

**HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE**

**BEREKUM**

**A CLIENT/FAMILY CENTERED NURSING CARE STUDY ON**

**PEPTIC ULCER DISEASES**

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**A PATIENT/FAMILY CARE STUDY SUBMITTED TO THE NURSING AND MIDWIFERY  
COUNCIL OF GHANA IN PARTIAL FULFILMENT TOWARDS THE AWARD OF  
LICENSE TO PRACTICE AS A PROFESSIONAL REGISTERED NURSE.**

**AUGUST, 2022**

## **PREFACE**

Patient and family care study is a report primarily about the care rendered to a patient and family with the aid of the nursing process. The care last for a period of time from the time of meeting the patient on the ward till discharge through home visit till care is terminated. This study helps in broadening the knowledge of the student nurse on the nursing process which serves to provide a systematic methodology of nursing practice. It also helps the student nurse unify, standardize and direct nursing practice. The study also helps the student nurse to be abreast with the necessary care given to patients, emphasizing health promotion, maintenance and restoration or enhancing a peaceful death, depending on the patient's condition. The study again, is an academic exercise that forms part of the requirement for an award of Certificate by the Nurses' and Midwives' Council of Ghana to practice as a Registered General Nurse. During the study, a student nurse is required to give comprehensive details of a particular patient and family which include assessment of the patient and family to enable the student to set goals and objectives for proper implementation. Due to the comprehensive care plan given, the student nurse becomes equipped with information on the patient's condition.

## **ACKNOWLEDGEMENT**

**This report would not have been possible without the help of the Almighty God, who granted me strength, wisdom and knowledge. I wish to express my sincere gratitude first and foremost to God Almighty. A special note of appreciation goes to Miss. F.B. and family for their support and cooperation in providing all the needed information for writing this care study. I am also grateful to all the doctors and nurses of St. Theresa's Hospital, Nkoranza (female medical ward), who gathered and assisted me in writing this care study. My appreciation also goes to Mr. Edward Amponsah, my supervisor and the entire faculty and staff of Holy Family Nursing and Midwifery Training College, Berekum, for their guidance and support, advice and for giving me the insight and time to take up this study. Again, I am grateful to my family especially my able mother and Father, Mr. and Mrs. Owusu Agyeman, and colleagues of the noble profession and all whose criticisms, encouragement and support helped me to complete my care study successfully. Finally, I wish to also acknowledge the authors and publishers of whose literature I used as references in writing my care study.**

## INTRODUCTION

Patient and family care study is a study made on a particular patient and family with a specific disease condition. This is done to improve upon the nursing skills and care rendered to a particular client by drawing a comprehensive care that will help patient attain optimal health. This study deals with the nursing care rendered to Miss. FB. a 21-years-old lady who stays with her parents in Nkoranza in the Bono East region. On the 14th day of November, 2021 at 1:30 pm, Miss. FB. was brought to the Female Medical Ward through Out Patient Department (OPD), for admission per ambulation by the admission team and accompanied by the mother with the diagnosis of Peptic Ulcer Disease. Patient was alert and conscious on arrival. Patient and family were welcomed at the nurses' station and the patient made comfortable in an already prepared admission bed. They were reassured of the competency of the health team and that measures will be put in place to care for the patient. I then took the opportunity to express my intention of selecting her for my care study, because I was interested in patient's condition and wanted to learn more which was welcomed. To be able to render patient and family holistic and individualized nursing care, the nursing process was employed. The whole care study is divided into six chapters according to the nursing process approach and organized as follows; Chapter one deals with assessment of patient/family. This includes patient particulars, family medical and socio-economic history, patient developmental history, and patient's life style and hobbies, past and present medical history, admission of patient, patient concept of illness, literature review on the disease condition and validation of data. iv Chapter two involves data analysis in which data collected is compared with the standard in the literature review, tables of laboratory investigations, treatment, clinical manifestation, pharmacology of drug, complication, patient and family strength, health problems identified and nursing diagnoses. Chapter three entails planning for client and family care, in this chapter care plan was drawn and interventions carried out. Chapter four deal with implementation of patient and family care, summary of actual

nursing care given to client, preparation of patient and family towards discharge and rehabilitation and follow-up home visit. Chapter five evaluates care rendered to patient and family, amendment of nursing care, termination of care and also, involves summary and conclusion of the nursing care rendered to Miss. F.B. and family from time of admission to when she was discharged.

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## **CHAPTER ONE**

### **ASSESSMENT OF PATIENT /FAMILY**

#### **1.0 Introduction**

Assessment can be defined as a critical analysis and evaluation or judgments of the status or quality of a particular condition, situation or other subject of appraisal. It involves the collection of data about the patient and the family's health which forms the identification of patient's problems. It is also the systematic collection of patient data pertaining to the individual's health status, abilities and preferences for care and treatment (Student portals, 2021).

This chapter is the first step of the nursing process which involves the collection of data concerning the patient, family and environment. This is done through interview, observation, examination and the use of medical records. This chapter also gives the general background information about the patient and family as well as the community in which they live. It comprises the patient's particulars, the family medical and socioeconomic history, the patient's developmental history, her lifestyle and hobbies. All these pieces of information were gathered gradually starting from the day of admission.

#### **1.1 Patient's Particulars.**

The particulars of something or someone are facts or details about them which are written down and kept as record (Collins English Dictionary, 2022). The patient, F.B is a 21 years old young lady, born in the year 2000. She was born in upper west region in a town called Jirapa, Ghana. She is a Dagaati by tribe but also speaks Bono and English in addition to Dagaati language due to their migration to Bono land, Nkoranza. She is a Christian and attends the Presbyterians' Church. She stays with the parents in Nkoranza, Bono East region. She stays at Newtown, a suburb in Nkoranza. The patient and parents are renting in a house behind Fabea FM, with house number NG0094. Miss FB started school alright but ended at junior high level. She started to

learn dress making after dropping out from school. She has passed out and is now a qualified seamstress. F.B started her dress making business not quiet long therefore, still depends on her family for her upkeeps. F.B is the first born to Mr. R.D and Mrs. P.D. The parents have 4 children including Miss F.B. She is of the height 150cm, weights 65kg, dark in complexion with no physical impairment.

### **1.2 Patient Family's Medical History.**

Medical history is a record of information about a person's health (NCI, 2022). A patient medical history includes information about allergies, illnesses, surgeries, immunization, and results of physical examinations and tests. It also includes information about medicines taken and health habits, such as diet and exercise. By extension, family medical history includes health information about a person's close family members (parents, grandparents, children, sisters and brothers) (Palta, Szanton, and Semba, 2015). The knowledge of the family's medical history helps in the diagnosis of certain hereditary diseases in the family.

According to the patient and family, hypertension and diabetes have ever been recorded in their extended family but they attributed it to sedentary lifestyle the affected persons lived. The family cannot recall any history of sickle cell disease, mental illness, cancer or any degenerative condition apart from the aforementioned hypertension and Diabetes, which the members suffering the ailments are on medications offered to them by qualified healthcare providers from accredited health facilities. None of her family members have never been admitted in a psychiatry hospital. According to the family, their main means of transport within their settlement is motorbike, hence members are often admitted to hospital due to motorbike accident. However, none ever got fatal since they are always in helmets and joints protected garment.

