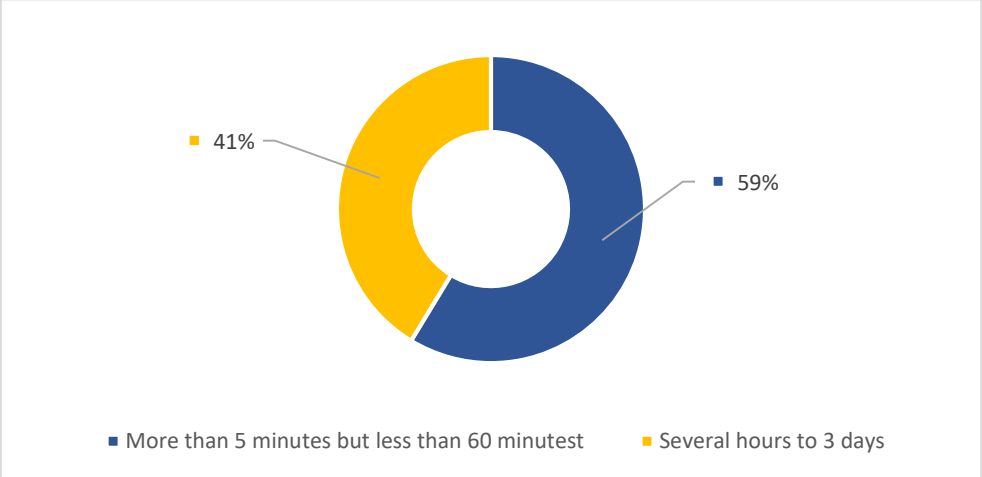

Figure 06: Types of Migraine

7. Have you experienced any of these symptoms?

In this study, severe throbbing pain in one side of the head was most common in 25% of the participants. 19% of the participants have experienced nausea. More than 16% of the participants have vomiting and speech disturbances. 12% of the participants have photophobia. 7% of the participants have phonophobia, and only 4% have a visual loss.

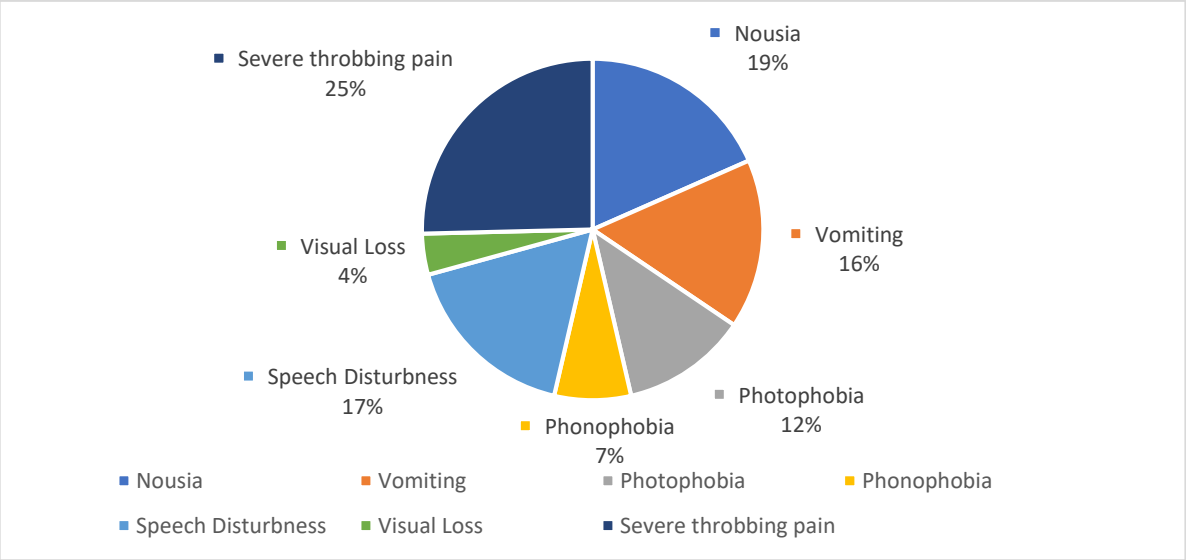

Figure 07: Symptoms

8. Do you have a migraine headache after consuming any of the foods or beverages below?

This study found approximately 120 migraine-affected people. Among those, 25% of the participants got salty food as a triggering factor for migraine. 16% of the participants got migraines after eating chocolate, and 14% got headaches after eating hot dogs. Smoked fish and blue cheese trigger migraine above 10% of the population. Only a few above 5% of participants got migraine attacks after consuming onions, garlic, alcoholic beverage, and MSG-containing food.

