

# Thesis On

# "A survey on Knowledge, Attitude, and Practice towards taking Proton Pump Inhibitors (PPIs) among Bangladeshi villagers"

### **Submitted To**

Department Of Pharmacy Faculty Of Allied Health Science Daffodil International University

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## Approval

This thesis paper, "A Survey On Knowledge, Attitude, and Practice towards taking Proton Pump Inhibitors (PPIs) among Bangladeshi villagers", submitted To the Department Of Pharmacy, Faculty Of Allied Health Science, Daffodil International University Has been accept satisfactory for the partial fulfilment of the requirement for the degree of M.Pharm and approved as to its style and contents.

**Board Of Examiners** 

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 Internal Examiner 1

 Internal Examiner 2

 External Examiner 3

## **Declaration**

I hereby declare that thesis report "A survey on Knowledge, Attitude, and Practice towards taking Proton Pump Inhibitors (PPIs) among Bangladeshi villagers" is complete by me under the supervisor Subrato Kumar Barman, Lecturer, Department Of Pharmacy, Faculty OF Allied Health Science, Daffodil International University. I declare that, I hereby certify that, this thesis is entirely my own creation. I further certify that no portion of this thesis has been submitted elsewhere for consideration for a master's degree.

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I might want to thank Vogoban for giving me the ability to complete my incomplete work and the opportunity to speak with you about this topic.

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Lastly, I would want to thank my parents for their gracious support and encouragement, both of which enabled me to finish this project.

**Dedication..** 

# To my parents

Those who consistently provide me encouragement in all areas of my life.

#### Abstract

It is a survey on Knowledge, Attitude, and Practice towards taking Proton Pump Inhibitors (PPIs) among Bangladeshi villagers. Out most of the villagers don't know about proper use of PPIs. They do not know when it will be taken and why the are taken PPIs? There haven't any awareness between most of the Bangladeshi villagers. Who don't have any formal educational knowledge the take PPIs without doctor's advice. They go to pharmacy and bye PPIs. They don't know about dose of the PPIs at a time. The take their own advice. They take it after taking food. That's why it can not work properly. In the result Most of the Bangladeshi villagers are use PPIs. Most of them are woman and who do not have any educational knowledge the use without doctors prescription. Who are Educated they know everything about PPIs. But one part of educated villagers don't know when it will be take. They take it after taking food. That's why it can't work 100% or properly. They do not know about it's demerits. They don't have any knowledge it create some adverse effect after taking PPIs. On the other hand who are un educated, don't have any academic knowledge they don't have any knowledge about PPIs. They take it without doctor's prescription. They do not know when it will be taken. And they take it randomly. They also don't know 30-60 minutes before taking food it will be taken. That's why there are suffering mane problems and for that reasons PPIs can not work properly. For that reason PPIs don't it's 100%.

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# Chapter 1 Introduction

#### Introduction

Treatment with proton pump inhibitors (PPIs) has significantly altered the clinical manifestation of gastric reflux disease (GERD). Before PPIs were developed in 1989, doctors had difficulty treating patients with reflux with the pharmaceutical treatments that were then available, which were primarily histamine-2 receptor antagonists. Naturally, an endoscope at the time could easily identify the "refractory patient" because of recurring strictures, ulcers, and chronic mucosal erosions. Nevertheless, these issues almost mysteriously gave way to the strong acid suppression that PPIs made possible. With continued PPI therapy, it is now generally acknowledged that the mucosal symptoms of GERD (apart from Barrett's metaplasia) can be permanently managed [1]. Unsurprisingly, the use of PPIs has since skyrocketed, and a variety of substitute compounds have been introduced to the arsenal of treatment options.

Extended and perhaps careless use of PPIs has been linked to a number of hazards. PPIs have the ability to affect medications whose proper absorption depends on pH, increasing the rates of absorption. Ketoconazole, digoxin, nifedipine, indinavir, midazolam, did methadone, and aspirin are a few examples of these medications. There have been numerous reports of hypomagnesemic hypoparathyroidism linked to long-term PPI use. Vitamin B12 deficiency has been linked to PPI use for 12 months or longer, but no correlation has been observed between prior or current PPI therapy. Hip fractures, community-acquired pneumonia, and Clostridium difficile-associated diarrhea have all been demonstrated to have a statistically significant correlation with either long-term or current PPI use.

Urinary tract, pulmonary, and enteric infections can potentially result from PPIs' prolonged suppression of acid production. Chronic PPI use-induced hypochlorhydria may lead to hypergastrinemia, which in turn facilitates the development of gastric carcinoids, gastric polyps, and gastric cancer.