Also, F.B and family admitted for the fact that their family often use herbal preparations or buy over-the-counter medications like acetaminophen, ibuprofen, magnesium trisilicate, diclofenac, etc, for headaches, abdominal pains and fever.

### **1.3 Parent/family's Socio-Economic History.**

Socioeconomic status is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic access to resources and social position in relation to others (Palta, Szanton, and Semba, 2015). Socioeconomically, the patient family falls within the middle-income class and is able to settle hospital bills with the National Health Insurance Scheme (NHIS). The patient's parents are both farmers. They practice mix farming and mix cropping. Sheep, goats and fowls are the animals they rear and for the crop farming, the products ranges from cereals, tubers and vegetables, all in small scales. Patient's mother takes farm product to market for sales every Tuesday during harvest season while father sells animals when the need arises. They are basically depending on their farming for survival and also extend support to the extended family occasionally. F.B now operates her own seamstress shop and the family's prayer is that her business gets booming so she could extend help to her siblings' school needs. According to Mr. R.D, the extended family do not support them in any kind rather do demand from them.

The patient's family is an extended type which they often pay homage to each other when the needs arise. Though their nuclear family is settled in Nkoranza, but during festive and ceremonial celebration, they all do travel to Upper West, Jirapa to be precise for whatever occasion they have. The patient has good relation with family and friends, and gets social support from them when the needs arise. During her hospitalization, all her additional bills to her active National Health Insurance scheme were financed by her father, solely from their farming business. There are no obvious taboos in the family but they cherish good moral values.

#### **1.4 Patient's Developmental History.**

Developmental history refers to the information obtained from the parents of a specific patient regarding potential significant historical milestones and event that might have a bearing on the patient current difficulties. Development is the process of growth differentiation. It's the act or process of growing or causing something to grow or become larger or more advanced (Webster, 2021). Growth on the other hand, is also the progressive development of a living thing, especially the process by which the body reaches its point of complete physical development (Weller, 2019).

Maturation is the emergence of personal and behavioral characteristics through growth processes; the process of developing in the body or mind. F.B had a normal growth/developmental milestone.

According to Patient and family, her mother had a normal vaginal delivery by the help of a Traditional Birth attendant. She also said that, the mother did not incur any complications during birth and she could cry and moved her limbs immediately after delivery. According to patient's mother, she breastfed her together with other feeds (Supplementary feeding). She said her mother told her; she was able to sit by the 5<sup>th</sup> month. She started crawling at the 10<sup>th</sup> month and was able to utter simple words like "mama", "dada" also around the same time. Patient's mother also attested that, her ward ever been immunized, but cannot tell the kind of immunization it was but has a scar on her right deltoid which serves as an evident that she was immunized when she was a child. She therefore developed motor and mental abilities normally. Puberty is the condition of being or the period of becoming first capable of reproducing sexually, marked by maturing of the genital organs, development of secondary sexual characteristics, and in the human and in higher primates by the occurrence of breaking of voice in the male.

She developed her secondary sexual characteristics like enlargement of breast and hips, growing of pubic hair in armpit at the age of thirteen. She attended school but ended at Junior High level.

She decided to be a dressmaker through her family recommendation. She's currently in her active reproductive ages but has not married nor giving birth.

According to Erik Erikson's stages of psychosocial development, the basic assumption of the theory is that, human beings go through eight (8) stages of development. Failure to go through a stage completely would lead to a reduced ability to complete further stages. These are;

- Trust verses Mistrust (0-18 months),
- Autonomy verses Shame (18-3 years),
- Initiative verses Guilt (3-5 years),
- Industry verses Inferiority (6-12 years),
- Identity verses Role confusion (12-18 years),
- Intimacy verses Isolation (19-40 years),
- Generativity verses stagnation (40-65 years),
- Integrity verses Despair (65 years and above).

With reference to the theory of psychosocial development, F.B is within "Intimacy versus Isolation" which is the sixth stage, people within this stage are in their early adulthood (20s through to early 40) and hence develop sense of readiness to share their lives with others. However, if other stages have not been successfully resolved, young adults may have trouble developing and maintaining successful relationships with others. The family's hope is that F.B go through all stages in complete succession. As in the aforementioned, F.B, after dropping out from school, she did learn a trade as dressmaker and also help the family in farming business.

### **1.5 Patient's Obstetric History**

According to F.B, and confirmed by her parents, she is not married and has never being pregnant before. F.B said she had her menarche was in her late 12<sup>th</sup> year which she sometimes regards it as in age thirteen. Ever since she has been experiencing normal 5-days menstrual flow with usual cramps during first two days. F.B understands that unprotected sex could lead to sexual transmitted infection and have always been careful around it. She has never gone through any gynecological examination, be it physical or laboratory study, but believes she is reproductively healthy. However, she understands the implications of her habit, as early detection of conditions like fibroids, cervical cancer, breast cancer, ovarian cysts, etc., is part of the solution.

### **1.6 Patient's Lifestyle and Hobbies**

Lifestyle and hobbies of a particular person or a group of people is the living conditions, behavior, and habits that are typically of them or chosen by them (Collins English Dictionary, 2022). According to F.B, during her school days' time, 4 years ago, she used to wake up around 4am to prepare for school, and ever since she drops out, she's still used to waking up early as she used to during her schooling days.

She brushes her teeth with toothbrush and toothpaste unassisted. She takes her bath twice a day with soap and water and she has a regular bowel pattern. Currently she finds it so fun being around her dressmaking machines doing her usual work. She mostly takes tea before going to work and takes her lunch from her own a preparation, and takes enough water during the day. At work, she is very quiet and avoids senseless vigorous activities because of the focus she has for her job. She has 3 other apprentices learning the trade from her. According to F.B, she has a friend that they do visit each other very often. Her favorite food is Rice and Kontommire Stew. She loves to sing but finds her voice awful around others therefore, sings when alone. She is a Christian though, but loves circular hit songs. During her leisure time, around others she likes to play Ludo, usually with family or her apprentices. On Sundays, she attends church with his family. F.B is sociable and calm.

### **1.7 Patient's Past Medical/Surgical history**

The past medical/surgical/obstetric history of a patient is a detailed summary of a person's past health, and it is an important part of the health history. (Smeltzer et al, 2021). According to the patient, she does not remember any childhood illness such as measles and Whooping cough. She has had a car accident on Nkoranza - Kintampo Road which led to her been hospitalized but no surgery was done and no complication observed.

She manages minor illness like headache, abdominal pains and fever with herbal preparation and sometimes over-the-counter-drugs. She only goes to seek medical help from a hospital when she fails treating it herself. She stated that, she has never been operated on before. She admitted that she does not often go for medical checkup, but unless her symptoms get worse. She can only recall of 3 admissions to hospital in her adolescent and adult life; on first account she was diagnosed of malaria, second account gastroenteritis and the current hospitalization PUD, with reference to information in her folder.

### **1.8 Patient's Present Medical History**

According to miss FB, she experienced epigastric pain one month ago but was using herbal preparation and it got well until the 10<sup>th</sup> of November 2021 when it started again but was gradual. It became severe on 14<sup>th</sup> November 2021 when she was rushed to St Theresah Hospital. During OPD consultation, she complained of experiencing severe epigastric pain, vomiting, heart burns and also, had history of constipation. She said both hunger and taking in foods aggravates her pain.

She arrived at the St. Theresah hospital at the Out-Patient Department accompanied by a relative at 1pm. She was admitted to the female's medical ward of the hospital for proper medical care.