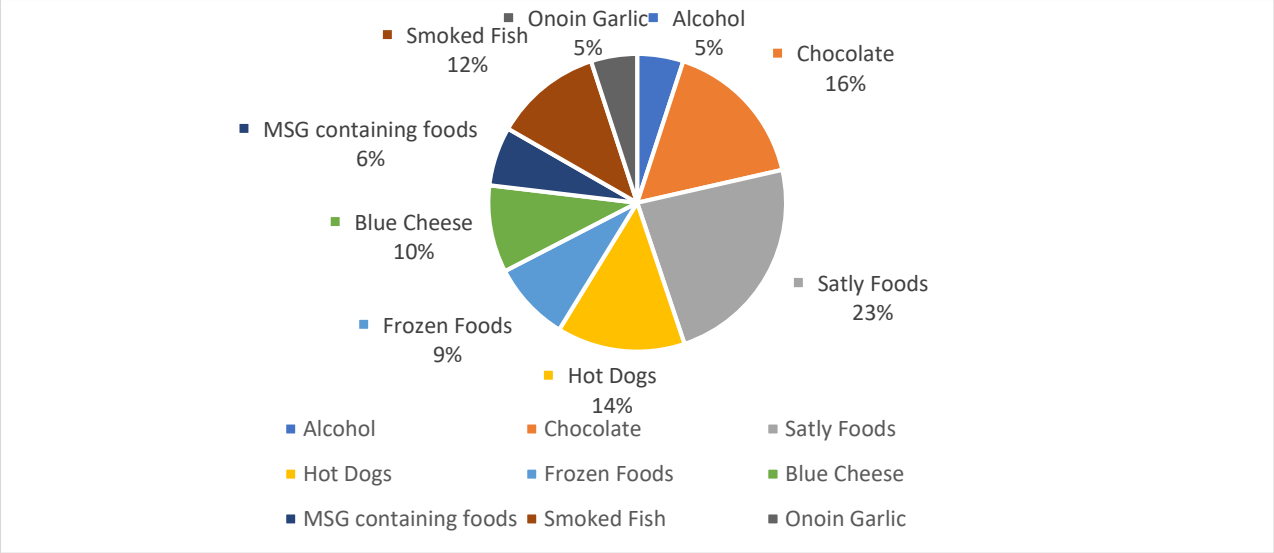

Figure 08: Food and Beverage

9. Do you experience migraines when working in a stressful environment?

This study found that most of 72% of the participants were feeling migraine headaches under stressful conditions. 21% of participants didn't experience migraine headaches under stressful situations, and the remaining 7% were unsure about this Question.

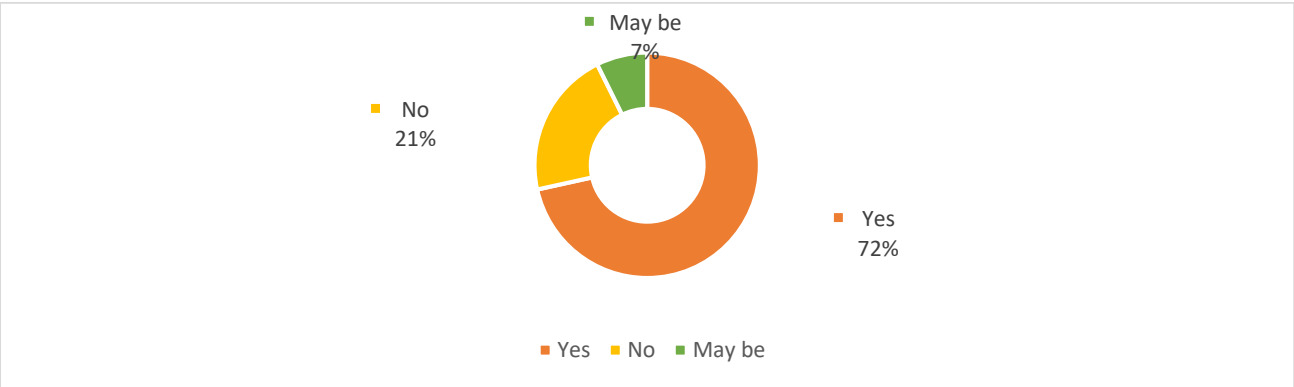

Figure 09: Stressful Environment

10. Have you felt migraine headaches in any of these environmental condition below?

Some triggering environmental factors are highly responsible for the development of migraine pain. Loud noise is a major ecological triggering factor for migraine headaches. More than 16% of the participants were having migraine to changes in routine. 14% of the participants confirmed that they felt a headache while travelling. The pungent smell of perfume, weather changes, and air pollution can trigger migraine pain above 12% of the participants. Only a few participants who were having problems with seeing a pattern, high wind, change in pressure and smell from food and paints have been found.

