

# **Project On**

# "Survey on daily routine activities and food habit of peptic ulcer patients"

# **Submitted To**

The Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University

In the partial fulfillment of the requirements for the degree of Bachelor of Pharmacy

# Submitted By

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## **APPROVAL**

This project paper, Online survey assessing the insight and perception on gastrointestinal disease among common individuals, 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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Internal Examiner 1 Internal Examiner 2 External Examiner

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# DECLARATION

I hereby declare that this thesis report is done by me under the Supervisor of Dr.Md Sarowar Hossain, Assistant Professor, Department of Pharmacy, Faculty of Allied health of science, Daffodil international University, impartial fulfillment of the requirement for the degree Bachelor Of Pharmacy (B.Pharm)

I am declaring that this project is my original work. I am also declaring that neither this thesis nor any part thereof has been submitted elsewhere for the award of Bachelor or any degree.

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# Abstract

Broad utilization of specific medications, changes in ways of life and food propensities, just as stress factors in present day human lives have prompted an outstanding expansion in the frequency of gastric ulceration. The ideal enemy of ulcer drug with less side impacts and repeat, and reasonableness has so far stays tricky, giving roads to advancement, particularly with phytochemicals. This survey outfit's broad data on the prior works did around here and think the method of activity of them, refering to restrictions of the past investigations. The essential point was to cover various classes of strong regular mixtures that have amazing gastro-defensive property against different ulcerogens (aside from Helicobacter pylori disease), and are accessible in enormous amounts from the characteristic sorces. A couple of instances of engineered congeners have additionally been incorporated to feature the kind of advancement that might be needed for growing new medications.

Key words: Peptic Ulcer, Drug, Diseases, Antibiotic, Treatment.

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# Chapter 1

# Introduction

#### **1. Introduction:**

An ulcer is a brokenness or break in a liberal layer that represses the influenced organ's typical cutoff. "Ulcer is the crack of the trustworthiness of skin, epithelium, or mucous layer accomplished by sloughing off of invigorated necrotic tissue," as indicated by Robins' pathology. Ulcer (dermatology), a skin oddity or a break in the skin, is a typical sort of ulcer found in prescription.

•Pressure ulcers, regularly known as bedsores.

•A genital ulcer is a kind of ulcer that creates on the genital region.

•Ulcerative dermatitis, a skin condition brought about by bacterial development, regularly creates with no other individual's association.

•Anal opening, otherwise called a rectum ulcer or tear, happens close to the hindquarters or inside the rectum.

•Diabetic foot ulcer, which is a genuine capture of the diabetic foot.

•A corneal ulcer is a combustible or irresistible condition that influences the cornea.

•A mouth ulcer is a sore inside the mouth that is open.

•Aphthous ulcer, otherwise called a polluted ulcer, is a kind of mouth ulcer.

•A peptic ulcer is a gastrointestinal mucosal issue (stomach ulcer)

•Venous ulcer, a clinical disease thought to be brought about by the unattractive working of vein valves.

•A stress ulcer is a kind of ulcer that creates in the stomach and proximal duodenum.

•Ulcerative sarcoidosis, a cutaneous sickness that influences sarcoidosis patients

•Ulcerative lichen planus is a special kind of lichen planus.

•Ulcerative colitis is a kind of incendiary inside sickness (IBD)

•Ulcerative outlook, an issue or weight that creates uproar in the stomach and is normally

Connected to the movement of gastritis



Fig 01: Ulcer

#### **1.1. Peptic ulcer disease:**

Peptic ulcer disease is described by a break in the stomach's interior covering, the fundamental piece of the little stomach related structure, or, generally, the lower throat. [1] A gastric ulcer is one that happens in the stomach, while a duodenal ulcer happens in the hidden part of the stomach's associated organs. The most well-known side effects of a duodenal ulcer are upper stomach torment in the nights and upper stomach torment that improves with food. With a gastric ulcer, the agony may diminish as you eat. The torture is here and there portrayed as a copying through or a lethargic heartbeat. Burping, upchuck, weight reduction, and an absence of hunger are only a couple of the manifestations. About 33% of people who are more settled experience no indications. Intricacies incorporate stomach traveling through, opening, and blockage. Draining can happen in as numerous as 15% of cases. Helicobacter pylori microbes and nonsteroidal calming prescriptions are two significant guilty parties. Tobacco smoking, strain identified with a certifiable condition, Behcet defilement, Zollinger-Ellison issue, Crohn's infection, and liver cirrhosis are among the additional astounding causes. [3] The ulcer-causing impacts of NSAIDs are especially articulated in more established grown-ups. The request is often connected with the arrangement of results confirmed through endoscopy or barium swallow. H. pylori can be recognized by searching for antibodies in the blood, utilizing a urea

breath test, looking for indications of the minuscule critters in the crap, or taking a biopsy of the stomach. Peptic ulcer illness is portraved by a crack in the stomach's inward covering, the hidden section of the little stomach-related system, or, generally, the lower throat. [1] A gastric ulcer is one that happens in the stomach, while a duodenal ulcer happens in the stomach's basic organs. The most well-known manifestations of a duodenal ulcer are upper stomach torment in the nights, which improves with food. The distress of a stomach ulcer may die down as you eat. From time to time, the torture is portrayed as a copying fire or a lethargic heartbeat. Burping, upchuck, weight reduction, and a deficiency of craving are only a couple of the indications. About 33% of the individuals who are more settled are without indication. Section, opening, and blockage of the stomach are largely potential confusions. In up to 15% of cases, there will drain. Helicobacter pylori microbes and non-steroidal calming prescriptions are both significant variables. Tobacco smoking, stress identified with a veritable condition, Behcet tainting, Zollinger-Ellison disorder, Crohn's sickness, and liver cirrhosis are among the additional astonishing causes. [3] The ulcer-causing impacts of NSAIDs are particularly articulated in the old. The request is habitually connected to endoscopy or barium gulping as a method for guaranteeing the outcomes. A blood test for antibodies, a urea breath test, a stool test for signs of the little critters, or a biopsy of the stomach would all be able to be utilized to decide whether H.pylori is available

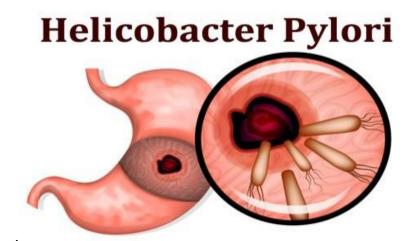


Fig 02: Helicobacter Pylori

#### 1.1.1. Signs and symptoms:

Regardless, one of the signs and manifestations of a peptic ulcer can meet up.