### **1.9 Admission of the Patient**

F.B was admitted to the females' medical ward through the Out-Patient Department. She was accompanied by two nurses and a relative at 1:30pm to the ward with diagnosis of peptic ulcer

disease. She was given bed 13 on arrival to medical ward. F.B complained of epigastric pain, vomiting, cough, loss of appetite and constipation. F.B was made comfortable and to rest in bed.

Her vital signs during admission were assessed and recorded as:

- Temperature 35.6<sup>0</sup> C
- Pulse 101bpm
- Respiration 24cpm
- Blood pressure 110/80mmHg
- Weight 65kg
- Height 150cm

Patient was managed on the following medications;

- Suspension Nugal O 15mls tds x 5days
- Intravenous Dextrose in Normal Saline 5% 2 liters x 24 hours
- Intravenous Omeprazole 40mg stat then 40mg bd x 24 hours
- Rangers Lactate 1litre x 24 hours
- Intravenous Buscopan 40mg bdx 24hours
- Intramuscular Promethazine 25mg stat
- Capsule Omeprazole 20mg bd x7days
- Intravenous Amoxiclav 1.2g tds x 24 hours
- Amoxiclav, oral, 625mg bd x 7days
- Intravenous metronidazole 500mg tds x 24 hours
- Metronidazole, oral, 400mg tds x 7days
- Intravenous Tramadol 200mg in 500mls of Normal Saline x 12 hours

Ordered laboratory investigations were;

- Full blood count

- Blood film for malaria parasite
- Stool analysis for Helicobacter Pylori
- BUN (Blood Urea Nitrogen) and creatinine.

F.B and relatives were orientated to the ward and its cubicles and daily ward routines were adequately explained to them. The patient was not disturbed much with orientation since she was in pain and needed rest and care immediately. They were also introduced to the other client on the ward and her name and other particulars were entered into the admission and discharge book as well as the daily ward state. An intravenous catheter was secured on her right wrist. The patient and the relative were very anxious on assessment. Psychological preparation by reassuring them of the competency of staff present was offered to them. IV Tramadol 200mg in 500mls of Normal Saline and Syrup Nugal O were administered to reduce patient's abdominal pains. After patient felt a bit relieved from the pains, she and her relative was spoken to about the intention to use them for care study. Thorough explanation about what, how and when the care study will be done was offered to them. Both patient and relative offered a verbal consent after they understood the explanation. They were assured of total confidentiality about any information they let out. The ward in-charge and other ward nurses present were also informed and they gave their go-ahead. Further explanations were given to her about how the care is going to be rendered to her from the time of admission until discharge and also, visitations to her residence during her admission and after she has been discharged. Discharge plan was communicated to patient and relatives including possible duration of hospitalization.

After the admission process, a care plan was prepared for the patient based on problems identified.

### **1.10 Patient's concept of the condition or illness**

Upon interviewing the patient, it was realized that she did not know the actual cause of her illness. The patient however, did not also relate the cause of her illness to any spiritual factor but believed that after her treatment, she will be healthy once again.

### **1.11 Literature review on peptic ulcer disease**

Literature review of a condition gives a detailed insight into the condition. It talks about the established and laid down facts about the disease condition, which aids in the medical and nursing diagnoses and the appropriate management for that particular disease. It also entails the standard with which the patient's clinical manifestations, diagnostic investigations, treatment and others are compared. It comprises of the following overview;

- Definition
- Types
- Incidence
- Etiologic/Causes
- Pathophysiology
- Clinical features
- Diagnostic investigations
- Medical and Surgical management
- Nursing management
- Prevention and
- Complications

## Anatomy overview of the Gastro-Intestinal Tract (GIT)

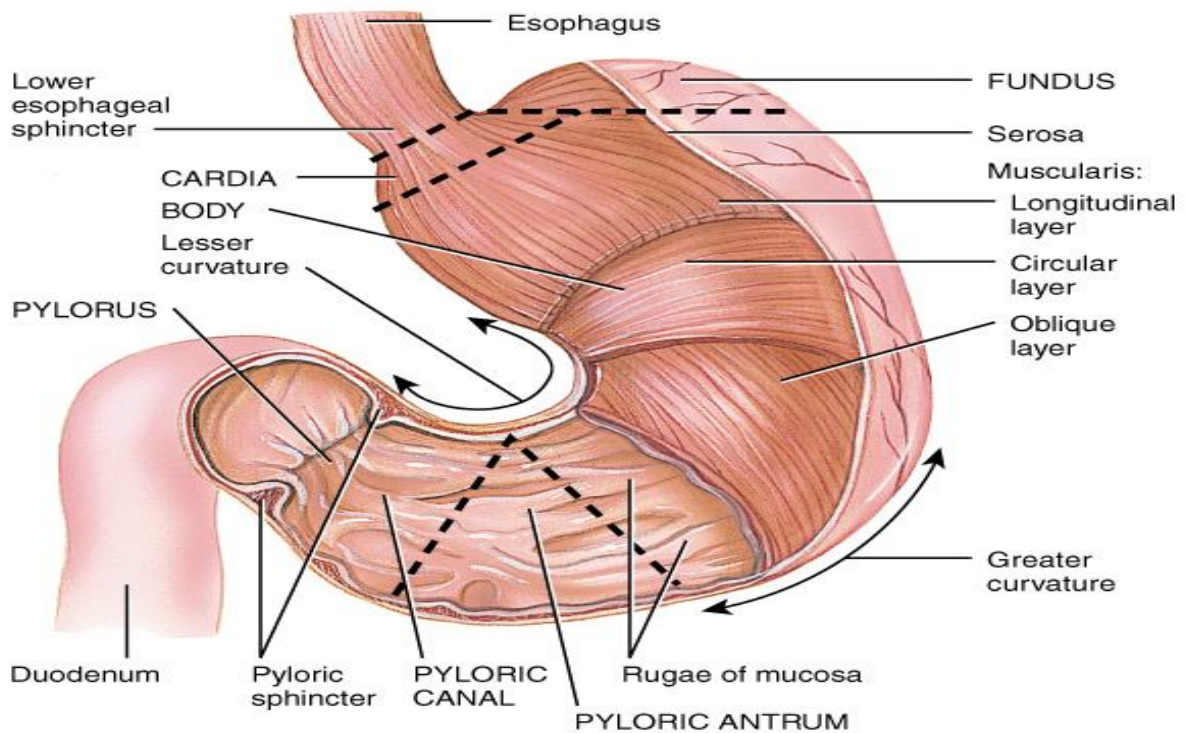


Figure 1: The Stomach.

According to Tortora & Derrickson (2019), the gastro-intestinal system is essentially a long tube running right through the body, with specialised sections that are capable of digesting material put in at the top end and extracting any useful components from it, then expelling the waste products at the bottom end. The whole system is under hormonal control, with the presence of food in the mouth triggering off a cascade of hormonal actions; when there is food in the Stomach, different hormones activate acid secretion, increased gut motility, enzyme release etc. Nutrients from the GI tract are not processed on-site; they are taken to the liver to be broken down further, stored, or distributed.