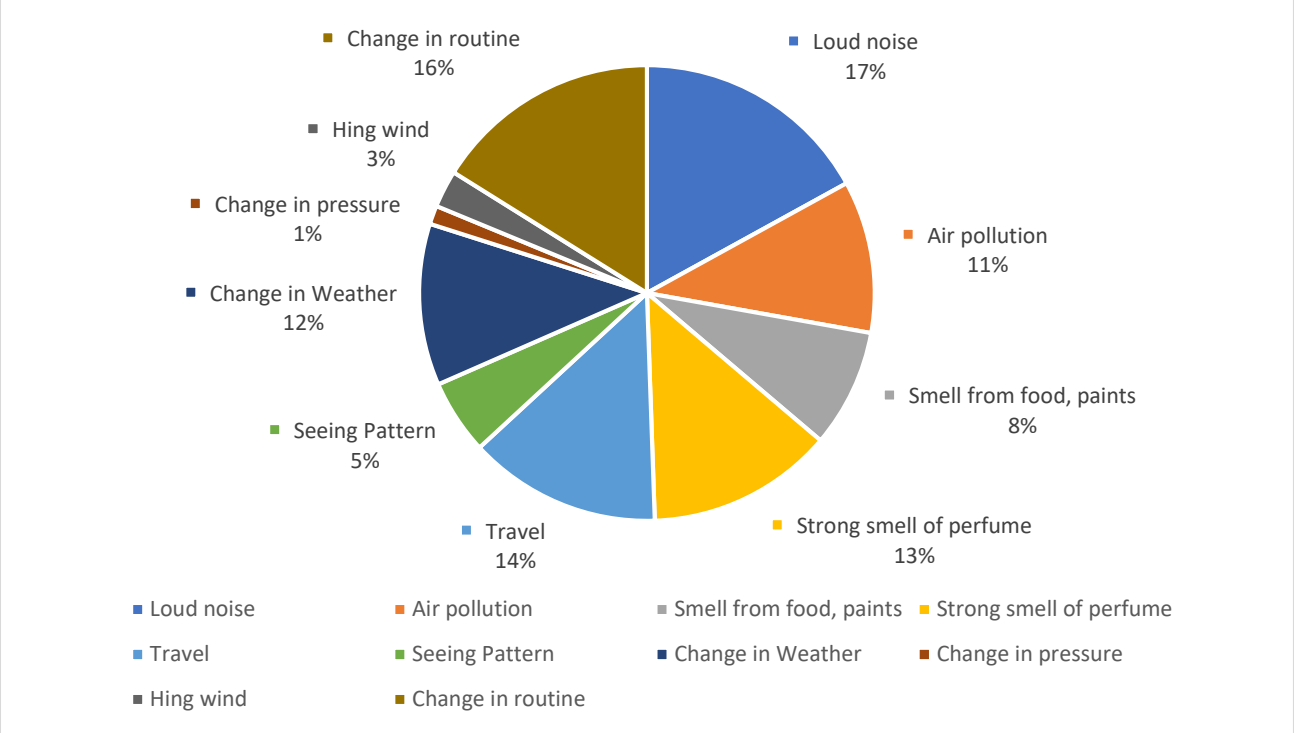

Figure 10: Environmental Condition

11. Do you take any medication for reducing this migraine headache?

Questionnaires asked the participant whether they took any medication to reduce their migraine headache. The majority of the participants, about 88%, confirmed that they took any of the medicines for reducing their migraine headaches, and 15% of the participant confirmed that they didn't take any medicine.

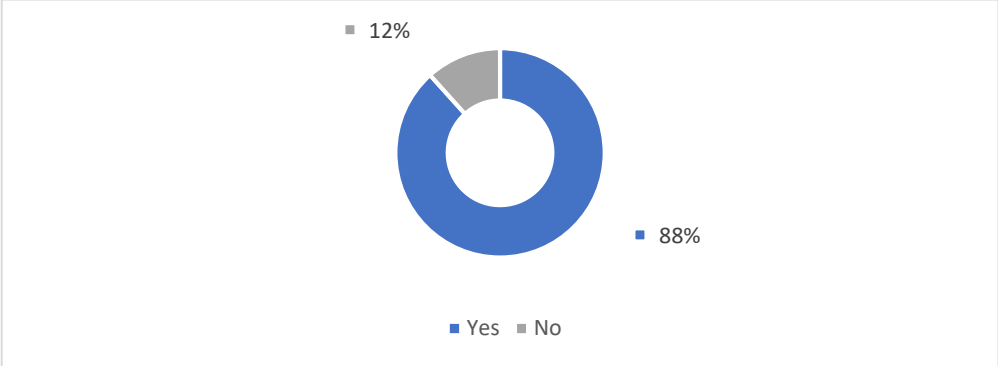

Figure 11: Medication

12. The type of medicine you take for reducing migraine headache –

Questionnaires were asked about the type of medicine they took to manage the migraine headache. The majority of the participants took paracetamol during their migraine pain. 25% of the participants took Tolfenamic acid. Some participants took other medicine like Pizotifen, Aspirin and Sumatriptan. Of the remaining participants, 6% didn't take any medication to reduce their migraine headaches.