Literature review

### Literature review

Proton pump inhibitors (PPIs) reduce basal and induced acid secretion by permanently deactivating the active form of the proton pump. Science their clinical debut in the 1980s, PPIs have grown to be one of the pharmacological classes that are prescribed the most often in the globe.

That guidelines recommend that patient with un-investigated dyspepsia or gastro-esophageal reflux disease (GORD) be given Lifestyle advice, such as healthy eating, weight loss and quitting smocking, before attempting non systemic OTC therapies, like antacid and alginates if symptoms are not adequately controlled, even though they are indicated for the treatment of the condition.

Because PPIs are so effective, they are overused in many acid related diseases, including GORD. In contrast to the above mentioned advice, doctors frequently prescribe PPIs as first-line treatments for illnesses associated to acid reflux, and for prolonged periods of time without reassessment. A significant percentage of patients continue to take PPIs for more than a year.

Not all of the suggested correlations between PPI use and outcomes have been consistently shown. The potential elevated risk of fracture is one of the documented side effects linked to long-term PPI usage that has received a lot of attention.

All clinical medications, including PPIs, have both beneficial and negative effects. Since all currently available PPIs have a fundamental chemical structure, there are two categories of undesirable effects that can be distinguished: those that are connected to acid inhibition and those that are not.

While side effects unrelated to acid inhibition can occur in patients receiving both long-term and short-term PPI treatment, the majority of acid inhibition-related side effects are seen during long-term treatment.

**Purpose Of The Study** 

#### 2.1 Purpose of the study

It is a survey on Knowledge, Attitude, and Practice towards taking Proton Pump Inhibitors (PPIs) among Bangladeshi villagers. Out most of the villagers don't know about proper use of PPIs. They do not know when it will be taken and why the are taken PPIs?

There haven't any awareness between most of the Bangladeshi villagers. Who don't have any formal educational knowledge the take PPIs without doctor's advice. They go to pharmacy and bye PPIs. They don't know about dose of the PPIs at a time. The take their own advice. They take it after taking food. That's why it can not work properly.

Purpose of the study are

- Control the misuse of PPIs
- Awareness about PPIs
- Proper use of PPIs

Methodology

#### 3. Methodology

To collect information from Bangladeshi villagers, create some questionnaire.

• I have started work for this survey from October 2023.

#### **3.1 Data collection**

- 1. Firstly create some valuable questionnaire for the survey.
- 2. Then translate that into Bangali for the better understanding by the villagers.
- 3. Then printout that questionnaire.
- 4. Then conduct face to face interview from the respondents. Ensure informed consent and data confidentiality.
- 5. A significant amount of pertinent information has been gathered by reviewing several linked article papers from Google Scholar.

#### 3.2 Data variables:

1. Collect the information including name, age, gender, educational background, occupation.

# **Result And Discussion**

#### 5.1 Age of responders:

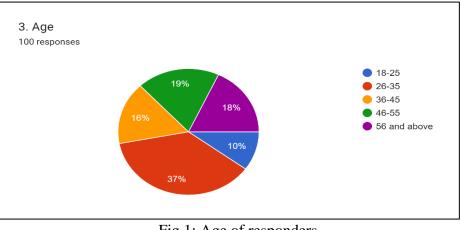


Fig 1: Age of responders

**Discussion:** According to the survey, 10% responders are 18-25 age, 16% responders are 36-45 age, and 18% responders are 56 and above. The majority of individuals providing responses seem to be 26-45 years.

#### 5.2 Gender of responders:

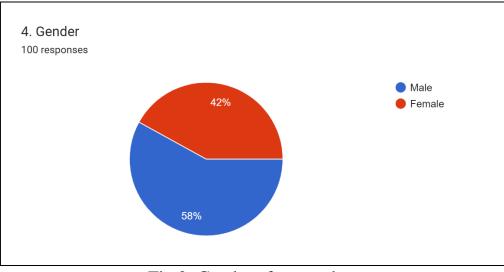


Fig 2: Gender of responders

**Discussion:** The diverse gender representation in the survey, with 58% male and 42% female participants.

#### **5.3 Occupation status of responders:**

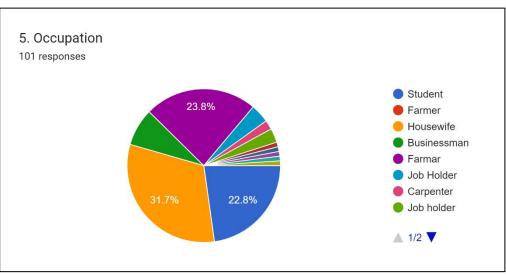
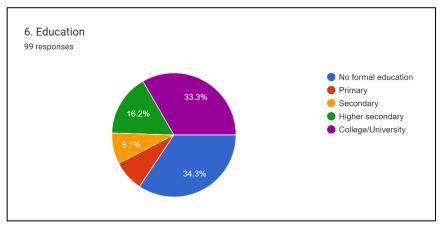