•Abdominal torment, normally epigastric, that is undeniably connected to eating times •bloating and stomach fulfillment; •waterbrash (a surge of spit after a scene of shooting to incapacitate the dangerous in throat, notwithstanding this is all the more generally connected with gastroesophageal reflux illness); •nausea and expansive hurling; •loss of hunger and weight loss•melena (delay, awful crap attributable to oxidized iron from hemoglobin); •rarely, a stomach or duodenal ulcer may cause a gastric or duodenal opening, bringing about serious peritonitis and agonizing, harmful pain, [13] and requiring a prompt operation. The utilization of express arrangements, just as an establishment set apart by indigestion or gastroesophageal reflux infection (GERD), can lift the danger of peptic ulcer. NSAIDs (non-steroid inhibitors of cyclooxygenase) and most glucocorticoids are utilized in peptic ulcer meds (e.g., dexamethasone and prednisolone). The danger of peptic ulceration is adequately high in grown-ups more than 45 two years old inside fourteen days of getting the previously mentioned information to require quick esophagogastroduodenoscopy assessment. Gastric and duodenal ulcers may detach within the sight of signs practically identical to those seen after a dinner. As food enters the stomach, a gastric ulcer would cause epigastric torment, which would be joined by chaos and hurling. Yearning disturbs torment in duodenal ulcers, which is diminished by a dinner, and is connected to late evening languishing. [8] Furthermore, the result of a peptic ulcer can change contingent upon the size of the ulcer and the age of the patient. Moreover, normal ulcers repair and repeat consistently, and the torment may last a couple of days or weeks prior to melting or vanishing. [9] except for when hindrances have happened, youngsters and the old don't ordinarily develop any markers. A penetrating or gnawing sensation tendency in the stomach region enduring between 30 minutes and 3 hours all things considered goes with ulcers. This wretchedness can be confounded as yearning, indigestion, or heartburn. Torment is normally accomplished by the ulcer, yet it might be bothered by the stomach dangerous when it comes into contact with the ulcerated region. The wretchedness accomplished by peptic ulcers can be felt any place from the navel up to the sternum, it might last from few moments a few hours, and it might be even more repulsive when the stomach is unfilled. In like way, infrequently the torment may radiate around evening time, and it can for the most part be quickly quieted by eating food groupings that help

stomach damaging or by taking foe of dangerous medication.[10] However, peptic ulcer sickness signs might be indisputable for each sufferer.[11]

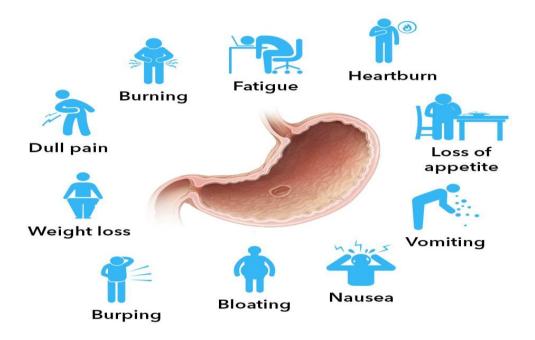


Fig 03: Signs and symptoms

#### **1.2. Complications:**

The most widely recognized wellspring of inconvenience is gastrointestinal exhaustion. Gigantic exhaustion that happens out of nowhere may be lethal. [12] It has been connected to a demise pace of 5% to 10%. [13] When a stomach ulcer is left untreated, opening (an opening in the mass of the gastrointestinal lot) happens. The ulcer's cracking of the gastrointestinal parcel makes stomach or intestinal substance fill the stomach pit, bringing about a serious intense peritonitis. As for Valentino's situation, the primary pointer is normally surprising genuine stomach torment. Because of the connection of the gastroduodenal vein to the basic segment of the duodenum, a back gastric divider opening may cause spilling. [required citation] The current circumstance has a 20% passing rate. [14] The early motivations and the ulcer proceed into associated organs like as the liver and pancreas, which is alluded to as infiltration. [15] For the situation of peptic ulcers, gastric outlet block (stenosis) is a narrowing of the pyloric channel brought about by scarring and amplification of the gastric antrum and duodenum. The individual is known for

tossing genuine flinging. Mischief is connected to differential confirmation (depicted by biopsy), Helicobacter pylori as the etiological factor, making it three to various occasions bound to develop stomach contamination from the ulcer. With stomach ulcers, the danger of creating gastrointestinal sickness gives off an impression of being to some degree expanded. [16]

#### **1.3. Cause:**

#### H. pylori:

Quite possibly the most widely recognized reasons for peptic ulcer illness are Helicobacter pylori. It secretes urease to establish a positive climate for its endurance. Blood pack antigen adhesin (BabA) and external burning protein adhesin (OipA) are conveyed by it, permitting it to join to the stomach epithelium. Ruinous factors like CagA and PicB, which cause stomach mucosal interruption, are likewise sent by the bacterium. VacA represents vacuolating cytotoxin, notwithstanding its job in peptic ulcer improvement is muddled. Hyperchlorhydria (expanded stomach ruinous delivery) or hypochlorhydria are additionally potential reasons for stomach mucosal bothering (decreased stomach dangerous outpouring). The harming arrival of parietal cells is constrained by provocative cytokines. H. pylori likewise secrete substances that repress hydrogen potassium ATPase, actuate calcitonin-related peptide material neurons, increment somatostatin discharge, and forestall gastrin surge. Gastric ulcers result from a decline in damaging creation. [14] In 10% to 15% of H. pylori contamination occasions, notwithstanding, drawn out destructive creation at the pyloric antrum are connected to duodenal ulcers. Until further notice, somatostatin creation is decreased while gastrin creation is expanded, bringing about expanded histamine surge from enterochromaffin cells and, accordingly, expanded damaging creation. Duodenal ulcers are brought about by an acidic climate at the antrum, which produces duodenal metaplasia. [17] Similarly, the ascent of peptic ulcer disease is a human safe reaction to minute living creatures. Interleukin 1 beta is encoded by the human IL1B quality, while tumor decay factor (TNF) and Lymphotoxin alpha are likewise engaged with gastric aggravation. [18]

#### NSAIDs

When contrasted with non-customers, taking nonsteroidal mitigating meds (NSAIDs) and migraine treatment builds the danger of peptic ulcer contamination by a factor of a few.

