

**HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE,
BEREKUM**

A PATIENT / FAMILY CARE STUDY ON PEPTIC ULCER DISEASE

BY

NAKU JOAN

4120190106

**A PATIENT / FAMILY CARE STUDY SUBMITTED TO NURSING AND MIDWIFERY
COUNCIL OF GHANAIN PARTIAL FULFILMENTTOWARDS THE AWARD OF
LINCENCE TO PRACTICE AS A PROFESSIONAL REGISTERED GENERAL NURSE.**

AUGUST, 2022

PREFACE

Nursing is a professional that is directed towards the promotion and maintenance of health as well as treatment and prevention of diseases and the restoration of optimal functioning of the individual, family, and communities. To be able to meet the various needs of patients and family, and thus give quality care to them, nursing care has moved from a task-oriented approach to giving total or individualized care involving both patient and family.

Patient and family care study forms part of the practical syllabus of the nursing and midwifery council. It is done as a requisite and a compulsory study that every final year student diploma nurse executes and presents to the nursing and midwifery council of Ghana for an award in diploma nursing.

The patient and family care study form part of the academic program for Diploma Nursing students which requires the student to carry out total nursing care to the patient and his family from the time of admission to time of discharge including home care. It takes into account the physical, psychological, social, and spiritual needs of the patient and family.

The study helps the patient /family to comprehend and gain insight into the condition and improve upon their health status through the practice and health education received throughout their interaction with the student nurse.

The study also equips the student nurse with practical skills on the condition and allows him to practice the knowledge and skills acquired during his training to give comprehensive care using the nursing process approach.

Finally, the care study serves as an evaluation tool by the Nursing and Midwifery Council of Ghana for assessing and awarding the student nurse with the registered general nursing certificate to practice at the end of her training.

The study will use initials instead of the patient's name to ensure confidentiality.

ACKNOWLEDGEMENT

My earnest gratitude goes to the Almighty God for his fortification, might, and intelligence was given to me throughout the study and to the patient, Miss. L.R, and family. I wish to say thank you for your cooperation and understanding of the period of our interaction.

I would also like to express my appreciation to all the tutorial staff of Holy Family Nursing and Midwifery Training College Berekum for the immense contribution towards the success of this studies especially Ms. Antoinette Effum for supervising and editing the study.

My next thanks go to the entire medical staff of Holy Family Hospital, Techiman, especially the Emergency Unit for their assistance and guidance. And also, my heartfelt gratitude goes to my father Mr. Naku Paul, my mother Ms. Esther Ansah, my brother, Banabas Naku and all my family and friends who have contributed so much towards my education.

Finally, my utmost appreciation goes to the numerous authors and publishers of the various books from which relevant information was collected to write this patient and family care study.

God bless you all.

INTRODUCTION

Patient/Family care study is an academic exercise carried out by final year student nurses using the nursing process which is a deliberate activity where nursing care is rendered systemically. With this, the emphasis is placed on health promotion, maintenance, and restoration or enhancing a peaceful death.

For the sake of this care study, the patient will be known as Ms. L.R to maintain confidentiality. My interaction with Ms. L.S and her family started on 12th November, 2021. She was admitted with peptic Ulcer Disease to the Emergency Unit at Holy Family Hospital, Techiman. She presented with epigastric pain, vomiting.

A cordial and therapeutic relationship was established with the patient and family. With effective medical care, the patient was relieved of signs and symptoms manifested, she became well and was discharged home on the 15nd November, 2021.

Three consecutive home visits were also made to the patient's home to assess the home environment upon which health education was given. It aimed at determining whether the environmental factors and others contributed to her disease condition and allows educating patients and family on personal and environmental hygiene. The patient and family were also assessed to determine whether there is an improvement in her condition and whether she is conforming to the treatment regimen.

This care study was organized into six chapters; Chapter one involves the assessment of the patient and family. Chapter two is the analysis of data and comparison with standards. Chapter three deals with the planning of patient and family care while using the nursing care plan. Chapter four is the implementation of patient and family care strategies, which consist of a summary of actual nursing care rendered to the patient and family. Chapter five gives an account of the evaluation of care rendered to patients and families. Chapter six which talks about the summary and conclusion then ends this care study report by reviewing thematic issues that arose in the care study from admission to last home visit after discharge.

TABLE OF CONTENTS

PREFACE	v
TABLE OF CONTENTS	v
LIST OF TABLES	vi
LIST OF FIGURES.....	vi
CHAPTER ONE	1
ASSESSMENT OF THE PATIENT AND FAMILY	1
1.0 Introduction	1
1.1 Patient's particulars	1
1.2 Patient/family medical history	2
1.3 Socio-Economic History	2
1.4 Patient Developmental History	3
1.5 Patient Obstetric History	5
1.6 Patient Lifestyle / Hobbies	5
1.7 Past Medical History	6
1.8 Patient Present History	6
1.9 Admission of the Patient	7
1.10 Patient's Parents Concept of Condition.	9
1.11 Literature Review	10
1.12 Validation of Data	25
CHAPTER TWO.....	26
ANALYSIS OF DATA.....	26
2.0 Introduction	26
2.1 Comparison of data with standard.....	26
2.2 Causes of patient's condition	29
2.3 Patient's Health Problem.....	41
2.4 Patient/Family Strengths	41
2.5 Nursing Diagnosis	42
CHAPTER THREE.....	43
PLANNING FOR PATIENT AND FAMILY CARE	43
3.0 Introduction	43
3.1 Objective / Outcome Criteria	44

CHAPTER FOUR.....	60
IMPLEMENTATION OF PATIENT/ FAMILY CARE	60
4.0 Introduction	60
CHAPTER FIVE.....	75
EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY.....	75
5.0 Introduction	75
5.1 Statement Of Evaluation.	75
5.3 Termination Of Care.	77
CHAPTER SIX	79
SUMMARY AND CONCLUSION.....	79
6.0 Summary	79
BIBLIOPGRAPHY.....	81
APPENDIX.....	81
SIGNITORIES	83

LIST OF TABLES

Table 1: Comparison of Diagnostic tests carried out on the patient with those outlined in the literature review	27
Table 2: Diagnostic Investigations/Test Compared with Standards	28
Table 3: Clinical Manifestations of Patient’s Condition Compared with Literature Review	30
Table 4: Comparison of Medical Treatment Prescribed for patient with those outlined in the Literature Review.....	32
Table 5: Pharmacology of Drugs Prescribed for Miss L.R.	34

LIST OF FIGURES

Figure 1: A Diagram Of The Anatomy of the Stomach

CHAPTER ONE

ASSESSMENT OF THE PATIENT AND FAMILY

1.0 Introduction

According to (Toney-Butler & Unison-Pace, 2018), assessment is the first phase of activities in the nursing process. It is the systematic gathering of necessary data about the patient potential health problems and needs through interviewing, physical examination and observation. Data collected is analyzed and this gives information about the client, her family, their community characteristics and identification of their health problems. This helps to plan appropriate care for the patient and family.

Assessing the patient family assists the nurse to identify the physical, emotional and intellectual needs of the patient family to be able to give quality nursing care to the patient family. Assessment includes the patient's particulars, patient/family medical history, patient's past medical/surgical history, patient's lifestyle and hobbies, patient's developmental history, and patient's admission.

This chapter also involves the patients' concept of her illness, literature review and validation of the data collected.

Data for this study was gathered from the patient, relatives and the health team through interviews, physical examinations, and observations.

1.1 Patient's particulars

It is the details or information especially the one that is written down usually of an individual's personal details. This includes the patient's date of birth, age, sex, address, marital status, occupation, religion, and others. (Elaine 2011). It is the details or information about patients' which are written down and kept as a record. This includes the patient's date of birth, age, sex, where she currently lives, address, marital status, occupation, religion, and others.

Miss. L.R. was admitted to the emergency unit of the Holy Family Hospital, Techiman on the 12th of November, 2021. She is a 33- year old Ghanaian born on the 13th of September, 1988 at Bawku in the Upper East region. She hails from Bawku in the Upper East region. She currently lives at Hansua, a suburb of Techiman. She speaks Moli and Twi. She is a Muslim by religion.

On admission she weighed 62 kilograms (kg) with 1.7meters in height. She is fair in complexion. She is not physically impaired. She is a JHS drop out, married with four kids. Her next of kin is her younger sister.

1.2 Patient/family medical history

This is information gained about a particular family by a nurse or physician by asking specific questions, either of the patient or a relative who can give suitable information with the aim of obtaining information useful in formulating a diagnosis and providing medical care to the patient (Klemperer, 2007).

According to the patient, there is a history of hypertension and diabetes in the family which her mother was affected, but there are no known communicable diseases like Tuberculosis, leprosy, and others.

Also, there is no known history of mental health disorders in her family. She added that the first line of treatment for the family is over-the-counter medications which they usually purchase from licensed chemical stores when they experience minor illnesses such as headache, abdominal pains and catarrh.

Patient and family were educated to visit the nearest hospital when they experience minor illness and desist from always buying over the counter drugs.

1.3 Socio-Economic History

Socio economic history talks about the social standing or class of the patient. It is often measured as a combination of education, income and occupation of the patient. Examinations of socioeconomic status

often reveal inequities in access to resources, plus issues related to privilege, power and control. (Weller, 2010).

Patient's highest level of education is JHS. She is a trader. She trades by selling cosmetics at Techiman market. She gets her financial support from her husband.

She is insured under the National Health Insurance Scheme (NHIS) that contributes to a source of support during medical care. The relationship among members of the extended family is cordial. This was evidenced by the frequent visit, care and concern they showed her during her admission period till discharge. According to her, she lives in a socially rich society where attending social activity is of utmost importance. She attends all social gathering including marriage ceremonies, out-dooring, and funerals. The family has no known taboos.

1.4 Patient Developmental History

Growth is the progressive development of living thing, especially the process by which the body reaches its points of complete physical development. It is characterized by an increase in size of cells.(Collins English Dictionary, 2012).

Development is also the progressive increase in skills and capacity of function. It explains the qualitative change in an individual when there is an increase in skills. (James W. Kalat, 2008).

Developmental Mile stone is a specific skill, task or learned behavior that can be used to assess development at a particular age of an individual. (Dennis C., et al, 2013)

Maturation is the orderly sequence of changes in the physical and behavioral pattern of an individual. (Barbara F. Weller, 2014)

According to the patient, she was delivered spontaneously per vagina at term without any complication in Bawku Municipal Hospital. She went through the normal developmental milestone as indicated here;

she could control her neck at five months, sat down at the sixth month without support and eruption of teeth was at the seventh month. She said she received immunization against all the vaccine preventable disease approved by the Ministry of Health such as Tetanus, Tuberculosis, Pertussis, poliomyelitis, Diphtheria and measles as evidenced by a scar on her left shoulder. She was exclusively breastfed for the first six months of life after which she was introduced to porridge and other meals like TZ.

According to the patient, she started schooling at the age of six years under the care of her parents, Mr. A. R. and Madam A. F. at Bawku Zonou primary JSS where she dropped out at JSS two. She said she had an ambition of becoming an army officer but her dream was shuttered down because she got pregnant along the way.

According to Erikson's theory of psychosocial development (1959), there are eight distinct stages with each possible result being either success or failure.

Patient is currently thirty-three years old and according to Erik Erikson's theory of psychosocial development theory, she falls within the seventh stage, which is **Generativity versus stagnation**. The development in this stage is around generativity and stagnation or self-absorption. When a person feel a sense of care and responsibility, it's called generativity. They look out for those around and also feel the need to pass along what they have learnt to the younger generation. But if they don't act as a mentor in a capacity, they may feel bitter and unhappy. This leads to restlessness and isolation from friends, family and society.

Upon further discussions and observations, Iam sincerely convinced that patient has developed a sense of generativity of Erikson's psychosocial development because she wants to raise or work towards the betterment of the society.

1.5 Patient Obstetric History

According to (Toney-Butler & Unison-Pace, 2018), patient obstetric history is the collection of information about patient's past pregnancy, childbirth and postpartum period.

