

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



**Shendi University**



**Faculty of Graduate Studies and Scientific Research**

*Research about:*

**Assessment of Knowledge and Quality of  
Life Among Peptic Ulcer Patients in - El-  
Mak Nimer University Hospital 2016**

A thesis submitted as partial fulfillment for the requirement of  
MSc of Medical Surgical Nursing.

**Submitted by:**

*Salma Ata allah Abd-elrhman Ali*

BS.c of - nursing science 2011- Shendi University

**Supervised by:**

**Dr: Mohammed Jaber Eldar Abu Anga**

*BSc. MSc. PhD*

Assistant professor of community health nursing - Shendi university

**December 2016**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# الآية

قال تعالى:-

﴿اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْعَلِيُّ الْكَبِيمُ لَا تَأْخُذُهُ سِنَّةٌ وَلَا نَوْمٌ لَهُ مَا فِي السَّمَاوَاتِ وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا خَلْفَهُمْ وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلَّا بِمَا شَاءَ وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ وَالْأَرْضَ وَلَا يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ﴾

صدق الله العظيم

سورة البقرة - الآية (255)



# *Dedication*

**I have dedicated this research to my dear parents  
Who gave me all efforts and facilities to my study from  
childhood until adulthood.**

**Father and Mother**

**To the soul of my heart really you are terrific and gentleman  
and thank you for supporting through out the process of  
completing this degree**

**My husband**

**Who are teaching me giving without take and patience  
without tedium.**

**Teachers**

**Also I would like to dedicate it to my remaining brothers  
and sisters for their continuous assistance and help.**

**To all my friends:**

**Those who precede me and no longer with me,**

**Those who precede me and are still among me,**

**Those with me,**

**And to those who will follow me.**



# Acknowledgement

*First of all I thank Allah that for giving me the strength and  
patience to perform this work.*

*Sincerest appreciation and Post gratitude to*

*Dr. Mohammed jaber eldar*

*for his patience and guidance throughout the work,*

*A special word of thanks:*

*Staff of medicine nursing staff in Elmak, Nimer hospital for  
their greater helps.*

*And finally I would like to extend our thanks to our families,  
friend's classmate.*

## List of abbreviation

Abbreviation	Mean
DU	Deudenal Ulcer
GERD	Gastro Esophageal Reflex Disease
GI	Gastric intestinal
GU	Gastric Ulcer
H <sub>2</sub> Blocker <sub>2</sub>	Histamine Blocjers
H pylori	Helicon bactor pylori
HRQOL	Health Related Quality of life
LgG	Immo gamma Globin
NSAD	Non Steroid anti Inflammatory drugs
PPI	Protein Pump Inhitor
PUD	Peptic Ulcer Disease
QOL	Qulity of life
WHO	World health Organization
SPSS	Statistical Package of social science
ZES	Zolling Elliso syndrome

## ملخص البحث

القرحة الهضمية هي ثقب في الطبقة المخاطية وتحت المخاطية للمعدة والأثنى عشر. القرحة الهضمية هي سبب اعتلال المرضى الذين يعانون من انخفاض الصحة ذات الصلة بنوعية الحياة، وهي مكلفة للرعاية الصحية وفي كثير من الأحيان تتطلب منظار طارئ ودخول المستشفى.

أجريت هذه الدراسة الوصفية المقطعية في الفترة من أغسطس - نوفمبر 2016م بمستشفى المك نمر الجامعي لتقييم معرفة ونوعية الحياة لدى مرضى القرحة الهضمية بعينة تشمل خمسين مريض في أثناء فترة الدراسة.

وجمعت وحللت هذه البيانات عن طريق برنامج الحزم الإحصائية للعلوم الاجتماعية إصدار 21.

وتوصلت نتائج الدراسة إلي أن ثلثي المرضى (64%) لا يعرفون معلومات عن المرض وأكثر من النصف (58%) متابعتهم غير منتظمة ويستخدمون الأدوية غير الموصوفة والمسكنة المضادة للالتهاب وهي سبب من أسباب قرحة المعدة وغالبية المرضى (70%) يتناولون دائما طعام يحتوي على الدهون ونصفهم (44%) يتناولون طعام مبهر حار وأكثر من النصف (58%) يتناولون القهوة وثلثيهم (64%) لا يمارسون الرياضة.

وقد أوصت الدراسة بناء على ما لخص ووجد بان هناك حاجة لبرامج تعليمية لدى المرضى لتغيير أو تحسين نوعية الحياة عن طريق زيادة مستوي معرفتهم وإتباعهم نظام غذائي وتشجيعهم على المتابعة الدورية وتناول الدواء بانتظام.

## Abstract

A peptic ulcer is a breach in the gastric or duodenal mucosa down to the sub mucosa<sup>(5)</sup>. Peptic ulcer disease is the cause of significant morbidity with patients having a low health-related quality of life. The healthcare costs of complicated peptic ulcer disease are considerable; often requiring emergency endoscopy, hospital admission <sup>(15)</sup>.

A descriptive cross sectional study was conducted in Elmak Nimer university hospital during period from (August to December 2016), by sample questionnaire included 50 patients the study was conducted in this period. The data collection and analyzed by statistical method by computer SPSS version<sup>(22)</sup>.

To assessment the knowledge and quality of life among patients about peptic ulcer

The result of study showed near two third (64%) not known information about definition peptic ulcer. More than half (58%) of study group not on regular follow up and follow only when they complain of symptoms . and near to half (48,%) had not regular to taking medication also near to half (46%) had taking NSAID this cusecs for disease. Near to half (44%)eating spicy food, majority of (70%) always were taking diet contain fat, more than half (54%) always were drinking of coffee, more than two third (68%) neglect exercise.

Based on the study finding and conclusion study recommend that there is need for educational programs to change or improve the of quality of life among patients by increase level of knowledge and follow regimen of diet and encourage patient about follow up and take medication regularly.

## List of contents

<i>No</i>	<i>Subject</i>	<i>Page no</i>
1	الآية	I
2	Dedication	II
3	Acknowledgement	III
4	List of abbreviation	IV
5	Abstract Arabic	V
6	Abstract English	VI
7	List of contents	VII
8	List of tables	VIII
9	List of figures	IX
<b><i>Chapter one</i></b>		
10	Introduction	1 – 2
11	Justification	3
12	Objectives	4
<b><i>Chapter two</i></b>		
13	Literature review	5 – 20
<b><i>Chapter three</i></b>		
14	Methodology	21 – 22
<b><i>Chapter four</i></b>		
15	Results	23 – 39
<b><i>Chapter five</i></b>		
16	Discussion	40 – 42
17	Conclusion	43
18	Recommendations	44
<b><i>Appendix</i></b>		
19	References	45 – 46
20	Questionnaires	47 – 50



## List of tables

No of table	Table	Pages
1	Distribution of study group according their ( ages, sex, occupation)	23
2	Distribution of study group according to their level of education	24
3	Distribution of study group according to their marital status	24
4	Distribution of study group according to their Family income	25
5	Distribution of study group according to their personal bad habits	25
6	Distribution of study group according to their Family history of peptic ulcer	26
7	Distribution of study group according to their Risk factor of peptic ulcer.	27
8	Distribution of study group according to their causes of peptic ulcer	28
9	Distribution of study group according to their type of peptic ulcer	28
10	Distribution of study group according to their Common sings and symptom of peptic ulcer	29
11	Distribution of study group according to their Site of pain	29
12	Distribution of study group according to their aggravating factor	30
13	Distribution of study group according to their relieving factor	31
14	Distribution of study group according to their mode of diagnosis	31
15	Distribution of study group according to their complication of peptic ulcer	32
16	Distribution of study group according to their medical regimen taking your medication	33
17	Distribution of study group according to their medical regimen: B-Type of medicine are taking	33
18	Distribution of study group according to their medical regimen: C-Use of non-steroid anti-inflammatory drugs	34
19	Distribution of study group according to their diet ( fruits, Spices, Eat diet containing fat, Coffee, Milk)	34
20	Distribution of study group according to their physical activity: B-Exercise regimen	35
21	Distribution of study group according to their bad habit s:A-smoking: cigarettes do you smoke per day	36
22	Distribution of study group according to their bad habit s :B-alcohol: patient consume alcohol per day	36
23	Cross tabulation between age and type of peptic ulcer	38
24	Cross tabulation between sex and type of peptic ulcer	38
25	Cross tabulation between level of education and peptic ulcer	39
26	Cross tabulation between level Education and risk factor of peptic ulcer	39

## List of Figures

No of figure	Title	Page No
1	Distribution of study group according to their source of knowledge of information about peptic ulcer	26
2	Distribution of study group according to their knowledge to definition of PUD	27
3	Distribution of study group according to their characters of pain	30
4	Distribution of study group according to their had medical treatment	32
5	Distribution of study group according to their had physical activity : A- type of Exercise you do	35
6	Distribution of study group according to their had in stress and crisis you	37
7	Distribution of study group according to their had in Follow up	37

# *Chapter One*

*Introduction*

*Justification*

*Objectives*

## 1.1 Introduction

Ulcer is a sore which means it is an open. Pain full wound. Peptic ulcer are ulcer that form in the stomach or the upper part of the small intestine called the duodenum. an ulcer in the stomach called a gastric ulcer, an ulcer in the duodenum is called a duodenal ulcer. Both a gastric and duodenal ulcer result when hilopacter pylori or drug weakens the protective mucous of the stomach and duodenum allowing acid to get through to the sensitive lining. Both the acid and the bacteria can irritate the lining and causes an ulcer to form hilopacter pylori infection is usually contracted in childhood perhaps through food, water or close contact with an infected individual. Infection are more common in adult older than age 60 and in developing countries and most people with hilopacterpylori don't display any symptoms until they are older <sup>(1)</sup>.

In fact they may go through life unaware that they are infected, in the past having peptic ulcer mean living with chronic condition for several years or even alive time. But today better understanding of the cause of peptic ulcer and how to treat them means that most people can cured. The incidence among women's is almost equal to that in men, predisposing factors include family history of peptic ulcer, chronic use of non-steroidanti-inflammatory drug, alcohol intake, excessive smoking, high stress <sup>(1)</sup>.

Before the twentieth century, gastric ulceration constituted the bulk of peptic ulcer disease and duodenal ulcers were quite rare, the incidence of duodenal ulcers increased progressively, reaching a peak in the 1950s. The cause of this rise is unclear, because H. pylori are thought to have been ubiquitous in the human Population for thousands of years <sup>(2)</sup>.