Ibuprofen clients are at an expanded danger of fostering a peptic ulcer. At the point when NSAIDs are utilized with SSRIs and corticosteroids, the danger of depleting builds., antimineralocorticoids, and anticoagulants. The gastric mucosa safeguards itself from gastric destructive with a layer of natural liquid, the outflow Specific prostaglandins empower this cycle. NSAIDs repress the catalyst cyclooxygenase 1 (COX-1), which is needed for the creation of prostaglandins. Beside that, NSAIDs diminish the extension of stomach mucosa cells and mucosal blood stream, bringing down bicarbonate and organic liquid emanation, and bringing down the mucosa's uprightness. COX-2 explicit moderating meds (like celecoxib) are NSAIDs that explicitly repress COX-2, which is less significant in the stomach mucosa. This decreases the probability of creating peptic ulcers; all things considered, it might postpone ulcer recuperating for the individuals who as of now have one. [19]

#### Stress

Stress brought about by genuine clinical issues, for example, those requiring treatment in a trauma center, is once in a while portrayed as a reason for peptic ulcers, otherwise called pressure ulcers. While it was previously believed that tenacious life stress was the essential driver of ulcers, this is not, at this point the case. [20] Playing a section is, all things considered, still in some cases satisfactory. [21] This could be because of the all around recorded impacts of heftiness on stomach physiology, expanding the danger in individuals with different components, like H. pylori or NSAID use. [22]

#### Diet

Dietary segments, for example, taste use, were thought to cause ulcers until the late 20th century, however have since been demonstrated to be of just moderate consequence.[23] Caffeine and coffee, which are additionally usually accepted to cause or demolish ulcers, seem to have no impact. [24] [25] similarly, while examines have uncovered that drinking liquor expands hazard when joined with H. pylori disease, it doesn't seem to build hazard all alone. Regardless, when combined with H. pylori sickness, the increment is minor in contrast with the essential danger factor. [26] [27]

#### Other

Different reasons for peptic ulcer illness incorporate gastric ischaemia, drugs, metabolic unsettling influences, cytomegalovirus (CMV), upper stomach radiation, Crohn's sickness, and others.and vasculitis.Gastrinomas (Zollinger–Ellison problem), or remarkable gastrin-emanating tumors, in like manner cause various and difficult to-retouch ulcers.[28]

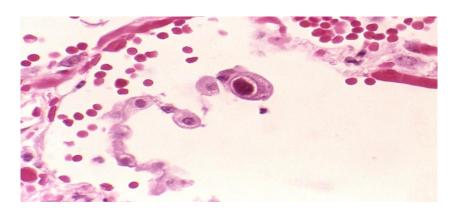


Fig 04: Cytomegalovirus

#### 1.4. Diagnosis

The end depends on the brand name signs in any case. The most widely recognized indication of a peptic ulcer is stomach torment. Infrequently, specialists will treat ulcers without performing itemized testing to check if the side effects disappear, recommending that their principle decision was right. Peptic ulcers break down the muscularis mucosae considerably more expressly, basically to the level of the submucosa (instead of deteriorations, which do exclude the muscularis mucosae). [29] Tests, for example, endoscopies or barium contrast x-radiates are utilized to affirm the end. The tests are every now and again looked for if the indications continue following a month of therapy, or when they initially show up in an individual beyond 45 several years old who has a few appearances, for example, weight reduction, since stomach malignant growth can have comparative incidental effects. An expert may presume a secret ailment that makes the stomach overproduce destructive when critical ulcers oppose treatment, particularly if an individual has a couple of ulcers or the ulcers are in surprising spots. At the point when a peptic ulcer is suspected, an esophagogastroduodenoscopy (EGD), a sort of endoscopy otherwise called a gastroscopy, is performed. For peptic ulcer illness, it is additionally

the greatest level of finding. The region and seriousness of a ulcer can be shown by means of direct visual distinguishing proof. Furthermore, if no ulcer is available, EGD can do an elective examination consistently. One explanation blood tests aren't solid for pinpointing peptic ulcers is their failure to recognize past openness to microorganisms and current tainting. Moreover, with an invented ill-disposed result is conceivable. On the off chance that the individual has as of late taken certain meds, like enemy of disease specialists or proton-siphon inhibitors, a blood test will be performed. [30]

Helicobacter pylori can be identified utilizing the accompanying strategies:

•Urea breath test (noninvasive and doesn't need EGD);

•Direct culture from an EGD biopsy test; this is tedious and expensive. •Direct finding of urease development in a biopsy model by fast urease test; •Measurement of neutralizer levels in the blood (doesn't need EGD). •Histological assessment and staining of an EGD biopsy. It is as yet disputable whether a positive neutralizer without EGD is adequate to warrant demolition treatment. H. pylori is recognized utilizing a breath test that utilizes radioactive carbon. [32] To complete this test, the subject is approached to drink a dull fluid that contains carbon as a segment of the substance isolated by the minuscule organic entities. Following an hour, the subject is drawn closer and requested to blow into a set sack. If the individual is tainted with H. pylori, the breath test will uncover radioactive carbon dioxide. This test enjoys the benefit of permitting you to check your response to the microorganism killing treatment. Realize that ulcers can be brought about by an assortment of components, the most genuine of which is a danger (gastric threatening turn of events). This is particularly evident with ulcers on the stomach's more noticeable (gigantic) bend, which are quite often the consequence of tireless H. pylori disease. In the event that a peptic ulcer breaks, air will spill from the gastrointestinal plot (which is in every case halfway loaded up with air) into the peritoneal pit (which usually never contains air). This makes the peritoneal misery load up with "free gas." The gas will float to a situation under the stomach if the individual gets an opportunity of achievement, for example, while having a chest X-shaft. Gas in the peritoneal wretchedness, as seen on an erect chest X-beam or a prostrate level stomach X-beam, is a side effect of punctured peptic ulcer infection in this style. It's as yet muddled whether smoking expands the hazard of peptic ulcers.