According to madam L.R, she is Gravida 4 Para 4^{4A}, of which none was aborted. She delivered three children at Holy Family Hospital by spontaneous vaginal delivery (S.V.D) but had caesarean section during her last child delivery at Holy Family Hospital when she had complications.

She had no preterm labor, still birth or neonatal death. Her menstrual period had been regular. She experienced her menarche when she was sixteen years of age.

1.6 Patient Lifestyle / Hobbies

According to (Cambridge Dictionary, 2016), patient's hobbies talk about what the patient likes doing most times. The patient's lifestyle deals with his day to day activities.

Miss. L.R. said she usually wakes up at 5:00am. She brushes her teeth with tooth paste or at times chewing stick and takes her bath immediately and performs Fajir (their religious morning worship). Her daughter helps her to clean the house. She takes her breakfast at 8:00am and sets off to trade in the market. During Sundays after her routine morning activities, she goes to visit family and friends or attends social activities.

According to patient, she sometimes eats once a day due to her busy schedule at the market. She empties her bowel once or twice daily when she feels the urge. She said after a hard day's work from the market, she usually plays "ludu" (local game) with her friends. She usually takes her bath and brushes her teeth before going to bed in the evening. In bathing, she uses medicated soap and uses Pepsodent with brush in brushing her teeth. Both are normally done twice daily.

Her favorite food is T.Z and Okro soup. She does not take hard drugs. Through the interaction, I noticed that she had the ability to verbalize her emotions appropriately that was evidenced by her nonverbal communication cues, for example; her gestures, facial expressions and eye movements. As a member in the community, she attends social gathering including wedding, out-dooring, parties and funerals.

1.7 Past Medical History

This refers to the total sum of a patient's health status prior to the presenting problem (Swartz, 2008).

According to Miss. L.R., she has no allergies to drugs and has not been involved in any accident or injury. She says she has been admitted to the Holy Family Hospital and other private hospital for a number of times with malaria, abdominal pain and others.

Patient has had surgery before (caesarian section) during her last child delivery at Holy Family Hospital when she had complications.

Patient said she normally visits the hospital for medical check-ups even when she is not sick especially to monitor her Blood pressure.

1.8 Patient Present History

This deals with the patient's current condition, its occurrence, signs, and symptoms, treatment, and complication.(Jarvis, 2012).

Upon various interactions with patient, she was well until 11thNovember, 2021, around 7:30 pm when she became weak and felt severe abdominal pain, dizziness, nausea and vomiting. Her daughter called her aunty to come to their aid. She was made to take Acetaminophen to alleviate the pain. They took care of her until the next morning since it was in the evening. On the next morning, 12thNovember, 2021, she was rushed to the emergency department by her sister and daughter around 7:15am.

At the Emergency department, the physician on duty attended to her and observed that she had severe abdominal pain, nausea, dizziness, headache and vomiting with vital signs checked and recorded as ; Temperature: 36.8⁰C, Pulse: 92 beat per minute, respiration: 24 cycle per minute, blood pressure: 120/70 millimeters of mercury, Body weight: 62 kilograms and Height: 166meters.

The following investigations were carried out on admission.

Full Blood Count

Blood sample for Malaria Parasites (MPs)

Urine for routine examination

Stool test for H. Pylori

She was diagnosed with peptic ulcer based on the signs and symptoms she presented and the results of the lab investigations. She was detained at the accident and emergency unit and treatment was initiated immediately.

1.9 Admission of the Patient

Admission of a patient into the hospital ward is a change of environment with its attendant problems (Toney-Butler & Unison-Pace, 2018).

On the 12th November, 2021 at 7:15am, Miss. L.R. with her relatives arrived at the Holy Family Hospital, Techiman. She was brought into the Accident and Emergency unit in a wheel chair by the relatives and the driver. She complained of abdominal pains, headache, dizziness, malaise and severe vomiting. Patient was reassured that she was in the hands of skilled and competent staff and hence everything possible will be done to facilitate speedy recovery. Information about the patient such as Name, address, hometown, age, inpatient number, date of admission as well as condition were recorded

in the admission and discharge book, daily ward state and in the nurse's notes. Her vital signs checked and documented on admission as;

Temperature - 36.8 degree Celsius

Pulse- 92 beats per minute

Respiration - 24 cycles per minute

Blood pressure-.120/70 millimeters of mercury

SPO2 -95%

Weight -62 kg

She was put on the following medications;

Intravenous Buscopan 40mg stat

Intravenous Omeprazole 80mg stat then 40mg bd× 24hrs

Intravenous Metronidazole 500mg tds× 24hrs

Infusion ringers lactate 1000 mls for 24 hours

Infusion normal saline 1000 mls for 24 hours

Intravenous promethazine 40mg

Patient was given 40mg of promethazine and also 500mls of ringers lactate as a stat dose to reduce vomiting as well as restore the fluid lost. A simple bed was made for her and she was made comfortable in bed. A vomitus bowl was provided beside the bed since she was vomiting and weak. This was employed to prevent her from frequently walking to the washroom. Initial doses of the other drugs were administered and recorded into the treatment sheet as well as the nurses' notes. Specimen for requested

laboratory investigations were taken labeled and sent to the laboratory technician for investigation. The investigations requested were;

Blood sample for Malaria Parasites (MPs)

Blood for Full Blood Count

Urine for routine examination

Stool test for H. Pylori

After administering her stat medications, she was a little stable, she was oriented together with her relative to the ward staff, other patients, hospital policy and routines in terms of visiting, medication time and the activities were explained to the mother. They were educated on her hospitalization and what would be done for her. Patient's husband, Mr. I.I was called to be told of his wife admission. He brought the necessary items that will be needed during admission such as bucket, bowl and spoon, sponge, towel etc. Patient and her relative were reassured of optimum care from the health team to ensure quick recovery.

I then introduced myself that am a student nurse at Nursing and Midwifery Training College-Holy Family, Berekum, and a final year student and would like to take Miss. L.R for my care study, which they agreed. I decided to use peptic ulcer as my study as I wanted to broaden my knowledge level on the condition and also have a practical knowledge on the management of the condition.

1.10 Patient's Parents Concept of Condition.

A concept is a thought or idea. The time taken to understand the patients thought, mind and ideas about the cause of her illness and disease. (Fragiskos, 2018)

Miss. L.R believes that, sickness forms part of human life and once a while, a person becomes sick. She did not associate it with witchcraft or any other forces. She also said she has confidence in the nurses and doctors who are providing holistic care for her.

1.11 Literature Review

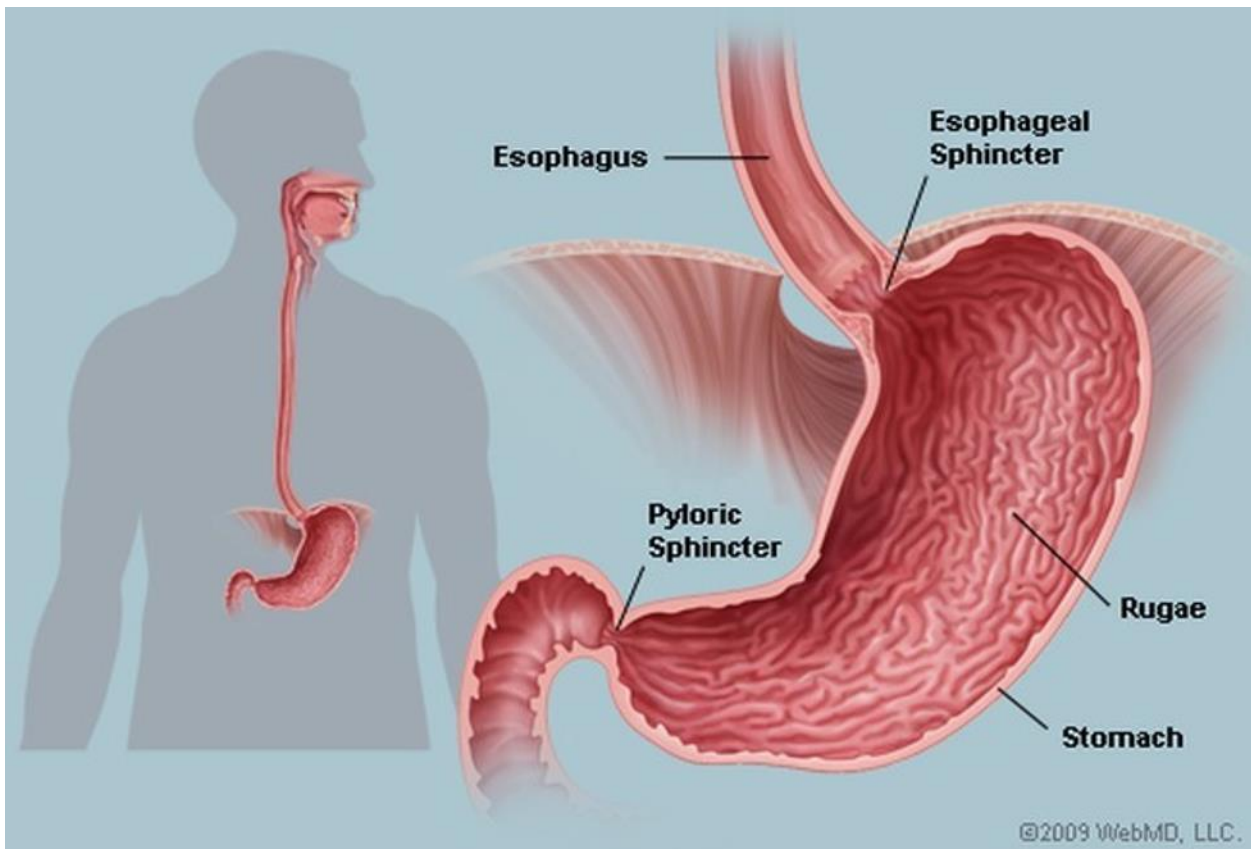
This comprises of significant data on my patient's condition that are obtained from books and journals.(Mandell & Niederman, 2019)

Basic Anatomy of the Stomach and the Intestines

The stomach is situated in the left upper portion of the abdomen under the left lobe of the liver and the diaphragm, overlaying most of the pancreas. A hollow muscular organ with a capacity of approximately 1500 mL, the stomach stores food during eating, secretes digestive fluids, and propels the partially digested food, or chyme, into the small intestine. The gastroesophageal junction is the inlet to the stomach. The stomach has four anatomic regions: the cardia (entrance), fundus, body, and pylorus (outlet). Circular smooth muscle in the wall of the pylorus forms the pyloric sphincter and controls the opening between the stomach and the small intestine. The stomach is lined with columnar epithelial tissues. The **small intestine** is the longest segment of the GI tract, accounting for about two thirds of the total length. It folds back and forth on itself, providing approximately 7000 cm (70 m) of surface area for secretion and **absorption**, the process by which nutrients enter the bloodstream through the intestinal walls. It has three sections: The most proximal section is the duodenum, the middle section is the jejunum, and the distal section is the ileum. The ileum terminates at the ileocecal valve. This valve, or sphincter, controls the flow of digested material from the ileum into the cecal portion of the large intestine and prevents reflux of bacteria into the small intestine. Attached to the cecum is the vermiform appendix, an appendage that has little or no physiologic function. Emptying into the duodenum at the ampulla of Vater is the common bile duct, which allows for the passage of both bile and pancreatic

secretions. The **large intestine** consists of an ascending segment on the right side of the abdomen, a transverse segment that extends from right to left in the upper abdomen, and a descending segment on the left side of the abdomen. The sigmoid colon, the rectum, and the anus complete the terminal portion of the large intestine. A network of striated muscle that forms both the internal and the external anal sphincters regulates the anal outlet (Hinkle & Cheever, 2014).