Peptic ulcer disease (PUD) is one of the most common human ailments, affecting approximately 50% of the world population, PUD also known as peptic ulcer or stomach ulcer, is a break in the lining of the stomach, first part of the small intestine, or occasionally the lower esophagus, The life time for developing a peptic ulcer is approximately 10%, They resulted in 301.000 deaths in 2013 down from 327.00, In western countries the percentage of people with

Helicobacter pylori infections roughly matches age(i.e.,20% at age 20,30% at age 30,80% at age 80 <sup>(3)</sup>).

Quality of life has emerged as an important concept and outcome in health and health care ,In public health and in medicine, the concept of health- related quality of life refers to a person or groups perceived physical and mental health over time. Physicians have often used health-related quality of life to measure the effect of chronic illness in their patients in order to better understand how an illness interferes with a person's day-to-day life. Similarly, public health professionals use health-related quality of life to measure the effects of numerous disorders, short and long-term disabilities, and disease in different populations. Tracking health-related quality of life in different populations can identify subgroups with poor physical or mental health and can help guide policies or interventions to improve their health <sup>(4)</sup>.

## 1.2 Justification

Peptic ulcer is one of the chronic diseases that had common incidence and lead to serious complication. Through early detections, simple life style modifications and with the help of modern medical treatment, the problem of peptic ulcer disease can be largely controlled and patients with peptic ulcers lead a prolonged and healthy life. So managing life style permit early identification of complication and initiation of management measures prevent and decrease complication and have numerous psychological benefits for the patients.

Quality of life has emerged as an important concept and outcome in health and health care, in public health and in medicine, the concept of health- related quality of life refers to a person or groups perceived physical and mental health over time <sup>(4)</sup>.

## **1.3 Objectives**

### **1.3.1 General objective:**

To study the knowledge and quality of life among peptic ulcer patient's in Elmak Nimer University hospital .

### **1.3.2 Specific objectives:**

1. To identify causes and risk factors of peptic ulcer.
2. To identify type and common sign and symptoms of peptic ulcer.
3. To evaluate mode of diagnosed and treatment.
4. To assess level of awareness about the disease.
5. To evaluate quality of life for peptic ulcer patients.

## 2. Literature review

A peptic ulcer is a breach in the gastric or duodenal mucosa down to the sub mucosa. Small or shallow breaches are termed ‘erosions’; whilst sometimes insignificant, these may herald ulcers. Worldwide, the two most common causes of peptic ulceration are *Helicobacter pylori* infection and non-steroidal anti-inflammatory drugs (NSAIDs), including aspirin ibuprofen, naproxen, Smoking cigarettes or using tobacco <sup>(5)</sup>

Peptic ulcer disease has a point prevalence of approximately 15% (DU- 11.98% and GU-3.58%), which is much higher than that in the developed countries (15% vs 1.5%). And it is among the top 25 leading causes of death according to the World life Expectancy Over 95% (95-100%) of DUs and >80% (56-96%) of GU are strongly associated with *H. pylori* infection. <sup>(6)</sup>

Diseases of the digestive system such as gastritis, functional gastrointestinal disorders, and peptic ulcers are common throughout the world. While these are not generally life-threatening conditions, they can significantly impair patients’ quality of life (QOL). These digestive system diseases are important to public health because they are remarkably common, can hinder a person’s daily activities, and can cause major social and economic burden. Peptic ulcer disease (PUD) affects as many as 10% of people in the United States at some point during their life, and the annual cost of treatment in the United States alone has been estimated at \$5.7 billion. Thus, there is a substantial impact of these diseases on public health. In the last 30 years, health-related quality of life (HRQOL) has become an important outcome measure for patients with cancer and chronic diseases <sup>(7)</sup>.

### 2.1 Definition of peptic ulcer:

A peptic ulcer is an excoriated area of stomach or intestinal mucosa caused principally by the digestive action of gastric juice or upper small intestinal secretions. Peptic ulcer is a conglomerate of heterogeneous disorders, which manifests itself as a lesion in the lining of the gastrointestinal mucosa bathed by



acid and/or pepsin. Peptic ulcers frequently occur along the lesser curvature of the antral end of the stomach or, more rarely, in the lower end of the esophagus where stomach juices frequently reflux <sup>(8)</sup>.

Peptic ulcer a hole in the lining of the stomach, duodenum, or esophagus. A peptic ulcer of the stomach is called a gastric ulcer, an ulcer of the duodenum is a duodenal ulcer, and a peptic ulcer of the esophagus is an esophageal ulcer. A peptic ulcer occurs when the lining of these organs is corroded by the acidic digestive juices which are secreted by the stomach cells <sup>(9)</sup>.

A peptic ulcer is an excavation formed in the mucosal wall of the stomach, pylorus, duodenum, or esophagus. It is frequently referred to as a gastric, duodenal, or esophageal ulcer, depending on its location. It is caused by the erosion of a circumscribed area of mucous membrane. Peptic ulcers are more likely to be in the duodenum than in the stomach. They tend to occur singly, but there may be several present at one time. Chronic ulcers usually occur in the lesser curvature of the stomach, near the pylorus. Peptic ulcer has been associated with bacterial infection, such as *Helicobacter pylori*. Peptic ulcer disease refers to painful sores or ulcers in the lining of the stomach or first part of the small intestine, called the duodenum. Peptic ulcer disease (PUD), also known as a peptic ulcer or stomach ulcer, is a break in the lining of the stomach, first part of the small intestine, or occasionally the lower esophagus. An ulcer in the stomach is known as a gastric ulcer while that in the first part of the intestines is known as a duodenal ulcer <sup>(10)</sup>.

## **2.2 Pathophysiology:**

Peptic ulcers occur mainly in the gastro duodenal mucosa because this tissue cannot withstand the digestive action of gastric acid (HCl) and pepsin. The erosion is caused by the increased concentration or activity of acid-pepsin, or by decreased resistance of the mucosa. A damaged mucosa cannot secrete enough mucus to act as a barrier against HCl. The use of NSAIDs inhibits the secretion of mucus that protects the mucosa. Patients with duodenal ulcer disease secrete more acid than normal, whereas patients with gastric ulcer tend to secrete

normal or decreased levels of acid. Damage to the gastroduodenal mucosa allows for decreased resistance to bacteria, and thus infection from *H. pylori* bacteria may occur. ZES is suspected when a patient has several peptic ulcers or an ulcer that is resistant to standard medical therapy. It is identified by the following: hypersecretion of gastric juice, duodenal ulcers, and gastrinomas (islet cell tumors) in the pancreas. Ninety percent of tumors are found in the “gastric triangle,” which encompasses the cystic and common bile ducts, the second and third portions of the duodenum, and the junction of the head and body of the pancreas. Approximately one third of gastrinomas are malignant. Diarrhea and steatorrhea (unabsorbed fat in the stool) may be evident. *H. pylori* is not a risk factor for ZES <sup>(1)</sup>.

Stress ulcer is the term given to the acute mucosal ulceration of the duodenal or gastric area that occurs after physiologically stressful events, such as burns, shock, severe sepsis, and multiple organ traumas. These ulcers, which are clinically different from peptic ulcers, are most common in ventilator-dependent patients after trauma or surgery. Fiberoptic endoscopy within 24 hours of trauma or surgery reveals shallow erosions of the stomach wall; by 72 hours, multiple gastric erosions are observed. As the stressful condition continues, the ulcers spread. When the patient recovers, the lesions are reversed. This pattern is typical of stress ulceration. Differences of opinion exist as to the actual cause of mucosal ulceration in stress ulcers. Usually, the ulceration is preceded by shock; this leads to decreased gastric mucosal blood flow and to reflux of duodenal contents into the stomach. In addition, large quantities of pepsin are released. The combination of ischemia, acid, and pepsin creates an ideal climate for ulceration <sup>(1)</sup>.

Stress ulcers should be distinguished from Cushing's ulcers and Curling's ulcers, two other types of gastric ulcers. Cushing's ulcers are common in patients with head injury and brain trauma. They may occur in the esophagus, stomach, or duodenum and are usually deeper and more penetrating than stress ulcers.

Curling's ulcer is frequently observed about 72 hours after extensive burns and involves the antrum of the stomach or the duodenum.

Gastric ulcers are associated with a gastritis affecting the body as well as the antrum of the stomach (pangastritis) causing parietal cell loss and reduced acid production. The ulcers are thought to occur because of reduction of gastric mucosal resistance due to cytokine production by the infection or perhaps to alterations in gastric mucus <sup>(1)</sup>.

### **2.3 Epidemiology of peptic ulcer disease:**

First classification of stomach diseases came in 1793 from Matthew Baillie, with clear descriptions of acute inflammation (arsenic), trichobezoar, ulcer, perforation, pyloric stenosis, scirrhus and ulcerated cancer. In 1817, patients with perforated gastric ulcer were reported in Dublin by Crampton and patients with perforated duodenal ulcer were reported in London by Travers, who also noted bleeding, stenosing and penetrating gastric ulcers. The first epidemiological study on peptic ulcer in North India was conducted in 1963. Approximately 5,00,000 new cases and 4 million recurrences of peptic ulcer are reported each year, contributing to the approximately 10% of Americans developing peptic ulcer disease during their lifetime <sup>(11)</sup>.

Complications of peptic ulcer disease, including perforation, bleeding, and obstruction, occur in up to 20 % of cases; overall, gastric outlet obstruction may affect 5% - 12% of peptic ulcer patients. Johnson et al noted that peptic ulcer disease was the origin of obstruction in 62 % of patients from 1962 to 1975, and in 45 % of patients from 1975 to 1985. Gibson et al investigated that only 33 % of patients in their series with peptic ulcer disease and outlet obstruction were *H. pylori* positive. The annual incidence of gastric ulcers varies from approximately 1 case per 1000 population in Japan to 1.5 cases per 1000 population in Norway to 2.7 cases per 1000 population in Scotland. Commonly, the ratio of duodenal ulcer to gastric ulcer varies with place and time. In most countries, duodenal ulcers are about three times more common than gastric ulcers. Both DUs and GUs are common in the elderly. There is

considerable geographical variation, with peptic ulcer disease being more prevalent in developing countries related to the high H. pylori infection. The prevalence of peptic disease with or without ulcer was more common in age group of 20- 49 years, prevalence of duodenal ulcer is more <sup>(11)</sup>.