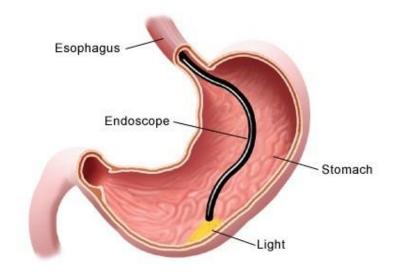


Fig 05: EGD biopsy

#### **1.4.1. Classification:**

A sort of corrosive peptic infection is peptic ulcers. Peptic ulcers are arranged dependent on the area of the ulcer and different attributes.

Geographically:

Duodenum is a piece of the stomach related framework (called duodenal ulcer)

- Sphincter of Oddi (called esophageal ulcer)
- Digestive framework (called gastric ulcer)
- Meckel's diverticulum (otherwise called the Meckel's diverticulum ulcer; unmistakable delicacy)

Johnson revised:

- Type I: Ulcer in the stomach's body, most ordinarily at the incisura angularis along the locus minoris resistantiae. Corrosive hypersecretion isn't connected to it.
- Type II: A body ulcer that is went with duodenal ulcers. Oversecretion of corrosive is connected.

•Type III: Within 3 cm of the pylorus, in the pyloric channel. Oversecretion of corrosive is connected.

•Type IV: Proximal gastroesophageal ulcer

• Type V: This sort of stomach malignant growth can influence any piece of the stomach. The use of nonsteroidal calming drugs (NSAIDs) on a drawn out premise has been connected to the improvement of (like ibuprofen).

#### **1.5. Macroscopic appearance:**

Gastric ulcers are generally restricted to the stomach's lower curve. The ulcer is a 2–4 cm across round to oval parietal deformity ("opening") with a smooth base and restricting edges. In the serious sort of peptic ulcer, these lines are not raised or unforeseen, and in the consistent construction, they are common yet with raised cutoff points and blazing overwhelming. The lines in ulcerative stomach threatening improvement are eccentrically drawn. Because of the parietal scarring, the encompassing mucosa may present extended folds.

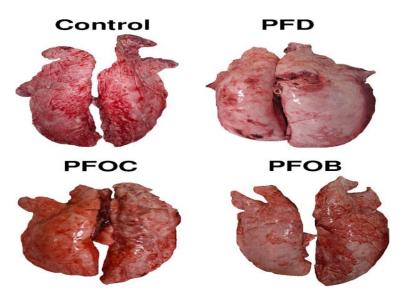
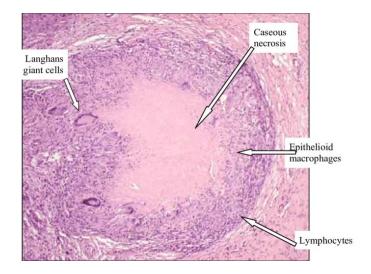


Fig 06: Macroscopic appearance

#### **1.6. Microscopic appearance:**

A stomach peptic ulcer is a mucosal opening that enters the muscularis mucosae and lamina propria, and is brought about by destructive pepsin opposition in most of cases. The ulcer borders are on the contrary side of the stomach, showing that gastritis is available. The establishment of the ulcer uncovers four zones during the unique stage: fibrinoid defilement,

blazing exudate, granulation tissue, and strong tissue. The ulcer's strong base may have veins with thicker dividers or apoplexy. [33]



#### Fig 07: Microscopic appearance

#### 1.7. Differential diagnosis

- o Gastritis
- Stomach malignant growth
- Gastroesophageal reflux disease are examples of conditions that may appear comparable.
- o Biliary colic
- o Inferior myocardial localized necrosis
- Referred torment (pleurisy, pericarditis)
- Superior mesenteric conduit disorder
- Pancreatitis
- Hepatic obstruction
- o Cholecystitis
- Biliary colic

#### **1.8. Prevention:**

With the expansion of a proton siphon inhibitor (PPI), a H2 adversary, or misoprostol, the presumption for peptic ulcer ailment in individuals on NSAIDs (with low cardiovascular danger) can be refined. At the point when utilized in mix with different NSAIDs, COX-2 inhibitors may

moderate the movement of ulcers. PPI is the best quality level in forestalling peptic ulcers. In any case, there is no evidence that H2 adversaries assist with forestalling stomach spillage in NSAID clients. In spite of the fact that misoprostol is compelling at forestalling peptic ulcers, its characteristics of rushing the finish of the cycle and causing gastrointestinal agony limit its utilization. For patients with a high danger of cardiovascular illness, joining naproxen with a PPI might be a shrewd decision. Low-bundle calming remedy, celecoxib, and PPI would all be able to be utilized along these lines.

#### **1.9. Management:**

#### **Eradication therapy**

When H. pylori are confirmed, the first line of treatment is a triple regimen that includes pantoprazole and clarithromycin, as well as one of the antibiotics amoxicillin or metronidazole. This treatment plan can last anywhere from 7 to 14 days. In any event, its efficacy in eradicating H. pylori has dwindled from 90% to 70%. By the way, the speed of obliteration can be sped up by replicating the pantoprazole portion or expanding the treatment period to 14 days. Treatment with four antibiotics (pantoprazole, clarithromycin, amoxicillin, and metronidazole) is comparable. The fourfold procedure can achieve a 90 percent pulverization speed. If the clarithromycin block rate is greater than 15% in that region, clarithromycin should be avoided. In the end, a bismuth-containing four-step treatment (pantoprazole, bismuth citrate, antidote poison remedy, and metronidazole) can be used for 14 days. The bismuth therapy can also achieve a 90 percent devastation rate and can be used as a backup treatment if the central line triple-routine treatment fails. When H. pylori is eradicated, intermittent ulcer drainage is acceptable as long as NSAIDs are taken



Fig 08: Pantoprazol

#### NSAIDs induced ulcers

At the point when NSAID-related ulcers are treated with proton siphon inhibitors and the NSAIDs are removed, the ulcers recuperate in 6 to 2 months.