FIGURE 1: A Diagram Of The Anatomy of the Stomach



Definition

A peptic ulcer is an exacerbation (hollowed-out area) that forms in the mucosal wall of the stomach, in the pylorus (the opening between the stomach and duodenum), in the duodenum (the first part of the small intestine), or in the esophagus. Erosion of a circumscribed area of mucous membrane is the cause. This erosion may extend as deeply as the muscle layers or through the muscle to the peritoneum. Peptic ulcers are more likely to occur in the duodenum than in the stomach. In the past, stress and anxiety were thought to be causes of ulcers, but research has documented that peptic ulcers result from infection with the gram-negative bacteria *H. pylori*, which may be acquired through ingestion of food and water. Person-to-person transmission of the bacteria also occurs through close contact and exposure to emesis. (Nicki R. Colledge, Brian R. Walker, Stuart H. Ralston, 2010)

Classification

A peptic ulcer may be referred to as a gastric, duodenal, or esophageal ulcer, depending on its location.

Duodenal Ulcers

This is an exacerbation (hollowed-out area) of the circumscribed area of mucous membrane. Biopsies often show high prevalence of *Helicobacter pylori* infection. In duodenal ulcer, the incidence of male to female is in the ratio 2:3, 80% of peptic ulcers are duodenal. The possibility of malignancy is rare.

Duodenal ulcers are common between ages 30–60 years. (Parry E, Godfry R, Mabey D, Gill G, 2004).

Causes

Acute duodenal ulcer is often caused by dietary indiscretion—the person eats food that is contaminated with disease-causing microorganisms or that is irritating or too highly seasoned. Other causes of duodenal ulcers include;

1. Overuse of aspirin and other Non - Steroidal Anti-Inflammatory Drugs (NSAIDs),

Excessive alcohol intake,

H. pylori,

smoking

Stress.

Clinical Manifestation

Acute duodenal ulcer may be asymptomatic. But some patients may have rapid onset of symptoms, such as;

Abdominal discomfort

Lassitude

Nausea

Anorexia

Vomiting

Hiccupping

May have weight gain

Pain occurs 2–3 hours after a meal; often awakened 1–2 AM; ingestion of food relieves pain

Vomiting uncommon

Hemorrhage less likely than with gastric ulcer, but if present, melena more common than hematemesis

More likely to perforate than gastric ulcers

Gastric ulcers

Gastric ulcers may result from repeated exposure to irritating agents or recurring episodes of acute gastritis and they are found in patient with, chronic alcohol abuse, Smoking, the bacteria *Helicobacter pylori*, dietary factors such as caffeine, the use of medications, especially NSAIDs. In gastric ulcer, the incidence of male to female is in the ratio 1:1, 15% of peptic ulcers are gastric. There is occasionally possibility of malignancy. Gastric ulcer is common between usually 50 years and over. (Porth C M, 1994).

Causes

It can be caused by;

The bacteria *Helicobacter pylori*: This bacterium causes an infection which breaks down the mucosal barrier, making the epithelium of the stomach vulnerable to ulceration. *Helicobacter pyloric* is the major cause of peptic ulcer disease (NDDIC, 2014). More than 95 % of patients suffering from the duodenal ulcers and about 70 % - 80 % of patients with gastric ulcers are *H. pylori* positive (Momtaz et al,2012)

b.Stress: According to Skidmone (2005), physiologically stressful events such as burns, shock and severe sepsis may result in acute mucosal ulceration of the duodenal or gastric area.

c.The use of medications, especially NSAIDs: such as aspirin and Ibuprofen: They promote ulcer formation by inhibiting gastro-duodenal prostaglandin synthesis, resulting in reduced secretion of mucus and bicarbonate and decreased mucosal blood flow. In other words, they impair local defenses against acid damage (Toy &Patlan, 2009). There is about 10% to 20% prevalence of gastric ulcers and a 2% to

prevalence of duodenal ulcer among chronic NSAIDS users. The pathogenesis of NSAIDS- induced ulcers is thought to involve mucosal injury and inhibition of prostaglandin synthesis

d. Alcohol intake: This is directly absorbed in the stomach and weakens the stomach mucosa resulting in ulceration (Smelter et al, 2012)

e. Zollinger – Ellison Syndrome: This is a tumor of the pancreas which causes excess secretion of gastric acid predisposing to gastric ulceration (Momtaz et al, 2012).

f. Bile reflux: The reflux of bile and pancreatic enzymes into the stomach due to an incompetent pyloric sphincter may lead to gastric ulceration; the bile salts damage the gastric mucosa, predisposing it to ulceration (Toy & Patlan, 2009).

Clinical Manifestation

The patient with Gastric ulcers may experience,

a. Weight loss: gastric ulcers sometimes create a block in the digestive system due to the inflammation they cause. This can prevent food from moving through the stomach, leading to weight loss and a decrease in appetite. (Smeltzer and Bare, 2010).

b. Pain occurs 30 minutes to 1 hour after a meal; rarely occurs at night, may be relieved by vomiting, ingestion of food does not help, sometimes increases pain

c. Vomiting common:

d. Hemorrhage more likely to occur in gastric ulcer than with duodenal ulcer

e. Hematemesis more common than melena

Pathophysiology

Normally the stomach is protected from the digestive substances it secretes, namely hydrochloric acid and pepsin, produced by the mucosal barrier. When this barrier is disrupted by an acute or chronic irritant, or when the processes that maintain the barrier are altered by disease, the gastric mucosa becomes irritated and inflamed. The mucous membrane becomes edematous and hyperemic (congested with fluid and blood) and undergoes superficial erosion. Lipid soluble substances such as aspirin and alcohol penetrate the gastric mucosal barrier, leading to irritation and inflammation. Bile acids also break down the lipids in the mucosal barrier, increasing the potential for irritation (Parry E., 2004).

In addition, aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) inhibit prostaglandins. Prostaglandins stimulate the production of bicarbonate, which neutralizes hydrochloric acid and increases the thickness of the mucosal barrier (Wollner T, 2004).

Peptic ulcer disease (PUD) is a condition in which the lining of the stomach, pylorus, duodenum or esophagus is eroded, mostly from infection with helicobacter pylori (NIDDIC, 2014). The gastric mucosa is normally protected from auto-digestion by pepsin and hydrochloric acid by the presence of the gastric mucosal barrier which protects the mucosal lining.

Mucus secreted by the goblets cells of the stomach forms a compact epithelia cell lining. Bicarbonate ions are also secreted by the surface epithelia cells which act to neutralize acids. Hence, the pathophysiology of peptic ulcer disease from all indications appears to be related to either a destruction of these elements mentioned above or an excess of acid-pepsin activity resulting from over –stimulation of the vagus nerve (Smelter et al, 2012).

However, in the absence of either of these factors, the prolonged contact of the stomach with highly acidic contents, that is hydrochloric acid and pepsin causes injury to the mucosal wall of the

gastrointestinal tract. Histamine is released from the damaged mucosa, resulting in ulceration of the mucosal lining of the gastrointestinal tract. This finally leads to inflammation, epigastric pain, nausea and vomiting.

When the mucosa is damaged, it cannot secrete enough mucus to act as a barrier against hydrochloric acid. The use of NSAIDs inhibits the secretion of mucus that protects the mucosal lining. Some individuals have more rapid gastric emptying which is combined with hyper secretion of acid, creating a large amount of acid moving into the duodenum. Clients with duodenal ulcer disease secrete more acid than normal, while clients with gastric ulcer tend to secrete normal or decreased levels of acid. As a result, duodenal ulcers occur often than gastric ulcers.

Diagnostic Tests and Procedures

1. Physical assessment for signs: This may reveal pain, epigastric tenderness, or abdominal distension (Janice & Kerry, 2014)

2. Esophagogastroduodenoscopy (EGD)

Esophagogastroduodenoscopy is the most definitive for the diagnosis of peptic ulcer may be repeated to evaluate the effectiveness of treatment (Momtaz et al, 2012).

3. Urea Breathe Test

The patient exhales into a collection container (baseline), drinks carbon-enriched urea solution, and is asked to exhale again into the collection container then, the two collections are compared. The breakdown of the solution and released of carbon dioxide confirm *Helicobacter pylori* infection (Momtaz et al, 2012).

4. Computerized Tomography Scan

Computerized tomography scans use a combination of x-rays and computer technology to create images. The patient is given a solution to drink and an injection of a contrast medium.

5. Upper Gastrointestinal radiographic studies involves radiologic examination of the lower esophagus, stomach, duodenum, and upper jejunum after ingestion of a solution of barium sulfate and histological examination of a tissue specimen obtained by biopsy. In addition to biopsy, other diagnostic measures for detecting *H. pylori* include

Serologic testing for antibodies against the *H. pylori* antigen, (Momtaz et al, 2012).

Medical Management

Medical management is aimed at

Diluting and neutralizing the offending agent.

Reducing and controlling secretions

To protect the mucosal barrier

And to subside inflammation

The various medications that can be used include;

H₂ receptor antagonist; they inhibit pepsin secretion and reduce the volume of gastric secretions

Examples are; Ranitidine Hydrochloride (Zantac), Cimetidine (Tagamet) 400mg bd for 4 to 6 weeks.

Antacids; they decrease acidity thus neutralizing acid content in the stomach. Examples include;

Magnesium Trisilicate 5-15mls tds for 3-6 weeks.

Antibiotics and Bismuth salts; to treat *Helicobacter pylori*. Examples include; Bismuth subsalicylate (Pepto-Bismol); tetracycline, Amoxicillin etc.

Proton (Gastric Acid) Pump Inhibitor; Suppresses *H. pylori* bacteria in the gastric mucosa

and assists with healing of mucosal lesions. It also inhibits acid secretion by blocking the action of histamine on the histamine receptors of the parietal cells in the stomach. Examples include Omeprazole (Prilosec), Lansoprazole (Prevacid), and Rabeprazole (Aciphex).

4. Anticholinergic drugs such as atropine sulphate and probathetine bromide may be prescribed to decrease cholinergic stimulation of hydrochloric acid. Cyto-protective drugs such as Sucralfate provide an adherent complex covering ulcer thereby, protecting it from erosion by pepsin, hydrochloric acid and bile salts.

Some supportive treatment may include; intravenous fluids to correct fluid and electrolyte imbalances, analgesic for pain and antiemetic to relieve the symptoms of nausea and vomiting

Supportive treatment includes:

1. .Nasogastric (NG) intubation,
2. Analgesic agents and sedatives, and intravenous (IV) fluids.
3. .If corrosion is extensive or severe, emetics and lavage are avoided because of the danger of perforation and damage to the esophagus.
4. Alcohol intake is avoided as well as irritating diet, promoting rest, reducing stress.

NURSING MANAGEMENT

Relieving Pain:

1. Management of peptic ulcer requires relieving of pain. Some measures to help relieve pain include;
2. Educating patient to avoid foods and beverages that are irritating to the gastric mucosa.
3. Regularly assessing patient level of pain using the numerical pain rating scale.
4. Providing comfortable bed

5. Reducing external noise by restricting visitors.
6. Organizing and performing nursing activities at specific times to encourage rest.
7. Engaging patient in diversional activities such as watching television.
8. Administering prescribed analgesics to patient.

Medications

1. Management of peptic ulcer requires careful administration of medication.
2. Administer prescribed medication as ordered.
3. Inform patient of the potential adverse effect of antibiotics therapy for example; diarrhea.
Instruct the patient to notify the doctor/nurse if any of these occurs.
4. Monitor for adverse reaction of histamine-2- receptor antagonists and omeprazole (such as dizziness, fatigue, rash and mild diarrhea)
5. Ensure patient eats before taking in drugs

Rest and Sleep:

Both physical and mental stability are necessary for the healing of a peptic ulcer. Measures to ensure rest and sleep are as follows:

- 1) Modify patient lifestyle to include health practices that will prevent recurrence of ulcer pain and bleeding.
- 2) Plan for rest periods and avoid or learn to cope with stressful situations.
- 3) Keep the environment clean, quiet and restful.
- 4) Restrict the number of visitors.
- 5) Provide diversionary therapy if pain is severe e.g. watching of television, newspaper reading, etc.
- 6) Nurse patient in a well-ventilated room and allow patient to assume a comfortable position that is suitable and promote body comfort.

- 7) Administer prescribed sedatives if patient is restless.

Dietary Management

For acute peptic ulcer, the nurse provides physical and emotional support and helps the patient manage the symptoms, which may include nausea, vomiting, heartburn, and fatigue. The following are ways to manage patients' diet.