### The Oesophagus

According to Tortora & Derrickson (2019), once food has been chewed and mixed with saliva in the mouth, it is swallowed and passes down the oesophagus. The oesophagus has a stratified

squamous epithelial lining which protects the oesophagus from trauma; the sub mucosa secretes mucus from mucous glands which aid the passage of food down the oesophagus. The lumen of the oesophagus is surrounded by layers of muscle- voluntary in the top third, progressing to involuntary in the bottom third and food is propelled into the stomach by waves of peristalsis

## **The Stomach**

The stomach is a 'j'-shaped organ, with two openings- the oesophageal and the duodenal- and four regions- the cardia, fundus, body and pylorus. Each region performs different functions; the fundus collects digestive gases, the body secretes pepsinogen and hydrochloric acid, and the pylorus is responsible for mucus, gastrin and pepsinogen secretion. The stomach is continuous with the oesophagus at the cardiac sphincter and with the duodenum at the pyloric sphincter. It has two curvatures; the lesser curvature and the greater curvature.

According to Sussan (2016), the stomach has these major functions.

- Temporary food storage.
- Control the rate at which food enters the duodenum.
- Acid secretion and antibacterial action

Different areas of the stomach contain different types of cells which secrete compounds to aid digestion. The main types involved are:

- Parietal cells which secrete hydrochloric acid.
- Chief cells which secrete pepsin.
- Entero-endocrine cells which secrete regulatory hormones.

The stomach contains three layers of involuntary smooth muscle which aid digestion by physically breaking up the food particles;

- Inner oblique muscle
- Circular muscle
- Outer longitudinal muscle

The stomach contains small amount of gastric juice present in the stomach, even when it contains no food. That is the fasting juice. Secretion of its maximum level about 1 hour after a meal then declines to the fasting level after four hours. There are three phases of secretion of gastric juice: cephalic phase, gastric phase, intestinal phase. The stomach mucosa is protected from the corrosive effect of the acid through the following ways:

- A thick coating of bicarbonate rich in mucus is built up on the stomach wall.
- The epithelial cells of the mucosa are joined together by tight junctions that prevent gastric juice from leaking into the underlying tissue layers.
- Damage epithelial mucosa cells are shed and quickly replaced by division of undifferentiated stem cells that reside where the gastric pits join the gastric gland.

### **The Small Intestine**

According to Waugh & Grant (2019), the small intestine is the site where most of the chemical and mechanical digestion is carried out, and where virtually all of the absorption of useful materials is carried out. The whole of the small intestine is lined with an absorptive mucosal type, with certain modifications for each section. The intestine also has a smooth muscle wall with two layers of muscle rhythmical contractions force products of digestion through the intestine (peristalsis).

### **The Duodenum**

It forms a 'C' shape around the head of the pancreas. Its main function is to neutralize the acidic gastric contents (called 'chyme') and to initiate further digestion; Brunner's glands in the submucosa secrete alkaline mucus which neutralizes the chyme and protects the surface of the duodenum.

### **Definition of Peptic Ulcer**

According to Smeltzer, Bare, Hinkle & Cheever, (2021), peptic ulcer is an excavation (hollowed-out area) that forms in the mucosal wall of the oesophagus, stomach, in the pylorus (the opening between the stomach) and duodenum, or in the duodenum (the first part of the small intestine).

Peptic ulcer may be referred to as an oesophageal, gastric, or duodenal ulcer, depending on its location. It is caused by erosion of a circumscribed area of mucous membrane. 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.

### **Incidence**

According to Smeltzer, et al., (2021), the disease can occur anywhere, but it is common only in some areas. Peptic Ulcer Disease occurs more in men than women with the ratio 3:1. It was recorded in London 20 years ago that duodenal ulcer was two to three times common than gastric ulcer. The prevalence of peptic ulcer is higher in Scotland and the North of England than in the South. In the developed world, duodenal ulcer is common than gastric ulcer and occurs in younger age. Gastric ulcer becomes relatively common in elderly. After menopause, the incidence of peptic ulcer in women is almost equal to that of men with duodenal ulcer.

### **Causes of Peptic Ulcer Disease (Predisposing Factors)**

According to Kumar & Clark (2019), and Standard Treatment Guidelines (2017) the causes of peptic ulcer are as follows;

- Age (most often in people between the ages of forty and sixty years)
- Emotion or stress and anxiety
- Infection of a gram-negative bacterial (helicobacter pylori)
- Familial tendency
- Medications; Chronic use of corticosteroids and Non-Steroidal Anti Inflammation Drugs e.g. Diclofenac, aspirin
- Alcohol ingestion
- Intake of spicy foods
- Excessive smoking
- Irregularities in hormonal secretion e.g. oestrogen and progesterone lower acid secretion.
- Blood type predisposition; duodenal ulcer is common in blood type O and gastric ulcer in blood type A
- Certain endocrine diseases such as hyperthyroidism, pituitary tumour
- Impaired activity of the pancreas.
- Excessive secretion of gastric acid
- Inadequate protection of the lining of the stomach and the duodenum against digestion of acid and pepsin

### **Types of Peptic Ulcer Disease**

According to Smeltzer, et al., (2021), peptic ulcer can be classified according to the location or site of mucosal erosion.

- **Oesophageal Ulcer:** This is the less common type of Peptic Ulcer where there is an excavation in a part of the mucosal lining of the oesophagus.
- **Gastric Ulcer:** This is an excavation formed in the mucosal wall of the stomach.

- Duodenal Ulcer: This is an excavation formed on the mucosa wall of the duodenum.

Peptic ulcer can also be described as acute or chronic depending on the degree of mucosal involvement.

### **Pathophysiology**

According to Smeltzer, et al., (2021), peptic ulcers occur mainly in the gastro-duodenal mucosa because this tissue cannot withstand the digestive action of gastric acid (HCl) and pepsin. The erosion is caused by the increased concentration or activity of acid-pepsin or by decreased resistance of the mucosa. A damaged mucosa cannot secrete enough mucus to act as a barrier against hydrochloric acid. The use of Non-Steroidal Anti-inflammatory Drugs (NSAIDs) inhibits the secretion of mucus that protects the mucosa. Patients with duodenal ulcers secrete more acid than normal, whereas patients with gastric ulcers tend to secrete normal or decreased levels of acid. Damage to the gastro- duodenal mucosa results in decreased resistance to bacteria, and thus infection from *Helicobacter pylori* bacteria may occur. Zollinger Ellison Syndrome (ZES) is suspected when a patient has several peptic ulcers or an ulcer that is resistant to standard medical therapy. It is identified by the following:

- hypersecretion of gastric juice,
- duodenal ulcers, and
- gastrinomas (islet cell tumors) in the pancreas.

Diarrhoea and steatorrhea (unabsorbed fat in the stool) may be evident. The most common symptom is epigastric pain. Stress ulcer is the term given to the acute mucosal ulceration of the duodenal or gastric area that occurs after physiologically stressful events, such as burns, shock, severe sepsis, and multiple organ traumas. As the stressful condition continues, the ulcers spread. When the patient recovers, the lesions are reversed. This pattern is typical of stress ulceration. Differences of opinion exist as to the actual cause of mucosal ulceration in stress

ulcers. Usually, the ulceration is preceded by shock; this leads to decreased gastric mucosal blood flow and to reflux of duodenal contents into the stomach. In addition, large quantities of pepsin are released. The combination of ischemia, acid, and pepsin creates an ideal climate for ulceration. A small portion of patients who bleed from an acute ulcer have had no previous digestive complaints, but they develop symptoms thereafter. Patients may present with gastrointestinal bleeding as evidenced by the passage of tarry stools.