Duodenal ulcers affect 10–15% of the adult population and are two to three times more common than gastric ulcers. Ulcer rates are declining rapidly for younger men and increasing for older individuals, particularly women. Both DUs and GUs are common in the elderly. There is considerable geographical variation, with peptic ulcer disease being more prevalent in developing countries related to the high H. pylori infection <sup>(12)</sup>.

#### **2.4 Type of peptic ulcer:**

Ulceration of the gastrointestinal mucosa is caused by disruption of normal balance of the corrosive effect of gastric juice and the protective effect of mucus on gastric epithelial cells. On the basis of location, peptic ulcers are categorized as follows:-

1. Gastric ulcer: means occurrence of ulcer in stomach. These ulcers occur more generally in the older age group,
2. Duodenal ulcer: Occurrence of ulcer in the duodenum is referred as duodenal ulcer. These ulcers are more common than gastric ulcers. They occur commonly in younger individuals and are evenly distributed among various socio-economic groups. Duodenal ulcer patients have higher than normal levels of acid secretion rates, Depending on severity . peptic ulcers are also classified as: Acute peptic ulcers: These ulcers involve tissues to the depth of the sub mucosa. They may arise in the form of single or multiple lesions. They are found in many sites of stomach and in the first few centimeters of duodenum. Chronic peptic ulcers: These ulcers penetrate through the epithelial and muscle layers of stomach wall and may include the adjacent pancreas or liver. In majority of cases, they occur singly in the pyloric antrum of the stomach and in duodenum <sup>(13)</sup>.

## **Causes of peptic Ulcers and risk factors:**

No single cause has been found for ulcers. However, it is now clear that an ulcer is the end result of an imbalance between digestive fluids in the stomach and duodenum. Most ulcers are caused by an infection with a type of bacteria called *Helicobacter pylori* (*H. pylori*). Factors that can increase risk for ulcers include:

- 1-Use of painkillers called non-steroidal anti-inflammatory drugs (NSAIDs), Such as aspirin, naproxen (Aleve, Anaprox, Naprosyn, and others), ibuprofen (Motrin).
- 2-Excess acid production from gastrinomas, tumors of the acid producing cells of the stomach that increases acid output (seen in Zollinger-Ellison syndrome.(ZES)
- 3-Excessive drinking of alcohol.
- 4-Smoking or chewing tobacco.
- 5-Serious illness.
- 6-Radiation treatment to the area <sup>(14)</sup>.

Peptic Ulcer Disease in Older People of peptic ulcers are *Helicobacter pylori* infection, and the use of non-steroidal anti-inflammatory drugs (NSAID) and aspirin. Smoking and excessive alcohol intake also increase the risk of peptic ulcer disease. Age is another risk factor, possibly a reflection of escalating *H. pylori* infection and altered mucosal resistance).

Peptic ulcer disease is the cause of significant morbidity with patients having a low health-related quality of life. Gastric bleeding is a common initial presentation and complications include perforation, penetration and gastric outlet obstruction. The healthcare costs of complicated peptic ulcer disease are considerable; often requiring emergency endoscopy, hospital admission <sup>(15)</sup>.

### **2.5 Disease characterized by:**

The characteristic feature of peptic ulcer is burning epigastric pain. The pain of a DU classically occurs at night (as well as during the day) and is worse when the patient is hungry, but this is not reliable.

Symptoms of an ulcer may last for a few days, weeks, or months and may disappear only to reappear, often without an identifiable cause. Many people with ulcers have no symptoms, and perforation or hemorrhage may occur in 20% to 30% of patients who had no preceding manifestations. As a rule, the patient with an ulcer complains of dull, gnawing pain or a burning sensation in the mid epigastrium or in the back. It is believed that the pain occurs when the increased acid content of the stomach and duodenum erodes the lesion and stimulates the exposed nerve endings. Another theory suggests that contact of the lesion with acid stimulates a local reflex mechanism that initiates contraction of the adjacent smooth muscle <sup>(1)</sup>.

Other symptoms include pyrosis (heartburn), vomiting, constipation or diarrhea, and bleeding. Pyrosis is a burning sensation in the esophagus and stomach that moves up to the mouth. Heartburn is often accompanied by sour eructation, or burping, which is common when the patient's stomach is empty. Although vomiting is rare in uncomplicated duodenal ulcer, it may be a symptom of a complication of an ulcer. It results from obstruction of the pyloric orifice, caused by either muscular spasm of the pylorus or mechanical obstruction from scarring or acute swelling of the inflamed mucous membrane adjacent to the ulcer. Vomiting may or may not be preceded by nausea; usually it follows a bout of severe pain and bloating, which is relieved by ejection of the gastric contents. Emesis often contains undigested food eaten many hours earlier. Constipation or diarrhea may occur, probably as a result of diet and medications. Fifteen percent of patients with peptic ulcer experience bleeding. Patients may present with GI bleeding as evidenced by the passage of melena (tarry stools). A small portion of patients who bleed from an acute ulcer have only very mild symptoms or none at all. Symptoms of an ulcer may last days, weeks, or months and may subside only to reappear without cause <sup>(1)</sup>.

Many patient shave asymptomatic ulcers.

- Dull, gnawing pain and a burning sensation in the midepigastriur or in the back are characteristic.

- Pain is relieved by eating or taking alkali; once the stomach has emptied or the alkali wears off, the pain returns.
- Sharply localized tenderness is elicited by gentle pressure on the epigastrium or slightly right of the midline.
- Other symptoms include pyrosis (heartburn) and a burning sensation in the esophagus and stomach, which moves up to the mouth, occasionally with sour eructation (burping).
- Vomiting is rare in uncomplicated duodenal ulcer; it may or may not be preceded by nausea and usually follows a bout of severe pain and bloating; it is relieved by ejection of the acid gastric contents.
- Constipation or diarrhea may result from diet and medications.
- Bleeding (15% of patients with gastric ulcers) and tarry stools may occur; a small portion of patients who bleed from an acute ulcer have only very mild symptoms or none at all. Diagnosis:

Doctor may suspect you have an ulcer just by talking with you about your symptoms. However, to confirm the diagnosis one of several tests should be taken. First, also may ask you to take an acid blocking medication, such as those used to treat heartburn, for a short period of time to see if symptoms improve. upper endoscopy. It involves inserting a small, lighted tube through the throat and into the stomach to look for abnormalities. This procedure is usually given if you are having severe or recurring symptoms of ulcers <sup>(1)</sup>.

## **2.6 How to confirm the disease:**

Investigation of suspected peptic ulcer disease Patients under 55 years of age with typical symptoms of peptic ulcer disease who are H. pylori positive can start eradication therapy without investigation.

1-Non-invasive methods:

Serological tests detect IgG antibodies and are reasonably sensitive (90%) and specific (83%). They have been used in diagnosis and in epidemiological studies. IgG titres may take up to 1 year to fall by 50% after eradication therapy

and therefore are not useful for confirming eradication or the presence of a current tests are not as sensitive or specific as serology. This is a quick and reliable test for H. pylori and can be used as a screening test. The measurement of  $^{13}\text{CO}_2$  in the breath after ingestion of  $^{13}\text{C}$  urea requires a mass spectrometer. The test is very sensitive (97%) and specific (96%). This test is suitable for testing for eradication of the organism, but may be falsely negative if patients are taking PPIs at the time. A rapid release tablet which produces a result in 15 mins is becoming available<sup>(14)</sup>.

■ **Stool antigen test.** A specific immunoassay using monoclonal antibodies for the qualitative detection of H. pylori antigen is widely available. The overall sensitivity is 97.6% with a specificity of 96%. It is useful in the diagnosis of H. pylori infection and for monitoring efficacy of eradication therapy. (Patients should be off PPIs for 1 week but can continue with H2 blockers.

2-Invasive:

■ **Biopsy urease test.** Gastric biopsies are added to a substrate containing urea and phenol red. If H.pylori are present, the urease enzyme that they produce splits the urea to release ammonia to release ammonia which raises the pH of the solution and causes a rapid colour change (yellow to red). The test may be falsely negative if patients are taking PPIs or antibiotics at the time.

■ **Culture.** Biopsies obtained can be cultured on a special medium, and in vitro sensitivities to antibiotics can be tested.

■ **Histology.** H. pylori can be detected histologically on routine (Giemsa) stained sections of gastric mucosa obtained at endoscopy<sup>(14)</sup>.

Definitive diagnosis of peptic ulcer is suggested by patient history and confirmed by endoscopy. However, endoscopy allows for biopsy or cytological brushing of gastric and esophageal lesions to distinguish between simple ulceration and ulcerating stomach cancer. Stomach cancer may manifest with similar manifestations and must be excluded, especially in patients who are > 45, have lost weight, or report severe or refractory symptoms. The incidence of malignant duodenal ulcer is extremely low, so biopsies of lesions in that area are



generally not warranted. Endoscopy can also be used to definitively diagnose H. pylori infection, which should be sought when an ulcer is detected <sup>(16)</sup>.

Investigation of suspected peptic ulcer disease Patients under 55 years of age with typical symptoms of peptic ulcer disease who are H. pylori positive can start eradication therapy without investigation <sup>(1)</sup>.

## **2.7 Suspected problem that disease can lead to:**

1-Hemorrhage mild to severe hemorrhage is the most common complication of peptic ulcer disease. Symptoms include hematemesis (vomiting of fresh blood or “coffee ground” material); passage of bloody stools (hematochezia) or black tarry stools (melena); and weakness, orthostasis, syncope, thirst, and sweating caused by blood loss <sup>(16)</sup>.

2-Perforation The frequency of perforation of peptic ulceration is decreasing, partly attributable to medical therapy. DUs perforate more commonly than GUs, usually into the peritoneal cavity; perforation into the lesser sac also occurs.. Surgery is usually performed to close the perforation and drain the abdomen. Conservative management using nasogastric suction, intravenous fluids and antibiotics is occasionally used in elderly and very sick patients<sup>(1)</sup>.