1. Patient should take at least six small or more meals at regular intervals in a day, this is because, if food is kept in the stomach it neutralizes the acid that is secreted.
 2. Eat food with large quantities of fat; this is because fat on entering the stomach acts as a feedback mechanism that inhibit gastric secretions.
 3. Serve non-irritating food such as spice free diet e.g. milk diet.
 4. Encourage patient to chew vegetables and fruits thoroughly into fine mixtures before swallowing in order to prevent irritating the mucus lining of the stomach.
 5. Encourage patient to eat high fiber and low-calorie diets.
 6. Educate patient to avoid coffee and other caffeinated beverages, as well as carbonated drinks; these aid to promote acid secretion.
 7. Ensure that the patient does not take alcohol and gas forming diet.
 8. Patient should avoid starving him/herself.
- 9.Meals should be provided on time and at regular intervals.

Observation

1. Monitor temperature, pulse, respiration and blood pressure every four hours and record.
2. Monitor for signs and symptoms of shock such as rapid pulse rate and shallow respiration
3. Note site of the pain whether epigastric or mid epigastric.

4. Weigh patient daily especially early in the morning to detect weight gain or loss.
5. Observe stool characteristics, example for blood, mucous and foreign bodies.
6. Monitor the patient's sleep pattern.

Psychological care

1. This relieves anxiety and reassures that he/she is in competent hands.
2. Explain patient condition to him/her such as causes, signs, symptoms and nature of sickness.
3. Introduce other health team members and their roles in care rendered.
4. Explain to patient all procedures to be carried out on him/his to elicit his/his total cooperation
5. Encourage patient to interact with other patients and introduce him/her to patients with similar condition who are recovering.
6. Encourage the client to ask questions to clarify misconceptions
7. Answer the client in a very simple language, terms and devoid of medical jargons

Personal hygiene

Explain the importance of personal hygiene to the patient. The measures to ensure good personal hygiene include;

Oral hygiene – mucus tends to accumulate in the mouth and throat of most patients which can be uncomfortable. Clean patient's mouth twice daily and encourage client to rinse mouth before and after meals.

Daily bath – encourage patient to bath twice daily and those who are bedridden should be given bed bath. Apart from the hygiene aspect it also boosts up the client's morale. Bathing also help prevents bedsores. Also, during bed bath, observe client's skin, hair, toes and nails for any abnormalities.

Establish rapport with the client.

Elimination

Monitor intake and output continuously to determine fluid volume status and report if there is any deviation.

Serve client with urinal and bedpan if necessary or assist patient to the toilet or urinal.

Monitor stools for blood and emesis.

Encourage oral fluid intake if patient can tolerate to maintain fluid and electrolyte balance so as to ease free bowel movement

Prevention and patient/family education

1. Educate dietary restrictions, including avoidance of foods that cause epigastric pain or distress.
This may include peppery foods, spicy foods and acid foods. Small frequent meals are better tolerated than large meals.
2. Explain the rationale for avoiding cigarettes. In addition to promoting ulcer development, smoking will also delay healing.
3. Educate on the need to avoid alcohol ingestion and carbonated drinks
4. Explain the rationale for avoiding over the counter drugs unless approved by the client's care provider. Many preparations contain ingredients such as aspirin that should not be taken unless approved by the health care provider.
5. Encourage thorough mastication and eat in a leisurely manner and on a regular schedule.
6. Explain the rationale for not interchanging brands of antacids and histamine-2-receptor blockers that can be purchased over the counter without checking with the health care provider. This can lead to harmful side-effects.
7. Teach the need to take all medications as prescribed.
8. Advise the intake of antacids 1 hour after meals, at bed time, and when needed.

9.Explain the relationship between symptoms and stress reducing activity or encourage strategies in order to avoid fatigue.

10.Encourage patient and family to share concern about changes in lifestyle and living with a chronic illness.

11.Educate patient to keep to follow-up medication appointment.

12.Explain the importance of reporting any of the following;

Increase nausea and vomiting

Blood stained emesis or tarry stools

SURGICAL TREATMENT

Pyloroplasty: is a drainage operation in which a longitudinal incision is made into the pylorus and transverse sutured closed to enlarge the outlet and relax the muscle.

Gastrectomy: it involves removal of a portion of the stomach, most commonly the distal half or two thirds of the stomach resected.

Antrectomy (a type of Gastrectomy). It involves removal of that portion of the stomach containing gastrin secreting cells.

The remaining portion of the stomach is anastomosed either to the duodenum (Billroth I) or jejunum (Billroth II). Usually some combination of these procedures is performed

Prevention

Making lifestyle changes, such as avoiding the long-term use of alcohol, NSAIDs, coffee, and drugs, may help prevent peptic ulcer.

Reducing stress through relaxation technique.

Avoid intake of alcohol and smoking.

Eat food that has been washed well and cooked properly.

Drink water from a clean, safe source.

Wash hands with soap and water after using the toilet room and before eating.

Complications

Gastric cancer

Haemorrhage

Perforation

Malignancy

1.12 Validation of Data

This is the act of crosschecking information collected from patient and relatives to confirm that they are accurate and precise. Rundell (2007).

The signs and symptoms exhibited by the patient were compared with standards in textbooks and other literature sources and found to be valid and true reflection of patients diagnose.

Diagnostic investigation carried out on the patient was also in line with that of the literature review.

Information gathered from patient, history taken and clinical features exhibited by the patient in addition to physical examination and laboratory investigation indicated that patient was really suffering from peptic ulcer as diagnosed, therefore the data on the patient is valid and reliable.

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

Analysis is process of inspecting, cleaning, transforming and modeling data with the goal of discovering useful information, informing conclusions and supporting decision-making. (Wikipedia, 2018). Analysis of data is the second stage of nursing process where data collected from patient are critically examined and conclusion drawn to determine patient family problem as well as strength. Nursing diagnosis is then formulated based on the problems identified. This chapter also involves comparison of data with standards. Information on diagnostic investigations, causes, clinical features, treatment and complications collected are compared with standard as found below.

2.1 Comparison of data with standard

This is the comparism of data collected during assessment period with literature review which includes :diagnostic investigations, causes of the illness clinical features ,management and complications. .(Collins Dictionary, 2012)

In the first section of the process, data collected from the patient is compared with standards of care from literature including, investigation of the causes of the disease, clinical features, laboratory and diagnostic investigations. Diagnostic test and investigations in the health sector is the careful examination or search in order to discover facts or gain information about the actual offending microorganism.

a. Diagnostic tests/ investigation.

According to Hornby (2017), investigation is defined as a scientific or academic examination of the facts of a subject or problem.

Below is the list of diagnostic investigations as requested by the doctor;

Urine routine examination

Full Blood Count

Malaria Parasites

stool test for *H pylori*

Table 1: Comparison of Diagnostic tests carried out on the patient with those outlined in the literature review

Literature diagnostic investigation	Diagnostic investigation done on my patient
Physical examination	Physical examination was conducted on patient.
Computer Tomography scan of the stomach and duodenum	CT scan was not done on patient
Upper Gastrointestinal Series	This was not done for patient
Esophagogastroduodenoscopy	Esophagogastroduodenoscopy was not done for my patient
Stool Test for H. pylori	Stool Test for H.Pylori was conducted for patient.
Urea Breath Test	Urea Breath Test was not carried on madam L.R.

Madam L. R's condition was based on clinical manifestations and physical examination. Her abdomen was palpated and it confirmed epigastric tenderness. Stool test for H. pylori was done and it was positive.

In addition to the above investigations, full blood count and blood film for malaria parasite were carried out as a differential diagnostic test to ascertain the presence of malaria parasite or signs of infection.

Table 2: Diagnostic Investigations/Test Compared with Standards

Date	Specimen	Investigations	Results	Normal Values	Interpretation	Remarks
12/11/2021	Urine	Appearance	Clear	Amber	Urine color is normal.	No treatment given
		Sugar	Negative	Negative	Within normal range.	No treatment given
		Deposits of white blood cell	0-1/High power field	0-4/High power field	Within Normal range.	No treatment given.
		Epithelial cells	3/High power field	Few	Within normal range.	No treatment given
12\11\21	Blood					

		White Blood Cell count	6.61×10 ³ μL	4-10×10 ³ μL	Values within normal range	No treatment given.
		Red Blood Cell count.	4.36 × 10 ⁶ μL	3.5-5.5×10 ⁶ μL	Values within normal range	No treatment given.
		Hemoglobin	12.5g/dl	11.00g/dl (female) Male: 12-18g/dl Children: 13.7g/dl	Normal	No treatment given.
		Malaria parasites	No malaria parasite seen	Malaria parasite should not be present	Normal	No treatment given.
12/11/2021	STOOL	Stool for Helicobacter pylori test	Helicobacter pylori Positive	Helicobacter pylori should be Negative	Patient has ulcerations in the stomach.	IV Omeprazole40 mg bd x 48hours.

2.2 Causes of patient's condition

Available literature reviews that the actual cause of peptic ulcer is not known, the diagnostic investigation (Stool test) carried on the patient indicated the presence of *H.pylori*. Peptic ulcer is a condition in which the lining of the stomach, pylorus, duodenum or esophagus is eroded mostly from

infection with helicobacter pylori. It is therefore evident that Madam L. R's disease was contracted from being infected by the organism helicobacter pylori.

Table 3: Clinical Manifestations of Patient's Condition Compared with Literature Review

Clinical Features In Literature	Clinical Features Exhibited by patient
Pain in the epigastric region which radiate to the back	Patient complained of pain at the upper central of the region of the abdomen.
Hematemesis may occur	Patient did not experience hematemesis.
Reflux vomiting (GERD)	Patient was vomiting
Weight gain in duodenal ulcer and loss in gastric ulcer	Patient did not gain or loss weight
Patient may complain of fatigue, weakness and dizziness	Patient complain of fatigue, weakness and dizziness
Severe abdominal pain	Patient complain of severe abdominal pain
Presence of occult blood in stool	Occult blood in stool was absent
Anaemia	Anaemia was absent
Belching	Patient did not complain of belching.
Anorexia	Patient complained of anorexia.

Statement of comparison: Based on the comparison made on the clinical manifestations presented by the patient and the presentation in the literature review, patient's diagnosis of peptic ulcer disease was right since she exhibited most of the clinical manifestations.

c. Treatment given to patient.

Treatment is an act or manner or an instance of treating someone or something. Treatment is any form of intervention carried out on a patient to cure an illness or injury. (Merriam Webster).The following drugs were given on admission;

Intravenous Buscopan 40mg stat

Intravenous Omeprazole 80mg stat then 40mg bd × 24hrs

Intravenous Metronidazole 500mg tds × 24hrs

Capsule Omeprazole 20mg daily × 7days

Tablet Buscopan 20mg tid × 4 days

Intramuscular Promethazine 25mg stat.

Tablet Acetaminophen 1g tid × 4 days

Syrup Nugal 15mls tid × 5 days

Infusion ringers lactate 1000mls for 24 hours

Infusion normal saline 1000mls for 24 hours

Intravenous dextrose saline 1000mls for 24 hours.

Table 4: Comparison of Medical Treatment Prescribed for patient with those outlined in the Literature Review

Treatment According to literature.	Medical Treatment Prescribed for patient
Antibiotics	Metronidazole tab 500mg, tid x 7 was given.
Analgesic and Antipyretic	Tablet Acetaminophen 1g tid x4 was given.
Antispasmodic	Hyoscine Butyl bromide inj,40, stat Tab Buscopan 20mg tid x4
Proton (Gastric Acid) Pump Inhibitor	Omeprazole inj, 80, stat Omeprazole caps 20mg daily x7 was given.
Antacids	Syrup Nugel15mls tid x5 was given.
Intravenous fluid	IV Normal Saline 1000mls x 24hours, Ringers Lactate1000mls x 24hours and Dextrose Saline 1000mls x24hours.
Mucosal protective agents. Example misoprostol.	No mucosal protective agent was given.
Blood transfusion	Patient was not transfused.

Sedative	No sedative was given.
----------	------------------------

This table indicates that, patient was rightly diagnosed and the correct treatments were given as most of the treatment in the literature review were prescribed for patient. Other drugs patient was managed with which were not included in the literature review includes promethazine which was prescribed to help relief patient from vomiting.