### **Clinical features**

- Dull gnawing pain or burning sensation in the mid-epigastrium or the back (epigastric pain).
- Feeling of hot water babbling in the back of the throat
- Vomiting
- Weight gain/weight loss depending on the type
- Pyrosis (heartburns)
- Bloating (abdominal tenderness)
- Nausea
- Constipation or diarrhoea
- Hematemesis (vomiting blood)
- Gastrointestinal bleeding
- Tarry stools
- Anaemia (if the ulcer has bled)
- Night awaking: this normally occurs in patients with duodenal ulcer due to severe pain that is relieved by eating (Smeltzer, et al., 2021).

**Table 1: Comparison of Duodenal Ulcer and Gastric Ulcer** (Smeltzer, et al., 2021)

<b>CRITERIA</b>	<b>DUODENAL ULCER</b>	<b>GASTRIC ULCER</b>
<b>INCIDENCE</b>	<ol style="list-style-type: none"> <li>1. Age 30–60.</li> <li>2. Male: female 2–3:1.</li> <li>3. 80% of peptic ulcers are duodenal.</li> </ol>	<ol style="list-style-type: none"> <li>1. Usually 50 and over.</li> <li>2. Male: female 1:1.</li> <li>3. 15% of peptic ulcers are gastric.</li> </ol>
<b>SIGNS AND SYMPTOMS, AND CLINICAL FINDINGS</b>	<ol style="list-style-type: none"> <li>1. Hypersecretion of stomach acid (HCl).</li> <li>2. May have weight gain</li> <li>3. Pain occurs 2–3 hours after a meal and often awakened when it is 1–2 am and relieved by food ingestion.</li> <li>4. Vomiting uncommon.</li> <li>5. Haemorrhage more likely to occur than with duodenal ulcer; hematemesis more common than melena stools.</li> </ol>	<ol style="list-style-type: none"> <li>1. Normal-hyposecretion of stomach acid (HCl).</li> <li>2. Weight loss may occur.</li> <li>3. Pain occurs 1-2 hours after a meal and rarely occurs at night and may be relieved by vomiting but ingestion of food does not help, sometimes increases pain.</li> <li>4. Vomiting common.</li> <li>5. Haemorrhage less likely than with gastric ulcer, but if present, melena stool is more common than hematemesis.</li> </ol>
<b>MALIGNANCY POSSIBILITY</b>	<ol style="list-style-type: none"> <li>1. Rare</li> </ol>	<ol style="list-style-type: none"> <li>1. Occasionally</li> </ol>
<b>RISK FACTORS</b>	<ol style="list-style-type: none"> <li>1. Helicobacter pylori, alcohol, smoking, cirrhosis, stress.</li> </ol>	<ol style="list-style-type: none"> <li>1. Helicobacter pylori, gastritis, alcohol, smoking, use of NSAIDs, stress.</li> </ol>
<b>PAIN</b>	<ol style="list-style-type: none"> <li>1. Burning, cramping pain across the epigastrium.</li> </ol>	<ol style="list-style-type: none"> <li>1. Dull, gnawing or burning sensation in the mid-epigastrium or back.</li> </ol>

### **Diagnostic Investigations**

- Upper gastric intestinal tract endoscopy and biopsy to rule out cancer.
- Stool analysis reveals occult blood or intestinal parasites
- Barium (Meal) radiographic studies of the intestinal tract to reveal changes in the mucosa.

- Computed tomography scan of the stomach and duodenum.
- History from patient.
- Full blood count (Haemoglobin estimation)
- Serum gastrin levels.
- Antigen test to detect presence of helicobacter pylori antigen in blood.
- Esophagogastroduodenoscopy (EGD) to determine the size and depth of the ulcer.
- Presenting signs and Symptoms (Smeltzer, et al., 2021).

### **Medical Treatment**

According to Kumar & Clark (2019), advances in drug therapy have dramatically changed the management of Peptic Ulcer Disease and significantly improved its effectiveness.

A variety of changes exists and the specific protocol for any particular patient is determined based on the preference of the physician and the patient's unique profile. The goal of the management is to eradicate helicobacter pylori, to manage gastric acidity, promote healing of the ulcer, and prevent reoccurrence and complications and to alleviate symptoms.

Drug therapy control peptic ulcer symptom effectively often in a matter of days;

- Antacids are given to neutralize the HCL. E.g. Magnesium Trisilicate, Aluminium Hydroxide.
- Histamine 2 receptor antagonist is given to reduce gastric secretion. E.g. Cimetidine and Ranitidine.
- Proton Pump inhibitors are given to eliminate acid secretions. E.g. Omeprazole, lansoprazole, rabeprazole.
- Mucosal Protective Agent is given to form a protective coat that prevents further excavation. E.g. Sucralfate, Misoprostol.
- Antimicrobial agent is given to prevent further infection. E.g. Metronidazole, Amoxicillin.

- Analgesics to relieve pain. E.g. Paracetamol, Tramadol.

### **Specific Medical and Surgical Intervention**

According to Kumar & Clark (2019), peptic ulcer disease can be treated both medically and surgically. The aim of treating peptic ulcer disease includes:

- To prevent complications and recurrence.
- To alleviate symptoms of the disease.
- To optimize the condition that promotes healing.
- To decrease the offensive factors responsible for ulceration.
- To eradicate H. Pylori if present

**Pharmacological treatment** (according to Standard Treatment Guidelines, Ministry of Health Ghana, 2017)

#### **A. Treatment for Dyspepsia**

##### **First line treatment**

Magnesium trisilicate, oral, 15mls 8 hourly (in-between meals and at bedtime to control dyspepsia)

OR

Aluminum Hydroxide, oral, 500mg 6 hourly (in-between meals and at bedtime)

##### **Second line of treatment**

Omeprazole, oral,

Adult: 20mg daily for 4 weeks. Repeat course if ulcer is not fully healed

#### **B. Treatment for NSAID-associated duodenal or gastric ulcer and gastro-duodenal erosions**

Esomeprazole, oral, OR Omeprazole, oral.

Adult: 20mg daily for 4 weeks. Repeat course if ulcer is fully healed

OR Pantoprazole oral,

Adult: 20-40mg daily for 4 weeks. Repeat course if ulcer is fully healed

**C. Treatment for Bleeding Peptic Ulcer (maybe an indication for surgery)**

Esomeprazole, IV

Adult: 40mg daily

OR

Omeprazole, IV.

40mg 12 hours for up to 5 days

**D. For Helicobacter Pylori Eradication**

Majority of patients presenting with duodenal ulcer are affected with Helicobacter Pylori. Eradication of H. Pylori should therefore be done using two of the antibiotics indicated in the table below.