3-Gastric outlet obstruction The obstruction may be prepyloric, pyloric or duodenal. The obstruction occurs either because of an active ulcer with surrounding oedema or because the healing of an ulcer has been followed by scarring. However, obstruction due to peptic ulcer disease and gastric malignancy are now uncommon Crohn's disease or external compression from a pancreatic carcinoma are more common causes. Adult hypertrophic pyloric stenosis is a rare cause. The stomach becomes full of gastric juice and ingested fluid and food, giving rise to the main symptom of vomiting, usually without pain as the characteristic ulcer pain has abated owing to healing. Vomiting is infrequent, projectile, large in volume, and the vomitus contains particles of previous meals. On examination of the abdomen there may be a succussion splash. The diagnosis is made by endoscopy but can be suspected by the nature of the vomiting; by contrast, psychogenic vomiting is frequent, small volume

and usually noisy. Severe or persistent vomiting causes loss of acid from the stomach and a metabolic alkalosis. Vomiting will often settle with intravenous fluid and electrolyte replacement, gastric drainage via a nasogastric tube and potent acid suppression therapy. Endoscopic dilatation of the pyloric region is useful and, overall, 70% of patients can be managed without surgery <sup>(1)</sup>.

## **2. 8 Treatment plan:**

The following treatments are recommended for ulcers:

-Lifestyle changes: Quit smoking, avoid alcohol, aspirin, and NSAIDs.

-Acid-blocking medications.

-Medications that protect the lining of the stomach and duodenum.

"-Triple-therapy" or "dual-therapy" regimens for ulcers caused by H pylori No single medication works to get rid of H pylori infection. Two combinations have been found that work well in most people <sup>(17)</sup>.

Triple therapy: The combination of bismuth subsalicylate (for example, Pepto-Bismol) and the antibiotics tetracycline and metronidazole are effective in 80%-95% of people and is the current standard of therapy. All are taken as pills. The bismuth subsalicylate and tetracycline have to be taken 4 times a day and the metronidazole 3 times a day. This is complicated.

• Dual therapy: This therapy was developed as a response to the complexity and side effects of triple therapy. It comprises 2 antibiotics, amoxicillin and metronidazole, both taken as pills 3 times a day. This simplified schedule is preferred by many people.

Clarithromycin can be substituted for the 15%-25% of people whose infections are resistant to metronidazole. Sometimes an acid pump inhibitor such as omeprazole (Prilosec, Prolosec) is added substituted for one of the antibiotics. These treatments usually take 2 weeks.. 2 week triple therapy that includes two antibiotics and bismuth subsalicylate is the most effective regimen. It eliminates the bacteria and prevents recurrence of ulcers in 90% of people who receive this treatment. Unfortunately, triple therapy has side effects such as upset stomach, nausea, vomiting, bad taste in the mouth, loose or dark stools, dizziness, and

yeast infections in women Any of several 2 week dual therapy regimens are simpler to follow, have fewer side effects, and work in about 80% of people who take them. A newer triple therapy combining antibiotics and rabeprazole (Aciphex) works in just 1 week to eradicate H pylori<sup>(17)</sup>.

#### Peptic Ulcer Medications:

Several types of medications are used to treat ulcers:

-Antacids: These nonprescription medications simply neutralize acid. Most include aluminum hydroxide combined with magnesium or calcium. Examples are Maalox, Mylanta, Tums, and Rolaids.

These can cause constipation, although those containing magnesium can cause diarrhea.

These effects are especially likely if the medications are taken regularly.

-Histamine (H<sub>2</sub>) blockers: These are acid-blocking medications widely used in the treatment of peptic ulcer diarrhea. These effects are especially likely if the medications are taken regularly. H<sub>2</sub> blockers include cimetidine (Tagamet), ranitidine (Zantac), famotidine (Pepcid), and nizatidine (Axid)

They prevent production of acid by blocking histamine, a chemical that promotes acid production.

Nonprescription strengths are available, but for most people the stronger prescription version are needed.

H<sub>2</sub> blockers work very well at reducing acid and pain. (Reducing acid helps the ulcers heal. They may take a few days to start having an effect. Treatment with H<sub>2</sub> blockers usually takes 6-8 weeks.

-Acid pump inhibitors: These drugs are also known as proton pump inhibitors (PPIs).

This group include omeprazole (Prilosec), lansoprazole (Prevacid), rabeprazole (Aciphex), and pantoprazole (Protonix). Acid pump inhibitors are even stronger than H<sub>2</sub> blockers. They work by stopping the "pump" that secretes acid into the stomach. They are being used increasingly in triple and double regimens for infection<sup>(17)</sup>.

-Protective agents: These drugs do not affect the amount of acid in the stomach; instead, they protect the mucous lining of the stomach from acid. One type is very thick and sticks to the ulcer, forming a physical barrier between the ulcer and the acid. An example is sucralfate (Carafate).

The other type increases the amount of mucus, which forms a physical barrier, and bicarbonate, which helps neutralize the acid. An example is misoprostol (Cytotec); this agent is used only for treatment of ulcers caused by medication. Antacids and products containing bismuth subsalicylate (such as Pepto-Bismol) also have protective effects.

-Antibiotics: As part of a combination regimen, antibiotics eradicate *H pylori*, the bacteria that causes ulcers in many people <sup>(17)</sup>.

### **Peptic Ulcer Surgery:**

Medical therapy works in most people with peptic ulcers. Sometimes, medical therapy does not work, or a person can't take the therapy for some reason. Surgery is a good alternative to medical therapy for these people. Surgical operations often used in peptic ulcers include the following: Vagotomy: Cutting the vagus nerve, which transmits messages from the brain to the stomach, can reduce acid secretion. However, this can also interfere with other functions of the stomach. A newer operation cuts only the part of the nerve that affects acid secretion <sup>(17)</sup>.

Antrectomy: This is often done in conjunction with a vagotomy. It involves removing the lower part of the stomach (the antrum). This part of the stomach produces a hormone that increases production of stomach acid. Adjacent parts of the stomach may also be removed.

Pyloroplasty: This procedure also is sometimes done with vagotomy. It enlarges the opening between the stomach and duodenum (the pylorus) to encourage passage of partially digested food. Once the food has passed, acid production normally stops.

Tying off an artery: If bleeding is a problem, cutting off the blood supply (artery) to the ulcer can stop the bleeding <sup>(17)</sup>.

## **2.9 Peptic Ulcer Follow up:**

Follow the recommendations of the health care professional.

- Lifestyle changes can relieve symptoms and help the ulcer heal. Stop smoking, avoid alcohol, caffeine, and avoid aspirin and nonsteroidal anti-inflammatory medications.
- Take all medications as prescribed.
- Follow up as scheduled with the health care professional to monitor your progress and prevent complications <sup>(17)</sup>.

## **2.10 Lifestyle advice:**

Diet and stress are not thought to be directly responsible for stomach ulcers but they may make the symptoms of ulcers worse, The following advice may be of some help:-

- Cut down on the amount of coffee and tea you drink. This can increase the amount of acid your stomach produces. Try herbal teas instead.
- Drink milk and eat milk-based foods, such as yoghurt and cheese. Milk is thought to coat the stomach and neutralise the effects of stomach acid.
- Lose any extra weight you are carrying.
- Eat little and often. This could help reduce the build-up of stomach acid between meals.
- Limit your intake of alcohol. Too much alcohol can irritate the areas of inflammation in your stomach.
- Avoid spicy or excessively rich foods if they make your symptoms worse.
- Quit smoking. It may put you at greater risk of developing an ulcer and slow down your recovery <sup>(18)</sup>.

## **2.11 Prevention of ulcer:**

To prevent the spread of bacteria and reduce risk of bacterial infection, wash your hands with soap and water on a regular basis and make sure that all food is properly cleaned and cooked thoroughly. To prevent ulcers caused by NSAIDs, stop using these medications (if possible) or limit their use. In you

need to take NSAIDs, be sure to follow the recommended dosage and avoid alcohol while taking these medications. Certain lifestyle changes can also help prevent ulcers from forming. Limiting alcohol consumption, avoiding tobacco products, and properly managing stress can all contribute to a healthy stomach lining <sup>(18)</sup>.

## **2.12 Quality of life:**

WHO definition of QOL (1993): Individual perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns ,Assessment of QOL can help the physicians in better understanding the results of their treatment not only in dimension of physical well being but also in spirit of treatment or QOL. During the past two decades, psychological status and quality of life of one very important clinical research and is emphasized as one of the aspects of effective patient care and has used its review of the existing differences between patients diagnosed, forecast consequences of disease treatment interventions and evaluation, has been on for a goal to improve the daily functioning and quality of life in patients with chronic diseasesThrough early detections, simple life style modifications and with the help of modern medical treatment, the problem of peptic ulcer disease can be largely controlled and patients with peptic ulcers lead a prolonged and healthy life. can Mere change of dietary or smoking habits can reduce the problem of having peptic ulcers. And simple affordable treatment such as the antimicrobial therapy for the eradication of helicobacter pylori can drastically reduce the occurrence and recurrence of peptic ulcer disease<sup>(2)</sup>. However even after having the expertise, methods, and facilities to tackle the problem to some extent, the burden of peptic ulcer in Bangladesh poses a significant health problem largely due to inadequate prevention and intervention strategies and lack of awareness about the disease among the people. And despite peptic ulcer disease being a major health problem in Bangladesh, studies of the active disease, autopsy researches and population surveys regarding peptic ulcer disease are mostly lacking or absent. Thus this research

would provide valuable epidemiological information about the magnitude of the disease which will in turn help to create awareness among the people regarding the disease, will open the gateway for further researches and will help design and implement adequate intervention measures <sup>(2)</sup>.

Several studies showed that the improvement in quality of life (QOL) in patients with PUD plays an important role in the treatment of the disease. It is notable that the quality of Life is a concept that must include all the somatic aspects, psychosocial functions, physical activities and other related factors of disease. A study indicated that QOL in PUD patients is lower than in normal population <sup>(19)</sup>.

Measurement of health-related quality of life (HRQL) is becoming an increasingly important endpoint to researchers and clinicians. In the context of upper gastrointestinal disorders, understanding the impact of the symptoms and their treatments on physical, psychological, and emotional well-being is crucial. The objective of this review is to provide a background for HRQL assessment for patients with upper GI disease. We assess and critique available generic and disease-specific HRQL instruments, and specify the factors that should be considered when evaluating an instrument. If employed correctly, HRQL assessments for patients with upper GI disease could improve quality of care <sup>(20)</sup>.

## **3.Methodology**

### **3.1 Study design:**

This study was descriptive cross-sectional hospital base study, done at El mak Nimer university hospital to Assess of knowledge and quality of life among peptic ulcer patient on the period extended from August to December 2016.