Table 5: Pharmacology of Drugs Prescribed for Miss L.R.

Date	Drug	Dosage/Route of Administration According to literature	Dosage/Route of Administration	Classification	Desired effect	Actual effect	Side Effects/Remedies
12/11/2021	Buscopan	Dosage: 20mg qid x7days Children:10mg tid x7days Route: intravenously and orally	Dosage: 40mg stat Route: intravenously Route: intravenously	Antispasmodics	Reduces motility of the gastrointestinal tract.	Abdominal pain was relieved	Dry mouth, blurred vision, constipation. None observed in patient
12/11/2021	Omeprazole	Dosage : 20mg daily for 4 weeks in duodenal ulcer and 8 weeks in gastric ulcer	Dosage: 80mg stat route: intravenously, 40mg bd x24hours.	Proton Pump Inhibitor	Suppresses gastric secretion.	Patient gastric secretions were suppressed.	Headache, dizziness, diarrhea, abdominal pains and vomiting

		Route: intravenously and orally.	Route: orally.				None observed in patient
12/11/2021	Metronidazole	Dosage: Adult: 400-800mg tid x7 days Child: 7.5mg/kg every 8 hours. Route: orally and intravenously.	Dosage: 500mg tds × 24hours route: intravenously, Dosage:400mg tds × 5 days Route: orally	Antimicrobials, Antifungal, Antibiotics, Anaerobe.	It is used to treat a range of infections caused by bacteria that causes stomach disorders	Patient was relieved from the infection.	Loss of appetite, nausea and vomiting, headache, heartburns, constipation, cramping in your abdomen. None observed in patient.

12/11/ 2021	Intravenous Normal Saline	Amount depends on patient's fluid and electrolyte level and age as well as by Doctors prescription.	dosage:1000 mls × 24 hours route: intravenously	Isotonic solution of sodium chloride.	Replace extracellular fluid by remaining in vascular space	Patient fluid and electrolyte were replenished.	Fever, injection site swelling, redness and infection. None observed in patient
12/11/ 2021	Intravenous Ringers Lactate	Amount depends on patient's fluid and electrolyte level and age as well as by Doctors prescription.	Dosage:1000 mls × 24 hours route: intravenously	Isotonic crystalloid solution	Provides fluid, electrolytes and calories for energy	Patient maintained body fluids and nutrition, and for rehydration	Volume overload, phlebitis, febrile response. None observed in patient.
12/11/ 2021	Intramuscular Promet	Dosage:25mg, max 100mg	Dosage:25mg stat Intramuscularly	Antiemetic	Act on chemoreceptor or trigger	Patient was relieved from the nausea and	Convulsion, dark urine, double vision, abdominal pain, severe muscle stiffness, increased sweating, unusually

	hazine	Child:5-10mg Route:IM			zone to decrease vomiting.	vomiting.	pale skin. None observed in patient.
--	--------	-------------------------------------	--	--	----------------------------------	-----------	---

14/11/20 21	Tablet Ciprofloxacin	<p>Dosage: adult;500mg bd for 60 days.</p> <p>Children; 15mg/kg for 60 days.</p> <p>Max; 500mg.</p> <p>Route: intravenously and orally.</p>	<p>Dosage:500mg bd × 7 days</p> <p>Route: orally</p>	Antibiotics: Fluoroquinolone	It fights against bacterial in the body	Patient was relieved from the infection	Hives, severe stomach pain, headache, severe dizziness, seizure, diarrhea, and insomnia. None observed in patient.
14/11/20 21	Tablet Acetaminophen	<p>Dosage:0.5-1g every 4-6 hours, max 4g per day.</p> <p>Child:2 months,60mg for post immunization pyrexia</p> <p>10mg/kg (5mg/kg if jaundiced)</p> <p>0.5-1g up to 4 times daily.</p> <p>Route: oral, rectal and IV</p>	<p>Dosage:1g tid × 5 days</p> <p>Route: orally</p>	Non-narcotic analgesic and antipyretics	Relieves pain and decreases fever	Patient was relieved from body pains	Nausea, epigastric pain, black tarry stools, vomiting, and constipation. None observed in patient

14/11/20 21	Syrup Nugel O	Dose: 15ml Dose mostly depends on the age of patient.	Dosage: 15mls tid × 5 days Route: orally	Antacids	To neutralize the hydrochloric acid secretion from the parietal cells of the stomach.	Epigastric pain was decreased.	Constipation, belching, abdominal distention, Flatulence. None observed in patient
13/11/20 21	Intravenous dextrose saline	Amount depends on patient's fluid and electrolyte level and age as well as by Doctors prescription. Route: intravenously.	Dosage: 1000mls × 12 hours route: intravenously	Caloric agent Fluid volume replacement	Provides supplements of calories and fluids	Patient maintained an adequate fluid and electrolyte balance	Exacerbated by pretension, phlebitis, osmotic dieresis, pulmonary oedema, venous sclerosis. No side effect observed in patient

Statement of comparison: drugs administered to Miss. L.R. have been classified and none of the side effects were observed.

Complications

Due to effective medical and nursing care rendered to Madam L.R., patient did not develop any complication of peptic ulcer during the period of hospitalization. She recovered fully and went home in a normal healthy state.

2.3 Patient's Health Problem

According to (Ruuskanen et al., 2011), the health problem is any physical, social, or psychological limitation on a patient that causes a change in the progress of his health. The problems were identified through observation and interviews made on the patient and family.

The problems identified on Miss. L.R. include the following;

1. Patient complains of an epigastric pain. (12/11/2021)
2. Patient complains of nausea and vomiting. (12/11/2021)
3. Patient had loss of appetite (anorexia). (13/11/2021)
4. Patient is anxious. (12/11/2021)
5. Patient complains of general body weakness. (14/11/2021)
6. Patient could not sleep as desired. (13/11/2021)
7. Patient had very little knowledge concerning her condition. (14/11/2021)

2.4 Patient/Family Strengths

Strength refers to the ability, capability or resource that can aid the patient to cope with stress specifically health problems thereby contributing to his or her speedy recovery. This could be physical, psychological, social and spiritual (Anderson, 2017). During Miss L.R. care, the following strengths were identified.

1. Patient is able to notice the site of pain.
2. Patient verbalizes resolutions of nausea and excessive vomiting.
3. Patient can take half cup of porridge
4. Patient could sleep for at least four hours at night
5. Client seeks clarifications on disease condition.
6. Patient can perform personal hygiene
7. She was willing to learn, adopt and apply new health seeking behaviors

2.5 Nursing Diagnosis

Nursing diagnosis is a statement about the patient actual or potential health concerns that can be managed through independent nursing interventions. The statement is made by associating the health problems with the likely causes of the problem(Association, American Nurses, 1998).

These statements are concise, clear and patient centered. The following nursing diagnoses were formulated for Miss. L.R. during her admission.

1. Acute pain(abdominal) related to inflammation of gastric mucosa as evidenced by patient self-rating pain as 8 on the numerical pain scale.
2. Risk for deficient fluid volume as evidenced by frequent vomiting.
3. Imbalanced nutrition (Less than body requirement) related to inadequate dietary intake as evidenced by decreased interest in food.
4. Insomnia related to change of environment as evidenced by early awakening and difficulty maintaining sleep state.
5. Fatigue related to reduced caloric intake.
6. Anxiety related to uncertainty of treatment outcome.

7. Deficient knowledge related to inadequate information on disease condition as evidenced by patient asking questions on causes and management of condition.

CHAPTER THREE

PLANNING FOR PATIENT AND FAMILY CARE

3.0 Introduction

Planning involves identification of problems presented by Patient and formation of interventions, implementation and evaluation of care given (Nicki R. Colledge, Brian R. Walker, Stuart H. Ralston, 2010).It also involves setting of objectives into short and long

term in order of priority which is part of the nursing care process and if they are not met after implementation, then it means the care rendered had to be reassigned and new plan of action has to be taken to help meet the problems that were not met.

3.1 Objective / Outcome Criteria

The following objective and outcome criteria were set for Patient;

1. Patient will be relieved of epigastric pain within 24 hours as evidenced by;
 - a. Patient self-rating pain as 2 or below on the numerical pain scale
 - b. Nurses observing that patient is comfortable and relaxed in bed without showing signs of pain.
2. Patient will maintain normal body fluid volumes throughout the period of hospitalization as evidenced by;
 - a. Nurse observing patient with sign of good hydration such as normal skin turgor, moist mucus membranes and absence of thirst.
 - b. Patient verbalizing resolution of vomiting.
3. Patient will regain her normal nutritional pattern throughout hospitalization period as evidenced by;
 - a. Patient verbalizing that she has regained appetite
 - b. Nurse observing patient consuming more than half of the food served.
4. Patient will be relieved of anxiety throughout hospitalization period as evidenced by;
 - a. Patient cooperating with care being rendered.

- b. Nurse observing patient with relaxed facial expression.
5. Patient will have a normal activity restoration within 72hours as evidenced by;
- a. Patient verbalizing increase in activity levels.
 - b. Nurse observing that patient can perform activities of daily living (grooming, feeding, bathing) without assistance.
6. Patient will regain her normal sleep pattern within 48 hours as evidenced by;
- a. Patient verbalizing that she has regained her normal sleep pattern.
 - b. Nurse observing sleep for at least 6 hours at night and a daytime nap of at least 30 minutes uninterrupted.
7. Patient will have adequate knowledge on condition throughout hospitalization as evidenced by;
- a. Patient asking questions about condition and care rendered.
 - b. Nurse observing improvement in patient's response to questions.

TABLE 6: NURSING CARE PLAN

DATE/ TIME	NURSING DIAGNOSIS	OBJECTIVE /OUTCOME CRITERIA	NURSING ORDERS	NURSING INTERVENTION	DATE/ TIME	EVALUATION	SIGNATURE
12/11/20 21 11:25am	Acute pain(abdomen) related to inflammation of gastric mucosa as evidenced by patient self-rating pain as 8 on the	Patient will be relieved of epigastric pain within 24 hours as evidenced by; a. Patient self-rating pain as 2 or below on the numerical pain scale. b. Nurses observing that patient is	a. Reassure patient that measures will be put in place to relief her of the epigastric pain. b. Assess patient level of pain using the numerical pain rating scale. c. Provide warm comfortable bed and blanket.	a. Patient was reassured that measures will put in place to relief her of the epigastric pain. b. Patients level of pain was assessed and she rated it as 4 on the numerical pain rating scale. c. Warm comfortable admission bed with blanket was provided to ensure rest.	13/11/20 21 2pm	Goal partially met as Patient verbalised a reduction of pain	N.J

	numerical pain scale.	comfortable and relaxed in bed without showing signs of pain.	<p>d. Educate patient on pain pathology and management.</p> <p>e. Engage patient in diversional activities.</p> <p>f. Administer prescribed analgesics.</p>	<p>d. Patient was educated on the reason for his pain and its management.</p> <p>e. Patient was engaged in diversional activities such as listening to news.</p> <p>f. Prescribed analgesics and Proton Pump Inhibitors such as Paracetamol 1G and omeprazole 80mg were administered to relief her pain.</p>			
--	-----------------------	---	---	--	--	--	--

TABLE 3: NURSING CARE PLAN

DATE/ TIME	NURSING DIAGNOSIS	OBJECTIVE /OUTCOME CRITERIA	NURSING ORDERS	NURSING INTERVENTION	DATE/ TIME	EVALUATION	SIGNA- TURE
12/11/20 21 12pm	Anxiety related to uncertainty of treatment outcome.	Patient will be relieved of anxiety through hospitalization period as evidenced by; a. Patient cooperating with care being rendered.	a. Reassure patient of the competent nursing care that will be ensured to alleviate her anxiety. b. Assess the type and level of anxiety (mild, moderate and severe) and clinical features of anxiety. c. Give patient clear, concise explanations of	a. Patient was reassured to feel that she could trust the nurses and rely on them for her care. b. Hamilton anxiety scale of clinical questions was used in assessing the patient anxiety and recorded as mild. c. All procedures were explained to the patient before they were	12/11/2 021 2:00pm.	Goal fully met as patient verbalized an absence of anxiety and Nurse observed cheerful facial expression of patient.	N.J