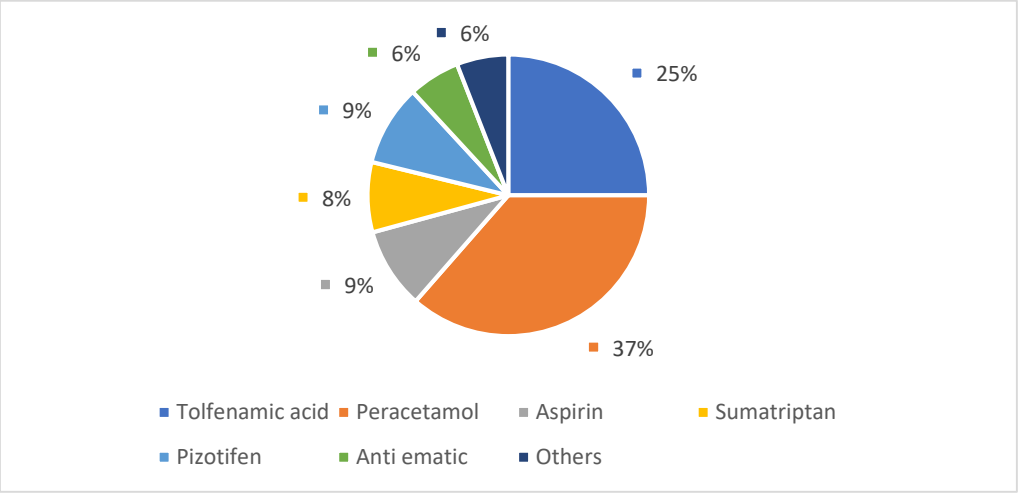

Figure 12: Types of Medicine

13. How many times do you consume main meal in a day?

Questionnaires asked the participants how many times they consumed the main meal each day. Among the migraine pain, more participants, 60%, confirmed that they consumed the main meal thrice daily. 27% said they consume the main meal twice a day, and the remaining 13% finished it once daily.

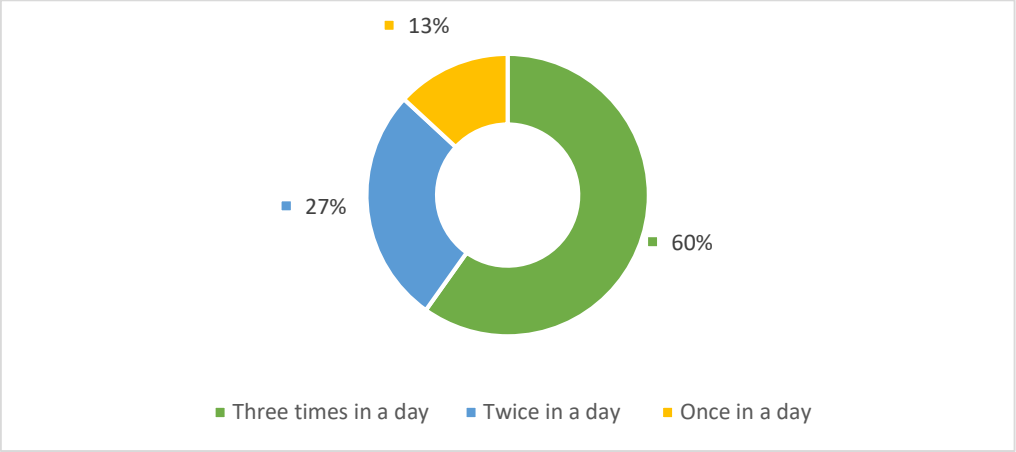

Figure 13: Number of Main Meal in Each Day

14. Do you know skipping a meal in a day can trigger your migraine headache?

Among the migraine patients, 46% did not know that skipping meals could trigger their pain. 25% confirmed they were known about this, and the remaining 28% didn't share their opinion.

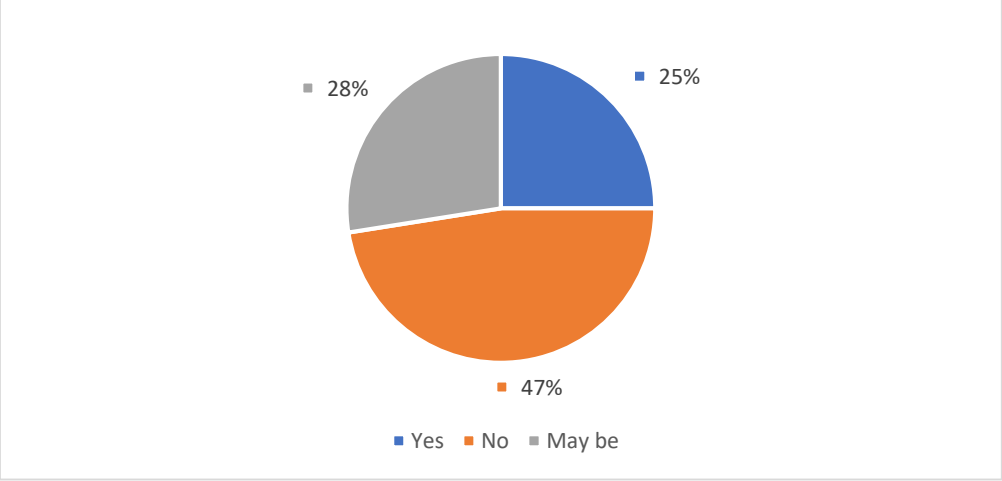

Figure 14: Skipping Meal as a Triggering Factors

15. Do you consume enough water per day?

Among the migraine patients, 73% confirmed that they were drinking enough water per day, and the remaining 27% confirmed they were not drinking enough water per day.