#### Bleeding

Liquid overriding with crystalloids ought to be given up for those with exhausted peptic ulcers to keep volume in the veins. Since it has been connected to a more slow demise rate, hemoglobin ought to be kept up with at more prominent than 7 g/dL (70 g/L) with prohibitive blood holding. The Glasgow-Blatchford score can assist with deciding if a patient ought to be treated in a foundation or as an outpatient. PPIs given intravenously can hide stomach exhaustion quicker than those given orally. An impartial stomach pH is thought to hold platelets set up and forestall group lysis. Tranexamic dangerous and antifibrinolytic experts are inadequate in the treatment of peptic ulcer illness. Early endoscopic treatment with devouring, endoclip, or epinephrine blend can help quit spilling. In the event that there is dynamic spilling in the stomach, apparent vessels, or a strong coagulation, treatment is shown. Endoscopy is likewise valuable for distinguishing people who are reasonable for clinical focus conveyance. To work on endoscopic view, prokinetic specialists like erythromycin and metoclopramide may be controlled before the method. PPIs with a high or low gap are similarly useful in diminishing releases following

endoscopy. A bolus of 80 mg of PPI is given, trailed by an implantation of 8 mg each hour for 72 hours, bringing about a persistent mixture of PPI of in excess of 192 mg each day by the day's end. Once there is no critical danger of rebleeding from a peptic ulcer, an intravenous PPI can be changed to an oral PPI. There is a decent danger that individuals with hypovolemic falter and ulcers bigger than 2 cm will neglect to react to endoscopic treatment. Accordingly, activities and angiographic embolism are saved for these muddled circumstances. Notwithstanding, when removed from rehashed endoscopy, people who had a medical procedure to cure the stomach exhausting site have a quicker pace of chaos. Angiographic embolisation has a higher rebleeding rate than a medical procedure yet a comparative casualty rate.

#### Anticoagulants

The in general standardized degree (INR) for the individuals who are right now on anticoagulants ought to be kept at 1.5, as demonstrated by very proficient evaluation. Clients taking cerebral torment medicine who required endoscopic treatment for a drained peptic ulcer face an expanded danger of rebleeding however a lower hazard of death two months in the wake of continuing ibuprofen. Since there is a high danger of stent circulatory issue, individuals who were on two antiplatelet specialists for possessing stent in veins ought not quit taking both antiplatelet specialists. To switch the effect of warfarin, new frozen plasma (FFP), supplement K, prothrombin complex concentrates, or recombinant factor VIIa can be managed to people who were already on it. To restrict the probability of rewarfarinization once stomach consumption has stopped, high dosages of supplement K ought to be stayed away from. Prothrombin complex concentrates are popular for their high pace of retention. As a result of its critical danger of thromboembolism, recombinant factor VIIa is kept endlessly to forestall exhaustion. Direct oral anticoagulants (DOAC) are liked over warfarin for forestalling thromboembolism since they are more viable. On the off chance that an exhausting occasion brought about by DOAC happens, founding charcoal inside 4 hours is the best arrangement. Hemodialysis could be utilized to assist with dabigatran consumption. For patients with a high cardiovascular danger, anticoagulants ought to be continued straightaway since, paying little heed to how the danger of rebleeding expands, by and large mortality brings down with anticoagulant restart.

#### 1.10. Epidemiology

The lifetime hazard of fostering a peptic ulcer is generally 5% to 10%, expanding at a pace of 0.1 percent to 0.3 percent consistently. In 2013, 301,000 individuals kicked the bucket from peptic ulcers, down from 327,000 of every 1990. In Western nations, the extent of individuals tainted with H. pylori increments with age (i.e., 20% at age 20, 30 percent at age 30, 80 percent at age 80, and so on) Immature nations have a more elevated level of shared trait, with generally 70% of everybody being surveyed, though created nations have a 40% limitation. As a rule, H. pylori diseases are on the decrease, particularly in created nations. Food, defiled groundwater, or human spit are altogether ways for the infection to spread (for example, from kissing or sharing food utensils). [35] Peptic ulcer contamination colossally affected mortality and horribleness until the most recent quite a few years of the 20th century, when epidemiological proof started to show a huge decline in its event. The improvement of new commonsense drug and damaging suppressants, just as the cautious utilization of nonsteroidal lightening specialists, are thought to have eased back the movement of peptic ulcer sickness.

#### 1.11. History

Starting in 1958, John Lykoudis, a clinical professional in Greece, treated individuals with antimicrobials for peptic ulcer tainting, quite a while before it was generally perceived that minor normal segments were a general legitimization of the disease.[36] In 1982, two Australian arranged specialists, Robin Warren and Barry J. Marshall, recognized Helicobacter pylori as a reason for ulcers. [37] Warren and Marshall contend in their noteworthy work that most stomach ulcers and gastritis are brought about by colonization with this bacterium, not pressure or consuming food, as recently suspected. [38] The H. pylori thought was at this point adversely received,[39], thusly Marshall drank a Petri dish with a culture of intestinal segments killed from an individual with a ulcer and had gastritis five days a short time later. Following fourteen days, his side effects dispersed, however he took antibodies destructive things to eliminate the extra germs on the guidance of his life accomplice, since halitosis is one of the indications of disease. [40] This test was distributed in the Australian Medical Journal in 1984 and is one of the diary's most broadly refered to papers. In 1997, the Centers for Disease Control and Prevention, as a team with other government organizations, research establishments, and business, dispatched a state funded instruction mission to teach clinicians and shoppers about the connection between