		<p>b. Nurse observing patient with relaxed facial expression.</p>	<p>every procedure.</p> <p>d. Educate patient on treatment modalities.</p> <p>e. Provide proper orientation to the ward.</p>	<p>implemented.</p> <p>d. Patient was oriented to the ward environment to promote comfort and reduce anxiety.</p> <p>e. Patient was educated on the treatment of peptic ulcer disease such as administration of proton pump inhibitors.</p>			
--	--	---	--	---	--	--	--

TABLE 3: NURSING CARE PLAN

DATE/ TIME	NURSING DIAGNOSIS	OBJECTIVE /OUTCOME CRIATERIA	NURSING ORDERS	NURSING INTERVENTION	DATE/ TIME	EVALUATION	SIGNA- TURE
12/11/2021 7:15am	Risk for deficient fluid volume as evidenced by frequent vomiting.	Patient will maintain normal body fluid volumes throughout the period of hospitalization as evidenced by; a. nurse observing patient with good skin turgor, moist mucus membranes and absence of thirst. b. Patient verbalizing	a. Assess for the signs and symptoms of dehydration. b. monitor intake and output. c. monitor BP and pulse regularly. d. Educate patient of fluid needs.	a. Clinical features of dehydration were absent. Patient had good skin turgor. b. Patient passed 1000mls of urine. Fluid balance was maintained. c. Patient Bp read 120\80 and pulse80 d. Patient was educated on fluid needs.	13/11/2021 12pm	Goal fully met as patient maintained her normal body weight of 60kg.	

		resolution of vomiting.	e. administer prescribed antiemetics and antibiotics.	e. promethazine 25mg was administered as prescribed.			
--	--	-------------------------	--	---	--	--	--

TABLE 3: NURSING CARE PLAN

DATE/ TIME	NURSING DIAGNOSIS	OBJECTIVE /OUTCOME CRIATERIA	NURSING ORDERS	NURSING INTERVENTION	DATE/ TIME	EVALUATION	SIGNA- TURE
13/11/2021 6am	Insomnia related to change of environment as evidenced by early awakening and difficulty maintaining sleep state	Patient will regain her normal sleep pattern within 48 hours as evidenced by; a. patient verbalizing that she has regained her normal sleep pattern. b. Nurse observing patient	a. Reassure patient. b. Assess sleep pattern of the patient. c. Encourage regular evening routine that promote sleep. d. Ensure a noise free and calm environment. e.Prepare and make	a. Patient was reassured of regaining a normal sleep pattern b. Sleep pattern of the patient was assessed. c. Patient was encouraged to perform evening routines especially urinating before bed. d. The ward was kept calm and conducive for sleep. e.A simple warm occupied wrinkle free bed was made for patient to provide	15/11/20 21 9am	Goal fully met as patient reported measures and rational to manage insomnia and return of normal sleep pattern.	N.J

		sleep for at least 6 hours at night and a daytime nap of at least 30 minutes uninterrupted.	comfortable bed for the patient to enhance quality of sleep. f. Educate patient on sleep hygiene.	comfort. f.A plan was developed to enable patient sleep. In line with her sleep history she was to have 7 hours sleep at night uninterrupted at night and 30 minutes nap during day time.			
--	--	---	--	--	--	--	--

TABLE 3: NURSING CARE PLAN

DATE/	NURSING	OBJECTIVE	NURSING ORDERS	NURSING INTERVENTION	DATE/	EVALUATION	SIGNA-
--------------	----------------	------------------	-----------------------	-----------------------------	--------------	-------------------	---------------

TIME	DIAGNOSIS	/OUTCOME CRIATERIA			TIME		TURE
13/11/2021 4pm	Fatigue related to reduced caloric intake.	Patient will have a normal activity restoration within 48hours as evidenced by; a. Patient verbalizing increase in activity levels. b. The nurse observing that the patient is performing selfcare and other	a. Reassure patient of improvement in activity. b. Assist patient to exercise all the extremities regularly to foster muscle strength and tone. c. Monitor side effects of prescribed drugs such as gait and fatigue. d. Ensure adequate rest. e. Encourage patient to perform minor activities and commend her effort.	a. Patient was reassured about improvement in activity. b. Patient was engaged in passive and gradually active exercises every four hours which foster her muscle strength and tone. c.Side effect of administered drugs were monitored. d. Enough rest was ensured to alleviate fatigue. e. Patient was encouraged to engage in minor activities like	15/11/2021 4PM	Goal fully met as Patient performed activities of daily living unassisted and Nurse visualized that patient was able to bath, groom and feed herself without assistance.	N.J

		activities without assistance		walking, bathing and toileting in the ward which she did.			
--	--	-------------------------------	--	---	--	--	--

TABLE 3: NURSING CARE PLAN

DATE/ TIME	NURSING DIAGNOSIS	OBJECTIVE /OUTCOME CRIATERIA	NURSING ORDERS	NURSING INTERVENTION	DATE/ TIME	EVALUATION	SIGNA- TURE
13/11/21 9am	Imbalanced nutrition:(Less than body requirement) related to inadequate dietary intake as evidenced by insufficient interest in food.	Patient will regain her normal nutritional pattern within 48 hours as evidenced by; a. Patient verbalizing that she has regained appetite b. Nurse observing patient consuming more than half of the food served	a. Assess nutritional need history; 24-hour recall; include other caregivers in assessment. b. Encourage adequate rest after feeding c. weigh patient daily. d. Educate patient on nutrition. e. Provide small but frequent nutritious food to the patient.	a. Assessment on patient nutritional history was done using the 24-hour food recall. b. Enough rest was ensured for patient. c. Patient was weighed d. Patient was educated on the type of food to eat and types to avoid in regards to her condition. e. Patient was provided with	15/11/21 8:20am	Goal fully met as patient maintained her normal body weight of 60kg.	N.J

				small but frequent nutritious and less spicy food.			
--	--	--	--	---	--	--	--

TABLE 3: NURSING CARE PLAN

DATE/	NURSING	OBJECTIVE	NURSING ORDERS	NURSING	DATE/	EVALUATION	SIGNA-
--------------	----------------	------------------	-----------------------	----------------	--------------	-------------------	---------------

TIME	DIAGNOSIS	/OUTCOME CRIATERIA		INTERVENTION	TIME		TURE
14/11/21 8am	Deficient knowledge related to inadequate information on disease condition as evidenced by patient asking questions on causes and management of condition	Patient will have adequate knowledge on condition throughout hospitalization as evidenced by; a. Patient asking questions about condition and	a. Reassure patient of acquiring more information about PUD cause, its management and prevention. b. Encourage patient to ask questions. Provide tactful answers to questions asked. c. Educate patient according to level of understanding, educational background and learning styles of the	a. Patient was reassured of gaining enough knowledge on PUD, its cause, management and prevention. b. Patient was encouraged to ask questions and tactful answers were provided. c. Teaching was done according to the level of understanding, educational backgrounds and learning styles of the patient.	14/11/21 12pm	Goal was fully met as patient was able to ask and answer some questions concerning her condition correctly.	N.J

		care rendered.	patient.			
		b. Nurse observing improvement in patient's response to questions.	d. Assess patient's knowledge after each educational encounter. e. Keep the environment free from noise and any other distractions and provide privacy.	d. Patient knowledge on condition was assessed after the education. e. Teaching and learning was enforced when the patient was relaxing in bed to obtain maximum concentration with enough privacy provided.		

CHAPTER FOUR

IMPLEMENTATION OF PATIENT/ FAMILY CARE

4.0 Introduction

Implementation is the fourth phase of the nursing process and it is the process of putting the nursing care plan which includes both medical and nursing interventions into action in order to obtain the desired outcome criteria (Association, American Nurses, 1998).

This chapter forms the fourth part of the nursing process. It outlines and summarizes the actual nursing care rendered to my patient and her relatives from the day of admission till discharge, indicating preparation towards discharge, rehabilitation and home visits

4.1 Summary of Actual Care Rendered to Patient

This is to ensure that nursing care is rendered to the patient in a more professional manner using the nursing care plan as a guide. In the implementation, all procedures are explained appropriately to the patient for his consent.

The nursing care given to patient started on the day of admission till discharge. The management aimed at making patient comfortable, promoting her early recovery and prevention of complication. During the period of admission, routine care such as bed making, feeding of patient, assisted bathing, administration of medication and other routine care were rendered to m patient. Other nursing cares were also given according to patient's need. Some observations that were carried out on Patient were checking and recording of vital signs, which comprises of temperature, pulse, respiration and blood pressure. Patient orientation to time, place, and person were also observed. Therapeutic effect and side effect of drugs served to patient were also monitored.

SUMMARY OF ACTUAL CARE RENDERED TO PATIENT

FIRST DAY OF ADMISSION (12th NOVEMBER,2021)

Patient arrived at the Emergency ward at Holy Family Hospital, Techiman at 7:15 am with her daughter and sister in a wheelchair. She was diagnosed as having Peptic Ulcer Disease. She was received into the ward warmly. She complained of abdominal pain, headache, dizziness and severe vomiting and nausea. Vital signs were checked and recorded as:

Temperature - 36.8 degree Celsius

Pulse -92 beats per minute

Respiration - 24 cycles per minute

SPO2 -90%

Blood pressure- 120/70 millimeters of mercury

Weight- 62 kg,

The following laboratory investigations were requested:

Full blood count (FBC)

Blood sample for Malaria Parasites (MPs)

Urine for routine examination

Stool test for H. Pylori

On admission patient was managed on the following medications:

Intravenous Buscopan 40mg stat

Intravenous Omeprazole 80mg stat then 40mg bd × 24hrs

Intravenous Metronidazole 500mg tds × 24hrs

Capsule Omeprazole 20mg daily × 7days

Tablet Buscopan 20mg tid × 4 days

Intramuscular Promethazine 25mg stat.

Patient was vomiting excessively on arrival, a nursing diagnosis of risk for deficient fluid volume as evidenced by frequent vomiting was made. An objective was set that patient will maintain normal body fluid volume throughout the period of hospitalization as evidenced by; nurse observing patient with good skin turgor, moist mucus membranes and absence of thirst. The following nursing interventions were carried out to maintain patient's normal body fluid. Patient was encouraged to take copious fluid in bits, intravenous fluid was administered. Vital signs (temperature, pulse, respiration, blood pressure) was monitored every four hourly. Fluid intake and output was monitored. She was given promethazine, 25mg stat to reduce the vomiting. She was later assisted to relax in bed at her desired position. Prescribed medications served as ordered.

At 11:25am, patient complained of epigastric pain. A nursing diagnosis of Acute pain(abdomen) related to inflammation of gastric mucosa as evidenced by patient self-rating pain as 8 on the numerical pain scale was made. Also, an objective was set that patient will be relieved of epigastric pain within 24 hours as evidenced by; Patient self-rating pain as 2 or below on the numerical pain scale, nurse observing that patient is comfortable and relaxed in bed without showing signs of pain. The following interventions was put in place to reduce patient's pain; patient was reassured that measures such as ensuring rest and administering drug will be put in

place to relieve her of the epigastric pain. Patient's level of pain was assessed by asking her about the nature of pain, its location, frequency and severity (by using the numerical pain scale) which she replied as "8, warm comfortable admission bed with blanket was provided to ensure rest, Patient was also educated on the reason for her pain and its management. She was also engaged in diversional activities such as listening to news. Prescribed Intravenous Omeprazole 80mg stat and Intravenous metronidazole 500mg were administered. Patient was left to relax in bed whilst observations and assessment were still going on.

At 12pm, patient was found to be anxious on observation. A nursing diagnosis was formulated as Anxiety related to uncertainty of treatment outcome. An objective was set that patient will feel less anxious throughout hospitalization period as evidenced by patient cooperating with care rendered and also asking questions about care rendered. The following interventions were made she was reassured to feel that she could trust the nurses and rely on them for her care. Hamilton anxiety scale of clinical questions was used in assessing her anxiety level and recorded as mild. She was educated on benefits of procedures such as administration of drugs in simple clear terms to ensure clear understanding, education on the treatment of peptic ulcer disease such as administration of proton pump inhibitors was done and patient was oriented to the ward environment to promote comfort and reduce anxiety.