Fig 3: Occupation status of responders

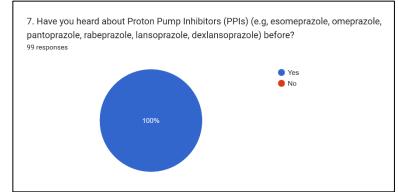
**Discussion:** Different professional personnel has been chosen for this survey. According to fig 3 most of the parsons are housewife who are 32%, farmers are 25%, 23% are students, 8% of the responders are Businessman, 7% of responders are job holder, carpenters are 2%, 1% is teacher, 1% is banker, 1% is autorickshaw driver.

#### **5.4 Education status of responders:**



#### Fig 4: Education status of responders

**Discussion:** In the Education status of responders 34.3% are no formal education, 33.3% are college/university, 16.2% are higher secondary, 8.1% are secondary and at last 8.1% have primary level education.



#### 5.5 Status of heard about Proton Pump Inhibitors PPIs before:

Fig 5: Status of heard about Proton Pump Inhibitors PPIs before

**Discussion:** In the Status of heard about Proton Pump Inhibitors PPIs before 99 responders are respond and 100% of responders are heard about Proton Pump Inhibitors PPIs before.

#### 5.6 Status of rate responders knowledge about PPIs

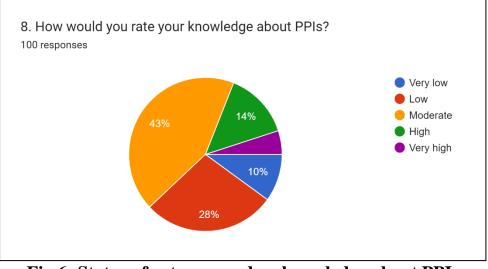
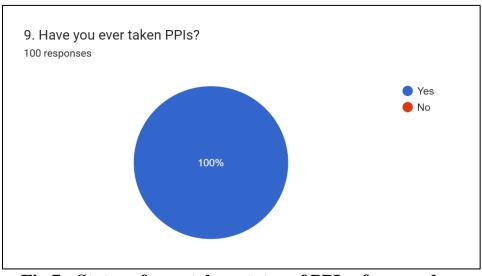


Fig 6: Status of rate responders knowledge about PPIs

**Discussion:** In this status of of rate responders knowledge about PPIs, here 43% have moderate knowledge about PPIs, 28% have low knowledge, 14% have high knowledge, 10% have very low knowledge and 5% have very high knowledge about PPIs.



#### **5.7 Status of ever taken status of PPIs of responders**

Fig 7 : Status of ever taken status of PPIs of responders

Discussion: In this status 100% of responders are ever taken PPIs.

#### 5.8 Status of responders what condition they are taking PPIs for

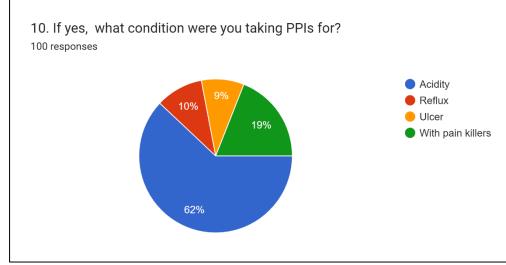
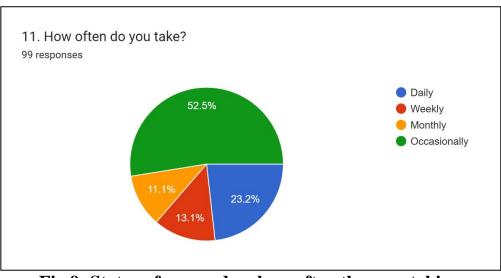


Fig 8: Status of responders what condition they are taking PPIs for

**Discussion:** In the Status of responders what condition they are taking PPIs for, 62% responders are used for acidity, 19% responders are used with pain killers, 10% are used for reflux, 9% are used for ulcer.