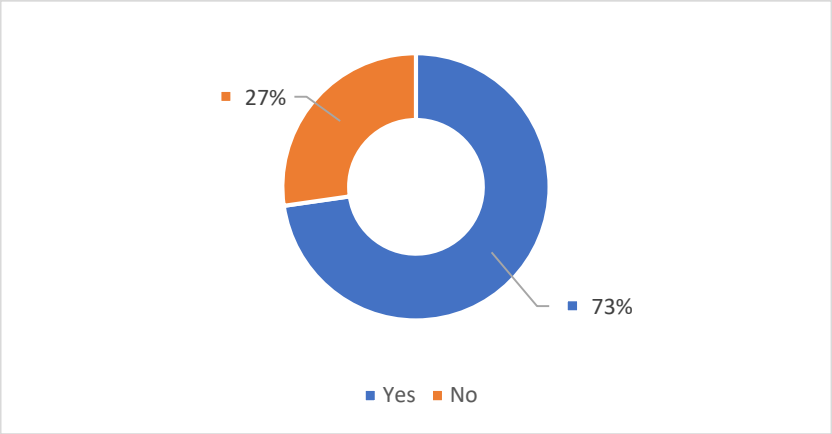

Figure 15: Question Regarding Drinking Water

16. How often do you consume citrus fruits?

Questionaries were asked to the participants about consuming citrus fruit. 38% confirmed that they consume citrus fruit twice or above time in a week. 28% said they finished once a week. 19% confirmed they consumed every day, and the remaining 15% consumed once a month.

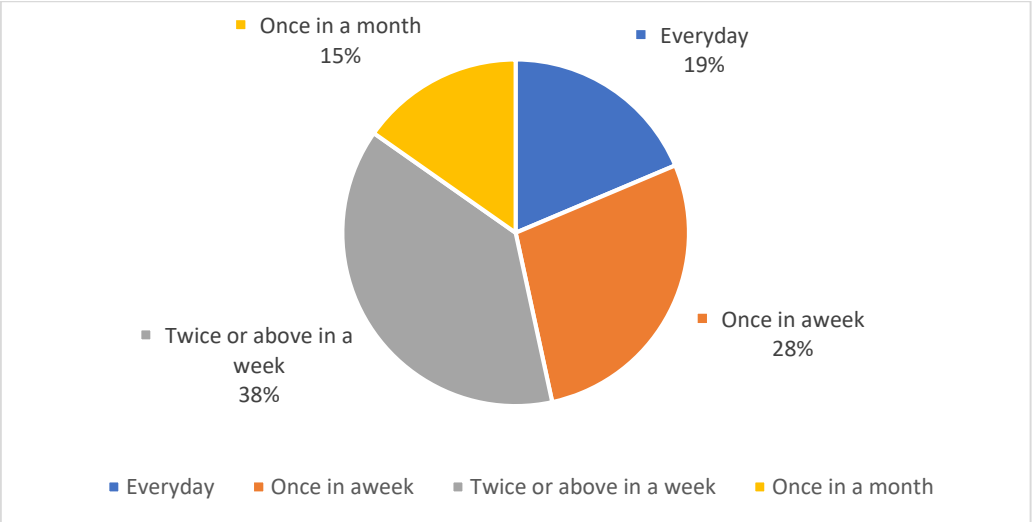

Figure 16: Consuming Citrus Foods

17. How often do you consume fast food or processed food?

Among the participants, 41% consumed fast food several times a week. 24% confirmed they consumed it daily, and the remaining participants consumed fast food once a week or monthly.

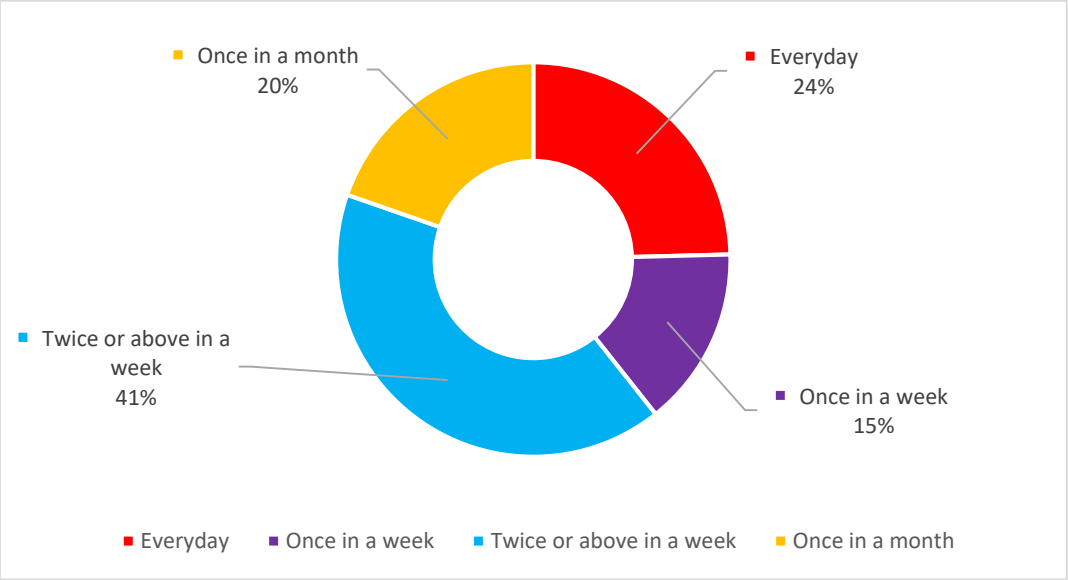

Figure 17: Consuming Fast Food

18. How often do you consume sugar rich foods?

Among the participants, 45% confirmed they consumed sugar-rich food every day. 31% said they finished once a week, and the remaining 24% confirmed they consumed several times a week.