At 2:00 pm, patient verbalized that her pain has reduced when she was reassessed and she rated pain as "4" on the numerical pain scale. She also appeared relaxed in bed on observation. She was served light soup which she took five table spoons. Goals set that patient's pain will reduce were fully met. Vitals were then checked and recorded as:

Temperature- 36.4 degree Celsius

Pulse - 90 beats per minute

Respiration - 22 cycles per minute

SPO₂- 98%

Blood pressure -125/70 millimeters of mercury

SECOND DAY OF ADMISSION (13th NOVEMBER,2021)

On this day, I arrived at the ward at 7:00am, The night nurses reported that patient had an intermittent sleep due to excessive vomiting. I assisted her to bath and to perform oral hygiene.

Vital signs were checked at 6:30am and recorded as;

Temp – 36.8 Degrees Celsius

Pulse – 80 B eat per minute

Respiration – 20cpm

SPO₂ -100 Percentage

Blood pressure.120/80 millimeters of mercury

At 7:30 in the morning, she was served with tea and bread as breakfast. Prescribed medications were administered.

Patient complained of loss of appetite, nausea, headache and insomnia. A nursing diagnosis was formulated as Imbalanced nutrition:(Less than body requirement) related to inadequate dietary intake as evidenced by insufficient interest in food .An objective was set to help maintain her nutritional status throughout hospitalization as evidenced by: Patient verbalizing that she has regained appetite and the nurse observing that patient has regained her appetite. These measures

were put in place to achieve this objective. Assessment on patient nutritional history was done using the 24-hour food recall -patient's feeding habits and favorite foods was noted including what she typically eats and drink within a 24hour period; patient drinks 'Hausa koko' and 'kose' in the morning, She normally does not eat in the afternoon which also contributed to her condition ,she ate T.Z and okro soup in the evening. She was also encouraged to have enough rest in order to improve her ability and desire to ingest food. Patient was also educated on the type of food to eat and types to avoid in regards to the condition. She was provided with small but frequent nutritious and less spicy food.

At 2pm, prescribed medication was served and patients vital signs were checked and recorded as:

Temp – 36.9 Degrees Celsius [$^{\circ}\text{C}$]

Pulse – 84 beat per minute [bpm]

Respiration – 20cpm

SPO₂ -95Percentage [%]

Blood pressure -120/80 millimeters of mercury

At 4:00pm, patient was fatigued, a nursing diagnosis of Fatigue related to reduced caloric intake was made an objective was set that Patient will have a normal activity restoration within 48hours as evidenced by; Patient verbalizing increase in activity levels, the nurse observing that the patient is performing selfcare and other activities without assistance. The following measures were put in place to relieve patient of the fatigue. patients' level of weakness was assessed. She was assisted to exercise all the extremities regularly to foster muscle strength and tone. Patient

was encouraged to have adequate bed rest and to perform activities like bathing, walking etc. and her efforts were commended. patient had a walk in the ward to serve as a source of passive exercise.

At 6:00pm, prescribed medications were served. patient had her bath after she had eaten Fufu with light soup. Vital signs were checked and recorded. Patient then took a warm bath around 6:30pm.

At 8:30pm, patient was handed over to the night nurses while she was sleeping for continuity of care. Vital signs were checked and recorded at 10:00pm by the night nurse

THIRD DAY OF ADMISSION (14TH NOVEMBER,2021)

In the morning, the report from the night nurses showed that patient was stable throughout the night. Patient took her bath and brushed her teeth at 6:30am. She was served with tea and bread as her breakfast around 6:49am, patient ate about two thirds of meal served. Prescribed medications were administered. Routine nursing care and procedure such as vital signs were checked and recorded as follows;

Temperature	35.5 degree Celsius
Pulse	86 beats per minute
Respiration	18 cycles per minute
Blood pressure	¹¹⁰ / ₇₀ milliliters of mercury

At 8:30am, the daily ward rounds were done and there were no changes in treatment regime, the treatment was continued.

After the ward rounds, during interaction with patient, it was discovered that patient has less knowledge on the condition and treatment processes. A nursing diagnosis was formulated as Deficient knowledge related to inadequate information on disease condition as evidenced by patient asking questions on causes and management of condition. An objective was set that Patient will have adequate knowledge on condition throughout hospitalization as evidenced by; Patient asking questions about condition and care rendered, Nurse observing improvement in patient's response to questions. The following interventions were made; she was educated and this was done in simple clear terms to enhance understanding. She was then educated on the condition (she was advised against excessive intake of spicy food and caffeinated beverages which increase the secretion of gastric acid). Education on adverse effects of self-medication was also stressed on. A conducive atmosphere was created for all questions that may bother her mind. All nursing intervention done on patient were written into the nurse's note. Patient's knowledge on condition was assessed after the education and she was able to answer most of the questions asked.

At 2pm, I sought permission from the ward in-charge to make my first home visit to patient's house with patient's husband whilst she was still on admission. I set off at 3:00pm and arrived at the house at around 3:45pm. The purpose of my visit was to assess patient's environment.

Vital signs were checked and recorded as:

Pulse – 85 beat per minute

Temperature – 36.1 °C

Respiration – 20cpm

SPO₂ – 97 percentage

Blood pressure- $113/70$ milliliters of mercury

At 3pm, I left with patient's husband from the hospital to their house for the first home visit. This was done with the intention of gaining a first-hand knowledge on the environmental conditions of the family that predisposes them to various medical conditions. Upon arrival, I realized that there were plenty trees planted in front and at the back of the house. I also observed that, they lived in their own house but its uncompleted. It has a supply of pipe-borne water with a toilet facility. The house was well cleaned and they had their refuse gathered in a covered bin some few meters away from the house. Also, there is good lightening system in the house. I gave them education on nutrition, personal hygiene and stress management.

I also encouraged them to ask health related questions. All questions asked were answered appropriately answered. I thanked them later when everything was done and went back to the hospital. Upon arrival at the hospital, I informed patient about the education given at the house based on their housing I educated the family on environmental and personal hygiene. I also educated the relatives on condition. I also informed the patient to always keep the children warm by wearing clothes that will cover their body well due to the number of trees found in their house. It is always cold in there and this could predispose the household especially the children to getting pneumonia.

At 7:30pm, vital signs were checked and recorded as normal.

At 8:00pm, due medications were administered. I assisted patient to bath and encouraged her to feed as well. Patient and relative was encouraged to report any change in the condition to the night nurse. I bid them goodbye and assured them on seeing them the following day.

FOURTH DAY OF ADMISSION (15TH November, 2021)

On arrival at the hospital, the night nurse reported that the patient had a stable condition throughout the night. I greeted the patient and assisted her to practice, personal hygiene by getting her warm water to bath as she requested. At 6am, vital signs were checked and recorded as:

Temperature-36.1 degree Celsius

Pulse – 85 beats per minute

Respiration – 23 cycles per minute

Blood pressure – $^{120}/_{80}$ millimeter of mercury.

At 6:30am prescribed medications were administered. During the ward rounds, the patient was informed that she was discharged. After the rounds, I reminded her and the relatives about the discharge and educated her on the need to heed to the scheduled review date (23/11/2021).

The need to avoid stress was emphasized. She was also advised to avoid caffeinated and spicy foods as well as eating in bits and on frequent intervals. Patient was also educated on how to take the drugs, its therapeutic and adverse effects and the need to comply with it was emphasized.

Patient was discharged on the following drugs;

Tab Omeprazole 40mg bd x 7

Metronidazole tabs 400mg tid x 7

Patient and I went to cashier to pay her hospital bills we then came back to the pharmacy for her medication. The receipt number was recorded in the admission and discharge book.

I helped pack and arranged her belonging thus cloth, bags, drugs and many more, I discarded the used lining and decontamination was done, we went to the nurse's station and the patient was

educated again about how she will continue her medication intake at home. She thanked the nurses again for their care, around 11:15am, she was done to go home. She informed the other patient about her discharge and also reassured them and said goodbye. I escorted her and her mother to the main gate to pick a car home.

Preparation for Discharge and Rehabilitation

Preparation of the patient towards discharge and Planning of Madam L.R. care started on the day of admission which was on 12th November 2021. Patient was made aware that she will be discharged when her condition stabilizes. All the necessary care to promote patient recovery during her period of hospitalization were given. On 14th November, 2021, at 3pm I made my first visit to Madam L.R.'s house while she was still at the ward, where I made an observation on patient's environment and educated patient and family base on the observations I made.

Education on personal and environmental hygiene, nutrition, eating of fruits and vegetables, exercises, drinking of water and education on stress management.

These educations were to help in the prevention of complication and reoccurrence of the diseases condition and also to prevent against other forms of disease. The family were also educated on the cause signs and symptoms of peptic ulcer disease, the need to report to hospital early whenever they encounter any form of diseases.

On 15th November 2021, patient was informed about the discharge on the next day if only her condition is stable and continuous education was given that, she should avoid starvation, smoking and drinking and was encourage to practice personal hygiene, she was discharged on 15th November 2021 and review date was communicated to her as 23rd November 2021, her bill was prepared and settled by the National Health Insurance Scheme and the rest was paid by her.

She was educated together with her sister on how the drugs should be taken and how to store them at home. She was also educated on the importance of review, that it is to assess the effectiveness of the treatment given, her health status, any complications arising from the condition and any adverse effects of the drugs. She was reminded on the education given on her condition.

Rehabilitation involves activities that are organized during the period of hospitalization for the patient towards his return home in his community to maintain his healthy status and prevent further ill-health. Madam L.R. did not develop any form of disability at the end of her hospitalization. Therefore, patient did not go through any form of rehabilitation services.

Follow Up/Home Visit/Continuity of Patient/Family Care

This is the act of rendering health service to a patient in his or her home environment to ensure continuity of care(Musher & Thorner, 2014).It helps to determine the health status of the patient following discharge, identify other problems and help find solution to the identified problems.

This involves visiting the patient's home before and after discharge to have first information on the condition of the house and its influence on the patient's health. This is of a great importance in the care of the patient

First Home Visit (14th November 2021)

On 14th June, 2021, I made my first home visit to patient's house whilst she was still on admission, it was a special home visit and it was made to familiarize myself to the home environment and for the continuity of patient's care. I set off at 3:00pm and arrived at the house at exactly 3:45pm. I went to the patient's house with her husband.

Patient lives at Techiman in the Bono East Region, she stays at Hansua which is a suburb of Techiman. On arrival, we met some of their relatives. They were all in good relationship due to how they relate and care for each other. Their health status was satisfactory. I greeted them and was offered a seat in front of their house. I then introduced myself and told them the reason for my visit and my reason was to know the actual home situation, to know the situation that had contributed to the patient's condition and how to care for patient after she has been discharged.

I made quick assessment of the environment. The house is a self-contained that is being built by the husband and they live there alone with their children. They have a lot of trees behind the house which makes the place very cold. They have a place of convenience in the house. There is electricity supply and their refuse are gathered into a covered basket and disposed of when full. Education was given to them on personal hygiene, good nutrition, intake of adequate liberal fluids and sleep in insecticide treated net to prevent mosquito bites and also encouraged them to ask health related questions.

I had a short discussion with patient's husband based on the assessment made after which I asked for permission to leave. I made a promise to visit again when the patient is finally discharged.

Second Home Visit (18th November 2021)

I visited the patient at home on 18th November, 2021 at 10:00am. The purpose of this home visit was to ascertain about her health after been discharged and to know how she was coping with the stresses of life and also to remind her to come for review on 23rd November, 2021. The family of patient expressed joy upon seeing me. They welcomed me and offered me a cup of water. After exchanging greetings, I had a quick look at the compound and observed that the education I gave during the first home visit was being put into practice. Upon interacting with the relatives, I got

to know that the patient had been doing well and she was taking the medications accordingly. I again emphasized on the education given earlier.