### **3.2 Study area:**

The study was conducted in El mek Nimer university hospital in Shendi. Shendi is located in the north of Sudan, about 173km to the north of the Khartoum. The town is considered as centrer of Gaalein tribe as well as other tribes like Shygia, Hssania, and others.

The major professions are farming ,trading ,working in factories and craft .there are several general centers for different service also there is Shendi university with it is different faculties (faculty of medicine and heath sciences, education, arts, economics, low social development and faculty of sciences and technology. Shendi has 3hospitals, Shendi teaching hospital, El-makNimer university hospital and military hospital.

All of them have different departments which provide good services for town population, there are also many health centers.

### **3.3 Study Setting:**

Elmak Nimer university hospital established 2002 and consists of medical, surgical and obstetrical department, ENT, renal, ophthalmic dental and pediatric. Unit and private section

There are also major and minor theater emergency room and CCU, ICU and dialysis room .there is also blood bank, laboratory and pharmacy the hospital have more than 200 beds.



### **3.4 Study population:**

This study involves all patients in medicine ward (male and female) with peptic ulcer disease during study period.

### **3.5 Sampling and sample size:**

50 patients were participated in this study, by convenience sample.20 male and 30female.

### **3.6Tools of Data Collection:**

Standard interview closed ended questionnaire was developed by the researcher composed of 27 questions, it divided to three section; the first section was designed to collect data about personal characteristics of patients (1- 8). The second was designed to collect data about knowledge of patients regard peptic ulcer disease (9 – 21) and the third one collect data about patients toward quality of life (21- 27).

### **3.7 Data collection technique:**

Data was collected during two month during the two shifts

### **3.8 Data analysis:**

The study was analyzed by SPSS statistical technique and presented in from of tables and figures.

### **3.9 Ethical considerations:**

The study was approved by ethical committee of research in the faculty of nursing sciences.

Before conducting the study, verbal permission was taken from patients in ward administration and from staff delivering the ward for patients. The purpose of study was explained to each one of patient and am assured them that the data collected from the questionnaire will remain confidential and it's not allowed for any person to identify it.

## 4. Results

**Table {1}: Distribution of study group according their ( demographic data).**

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>
20-30 years	10	20%
31-40 years	12	24%
More than 40 years	28	56%
Total	50	100%
<b>Sex</b>	<b>Frequency</b>	<b>Percent</b>
Male	20	40%
Female	30	60%
Total	50	100%
<b>Occupation</b>	<b>Frequency</b>	<b>Percent</b>
Employee	19	38%
Unemployed	31	62%
Total	50	100%

The above table showed that (56%) of study group their age more than 40years, (24%), between 31-40years while (20%) between 20-30 years .Also showed (60%) of study group were female and (40%) were male, and explained occupation of study group (62%) unemployed and (38%) were employee.

**Table {2}: Distribution of study group according to their level of education:**

<b>Level Education</b>	<b>Frequency</b>	<b>Percent</b>
Illiterate	12	24%
Khalwa	7	14%
Primary	14	28%
Secondary	12	24%
Graduate	5	10%
Total	50	100%

Above table explained that (28%) of study group had primary level, while (24%) were illiterate & secondary, (14%) khalwa and (10%) had graduate.

**Table {3 } Distribution of study group according to their marital status:**

<b>Marital Status</b>	<b>Frequency</b>	<b>Percent</b>
Married	32	64%
un married	12	24%
Divorce	6	12%
Total	50	100%

Above table explained that (64%) of study group were married, while (24%) were unmarried and (12%) were divorce.

**Table {4}: Distribution of study group according to their income.**

<b>Family income</b>	<b>Frequency</b>	<b>Percent</b>
High	4	8%
Moderate	24	58%
Low	17	34%
Total	50	100%

Above table clarified that (58%) of study group had moderate, income (34%) were had low and (8%) high income.

**Table {5 } : Distribution of study group according to their personal bad habits.**

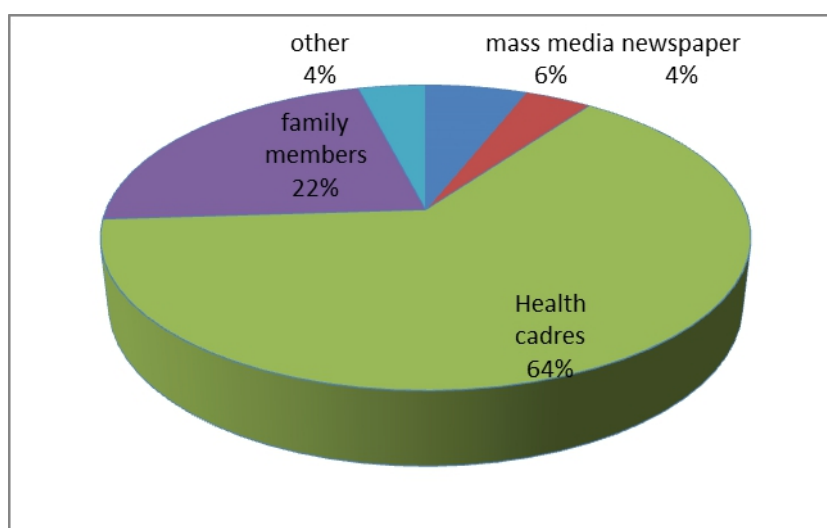
<b>Personal bad habits</b>	<b>Frequency</b>	<b>Percent</b>
Smoker	15	30%
Alcohol consumption	4	8%
Both	0	0
No	31	62%
Total	50	100%

The above table showed that (62%) of study group had no bad habits, (30%) were smokers and (8%) were alcohol consumption know one has both.

**Table {6}: Distribution of study group according to their Family history of peptic ulcer:**

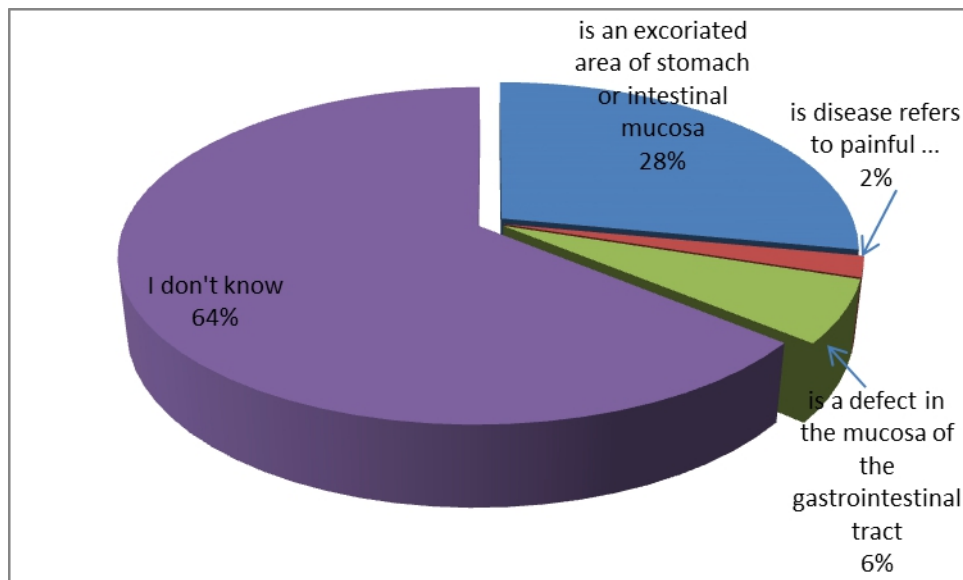
Family history	Frequency	Percent
Present	16	32%
Absent	34	68%
Total	50	100%

The above table clarified that (68%) of study group had absent family history and (32%) had present.



**Figure {1} Distribution of study group according to their source of knowledge information about peptic ulcer.**

Showed that (64%) from health cadres, (22%) were family members and (6%) for mass media and (4%) were newspaper and others.



**Figure {2}: Distribution of study group according to their knowledge about definition of PUD.**

This figure showed that (64%) I don't know, (28%) has is an excoriated area of stomach or intestinal mucosa,(6%)is a defect in the mucosa of the gastrointestinal tract and (2%) is disease refers to painful.

**Table {7}: Distribution of study group according to their knowledge about risk factor of peptic ulcer.**

Risk factor	Frequency	Percent
Smoking	6	12%
Coffee	8	16%
spicy food	19	38%
Alcohol	4	8%
Stress	1	2%
I don't know	12	24%
Total	50	100%

The above table clarified that (38%) of study group had spicy food, (24%) were had I don't know (16%) were had coffee,(12%) were had smoking, (8%) were had alcohol and (2%) were had stress.

**Table {8}: Distribution of study group according to their knowledge about causes of peptic ulcer:**

Causes of peptic ulcer	Frequency	Percent
H. pylori infection	11	22%
NSAID	9	24%
Oral corticosteroids	0	0
Gastric acid Secretions	10	20%
Oxidative stress	12	24%
I don't know	5	10%
Total	50	100%

The above table showed that (24 %) of study group had NSAID& (24%) were had oxidative stress, (22%) were had Pyloric infection,(20%) were had gastric acid secretions and (10%) were had I don't No and were had no oral corticosteroids.

**Table {9}: Distribution of study group according to their knowledge about type of peptic ulcer:**

Type of peptic ulcer	Frequency	Percent
gastric ulcer	31	62%
duodenal ulcer	19	38%
Esophageal ulcer	0	0
Total	50	100%

The above table clarified that (62%) of study group had gastric ulcer and (38%) were had duodenal ulcer.

**Table {10}: Distribution of study group according to their Common sings and symptom of peptic ulcer:**

Common sings and symptom	Frequency	Percent
Pain	26	58%
Vomiting	12	24%
Hematemesis	2	4%
Constipation	0	0
Melena	7	14%
Total	50	100%

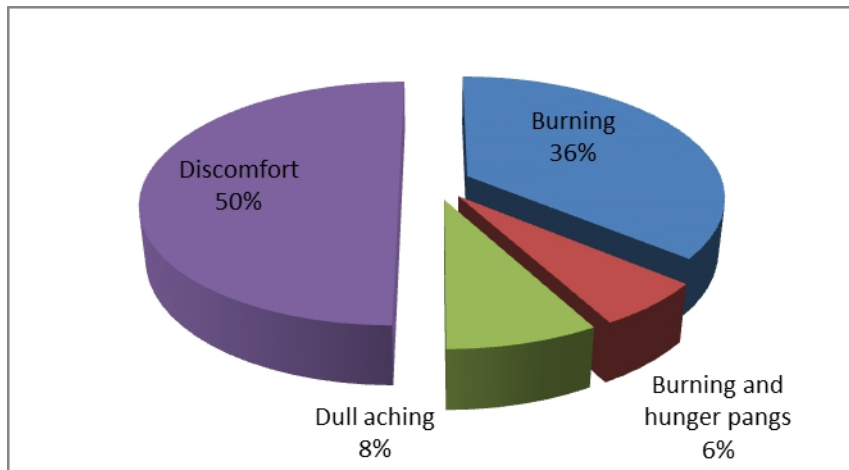
The above table showed that (58%) of study group had pain, (24%) were had vomiting, (14%) were had melena,(4%) were had hematemesis and no complain of constipation.