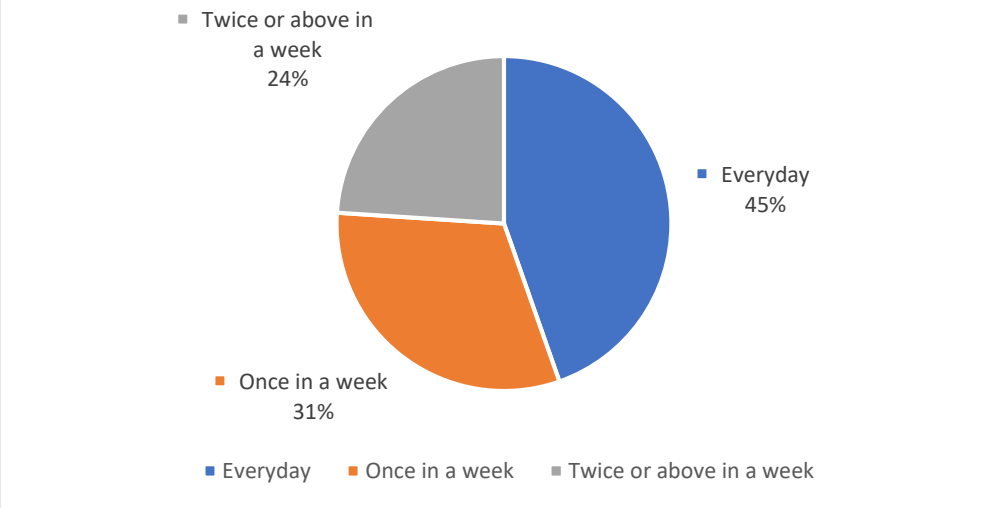

Figure 18: Consuming Sugar Rich Food

19. How many hours do you sleep per night?

Questionaries were asked about sleeping patterns or how many times they slept per night. More participants confirmed they slept 5 to 7 hours per night. 20% confirmed they sleep 7 hours per night, and the remaining 15% took less than 5 hours for their sleep time.

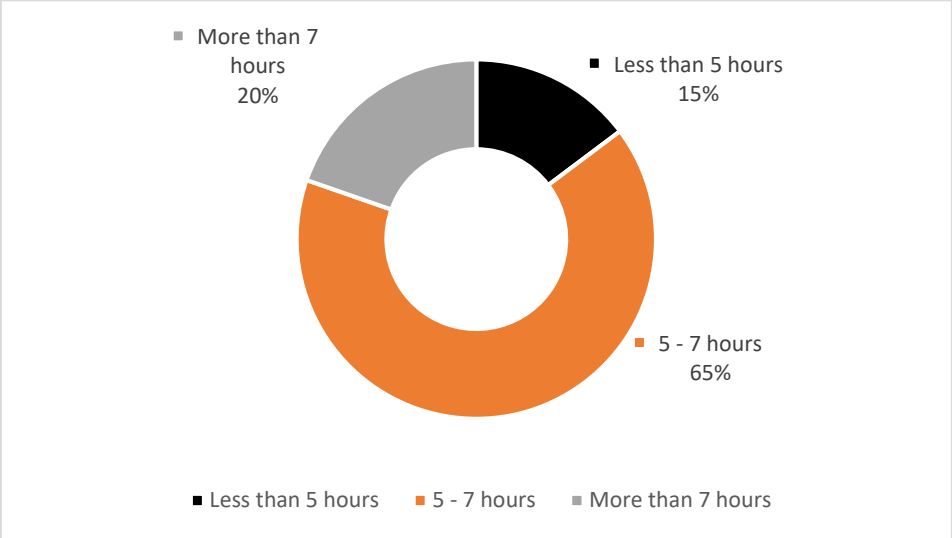

Figure 19: Sleeping Hours

20. Do you smoke or use any tobacco products?

This study found a higher number of participants, 68% nonsmokers and only 32% smokers.

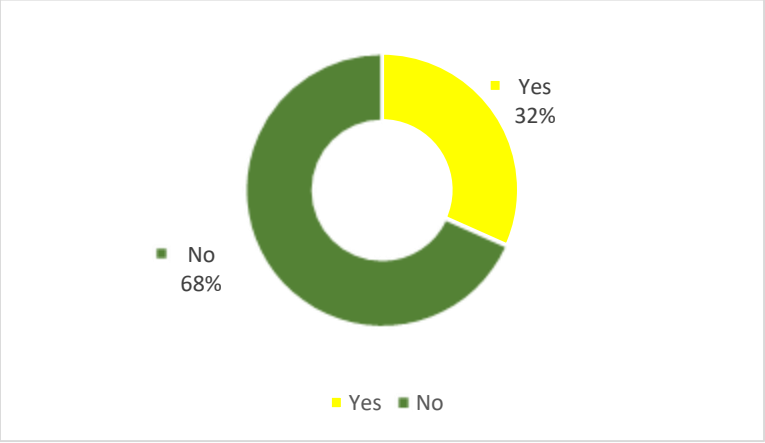

Figure 20: Smoking

Chapter Five

CONCLUSION

CONCLUSION

According to the current findings, the majority of the people of Dhaka suffer from migraine headaches. More than half of the participants have been affected by a migraine attack. The majority of the students have migraines with aura. One-third of the students have a family history of migraine. Salty food and chocolate were the major triggers of migraine pain among these students. The majority of the participants got migraines under stressful conditions. Loud noise and changes in routine were the most common environmental triggering factors. Anti-inflammatories and analgesics were used to treat it. In a nutshell, we advocate for the implementation of awareness campaigns that instruct people on how to avoid and treat headache problems. This might make it easier to lead a healthy life.