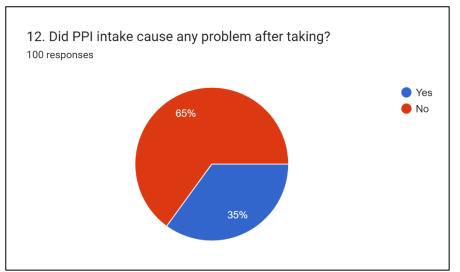


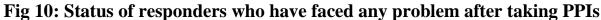
#### **5.9 Status of responders how often they are taking**

Fig 9: Status of responders how often they are taking

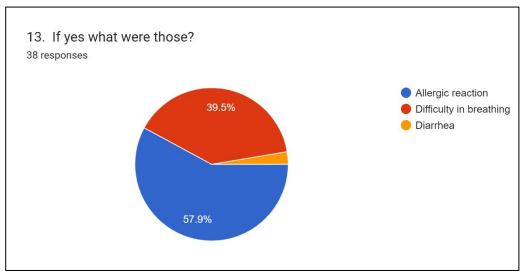
**Discussion:** In this status 52.5% are taking occasionally, 23.2% are taking daily, 13.1% are taking weekly and 11.1% are taking monthly.

#### 5.10 Status of responders who have faced any problem after taking PPIs





Discussion: In this status 65% have faced problem and 35% don't face any problem after taking PPIs.



#### 5.11 Status of problem which is faced by responder after taking PPIs

Fig 11: Status of problem which is faced by responder after taking PPIs

**Discussion:** In this status 57.9% are faced allergic problem, 39.5% are faced difficulty in breathing and 1% is faced diarrhea.

# **5.12 Status of responders knowledge about PPI should be taken 30-60 minutes before eating.**

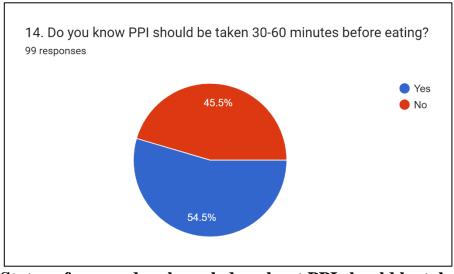
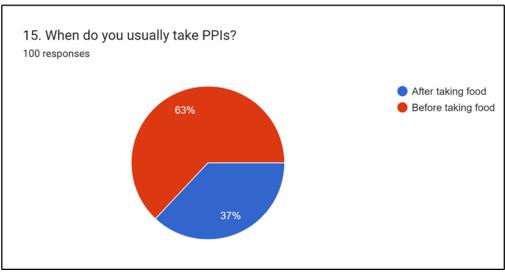


Fig 12: Status of responders knowledge about PPI should be taken 30-60 minutes before eating.

**Discussion:** In this status 54.5% is yes and 45.5% is No, knowledge about PPI should be taken 30-60 minutes before eating.



#### 5.13 Status of responders who are usually take PPIs

Fig 13: Status of responders who are usually take PPIs

Discussion: In this status 63% of responders are usually take PPIs Before taking food and 37% responders are usually take PPIs after taking food.

#### 5.14 Status of responders what sources do they trust for information about PPIs

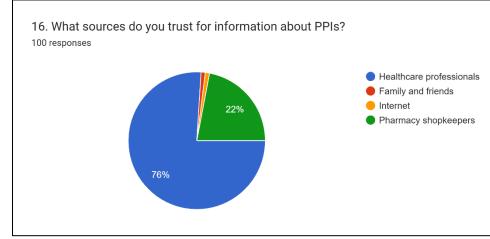


Fig 14: Status of responders what sources do they trust for information about PPIs

**Discussion:** Here 78% of responders trust for information about PPIs from healthcare professionals, 22% are trust from pharmacy shopkeepers, 1% is trust from family and friends and 1% is trust from internet.

5.15 Status of responders who have consult a healthcare professional before taking PPIs.

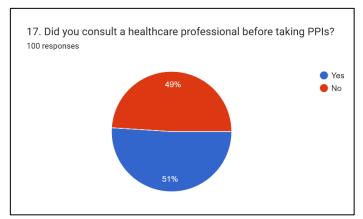


Fig 15: Status of responders who have consult a healthcare professional before taking PPIs.

**Discussion:** In this status 51% have consult a healthcare professional before taking PPIs and 49% don't have consult a healthcare professional before taking PPIs.