**Table: 2: Helicobacter pylori eradication therapy**

HELICOBACTER PYLORI ERADICATION THERAPY			
PROTON PUMP INHIBITOR	ANTIBIOTICS		
	Amoxicillin, oral	Clarithromycin, oral	Metronidazole, oral
Esomeprazole, oral, 20 mg 12 hourly	1g 12hourly	500 mg 12 hourly 500 mg 12 hourly	400 mg 12 hourly
OR Omeprazole, oral, 20 mg 12 hourly	1g 12hourly 500mg 12 hourly	500 mg 12 hourly 500 mg 12 hourly	400 mg 8 hourly 400 mg 12 hourly
OR Pantoprazole, oral 40 mg 12 hourly.	1g 12 hourly	500 mg 12 hourly 500 mg 12 hourly	400 mg 12 hourly
Avoid treatment regimen including Amoxicillin in patients with penicillin allergy:			

*Refer to specialist care when there is failure of Helicobacter Pylori eradication or if surgery is indicated*

*Source: Standard Treatment Guidelines, Ministry of Health Ghana, 2017.*

### **Indications for Surgery in Peptic Ulcer**

- Failure of ulcer to heal.
- Increased risk of bleeding.
- Multiple ulcer sites.
- Pyloric or pre-pyloric ulcer recurrence (Smeltzer, et al., 2021)

### **Surgical Intervention**

According to Kumar & Clark (2019), Surgery is used primarily for the management of complication such as perforation, suspected cancer and the treatment of the occasional intractable ulcer that is resistant to all standard therapy. Surgery procedures adopted include:

- Vagotomy – This is the surgical removal of the vagus nerves. There are three types and these are truncal, selective and highly selective.
- Antrectomy–This is the surgical removal of the pyloric (antrum) portion of the stomach and anastomose to the duodenum (gastroduodenostomy or Billroth I) or jejunum (gastrojejunostomy on Billroth II).
- Pyloroplasty – This is the surgical removal of the pyloric sphincter.

### **Nursing Management**

According to Smeltzer, et al., (2021), nursing management of patient with peptic ulcer includes;

#### **Position**

- Patient was made comfortable on a well-prepared admission bed with enough pillows for comfort.

- Patient was made to assume a normal position that was not contrary to her health example supine position.
- This helps the patient to relax and reduce pain.
- The patient was positioned to avoid neck pain and joint stiffness.

### **Reducing Anxiety / Reassurance**

- Assesses the patient's level of anxiety and reassure that patient is in the hands of competent and well-trained staff that are always ready to offer care and support to ensure good health.
- Introduce patient to other patients who have similar conditions as her and have had their treatment waiting to be discharged.
- Diversional activities such as watching of televisions and the use of slide pictures should be provided to divert patients mind from the condition.
- Patients with peptic ulcers are usually anxious, but their anxiety is not always obvious. Appropriate information is provided at the patient's level of understanding, all questions are answered, and the patient is encouraged to express fears openly. Explanation of diagnostic tests and administration of medications on schedule also help to reduce anxiety.
- Interact with the patient in a relaxed manner, and relaxation methods, such as biofeedback, hypnosis, or behaviour modification.
- The patient's family is also encouraged to participate in care and to provide emotional support.

### **Rest and Sleep**

- A quiet environment should be provided by reducing noise to allow patient to get enough rest.
- Windows are opened to allow ventilation.
- Visitors are also restricted to allow patient gets enough rest and sleep.
- Bed is made free from creases and cramps by straighten the bed linen. Warm beverages can be also.
- Warm bath with warm water, soap, sponge and towel are provided in order to relax patient and to induce sleep.
- Teach patient rest and relaxation techniques e.g. guided imagery emphasizes the need to avoid stress.

### **Observation**

- Vital signs are checked and recorded which comprises of temperature, pulse, respiration and blood pressure.
- Intake and output chart are also monitored to know patient's fluid and electrolyte balance.
- The desired effect and side effect of drugs served are also observed.
- Side effects of drugs should be monitored and reported. As well as skin and mucous membrane for signs of dehydration.
- Physical findings of epigastric or abdominal pain, nausea, vomiting, tarry stools, bleeding should be observed.
- Patient's response to medication therapy, nutritional therapy and emotional rest is also observed and recorded.

### **Personal Hygiene**

- Body hygiene is done by giving an assisted bed bath twice daily to prevent offensive odour and to remove microorganisms from the skin. Bony prominences, which are prone to be sore, are well cared for by treating the area to prevent bedsore.
- Soiled bed linens should also be changed when dirty or wet to prevent bad odour and harbouring of microorganisms.
- Oral hygiene should be done twice daily with toothpaste and toothbrush. This was done to prevent oral offensive smell and to prevent the harbouring of micro bacteria.
- Patient's hair is also cared for by washing it with soap and water and drying it, if it is applicable.
- Patient's hands and feet were cared for by soaking them in water and trimming the nails with nail clippers, washing and filling the nails. This will prevent harbouring of microbes or prevent injury from scratching.

### **Nutrition / Diet**

- The intent of dietary modification for patients with peptic ulcer is to avoid over secretion of acid and hypermobility in the gastric intestinal tract.
- These can be minimized by avoiding extremes of temperature and over secretion from consumption of meat extracts, alcohol, and coffee (including decaffeinated coffee, which also stimulates acid).
- Dietary compatibility becomes an individual matter. The patient eats food that can be tolerated and avoids those that produce pain. Certain substance such as spicy food cause severe pain and has to be avoided.
- Smoking should be avoided as it has been shown to delay ulcer healing regardless of the therapy.

- Serve small frequent and bland foods. Avoid alcohol and give milk in between meals.  
Patient is encouraged to take enough roughage to enhance bowel elimination.
- Vitamin and minerals such as fruits like orange, banana, pawpaw should be encouraged to boost up the immune system.

### **Patient / Family Education**

Patient and family are educated to;

- Identify factors that trigger the condition.
- Modify lifestyle including health processes that will prevent recurrence of ulcer pain and bleeding.
- Plan for rest periods.
- Learn to cope with stressful situation.
- Chew food thoroughly and eat in leisurely manner.
- Eat meals in regular schedule.
- Avoid eating large meals, as they tend to over stimulate acid secretion.
- Adhere to prescribed treatment.
- Report on signs and symptoms he experiences.
- Avoid antacids that causes changes in bowel movement.
- Avoid over – the counter drugs unless prescribed by doctor.
- Encourage stress-reducing activities.

And also:

- Explain pathophysiology of condition to patient and family to help them to understand the condition
- Educate patient on medication to be taken home, it doses, frequency, therapeutic effects and possible side effects and explain maximum compliance.

- Encourage patient to come for regular check-ups.
- Educate patient to avoid irritating substances such as caffeine, carbonated drinks, alcohol, and extremely spiced foods.
- Patient should identify and avoid foods that cause distress and pain.

### **Complications**

- Haemorrhage with hematemesis and melena-This occurs as a result of the erosion of blood vessels due to the actions of the HCL.
- Pyloric obstruction-Pyloric stenosis is the narrowing of part of the stomach (the pylorus) that leads into the small intestines. This occurs as a result of scars which forms when worn out tissues are been repaired.
- Perforation-Perforation is the erosion of the ulcer through the gastric serosa into the peritoneal cavity without warning. It is an abdominal catastrophe and requires immediate surgery.
- Penetration-Penetration is erosion of the ulcer through the gastric serosa into adjacent structures such as the pancreas, biliary tract, or gastro-hepatic omentum.
- Anaemia-This occurs as results of excessive bleeding from the eroded vessels.

### **Post-Operative Complications**

- Dumping Syndrome
- Bile reflux (Smeltzer, et al., 2021)

### **Prevention of Peptic Ulcer Disease**

- High intake of spicy and fried foods should be avoided as much as possible.
- A regular eating pattern should be established and abnormal long periods between meals should be discouraged.
- Intake of ulcer genic drugs such as salicylates, other non-steroidal anti-inflammatory drugs and corticosteroids should be avoided.