H. pylori and ulcers. This undertaking spread the word that ulcers are a treatable infirmity and that spreading data about H. pylori can incomprehensibly further develops execution and set aside cash. [41] In 2005, the Karolinska Institute in Stockholm granted Marshall and his enduring accomplice Dr. Warren the Nobel Prize in Physiology or Medicine "for their disclosure of the bacterium Helicobacter pylori and its part in gastritis and peptic ulcer polluting." Marshall keeps on dealing with H. pylori-related examination and deals with a sub-nuclear science lab at UWA in Perth, Western Australia. A few scientists found that mastic gum, a withdrew tree pitch, effectively kills the H. pylori microscopic organisms. [42] However, various late examinations have discovered that utilizing mastic gum had little impact on bringing down H. pylori levels. [43] [44] In the Mediterranean region, fat kind crowd creation is far and wide [45-51]: this semiexpansive development is typically moved in a couple of farms, with a week by week making of between 20–40 pigs killed at a last body weight of between 125–135 kg [52]. Mixed dinner tallies calories dependent on rough feedstuffs, ordinarily soaked, delivered out of destroyed oats, vegetable seeds - supper, oak seeds, and, on uncommon events, grassland. Generally, the utilization of fabricated all out feed for completing pigs has gotten progressively well known as of late: a couple of farmers are being compelled to work finishers and change their consideration preparing to adjust to tight necessities to restrict and control the spread of African Swine Fever pollutions. Thus, neighborhood feedstuffs are gathered and taken care of for pigs, in spite of the fact that farmers incidentally go to made feedstuffs to improve on care, limit, and increment feed change adequacy. The amount of pelleted feed sent from our establishment's help segment for quality control has as of late expanded in a critical degree. Pulverizing power is an issue in animal government help [53] and generally prosperity [54-56] issues, along these lines it is normal evaluated in pelleted feed during quality appraisal and the blend of tests. As a general rule, gastric wounds are turning out to be more normal in expanded pork creation, with a wide scope of commonness (32% 65%; [57]), influencing the non glandular gastric (NGR) mucosa (truly connecting in pigs' stomachs) in butchered pigs. Pigs matured three to a half year are represented in epidemiological data on "in farm" surprising passings (1-2%) from depleting gastric ulcers. Albeit the reason for stomach ulcers isn't quickly clear, the pulverizing limit of the taking care of routine gives off an impression of being among the danger factors [58-60]. Late headways in the etiology and pathophysiology of pigs' stomach injuries have come about in

gigantic contraptions to help veterinary experts in the evaluation of dangers related with the eating routine. This can be communicated as follows:

1) Increasing the size of coarse particles in the eating routine has no ulceroprotective impact except if the fine atom (VFP) size is likewise expanded, and coarser particles, especially in pelleted feed, add to the wobbliness of the pellet;

2) the atom size appointment ought to be checked after the pelleting cycle since it tends to a second preparing [61]: Actually, the get together association's beating stage previouslyto pelleting corresponds to the pellet molecular size, but the pelleting stage completes it. As a result, the pigs could ingest higher amounts of fine particles with the pelleted consumes fewer calories than set in the crushing period of the production line;

3) the VFP (0.4 mm) extent has been recognized as a "unambiguous factor" and that trial proof suggests we should focus on this extent of molecule mass corresponding to the potential ulcerogenic job applied by the eating regimen. In light of these developments, a significant achievement in lab methodology is the new explanation of the sieving strategy, which is comparable to take care of the tests' actual structure: the molecule size dispersion obtained by strainer investigation (dry/wet) demonstrates factual significance (P 0.05 on the assurance of the percent of particles 0.4mm; between results of dry versus wet sifter examinations). On-farm effects of a pelleted complete eating routine, classified as Class 1 (high ulcerogenic risk), versus a blended feast diet, classified as Class 3 (low ulcerogenic risk), for finishing pigs for fat sort hoard creation, were investigated and linked to gastric injuries discovered at the slaughterhouse: the specificity and precision of lab tests for "abiotic feed securitization."

# Literature review

#### Literature review:

Notwithstanding fundamental remedial enhancements, gastric ulcer is a typical general sickness with an expanding rate and recurrence. Ulcers influence 14.5 million people around the world, with a death pace of 4.08 million. Thus, much work has been finished with assorted phytogenic specialists to accomplish the remedial objectives of creating ulcer quiets that mitigate torment, mend the ulcer, and permit it to return. The previous synopses, while covering some part of these appraisal assignments, are restricted in scope and fundamentally screen plant/nearby fixations. This survey centers around normal phytochemicals that have antiulcer and ulcer-mending capacities against an assortment of ulcerogens, except for Helicobacter pylori contamination. To that reason, we isolated the counter ulcer experts into their most significant sorts and upheld the biochemical system of their activity according to certain ulcerogens, test models, and medication affiliation procedures. An assortment of semi-planned typical thing congeners has likewise been added to perceive the pharmacophore and handle concerns like as action potentiation and hurtfulness decrease, which is critical for future solution improvement. A short system of stomach ulceration, its causes, and revultion comparatively to fixing is likewise offered for a typical seeing even by a nonspecialist and excitement for the necessity of phytochemical threatening to ulcer medicines. The blends analyzed in this survey were picked dependent on an exhaustive composing review; however their other anticipated consequences for the stomach, like emesis, motility, etc, were overlooked. Plants have a practically inconceivable ability to join endless run of the mill mixes, and a couple of these could furnish prevalent ulcer insurance with less break confidence while staying reasonable. The meaning of neighborhood drugs is highlighted by the revelation that carbenoxolone, got from the plant Glycyrrhiza glabra, was the best solution against gastrointestinal ulcer. Likewise got from cabbage is gefarnate, which has been utilized as a ulcer expert in individuals medication. Endless plant removes have been researched for their likely job in the treatment of stomach ulcers. At the determination of the investigation, a segment of these, which are being utilized for treatment or evaluated at different phases of human clinical preliminaries, will be given. The expert decides the best treatment for stomach and duodenal ulcers dependent on the patient's age, general prosperity, clinical history, pathogenesis stage, capacity to bear medicines, theory, or medications, and notions or affinity. Already, the significant treatment procedure was to decrease the release of stomach acids, which was believed to be the principle reason for the ulcer plan. All around, the treatment methodology

has moved to mucosal safeguard potentiation pair with a reduction in unsafe discharge. Antitoxins toxins to butcher H. pylori, corrosive blockers (cimetidine, ranitidine, or famotidine), proton siphon inhibitors (omeprazole), and tissue lining obtaining topic specialists are the most normally utilized drugs (sucralfate, bismuth). These meds have decreased the seriousness of the condition, however they have an assortment of incidental effects, remembering a deficiency of trust for the infection, and they are much of the time unreasonable for the powerless.