**Table {11}: Distribution of study group according to their Site of pain:**

Site of pain	Frequency	Percent
Epigastrium	41	82%
Right Hypo chondrium	4	8%
lift hypo chondrium	3	6%
Epigastrium and umbilicus	2	4%
Total	50	100%

The above table explained that (82%) of study group had Epigastric pain, (8%) were had right hypo chondrium,(6%)were had lift hypo chondrium and (4%) were had Epigastrium and umbilicus.





**Figure {3}: Distribution of study group according to their characters of pain.**

This figure explain (50%) discomfort, (36%) burning,(8%) dull aching and (6%) Burning and hunger pangs.

**Table {12}: Distribution of study group according to their aggravating factor:**

Aggravating factor	Frequency	Percent
Diet	30	60%
Hunger	20	40%
Activity	0	0
Total	50	100%

The above table showed that (60%) of study group had aggravate by diet and (40%) were had hunger.

**Table {13}: Distribution of study group according to their relieving factor:**

<b>Relieving factor</b>	<b>Frequency</b>	<b>Percent</b>
Diet	13	26%
Hunger	10	20%
Vomiting	15	30%
Antacid	12	24%
Total	50	100%

The above table showed that (30%) of study group had vomiting, (26%) were had diet, (24%) were had antacid and (20%) were had hunger.

**Table {14}: Distribution of study group according to their mode of diagnosis:**

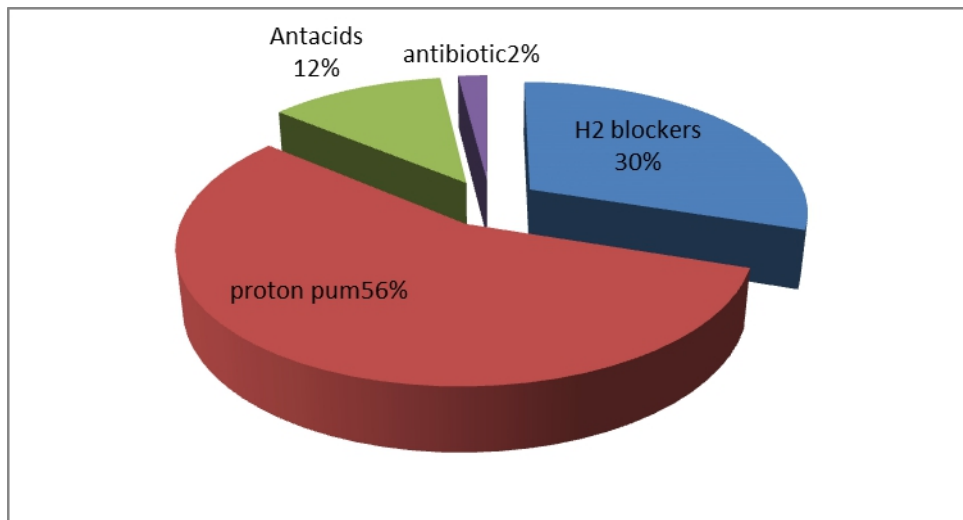
<b>Mode of diagnosis</b>	<b>Frequency</b>	<b>Percent</b>
G.I. endoscopy	7	14%
by the doctor	15	30%
abdomen u/s	12	24%
Investigations	16	32%
Total	50	100%

The above table showed that (32%) of study group had diagnose by investigations, (30%) were had by the doctor, (24%) were had Abdomen U\S and (14%) of G.I endoscopy.

**Table {15}: Distribution of study group according to their complication of peptic ulcer.**

Complication of peptic	Frequency	Percent
Perforation	16	32%
Hemorrhage	25	50%
Pyloric stenosis	9	18%
Total	50	100%

The above table explained that (50%) of study group had complicated hemorrhage, (32%) were had perforation and (18%) pyloric stenosis.



**Figure {4} Distribution of study group according to their knowledge about medical treatment.**

This figure clarifies (56%) proton pump, (30%) were had H2 blockers, (12%) were had Antacids and (2%) were had antibiotic.

**Table {16}: Distribution of study group according to their medical regimen:**

**A -taking your medication:**

<b>Taking your medication</b>	<b>Frequency</b>	<b>Percent</b>
Regular	20	40%
Irregular	24	48%
jest on pain or complain	6	12%
Total	50	100%

The above table explained that (48%) of study group had regular, (40%) were had irregular and (12%) were jest on pain or complain.

**Table {17}: Distribution of study group according to their medical regimen:**

**C-Use of non-steroid anti-inflammatory drugs:**

<b>Use of non-steroid anti-inflammatory drugs</b>	<b>Frequency</b>	<b>Percent</b>
Sometime	23	46%
Always	22	44%
Never	5	10%
Total	50	100%

The above table explained that (46%) of study group had some times, (44%) had always and (10%) were had never.

**Table {18}: Distribution of study group according to their medical regimen-comply with your triple therapy:**

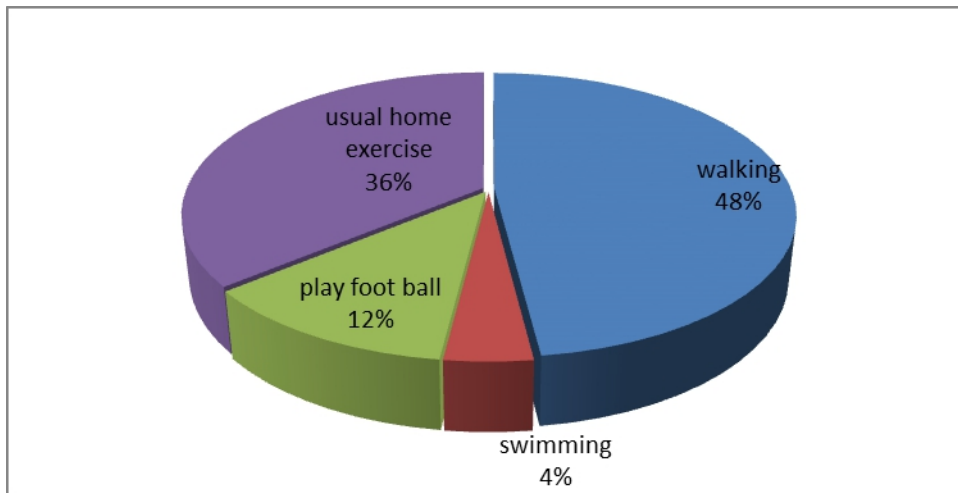
Comply with your triple therapy	Frequency	Percent
Doctor	32	64%
Friend	14	28%
Family member	4	8%
Total	50	100%

The above table explained that (64%) of study group had advice from doctor, (28%) were advice from friend and (8%) were had advice from family member.

**Table {19}: Distribution of study group according to their diet ( fruits, Spices, Eat diet containing fat, Coffee, Milk).**

Diet	Items or steps						Total	
	Sometime		Always		Never			
	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>	<i>F</i>	<i>P</i>
Fruits	19	38%	30	60%	1	2%	50	100%
Spices	21	42%	22	44%	7	14%	50	100%
Eat diet containing fat	8	16%	35	70%	7	14%	50	100%
Coffee	15	30%	27	54%	8	16%	50	100%
Milk	13	26%	30	60%	7	14%	50	100%

The above table explained that (60%) of study group had always eat fruits, (38%) were had sometimes and (2%) were had never, (44%) of study group had always eat spices, (42%) were had sometimes and (14%) had never. Also (70%) of study group had always eating diet content food, (16%) were had sometimes and (14%) were had never also (54%) of study group at always drink coffee, (30%) were had sometimes and (16%) never and (60%) had always drink milk, (26%) were had sometimes and (14%) had never.



**Figure {5} Distribution of study group according to their had physical activity: A- type of Exercise you do.**

This figure clarified (48%) were had walking, (36%) usual home exercise, (12%) were had football and (4%) were had swimming.

**Table {20}: Distribution of study group according to their physical activity: B- Exercise regimen:**

Physical activity ( Exercise regimen)	Frequency	Percent
Daily regular	7	14%
Sometimes	9	18%
Neglect	34	68%
Total	50	100%

The above table clarified that ( 68% ) of study group had neglect, (18%) were had some time and (14%) were had daily regular.

**Table {21}: Distribution of study group according to their bad habit s:**

**A-smoking: cigarettes do you smoke per day:**

<b>Smoking: cigarettes do you smoke per day</b>	<b>Frequency</b>	<b>Percent</b>
One cigarette	7	14%
Two cigarette	3	6%
More than three cigarette	5	10%
Stop	35	70%
Total	50	100%

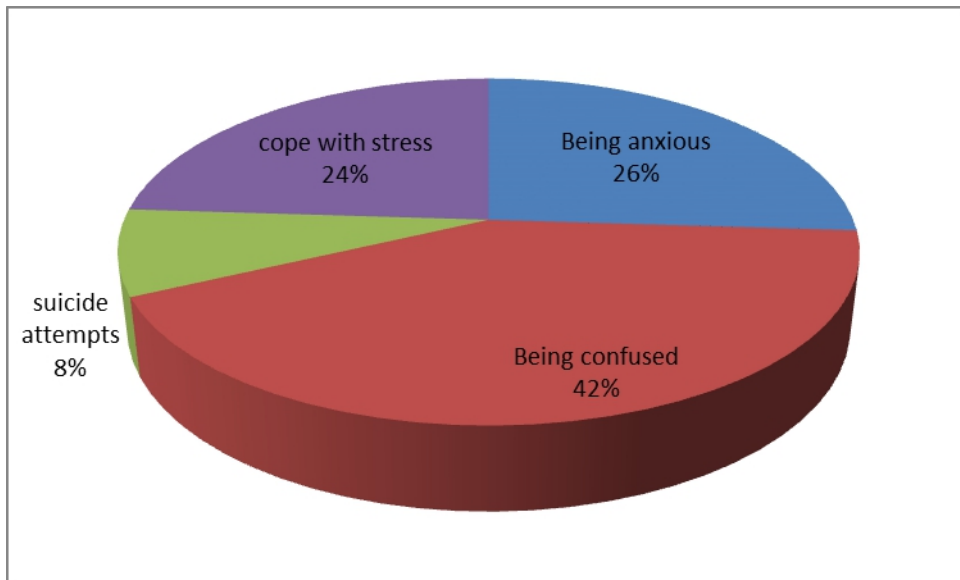
The above table explained that (70%) of study group had stop, (14%) were one cigarette, (10%) more than three cigarette and (6%) were two cigarette.