- Individuals with blood type O should adopt good lifestyle in order not to be predisposing to the condition.
- As far as emotional trauma, leading to stress and anxiety should be reduced.
- Smoking and alcohol intake should be avoided since they irritate the gastric mucosa.
- (Smeltzer, et al., 2021)

### **1.12` Validation of data**

Miss FB provided the necessary information needed which was crosschecked with that of the parents. What parents said were not different from what she said though there were additions. The information collected, Doctor's notes, nurse's records, previous history and personal observations on the patient were compared with literature reviewed which proved it standard and valid.

## CHAPTER TWO

### ANALYSIS OF DATA

#### 2.0 Introduction

Analysis is the detailed study or examination of something in order to understand the result of the study. This is the second stage of the nursing process. This stage covers the comparison of collected data with standards. The patient and family strengths, health problems identified and nursing diagnosis developed also are analyzed here. The data collected during the assessment phase are analyzed and interpreted at this stage.

#### 2.1 Comparison of Data with Standard.

Information obtained from the patient are compared with those in literature. These include diagnostic investigations, clinical features manifested by patient, medical treatment given to patient, pharmacology of drugs administered to client and complication of the patient condition reviewed with the actual ones observed.

##### A. Diagnostic Investigations/Test

Investigations/test according to Weller (2016) is the procedures performed to establish a diagnosis, to monitor a person's health, disease or the effectiveness of treatment. The Literature points out;, Full blood count, , Blood urea electrolyte and creatinine to assess liver function.

The following investigations and test were carried out on F.B. to assist in the treatment.

Ordered Laboratory Investigations Were;

- Full blood count
- Blood film for malaria parasite
- stool analysis for Helicobacter Pylori

- BUN (Blood Urea Nitrogen) and Creatinine

Below is a table showing the comparison of the diagnostic investigations ordered with the literature review

**Table 3: Comparison Of Diagnostic Investigation Reviewed And Actual Investigation Done On The Patient.**

<b>Diagnostic Test In Literature</b>	<b>Diagnostic Test Carried Out On My Patient</b>
Patient's health history	Patient's health history was taken
Complete physical examination	Complete physical examination was done
Stool analysis	Stool analysis for H. pylori was done
Electrocardiogram	Electrocardiogram was not done
Blood Urea Nitrogen and electrolyte	BUN was done, but electrolytes count was not done
Ultrasonography	Ultrasonography was not done
Urinalysis	No urine analysis was carried out.
Fasting blood glucose	Not in literature review, not requested but was done
Chest and/ abdominal x-ray	No Chest and/ abdominal x-ray were done
Full blood count	Full blood count was done
Blood film for malaria parasite (to rule out malaria)	Blood film for malaria parasite was done
BUN (blood urea nitrogen) and creatinine	BUN and creatinine were done

**Comments On The Patient's Diagnostic Investigations**

From the above table, patient was ordered to do most the investigations of the literature review with the exception of duplex ultrasonography, chest and/abdominal X-ray Urinalysis, and electrocardiogram. Fasting blood sugar on the other hand was not in the literature review and was not requested but was done. The ordered investigations were sufficient enough to diagnose the patient as suffering from Peptic ulcer disease.

**Table 4: Diagnostic Investigation/Test Conducted On Miss FB**

Date	Specimen	Investigation	Results	Normal Values	Interpretation	Remarks
14/11/21	Blood	Haemoglobin level estimation	12.9g/dl	12.5-17.3g/dl	Client's haemoglobin level was between normal range indicating no anaemia	No treatment given
14/11/21	Blood	White blood cell count	13.29 x 10 <sup>9</sup> /L	5.00-11.60 x 10 <sup>3</sup> /mcl	Above normal range indicating an infection	Antibiotics (amoxiclav and metronidazole) was given
14/11/21	Blood	Red blood cell count	5.10 x 10 <sup>6</sup> /L	3.79-5.78 x 10 <sup>6</sup> /L	Indicating normal RBCs	No treatment given
14/11/21	Blood	Urea and creatinine estimation	Urea;3.44mmol/L Creatinine; 0.61mg/dL	2.9-8.2mmol/L 0.59-1.35mg/dL	Normal kidney functioning	No treatment given No treatment given
14/11/21	Blood	Malaria parasite	No malaria parasite seen	Negative	She does not have malaria	No treatment given
14/11/21	Blood	Fasting Blood Sugar [FBS]	5.0mmol/L	3.5-6.5mmol/L	Patient has no hyperglycaemia	No treatment given
14/11/21	Stool	H. pylori test	Present	Should be absent in stool	Patient has H. pylori causing PUD.	Omeprazole and metronidazole were administered

**B. Cause of Patient's Condition**

Evidences from diagnostic investigations and patients presenting complains suggest that the patient was infected with Peptic Ulcer causing bacterium, *Helicobacter Pylori* and is experiencing the cardinal signs and symptoms of the condition.

**Table 5: Comparison Of Causes And Predisposing Factors In Literature To Those Confirmed By Miss F.B**

<b>Causes and Predisposing Factors in Literature</b>	<b>Causes and Predisposing Factors Of Patient Condition</b>
Age (most often in people between the ages of forty and sixty years).	The patient is 21 years of age
Emotion or stress and anxiety.	Patient experienced stress and anxiety
Infection of a gram-negative bacterial ( <i>Helicobacter pylori</i> )	Stole analysis revealed <i>Helicobacter pylori</i> positive
Familial tendency	No traces of PUD in patient's family
Chronic use of Non-Steroidal Anti Inflammation Drugs e.g. Diclofenac, aspirin.	Patient does not abuse NSAIDS
Alcohol ingestion.	Patient does not take alcohol
Intake of spicy foods.	Patient eats spicy foods
Excessive smoking.	Patient does not smoke
Irregularities in hormonal secretion e.g. oestrogen and progesterone lower acid secretion.	Patient has not done any hormonal test, however, she does not experience symptoms or side effects of any hormonal surge.
Blood type; duodenal ulcers are common in blood type O and gastric ulcers in blood type A.	The patient has AB positive blood group
Certain endocrine diseases such as hyperthyroidism, pituitary tumour.	Patient has no history of endocrine disorders
Impaired activity of the pancreas.	Patient has no history of pancreatic disorders

**Comments On Causes And Or Predisposing Factors**

From the above table, most of the causes/predisposing factors were not experienced by the patient but the most cardinal cause of PUD (presence of *Helicobacter pylori*) confirms that the patient actually suffered the condition and therefore, needs medical treatment.

**Table 6: Comparison Of Clinical Features Reviewed To That Miss FB Exhibited**

<b>Clinical features reviewed</b>	<b>Clinical features experienced by patient</b>
Dull gnawing pain or burning sensation in the mid- epigastrium or the back (epigastric pain).	Patient had epigastric pain
Feeling of hot water babbling in the back of the throat	Pat had no babbling in the throat
Vomiting	Patient had episodes of vomiting
Weight gain/weight loss depending on the type	Slightly weight loss was present
Pyrosis (heartburns)	Patient experienced heart burns
Bloating (abdominal tenderness)	Patient experienced bloating
Nausea	Patient had nausea and vomiting
Constipation or diarrhea	Slight constipation was present
Hematemesis (vomiting blood)	Patient had no blood in vomitus
Gastrointestinal bleeding	Patient had no bleeding in gastrum
Tarry stools	Patient had no tarry stools
Anaemia (if the ulcer has bled)	Patient had no hemoglobin level
Night awaking: this normally occurs in patients with duodenal ulcer due to severe pain that is relieved by eating (Smeltzer, et al., 2021).	Patient experienced several awakenings due to severe abdominal pains.