# 5.16 Status of responders who believe that PPIs are effective in treating stomach-related issues.

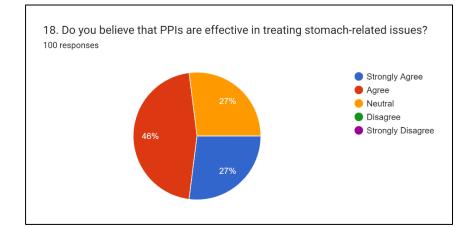
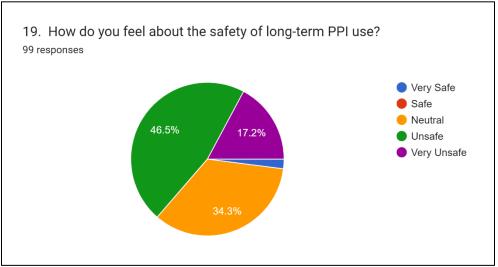


Fig 16: Status of responders who believe that PPIs are effective in treating stomach-related issues.

**Discussion:** In this status 46% are agree, 27% strongly agree, 27% are neutral that PPIs are effective in treating stomach-related issues.



#### 5.17 Response of responders who feel about the safety of long-term PPI use



**Discussion:** In this pie chart there 99 responders are response and 46.5% are unsafe, 34.3% are neutral, 17.2% are very unsafe and 2% are very safe to feel about the safety of long term PPIs use.

#### 5.18 Status of responders how long they have been taken PPIs.

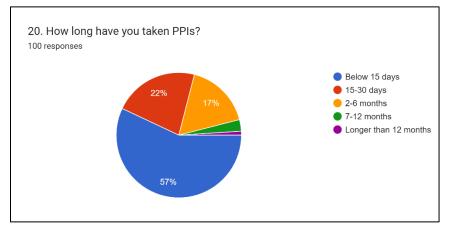


Fig 18: Status of responders how long they have been taken PPIs

**Discussion:** In this status 57% are below 15 days, 22% are 15-30 days, 17% are 2-6 months, 3% 7-12 months and 1% is longer than 12 months long have been taken by responders.

5.19 Status of knowledge of responders that long-term PPI use create some adverse effects.

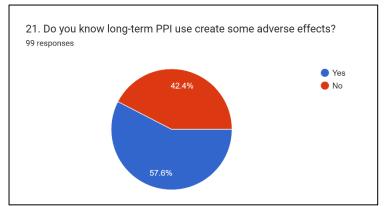


Fig 19: Status of knowledge of responders that long-term PPI use create some adverse effects.

**Discussion**: In this pie chart 57.6% are yes and 42.4% are no about the knowledge of responders that long-term PPI use create some adverse effects.

5.20 Status of responders who take PPI for long time, have they ever experienced any of the following?

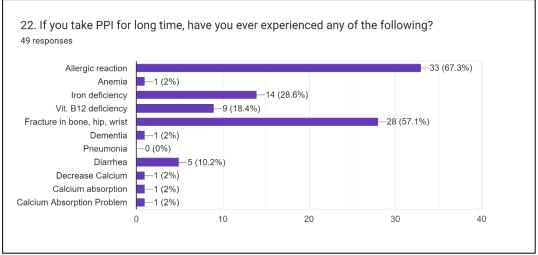


Fig 20: Status of responders who take PPI for long time, have they ever experienced any of the following?

**Discussion:** In this chart here response 49 responders and 67% have experience of allergic reaction,57.1% have experience of fracture in bone, hip, wrist, 28.6% iron deficiency, 18.4% have Vit. B12 deficiency, 10.2% have diarrhea, 2% have anemia, 2% have dementia, 6% calcium absorption problem.

Conclusion

### **Conclusion:**

In conclusion, A survey on Knowledge, Attitude, and Practice towards taking Proton Pump Inhibitors (PPIs) among Bangladeshi villagers, villagers have knowledge about PPIs. Who are Educated they know everything about PPIs. But one part of educated villagers don't know when it will be take. They take it after taking food. That's why it can't work 100% or properly. They do not know about it's demerits. They don't have any knowledge it create some adverse effect after taking PPIs.

On the other hand who are un educated, don't have any academic knowledge they don't have any knowledge about PPIs. They take it without doctor's prescription. They do not know when it will be taken. And they take it randomly. They also don't know 30-60 minutes before taking food it will be taken. That's why there are suffering mane problems and for that reasons PPIs can not work properly. For that reason PPIs don't it's 100%.

References