**Table {22}: Distribution of study group according to their bad habit s :B-**

**alcohol: patient consume alcohol per day:**

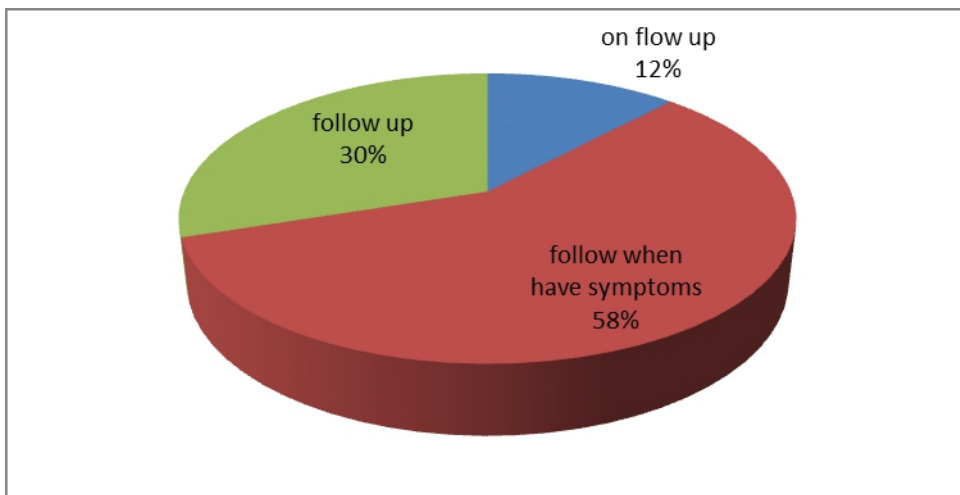
<b>Alcohol: patient consume alcohol per day</b>	<b>Frequency</b>	<b>Percent</b>
More than once per day	1	2%
Once per daily	6	12%
A few time per week	2	4%
Stop	41	82%
Total	50	100%

The above table explained that (82%) of study group had stop, (12%) were had once per daily, (4%) a few time per week and (2%) were had more than once per day.



**Figure {6} Distribution of study group according to their in stress and crisis.**

This figure explained (42%) Being confused, (26%) Being anxious, (24%) cope with stress and (8%) suicide attempts.



**Figure {7}: Distribution of study group according to their in follow up.**

This figure showed (58%) follow when have symptoms, (30%) has follow up and (12%) has no follow up.



**Table {23}: Cross tabulation between age and type of peptic ulcer:**

Age		Type of peptic ulcer			Total	Asymp. Sig. (2-sided)
		Gastric ulcer	Duodenal ulcer	Esoplygeal		
20-30 years	Count	8	2	0	10	.018
	% of Total	16.0%	4.0%	0.0%	20.0%	
31-40	Count	6	5	1	12	.150
	% of Total	12.0%	10.0%	2.0%	24.0%	
More than 40 years	Count	17	11	0	28	.049
	% of Total	34.0%	22.0%	0.0%	56.0%	
Total	Count	31	18	1	50	
	% of Total	62.0%	36.0%	2.0%	100.0%	

Table (23) showed correlation between age and type of peptic ulcer there is significant relation ship P-value (.018).

**Table {24}: Cross tabulation between sex and type of peptic ulcer:**

Sex		Type of peptic ulcer			Total	Asymp. Sig. (2-sided)
		Gastric ulcer	duodenal ulcer	Esoplygeal		
Male	Count	9	10	1	20	.088
	% of Total	18.0%	20.0%	2.0%	40.0%	
Female	Count	22	8	0	30	.074
	% of Total	44.0%	16.0%	0.0%	60.0%	
Total	Count	31	18	1	50	.031
	% of Total	62.0%	36.0%	2.0%	100.0%	

Table (24) showed correlation between sex and type of peptic ulcer there is not significant relation ship P-value (.088).

**Table {25}: Cross tabulation between level of education and peptic ulcer:**

Level of education		Peptic ulcer				Total	Asymp. Sig. (2-sided)
		is an excoriated area of stomach or intestinal mucose	is disease refers to painful ...	is a defect in the mucosa of the gastrointestinal tract	I dont know		
Illiterate	Count	1	0	0	11	12	.013
	% of Total	2.0%	0.0%	0.0%	22.0%	24.0%	
Khalwa	Count	3	0	1	3	7	.140
	% of Total	6.0%	0.0%	2.0%	6.0%	14.0%	
Primary	Count	3	1	0	10	14	.047
	% of Total	6.0%	2.0%	0.0%	20.0%	28.0%	

Table (25): showed correlation between level of education and type of peptic ulcer there is significant relationship P-value (.013).

**Table {26}: Cross tabulation between level Education and risk factor of peptic ulcer:**

Level of education		Risk factor of peptic ulcer					Total	Asymp. Sig. (2-sided)	
		Smoking	Coffee	Spicy food	Alcohol	Stress			I don't know
Illiterate	Count	2	2	4	0	0	4	12	.584
	% of Total	4.0%	4.0%	8.0%	0.0%	0.0%	8.0%	24.0%	
Khalwa	Count	0	0	3	2	0	2	7	.440
	% of Total	0.0%	0.0%	6.0%	4.0%	0.0%	4.0%	14.0%	
Primary	Count	0	4	5	1	0	4	14	.180
	% of Total	0.0%	8.0%	10.0%	2.0%	0.0%	8.0%	28.0%	

Table (26): showed correlation between level of education and risk factor of peptic ulcer there is not significant relationship P-value (.584).

## 5.1 Discussion

Ulcer is a sore which means it is an open. Pain full wound. Peptic ulcer are ulcer that form in the stomach or the upper part of the small intestine called the duodenum. an ulcer in the stomach called a gastric ulcer, an ulcer in the duodenum is called a duodenal ulcer <sup>(1)</sup>.

This study revealed that near two third of patients (60%) were female, more than half of them (56%) their ages were more than 40 years that agree with literature review ( Investigation of suspected peptic ulcer disease Patients under 55 years of age with typical symptoms of peptic ulcer disease who are H. pylori positive can start eradication therapy without investigation) <sup>(14)</sup>, less than to third of (28%) had primary level of education and near two third of them (62%) were unemployed. Also study result showed near two third of them (64%) were married, more than half of them (58%) had moderate socioeconomic status and near two third of them (62%) had no personal bad habits in the life, this is( disagree with literature review Excessive drinking of alcohol-Smoking or chewing tobacco. <sup>(14)</sup> and more than two third (68%) had past history of peptic ulcer in the family.

The study reflected that near two third (64%) acquired knowledge or information about peptic ulcer from health cadars, also study showed that near two third (64%) of participants poor about define peptic ulcer say I don't no, risk factors the study presented more than third (38%) of study group had spicy food this agree with literature review (avoid spicy or excessively rich foods if they make your symptoms worse <sup>(18)</sup> and near to quadrant (24%) of study group in the study explained causes of peptic ulcer is the NSAID and Oxidative stress this agree with literature review-(Use of painkillers called no steroidal anti-inflammatory drugs (NSAIDs), such as aspirin <sup>(14)</sup>. As the stressful condition continues, the ulcers spread. When the patient recovers, the lesions are Reversed. This pattern is typical of stress ulceration <sup>(1)</sup>.

The study reflected that near two third (62%) of study group complain of gastric ulcer and more than half (54%) pain and majority (82%) site of pain

epigastric was major symptom's to seek medical treatment this agree with literature review in ( the characteristic feature of .peptic ulcer is burning epigastric pain <sup>(1)</sup>. And pain characterized by discomfort table half (50%) of study group that near two third (60%) of study group Aggravating factor by diet (GU) and near to third(30%) pain relieving by vomiting of gastric content.

Also study appear near to third (32%) their are mode of diagnosis is investigations and half of patient's (50%) were aware that complicated peptic ulcer is hemorrhage and treatment more than half (56%) were prescribed proton pump inhibitors this agree with litterers review (Acid pump inhibitors: These drugs are also known as proton pump inhibitors (PPIs)is group include omeprazole (Prilosec), pantoprazole (Prevacid), rabeprazole (Aciphex), and pantoprazole (Protoni). Acid pump inhibitors are even stronger than H2 blockers they work by stopping the "pump" that secretes acid into the stomach <sup>(17)</sup>.

The study reflected their quality of life in medication regimen near to half (48%) of group study had irregular taking medication and half (50%) using type one of medications this not agree with litterers review (Triple therapy: The combination of bismuth subsalicylate (for example, Pepto-Bismol) and the antibiotics tetracycline and metronidazole are effective in 80% -95% of people and is the current standard of therapy<sup>(17)</sup> near two third(64%) the comply triple therapy by advice from the doctor this good attitude of study group and near to half (46%) using non steroid some time bad attitude about group study.

The study reflected their quality of life in diet study group that near r two third (60%) taking fruits always, near to half (44%) of group study had computation of spicy food always, and more than two third (70%) were had taking diet containing fat always, and more than half (54%) were had drinking coffee always and near r two third (60%) drinking milk always. physical activity type of Exercise you do near to half (48%) were had walking, also clarified that more than two third (68%) of study group had neglect physical activity this had about study group. The result explained about quality of life bad habits smoking that (70%) of study group had stop smoking this good behavior and patient

consume alcohol the study confirm majority (82%) of group study stop alcoholism.

The study explained near to half (42%) of group study were had being confused in the crisis situation and study showed more than half (58%) follow when symptom that not good about study group peptic ulcer chronic disease and need regular follow up.