Chapter Six

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Chapter Seven

ANNEXES

ANNEXES

A Survey on the Impact of Food, Stress and Environmental Factors on Triggering Migraine in Dhaka City.

(N.B Fill this form sincerely with true information. Option '**o**' contains single answer and '□' contains both single and multiple answer)

1. Gender -

- o Male
- o Female

2. Age -

- o 16-24 years
- o 26-34 years
- o 35-45 years

3. Have you ever experienced migraine headaches?

- o Yes
- o No

4. Do you have any family history of migraine?

- o Yes
- o No
- o Maybe

5. How frequent do you get affected by migraine?

- o Once in a weak
- o Once in a month
- o Once in a year

6. How much time does this migraine headache stay?

- More than 5 minutes but less than 60 minutes
- Several hours to 3 days

7. Have you experienced any of these symptoms?

- Nausea
- Vomiting
- Photophobia (eye discomfort in bright light)
- Phonophobia (abnormal fear of sound)
- Visual loss
- Speech disturbances
- Severe throbbing pain or a pulsing sensation, usually on one side of the head

8. Do you have a migraine headache after consuming any of the foods or beverages below?

- Alcohol
- Chocolate
- Salty foods
- Hot dogs, and sausages
- Frozen foods and drinks like ice cream, colas or slushies'
- Blue cheese (tyramine- containing foods)
- Monosodium glutamate (MSG) containing products including soy sauce, meat tenderizer
- Smoked or dried fish
- Onions, garlic

9. Do you experience migraines when working in a stressful environment?

- Yes
- No

10. Have you felt migraine headaches in any of these environmental condition below?

- Loud noise
- Air pollution and smoke from cigarettes, cigars, exhaust fumes, and fires
- Smells from food, paint, bleach, and chemicals
- Strong smell of perfumes
- Travel, including flying, jet lag, or motion
- Seeing patterns, including stripes, checkerboards, or zigzag lines
- Bright or glaring light, fluorescent lights, flashing lights, and computer screens
- Change in weather ((such as a change in humidity or temperature)
- Change in barometric pressure
- High winds

- Change in routine

11. Do you take any medication for reducing this migraine headache?

- Yes
- No

12. The type of medicine you take for reducing migraine headache –

- Tolfenamic Acid
- Peracetamol
- Aspirin
- Sumatriptan
- Pizotifen
- Anti-emetic (Metoclopramide HCl)
- None
- Other

13. How many times do you consume main meal in a day?

- Once in a day
- Twice in a day
- Three times in a day

14. Do you know skipping a meal in a day can trigger your migraine headache?

- Yes
- No
- May be

15. Do you consume enough water per day?

- Yes
- No

16. How often do you consume citrus fruits?

- Everyday
- Once in a week
- Twice in a week
- Once in a month

17. How often do you consume fast food or processed food?

- Everyday
- Once in a week
- Twice or above in a week
- Once in a month

18. How often do you consume sugar rich foods?

- Everyday
- Once in a week
- Twice or above in a week

19. How many hours do you sleep per night?

- Below 5 hours
- 5 to 7 hours
- Above 7 hours

20. Do you smoke or use any tobacco products?

- Yes
- No

ঢাকা সিটিতে মাইগ্রেনের উদ্রেককারী খাদ্য, স্ট্রেস এবং পরিবেশগত কারণগুলির উপর একটি সমীক্ষা।

1. লিঙ্গ -

- পুরুষ
- মহিলা

2. বয়স -

- 16-24 বছর
- 16-34 বছর
- 35-45 বছর

3. আপনি কি কখনও মাইগ্রেনের মাথাব্যথা অনুভব করেছেন?

- হা
- না

- হতে পার

4. আপনার কি মাইগ্রেনের কোন পারিবারিক ইতিহাস আছে?

- হা
- না
- হতে পারে

5. আপনি কত ঘন ঘন মাইগ্রেনে আক্রান্ত হন?

- একবার দুর্বল
- মাসে একবার
- বছরে একবার
- সপ্তাহে বেশ কয়েকবার
- মাসে বেশ কয়েকবার
- বছরে বেশ কয়েকবার

6. এই মাইগ্রেনের মাথাব্যথা কতক্ষণ থাকে?

- 4 ঘন্টা থেকে 72 ঘন্টা
- 5 মিনিটের বেশি কিন্তু 60 মিনিটের কম
- কয়েক ঘন্টা থেকে 3 দিন

7. আপনি কি এই উপসর্গগুলির কোন অভিজ্ঞতা পেয়েছেন?