Patient's sister was educated on patient's daily meals and the need to help patient reduce stress and also to report any adverse effects of drugs before the review date for prompt treatment. The family members were encouraged to support her physically, psychologically, socially and financially to promote the health of Madam L.R.

I reminded them about the review and its importance. I also informed them about my last visit to terminate care of patient and then bid them farewell.

Review Day (23rd November 2021)

23rd November 2021 was patient's reviewed date. Madam L.R and her sister arrived at the O.P.D of the Techiman Holy Family Hospital at 9:10am. Her vital signs were checked and recordings were within the normal range as

Temperature 36.5°C

Pulse 86bpm

Respiration 20cpm

SPO2 96%

Blood Pressure 120/80mmHg

She was then accompanied to see the doctor on duty in consulting room 5. She had no complains. She was therefore advised to continue her medication prescribed on the day of discharge till it gets finished. Madam L.R. was encouraged to report any problem that may arise after her review for early intervention. I escorted them to hospital gate and I said good bye

Third Home Visit (27th November, 2021)

Patient and the family were visited as promised on 27th of November 2021. The aim of the visit was to make sure that patient was in good condition and to terminate care if patient's health is satisfactory. Madam L.R. appeared healthy. The patient's family were congratulated for sticking to the medical advice given to them and other education they had whilst in the hospital.

The patient was examined physically and was found to have fully recovered. Madam L.R. confirmed that the epigastric pain has also stopped and she felt comfortable. Patient and her family were thanked for their support and cooperation during the care. They were advised to seek medical care when she feels any unusual sign and symptoms and also to avoid over the counter drugs. The patient and family also expressed their profound gratitude to me for the time and holistic care rendered to them. I informed her and family that I was terminating the care on the grounds that Madam L. R's health status had improved and I had limited time for my academic work.

I then informed them of finally handing her over to another nurse as discussed, the last time.

The family was happy and I thanked them for their love and cooperation through the period of our interaction. The community health nurse named Ms. M.S was also introduced to them and I assured them that my colleague was equally going to offer them same or even better health care service as I had done. The new nurse to take charge of Madam L.R. was introduced to the family. I educated patient and her family on the continuity of treatment, adequate intake of liberal fluids, avoid intake of spicy foods, personal hygiene. I sincerely thanked Madam L.R. and her family for their cooperation during the health care period. The community nurse and I asked permission to leave. We bid them goodbye and left the house.

CHAPTER FIVE

EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY.

5.0 Introduction

This is the final phase of the nursing process. It is directed towards determining the patient's nursing intervention and the extent to which the goal set have been achieved. This chapter involves the following;

Statement of evaluation.

Amendment of nursing care plan for partially met and unmet outcome criteria.

Termination of care.

5.1 Statement Of Evaluation.

Evaluation is the final phase of the nursing process. It is the process of assessing and comparing the outcome of nursing orders and intervention against previously stated goals and objectives (Association, American Nurses, 1998).

Patient was admitted on the 12th of November, 2021 at 7:15am. She was diagnosed of Peptic Ulcer Disease. She was nursed using the nursing process approach as a guide. A lot of problems were identified, goals were set and interventions employed to resolve them.

Relieving of epigastric pain

On the 12th of November 2022 at 7am, patient complained of abdominal pain.

A goal was set to relieve the pain within 4 hours. Nursing orders such as explaining to patient and family the reason for the pain and available management, assessing the level of pain, ensuring adequate bed rest, diversional therapy and administering prescribed medications were

carried out and goal was fully met on the 12th November 2021 at 2:00pm, as patient verbalized the absence of pain and nurse observing that patient shows no sign pain.

Relieving of anxiety

Patient looked anxious on 12th/11/2021 at 12:10pm, a goal was set to decrease the patient's level of anxiety throughout admission. Nursing orders such as reassuring patient of competent nursing care, explaining to patient all procedures to be carried out, assessing patient's level of anxiety, introducing patient to other patients who has recovered from same condition. Goal was fully met. as nurse observed a cheerful facial expression of the patient and patient verbalized a reduced level of anxiety

Relieving patient of vomiting

Patient complained of vomiting on 12th/11/2021 at 7am. A goal was set to relieve patient of vomiting and to maintain normal body fluid throughout the period of hospitalization. Nursing orders such as assessing the cause of vomiting, administering prescribed IV fluids and Intra muscular promethazine, monitoring and recording intake and output and encouraging patient to take in more fluids and goal was fully met on the 13/11/2021 at 12:20pm as nurse observed a normal skin turgor of patient.

Relieving of anorexia

Patient complained of loss of appetite on 13th/06/2021 at 9:45am, a goal was set to improve patient's appetite and maintain her normal nutritional status throughout the period of hospitalization, nursing orders such as involving patient in planning of diet, serving meals

attractively and in bits and also providing highly nutritious meals were provided. Goal was fully met on 15/11/2021 at 8:20am as patient verbalizes, she was able to eat more than half of meal served

Improving patient's knowledge on condition

On 14th/11/2021 at 8:30am, goal was set to improve the patient's level of understanding concerning the condition within 4hours, orders such as assessing patient's level of knowledge about the disease condition, educating patient on her condition and allowing patient to ask question for clarification. Goal fully met on 14/11/2021 as patient was able to answer questions concerning the condition correctly.

5.2 Amendment of Nursing Care Plan for Partially Met and Unmet Outcome Criteria Since there were no partially met goals and that all goals and objectives were fully met, there was no amendment to be made in the care plan.

5.3 Termination of Care.

Termination of care is the last phase of interaction of the nurse, patient and relatives. It is a gradual process which is started from the day of admission to the last home visit. Throughout hospitalization, patient and family were made aware that the care is for a period of time after which the nurse -patient relationship will eventually be terminated. Patient and family were educated on their personal and environmental hygiene, exercise and eating of a well-balanced diet. Patient was also educated on the need to continue taking her medication. Patient and family were again educated on the need to report to any nearby clinic in case of any ailment. They showed appreciation for the care I rendered. I introduced the community health worker thus

nurse M.S to patient and family that, they should communicate with her whenever she needed health assistance and also for continuity of care.

The actual termination of the interaction occurred on the last home visit which was on the 27th November 2021, I made them aware that it was my last official visit to them hence termination of care. It was actually hard when I informed patient of terminating the care since she wanted me to continue with the good therapeutic relationship. After explaining everything very well to her, she agreed to the termination of care, though it was a sad moment.

Patient and family showed appreciation for my service and asked me to keep the relationship established. I thanked them for their co-operation and assistance and I bid them good bye.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Summary

Mish (2016), defined summary as a brief statement that gives the most important information about something.

Patient was admitted at the Emergency unit at Techiman Holy Family Hospital on 12th November 2021 at 07:15am with complains of vomiting, abdominal and epigastric pain, general body weakness. She was accompanied by her sister and daughter. She was diagnosed of peptic ulcer disease with confirmed by signs and symptoms and laboratory investigations. She spent four days in the ward. Routine cares such as personal hygiene, assisted bed bath, monitoring of vital signs and intake and output monitored as well as administration of drugs were carried out successfully. On admission patient was manage on these drugs;

Intravenous Buscopan 40mg stat

Intravenous Omeprazole 80mg stat then 40mg bd × 24hrs

Intravenous Metronidazole 500mg tds × 24hrs

Infusion ringers lactate 1000 mls for 24 hours

Infusion normal saline 1000 mls for 24 hours

Intravenous promethazine 40mg

Seven nursing problems were identified, diagnoses made, and objectives set, nursing orders carried out and goals fully met within the expected time. Patient was discharged on the 15th

November, 2021 and she came for review on 23rd November, 2021. Follow ups were made to ensure to continuity.

6.1 Conclusion

According to Mish (2016) defined conclusion as a final decision reached by reasoning.

This care has broadened my knowledge about the causes, predisposing factors, signs and symptoms, management, and prevention of Peptic Ulcer Disease. It has given me an opportunity of knowing more about my patient and family. The patient and family care study has also helped me to know and understand comprehensive nursing care that has to be given to individual patient and also what efficient nursing care can do for hospitalized patient. It is obvious that successful patient and family care study depends much on the co-operation of patient and family as well as other members of the health team.

The knowledge I have acquired would enable me to care for patient not only with Peptic Ulcer but other disease conditions as well. I will to put into practice where my service will be needed when I pass out to become a staff nurse in the year ahead of me. I also recommend the daily use of the nursing process in our day to day practice as nurses and that more seminars should be held to elaborate more on the use of the nursing process and care plan in caring for our patients.

BIBLIOGRAPHY

Janice L.H and Kerry H.C (2014), *Brunner & Suddarth's text book of Medical-Surgical Nursing* (13thEdition) Philadelphia, PA 19103; Lippincott Williams & Wilkins.

Linad Skidone (2005): *Mosby's Drug Guide for Nurses*, 6th edition, Mexico Elsevier Mosby:

Momtaz H, Souod N, Dabri H, Sarshar M. (2012) Study of Helicobacter pylori genotype status in saliva,

dental plaques, stool and gastric biopsy samples. *World Journal of Gastroenterology*, 18(17):2105–2111.

National Digestive Diseases Information Clearing House (NDDIC, 2014). Peptic ulcer disease NIH Publication No. 14–4225. Retrieved from: www.digestive.niddk.nih.gov.

Patlan, T. J & Toy, T. E (2009): *case files, internal medicine* (7th Ed). The McGraw-Hill Companies, Inc.

Rafi Abul Hasnath Siddique (2014). Prevalence of Peptic Ulcer Disease among the Patients with Abdominal Pain Attending the Department of Medicine in Dhaka Medical College

Hospital, Bangladesh IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 13, Issue 1 Ver. IX, PP 05-20

www.iosrjournals.org

Smeltzer, S. C., Bare, B.G., Hinkle, L. J., & Cheever, K. H. (2012). *Brunner and Suddarth's, Textbook of medical surgical nursing* (12th Ed.) Wolters Kluwer Health / Lippincott Williams & Wilkins.

Wilma J.P, Virginia L.C, Judith K.S, Marry K.C (1995), Phipps Cass Meyer Sands Lehman Medical

Surgical Nursing (Fifth edition) USA, Graphic world, Inc.

Patient folder number:34504\20

APPENDIX

DATE	TIME	TEMPERATURE (°C)	PULSE (bpm)	RESPIRATION (cpm)	SPO2	BLOOD PRESSURE (mmHg)
12/11/2021	7:15am	36.8	96	24	95	120/70
	10:27am	36.4	90	22	98	125/70
	2:00pm	36.2	86	20	97	122/72
	6:36pm	36.4	84	22	98	120/68
	10:15pm	36.6	80	18	99	123/79
13/11/2021	6:30am	36.8	80	20	100	120/80
	11:00	36.9	84	20	95	120/80
	2:00pm	36.8	80	22	97	117/76
	6:24pm	36.5	88	24	98	119/78
	10:09pm	36.3	82	21	95	125/72
14/11/2021	6:50am	35.5	86	18	96	110/70
	10:38	36.1	85	20	97	113/70
	2:10pm	36.4	90	22	99	120/80
	7:30pm	37.0	84	18	99	118/78
	10:11pm	36.7	88	19	100	120/80
15/11/2021	6:00am	36.1	85	23	98	120/80
	10:00am	36.4	80	22	99	118/82

SIGNATORIES

SIGNATORIES

THE STUDENT NURSE

NAME: NAKU JOAN

SIGNATURE: 

DATE: 7/10/2022

THE NURSE IN-CHARGE OF EMERGENCY UNIT OF HOLY FAMILY HOSPITAL, TECHIMAN

NAME: Mr Henkiel Oppong Kjetjeki

SIGNATURE: 

DATE: 07/10/2022

THE SUPERVISOR, (HOLY FAMILY NURSING AND NURSING TRAINING COLLEGE, BEREKUM)

NAME: MS ANTHOINETTE EFFUM

SIGNATURE: 

DATE: 07/10/2022

THE PRINCIPAL (HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE- BEREKUM)

NAME: MONICA NKRUMAH

SIGNATURE: 

DATE: 10/10/2022

ACADEMIC CO-ORDINATOR-NURSING
HOLY FAMILY NURSING & MIDWIFERY
TRAINING COLLEGE- BEREKUM