There is significant relationship between age and type of peptic ulcer (p value = 0.018) (peptic ulcer affect to aging people according literature review <sup>(14)</sup>) Also there no significant relationship between sex and type of peptic ulcer (p value = 0.088) and (this disagree in female more than male according to study affect in female 60%) and is significant relationship between level Education and knowledge of group study about peptic ulcer (p value 0.013) (this agree with study group because most not known definition of peptic ulcer).

There was no significant relationship between level of education and knowledge of group study about risk factor of peptic ulcer(0.584)this disagree study group most not known.

## 5.2 Conclusion

The study concludes that:

More than half of study group not on regular follow up and follow only when they complain of symptoms. And near to half had not regular to taking medication also near to half had taking NSAID this cusecs for disease.

Near to half eating spicy food, majority always were taking diet contain fat, more than half always were drinking coffee, more than two third neglect exercise and near two third not known information about definition peptic ulcer.

### **5.3 Recommendations**

Based on the study finding and conclusion, the following recommendation are require to be implemented by hospital head director:

- There is a need for educational program to increase knowledge about peptic ulcers diseases.
- Encourage patient for follow up and taking medication regularly.
- Regular screening for early detection of the disease and complications.
- Improve access for peptic medication to decrease disease burden.

## References

- 1-Praveen Kumar, Michael Clark, Kumar and Clark, seven edition, Elsevier science health science division.. 2009.
- 2-NCBI<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4017537/>on 12/10/2016at1:57pm-
- 3- IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 14, Issue 7 Ver. VIII (. 2016), PP 40-46 [www.iosrjournals.org](http://www.iosrjournals.org)-
- 4-Centers for Disease Control and Prevention. Health-related quality of life? 2007. [www.cdc.gov/nccdphp/hrqol](http://www.cdc.gov/nccdphp/hrqol)[Accessed 3 Jan, 2011
- 5-Majumdar D, Bebb J, Atherton J. Helicobacter pylori infection and peptic ulcers. *Medicine*. 2007;35:204–2 15.
- 6- Health profile Bangladesh, World health rankings. World life expectancy 2010. Available online at<http://www.worldlifeexpectancy.com/country-health-profile/bangladesh>(Accessed on October 28, 2013
- 7- <http://www.biomedcentral.com/1471-230X/14/149>Wen et al 201 on 15/10/2016 at 4:54pm
- 8-Swati kansara\*, Bhumika. D. Sakhreliya, PEPTIC ULCER - Its Pathogenesis and Recent Approaches for the Treatment *journal of pharmaceutical science and bio scientific research* Volume 3, Issue 4: Aug Sept 2016 (136-139) . [http://www.medicinenet.com/image-](http://www.medicinenet.com/image-collection/peptic_ulcer_picture/picture.htm)
- 9--[collection/peptic\\_ulcer\\_picture/picture.htm](http://www.medicinenet.com/image-collection/peptic_ulcer_picture/picture.htm)on11/10/2016at 10:7AM)..
- 10--Hilarie Surrena ,Renee Gagliardi /Handbook for brunner&Suddarth's of medical surgical nursing/ 20th/Wolters,Lippincott Williams&wilkins/2016/(513-518
- 11- Rakesh Pahwa1\*, Neeta1, Vipin Kumar, Kanchan Kohli, Clinical Manifestations, Causes and Management Strategies *International Journal of Pharmaceutical Sciences and Drug Research* 2010; 2(2): 100-101, ISSN 0975-248X



12- linda A, paula D understanding medical surgical nursing,third edition ,2007,(497-500).

13-Rakesh Pahwa<sup>1\*</sup>, Neeta<sup>1</sup>, Vipin Kumar, Kanchan Kohli, Clinical Manifestations, Causes and Management Strategies International Journal of Pharmaceutical Sciences and Drug Research 2010; 2(2): 100-101, ISSN 0975-248X.

14- [www.webmd.com/digestive-disorder/digestive-disease-peptic-ulcer-disease](http://www.webmd.com/digestive-disorder/digestive-disease-peptic-ulcer-disease), assess on 10/11/2016 at 9:00PM

15- surgery Barkun A, Leontiadis G. Systematic review of the symptom burden, quality of life impairment and costs associated with peptic ulcer disease. Am J Med 2010; 123: 358-66. Non-Steroidal Anti-Inflammatory Drugs

16-By Michael C. DiMarino, MD, Peptic Ulcer Disease , Professional Version ,2016, page(3-4 )

<http://www.merckmanuals.com/professional/gastrointestinal-disorders/gastritis-and-peptic-ulcer-disease/peptic-ulcer-disease> on 17/10/2016, at 3:10pm

17 - [www.emedicinehealth.com/peptic-ulcer/peptic-ulcer-medication](http://www.emedicinehealth.com/peptic-ulcer/peptic-ulcer-medication), assess on 20/10/2016 at 9:00PM.

18- [nurseslabs.com/peptic-ulcer-nursing/management](http://nurseslabs.com/peptic-ulcer-nursing/management)

19-Zboralski K, Florkowski A, Talarowska-Bogusz M, Macander M. Quality of life and emotional functioning in selected psychosomatic disease. Postepy Hig Med Dosw (Online). 2008; 62:36 – 41. [PubMed]

20-<http://www.karger.com/Article/Abstract/16881> on 12/10/2016, at 2:19pm.

**Questionnaire about assessment of knowledge and quality of life in  
among peptic ulcer patient's in Almak Nimer university Hosptial**

**Part one(Socio demographic data)**

**1. Age:**

- a. 20-30 years ( ) b.31-40 years ( ) c. more than 40 years ( )

**2. Sex:**

- a. Male ( ) b. Female ( )

**3. Occupation:**

- a. Employee ( ) b. Un Employee ( )

**4. Level of education:**

- a. Illiterate ( ) b- kalawa ( ) c .Primary ( ) d. Secondary ( )  
e. graduate ( ) f. post graduate ( )

**5. Marital status:**

- a. Married ( ) b. Un married ( ) c. Divorce ( )

**6. Family income:**

- a. High ( ) b. Moderate ( ) c. Low ( )

**7. Personal bad habits:**

- a. Smoker ( ) b. Alcohol consumption( ) c. Both ( ) d-no ( )

**8. Family history of peptic ulcer disease:**

- a. Present ( ) b. Absent ( )

**Part two ( Knowledge about peptic ulcer):**

**9. Knowledge of Information on peptic ulcer:**

- a-mass media ( ) b- newspaper ( ) c- Health cadars ( )  
d- Family members ( ) e-others ( )

**10. Peptic ulcer:**

- a. is an excoriated area of stomach or intestinal mucosa. ( )
- b. is disease refers to painful sores or ulcers in the lining of the stomach and duodenum. ( )
- c. is a defect in the mucosa of the gastrointestinal tract. ( )
- d. d. I don't know ( )

**11-Risk factors of peptic ulcer:**

- a. smoking ( ) b. coffee ( ) c. spicy food ( ) d. Alcohol ( )
- e-stress ( ) f. I don't know ( )

**12-Causes of peptic ulcer:**

- a. H. pylori infection ( ) b. NSAID ( ) c. oral corticosteroids ( )
- d. Gastric acid Secretions ( ) e. Oxidative stress ( ) f. I don't know ( )

**13. Type of peptic ulcer:**

- a-gastric ulcer ( ) b-duodenal ulcer ( ) c. Esophgeal ulcer ( )

**14.Common signs and symptom:**

- a. pain ( ) b. vomiting ( ) c. hematmesis ( ) d. constipation ( )
- e. melana ( )

**15-Site of pain:**

- a. Epigastrium ( ) b. Right Hypo chondrium ( )
- c. lift hypo chondrium ( ) d. Epigastrium and umbilicus ( )

**16-Character of pain:**

- a. Burning ( ) b. Burning and hunger pangs ( ) c. Dull aching ( )
- d. Discomfort ( )

**17-Aggravating factor:**

- a. Diet ( ) b. hunger ( ) c. activity ( )

**18-Relieving factor:**

- a. diet ( ) b. Hunger ( ) c. Vomiting ( ) d. Antiacid ( )

**19-Mode of diagnosis**

- a. G.I. Endoscopy ( )    b. by the doctor ( )    c. abdomen U/S ( )  
d. investigations ( )

**20-Complications of peptic ulcer:**

- a. Perforation ( )    b. Hemorrhage ( )    c. Pyloric Stenosis ( )

**21-Medical treatment:**

- a. H2 blockers ( )    b. Proton pump inhibitors ( )    c. Antacids ( )  
d-antibiotic ( )

**Part three: quality of life:**

**(22) Medication regimen:**

**A. Taking your medication?**

- a-regular ( )    b-irregular ( )    c- just on pain or complain ( )

**B-Types of medicine are you taking for peptic ulcer:**

- a. one type ( )    b. two types ( )    c. three types ( )    d. Four types ( )

**C-Use of non-steroidal anti-inflammatory drugs**

- a. Sometime ( )    b. always ( )    c. never ( )

**D-comply with your triple therapy):**

- a. Advice from my doctor ( )    b. Advice from friends ( )  
c. Advice from family member ( )

**(23) Diet:**

**A-Fruits:**

- a. Sometime ( )    b. always ( )    c. never ( )

**B-Spices:**

- a. Sometime ( )    b. always ( )    c. never ( )

**C-Eat diet containing fat:**

1. Always ( )    2. Sometimes ( )    3. never ( )

**D-Coffee:**

- a. Sometime ( )    b. always ( )    c. never ( )

**E- Milk**

- a. Sometime ( )    b. always ( )    c. never ( )

**24) Physical activity:**

**A-Type of exercise you do:**

- a. Walking ( )    b. Swimming ( )    c. play foot ball ( )  
d. usual home exercise ( )

**B-Exercise regimen:**

- a. daily regular ( )    b. sometimes ( )    c. neglect ( )

**25) Bad habits:**

**(A) Smoking: cigarettes do you smoke per day:**

- a. one cigarette ( )    b. two cigarette ( )    c. More than three cigarette ( )  
d. stop ( )

**(B) Alcohol: patient consume alcohol per day :**

- a. More than once per day ( )    b. Once per daily ( )  
c. A few times per week ( )    d. stop ( )

**(26) In stress and crisis you:**

- a. Being anxious ( ).    b. Being confused ( ).  
c. suicide attempts ( ).    d. cope with stress ( ).

**(27) Follow up:**

- a. no flow up ( )    b. follow when have symptoms ( )    c. follow up ( )