# **Purpose of my study**

Peptic ulcer disease (PUD) is a break in the stomach's inward covering, the main segment of the small digestive system, or, now and again, the lower neck. A gastric ulcer is one that happens in the stomach, while a duodenal ulcer happens in the initial segment of the stomach related organs. The most well-known indications of a duodenal ulcer incorporate upper stomach torment that improves with gobbling and awakening around evening time with upper stomach torment. At the point when you have a gastric ulcer, the agony can deteriorate when you eat. The distress is often described as a burning-through or repetitive agony. Burping, hurling, weight reduction, and vulnerable yearning are generally conceivable incidental effects. About 33% of more seasoned individuals have no side effects. The goal of my study is

- 1. How many people are suffering from peptic ulcer
- 2. To find out the food habit of ulcerogenic patients
- 3. To find out the stage (chronic-acute) of the ulcerogenic patient
- 4. To find out the mostly used medicine in ulcerogenic patient
- 5. To differentiate between the ulcerogenic and non-ulcerogenic patient.

# Methodology

#### Methodology:

#### 4.1 Peptic ulcer:

Peptic ulcers are open wounds that make inside covering of your stomach and the upper portion of your little stomach related framework. The most generally perceived indication of a peptic ulcer is stomach torture. Peptic ulcers include: Gastric ulcers that occur inside the stomach.

#### 4.2 Cause of peptic ulcer:

The most notable explanations behind peptic ulcers are pollution with the bacterium Helicobacter pylori (H. pylori) and long stretch use of nonsteroidal quieting drugs like ibuprofen (Advil, Motrin IB, others) and naproxen sodium (Aleve). Stress and red hot food assortments don't cause peptic ulcers

#### 4.3 Peptic ulcer on food habit:

Basically all duodenal ulcers are connected with H. pylori sickness, while stomach ulcers are routinely achieved by NSAID use. In the past it was acknowledged that peptic ulcers were achieved by pressure, defenseless dietary affinities (tallying eating an extreme measure of rich, oily or fiery food sources), alcohol and caffeine.

#### 4.4 Junk food:

Bad quality sustenance is bothersome food that is high in calories from sugar or fat, with insignificant dietary fiber, protein, supplements, minerals, or other critical kinds of sound advantage. Precise definitions change by reason and after some time. Some high-protein food sources, like meat masterminded with splashed fat, may be seen as inferior sustenance.

#### 4.5 Alcohol:

Drinking alcohol with a ulcer isn't recommended. Drinking alcohol (checking wine or ale) can make your ulcer really unbearable, both from the stomach destructive that may be conveyed and from the alcohol coming into contact with the genuine ulcer.

### 4.6 Painkiller causes peptic ulcer:

When taken for a long time, painkillers like diclofenac and ibuprofen can provoke ulcers in the stomach and duodenum. In any case, the risk of this occasion can be doubtlessly diminished by similarly taking remedy to guarantee your stomach.

#### **4.7. Survey question:**

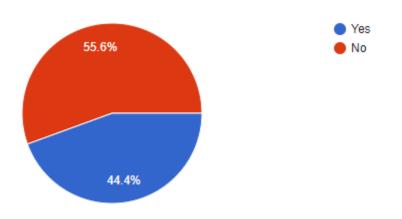
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	at is your symptoms ? *	
	Pain or a burning	
	Pain is usually relieved by eating	
	Tenderness	
	Pyrosis (heartburn)	
	vomiting	
	constipation or diarrhea	
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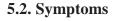
# **Result & Discussion**

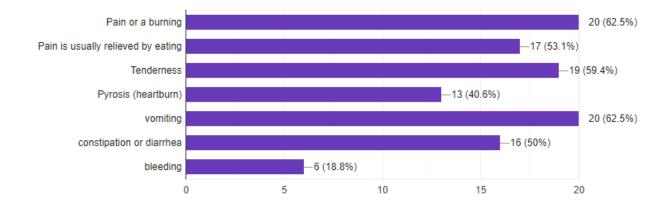
## 5.1. Suffering from peptic ulcer



## Fig 09: Suffering from peptic ulcer

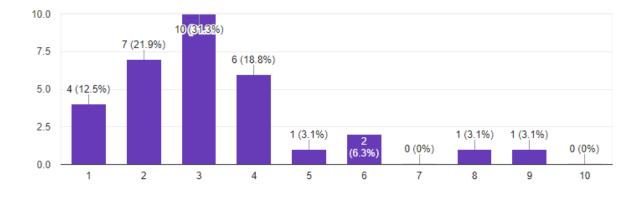
In this survey it is found that about 44.4% patient suffer from peptic ulcer



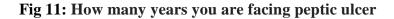


#### Fig 10: Symptoms

There are many symptoms of ulcerogenic patient. Such as pain, pain relived by eating, heartburn, vomiting etc. Among them pain and vomiting is commonly seen. About 59.4% patient suffer from tenderness. Bleeding is hardly seen

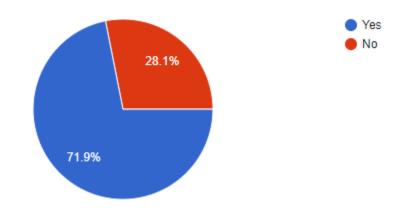


#### 5.3. How many year you are facing peptic ulcer



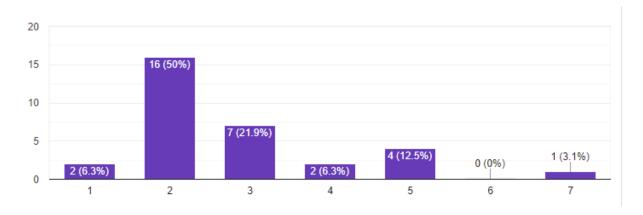
In this survey it is seen that 3.1% patients are suffering from peptic ulcer from 9 years. Most of the patients are suffering from this from 3 years. 12.5% patient suffering from 1 year. So it can be said that most of the peptic ulcer is getting chronic.