- বমি বমি ভাব
- বমি হওয়া
- ফটোফোবিয়া (উজ্জ্বল আলোতে চোখের অস্বস্তি)
- ফোনোফোবিয়া (শব্দের অস্বাভাবিক ভয়)
- ঝিকিমিকি স্পট
- চাক্ষুষ ক্ষতি
- বক্তৃতা ব্যাঘাত
- প্রচণ্ড স্পন্দিত ব্যথা বা স্পন্দন সংবেদন, সাধারণত মাথার একপাশে

8. নিচের কোন খাবার বা পানীয় খাওয়ার পর কি আপনার মাইগ্রেনের মাথা ব্যাথা হয়?

- অ্যালকোহল
- কফি, চা এবং কোলা সহ ক্যাফিনযুক্ত পানীয়
- চকোলেট
- লবণাক্ত খাবার
- হট ডগ এবং সসেজ
- হিমায়িত খাবার এবং পানীয় যেমন আইসক্রিম, কোলা বা স্লুশি'
- নীল পনির (টাইরামিন-যুক্ত খাবার)
- মনোসোডিয়াম গ্লুটামেট (MSG) সয়া সস, মাংসের টেন্ডারাইজার সহ পণ্য রয়েছে
- আলুর চিপ পণ্য
- মুরগির কলিজা এবং অন্যান্য অঙ্গের মাংস, পেটে
- স্মোকড বা শুকনো মাছ
- পেঁয়াজ, রসুন

9. চাপের পরিবেশে কাজ করার সময় আপনি কি মাইগ্রেন অনুভব করেন?

- হা
- না

10. নীচের এই পরিবেশগত পরিস্থিতিতে আপনি কি মাইগ্রেনের মাথাব্যথা অনুভব করেছেন?

- বিকট শব্দ
- বায়ু দূষণ এবং সিগারেট, সিগার, নিষ্কাশন ধোঁয়া এবং আগুনের ধোঁয়া
- খাদ্য, রং, ব্লিচ এবং রাসায়নিক থেকে গন্ধ
- পারফিউমের তীব্র গন্ধ
- ভ্রমণ, উড়ন্ত, জেট ল্যাগ বা গতি সহ
- স্ট্রাইপ, চেকারবোর্ড বা জিগজ্যাগ লাইন সহ প্যাটার্ন দেখা
- উজ্জ্বল বা ঝকঝকে আলো, ফ্লুরোসেন্ট লাইট, ফ্ল্যাশিং লাইট এবং কম্পিউটার স্ক্রিন
- আবহাওয়ার পরিবর্তন (যেমন আর্দ্রতা বা তাপমাত্রার পরিবর্তন)
- ব্যারোমেট্রিক চাপের পরিবর্তন
- প্রবল বাতাস
- রুটিনে পরিবর্তন

11. আপনি কি এই মাইগ্রেনের মাথাব্যথা কমানোর জন্য কোন ওষুধ খান?

- হা
- না

12. মাইগ্রেনের মাথাব্যথা কমানোর জন্য আপনি যে ধরনের ওষুধ খান –

- পেরাসিটামল
- অ্যাসপিরিন
- সুমাত্রিপ্টন
- রিজাত্রিপ্তান
- অ্যামিট্রিপটাইলাইন (এন্টিডিপ্রেসেন্টস)
- ভেনলাফ্যাক্সিন (এন্টিডিপ্রেসেন্ট)
- মেটোপ্রোলল
- অ্যান্টি-এমেটিক (মেটোক্লোপ্রামাইড এইচসিএল)
- প্রোপ্রানোলল এক্সটেন্ডেড-রিলিজ (বিটা ব্লকার)
- টপিরামেট (অ্যান্টিকনভালসেন্ট)
- এরগোটামিন
- ওনাবোটুলিনামটক্সিন
- কোনোটিই নয়
- অন্যান্য

13. আপনি দিনে কতবার প্রধান খাবার খান?

- দিনে একবার
- দিনে দুবার
- দিনে তিনবার

14. আপনি কি জানেন যে দিনে একটি খাবার বাদ দিলে আপনার মাইগ্রেনের মাথাব্যথা শুরু হতে পারে?

- হা
- না
- হতে পারে

15. আপনি কি প্রতিদিন পর্যাপ্ত জল খান?

- হা
- না

16. আপনি কতবার সাইট্রাস ফল খান?

- প্রতিদিন
- সপ্তাহে একবার
- সপ্তাহে দুবার

- মাসে একবার

17. আপনি কত ঘন ঘন ফাস্ট ফুড বা প্রক্রিয়াজাত খাবার খান?

- প্রতিদিন
- সপ্তাহে একবার
- সপ্তাহে দুবার বা তার বেশি
- মাসে একবার

18. আপনি কত ঘন ঘন চিনি সমৃদ্ধ খাবার গ্রহণ করেন?

- প্রতিদিন
- সপ্তাহে একবার
- সপ্তাহে দুবার বা তার বেশি

19. আপনি প্রতি রাতে কত ঘন্টা ঘুমান?

- 5 ঘন্টার নিচে
- 5 থেকে 7 ঘন্টা
- 7 ঘন্টার উপরে

20. আপনি কি ধূমপান করেন বা কোন তামাকজাত দ্রব্য ব্যবহার করেন?

- হা
- না