#### 5.4. What do you think, is the peptic ulcer depend on food habit





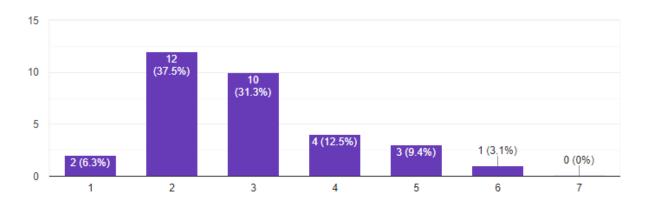
Most of the ulcerogenic patient think that peptic ulcer depend on food habit. But 28.1% patient didn't believe it. So this group of people does not control their food habit resulting increased risk for them.



## 5.5. How many days in a week you take junk food

#### Fig 13: How many days in a week you take junk food

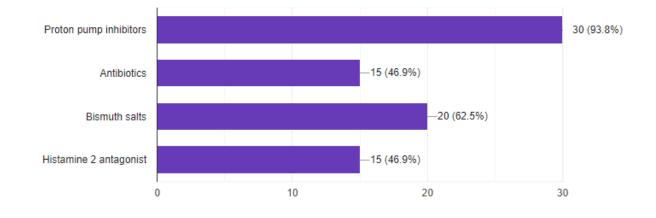
Peptic ulcer mostly depend on taking junk food but about 3.1% patient still continuously taking this junk food that is a threat for them. But most of the patient is conscious about their food habit



#### 5.6. How many days in a week you take Pain killer

#### Fig 14: How many days in a week you take Pain killer

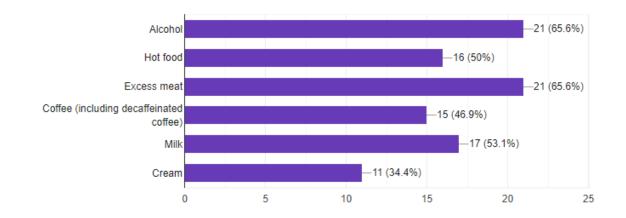
Ulcer generally occurs due to increased secretion of peptic acid. Pain killer generally increased Gastiric acid but still 37.5% patient taking about 2 pain killers in a week and 31.3% patient take three pain killer.



#### 5.7. Which type of medicine do you take

## Fig 15: Which type of medicine do you take?

Gastric acid is the main cause for creating gastric ulcer. So to prevent gastric ulcer it is needed to control gastric acid and bacteria. To prevent gastric acid proton pump inhibitors are mostly used (93.8%). Histamine 2 antagonist is Lesly used

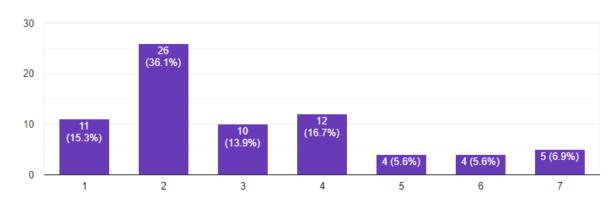


## 5.8. Which types of food do you avoid?

Fig 16: Which types of food do you avoid?

Food generally increase peptic ulcer. So it is need to control food. Most of the ulcerogenic patient avoids Alcohol (65.6%), Excess meat (65.6%) and milk (5.1%) which is good for them.

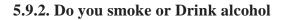
#### 5.9. Non Ulcerogenic

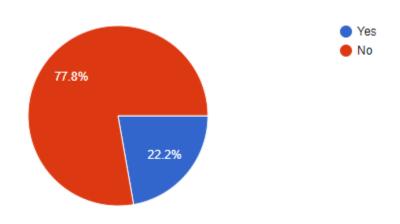


#### 5.9.1. How many days in a week you take junk food

Fig 17: How many days in a week you take junk food

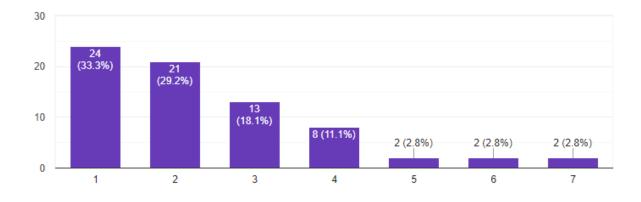
Non-ulcerogenic patient also need to control their food. Junk food mainly causes ulcer but about 6.9% people take junk food regularly. 36.1% people take junk food twitch in a week. So they should be concern about their physiology





#### Fig 18: Do you smoke or Drink alcohol

Drinking alcohol is always bad for everyone. It also harmful for stomach physiology. According to my survey about 22.2% people drink alcohol.



## 5.9.3. How many days in a week you take Pain killer

Fig 19: How many days in a week you take Pain killer

As pain killer increase the risk of peptic ulcer so everyone should be concerned about pain killer. Before taking pain killer it is must to take antacids. According to this survey 2.8% people regularly takes pain killer. So they are in a threat of ulcer.

# Conclusion

#### **Conclusion:**

Peptic ulcer disease is a typical youth sickness with a wide scope of indications; apparently powerful treatment and fruitful Helicobacter pylori destruction lead to clinical improvement and fix, just as long haul ulcer recuperating. Dietary decisions have a significant influence in the etiology of most G.I. sicknesses. In general, a high eating regimen of new leafy foods, alongside a high admission of cell reinforcements and carotenoids, has been connected to a lower hazard of G.I. disease. Food sources saved by salting, smoking, prickling, and aggravating food varieties, then again, have been displayed to improve the danger. Dietary adjustments are the most widely recognized treatment for GI issues brought about by food. The avoidance of the culpable food from the eating routine has been discovered to be the best treatment for all food sensitivities and bigotries. This backings past recommendations that nutritionists and dieticians ought to be remembered for the plan and general upkeep of diets to forestall offering inaccurate dietary guidance. This can go far toward decreasing the risk of dietary inadequacies and electrolyte irregular characteristics, as recently referenced. Subsequently, there is a request for everybody to be mindful about what they eat, as future gives off an impression of being reliant upon the GIT, as recently cautioned.

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