**Comments On Patient’s Clinical Features Exhibited**

From the above table, client exhibited most of the clinical features from the literature review after comparing. This goes to confirm that, the patient really suffered from Peptic Ulcer Disease.

### **C. Medical Treatment Given To Patient**

With reference to the treatment indicated in the literature review, the following specific medications were prescribed for the patient;

Suspension Nugal O 15mls tds x 5days

Intravenous Dextrose in Normal Saline 5% 2 liters x 24 hours

Intravenous Omeprazole 40mg stat then 40mg bd x 24 hours

Ringers Lactate 1litre x 24 hours

Intravenous Buscopan 40mg bdx 24hours

Intramuscular Promethazine 25mg stat

Intravenous Amoxiclav 1.2g tds x 24 hours

Amoxiclav, oral, 625mg bd x 7days

Capsule Omeprazole 20mg bd x7days

Intravenous metronidazole 500mg tds x 24 hours

Metronidazole, oral, 400mg tds x 7days

Intravenous Tramadol 200mg in 500mls of Normal Saline

**Table 7: Comparison of Patient’s Treatment with that of Literature Review**

<b>Treatment according to literature review</b>	<b>Treatment given to patient</b>
Proton Pump inhibitors are given to eliminate acid secretions E.g. Omeprazole	Omeprazole was given
Analgesics to relieve pain E.g. Intravenous tramadol, buscopan	Tramadol was prescribed
Antimicrobial agent is given to prevent further infection E.g., Metronidazole	Metronidazole was prescribed
Antacids are given to neutralize the HCL. E.g., Sodium carbonate, Aluminum Hydroxide	Suspension Nugal”O was given
Histamine 2 receptor antagonist is given to reduce gastric secretion E.g. Cimetidine and Ranitidine	Histamine 2 receptor antagonist was not given
Mucosal Protective Agent is given to form a protective coat that prevents further excavation. E.g. Sucralfate, Misoprostol	Mucosal Protective Agent was not given

**Comments On The Patient’s Treatment**

Based on the comparison of the patient’s treatment with that of the literature review it shows clearly that the patient was given the correct management for her condition. Intravenous fluids; Dextrose Normal Saline and ringers’ lactate were not outlined in the literature review but were prescribed for the patient due to her excessive vomiting episodes

**Table 8: Pharmacology of Drugs Administered To Miss FB**

DATE	NAME OF DRUG	DOSAGE AND ROUTE OF ADMINISTRATION	DOSAGE AND ROUTE OF ADMINISTRATION GIVEN TO PATIENT	CLASSIFICATION	DESIRED EFFECT/ACTION	ACTUAL EFFECT/ACTION OBSERVED	SIDE EFFECTS AND REMEDIES
14/12/21	Co-amoxiclav	<p><b>Adult dose:</b> 1.2 g tds for 7-10days</p> <p><b>Child dose:</b> 3months-18 years; 30 mg/kg tds, max. 1.2 g tds for 7-10 days</p> <p>&lt; 3months; 30 mg/kg bd for 7-10 days</p> <p><b>Route:</b> Intravenous or Oral</p> <p><b>Client`s dose:</b> 1.2g IV x 24hours and then 625mg oral bd x 7days.</p>	Dosage:625mg bd x7days	Antibiotics, synthetic penicillin	Inhibits enzymes in the biosynthetic pathway of bacteria cell wall	Signs and symptoms of infection subsided.	Diarrhea, vomiting, nausea.  Patient experienced none of these side effects.

14/11/21	Omeprazole	<p>Oral administration  <b>Adult dose:</b> 20-40 mg daily x 4-8weeks  <b>Children dose:</b>  &gt;20kg; 20mg daily x 4-8weeks  10-20kg; 10mg daily x 4-8weeks  5-10kg 5mg daily x 4-8weeks  <b>Patients's dose:</b> IV 40mg stat then bd x 24hrs  Oral, 20mg bd x 7days</p>	Dosage:40mg stat x 24hours	Proton Pump Inhibitor	Suppress acid secretion in the stomach to relieve epigastric pains and prevent erosion of stomach mucosa	Patient's epigastric pains were relieved indicating that hydrochloric acid secretion in Patient's stomach was reduced	Flatulence, headache, dizziness, constipation and depression. Constipation was experience by client and was served with high roughage diet and sips of water at frequent intervals
14/11/21	Intramuscular promethazine	<p><b>Adult dose:</b> 12.5-50mg  <b>Route:</b> oral, intramuscular, suppository  <b>Client's dose:</b> 25mg stat intramuscularly</p>	Dosage:25mg stat	Phenothiazine Antihistamine	Produces antiemetic effects by serving as a histamine (H1) and an alpha-adrenergic receptor antagonist	Patient was relieved of vomiting	Drowsiness, fatigue, hallucinations, dry mouth. Patient did not experience any of these.

14/11/21	Intravenous Hyoscine Butyl Bromide (Buscopam)	<b>Adult dose:</b> 20-40mg bd/tds x not more than 5days <b>Patient's dose:</b> 40mg bd x24hrs <b>Patient's Route:</b> Intravenously	Dosage: 40mg bd x24hrs	Antispasmodics	To relax smooth muscle spasm (cramps in the stomach and the intestine)	Patient was relieved of abdominal pain and discomfort	Dry mouth, itchy skin rash and dry skin, sweating  These Side effects were not observed
	IV Rangers Lactate	Amount to be given depends on the estimated sensible loss of fluid <b>Patient's Dose:</b> 1L in 24 hours Intravenously	Dosage:1000mls x24hours	Crystalloid; Isotonic solution containing sodium chloride, sodium lactate, calcium chloride, potassium chloride and bicarbonate	For fluid and electrolyte balance.	Patient's fluid and electrolyte balance was maintained.	Circulatory overload and acidosis.  None was observed.
14/11/21	Iv dextrose in normal saline	Amount to be given depends on the estimated sensible loss of fluid <b>Patient's dose:</b> 2L in 48hours intravenously	Dosage:5% 2liters x24hours	Crystalloid; Hypertonic intravenous fluid	To prevent dehydration, maintain fluid and electrolyte balance and provide energy	Dehydration was prevented and fluid and electrolytes balance were maintained	Fluid overload and metabolic acidosis were not observed
14/11/21	Syrup Nugal- O	Adult dose: 10-15mls x 5-7 days	Dosage:15mls tds x 5days	Antacid suspension	Reduce stomach acidity by	Hydrochloric acid secretion in	Nausea, constipation,

		<p><b>Patient's dose:</b> 15mls tid × 7days</p> <p><b>route:</b> Orally</p>			neutralizing gastric hydrochloric acid by preventing the secretion of acid	client's stomach was reduced and patient was relieved of pain.	diarrhea, headache. Patient experienced constipation which was managed with the intake of oral fluids
14/11/21	Metronidazole	<p><b>Adult dose:</b> 400/500mg tds x 5-7days</p> <p><b>Patient's dose:</b> 500mg tds x 24hrs Intravenously And then 400mg tds x 7days orally</p>	Dosage:500mls tds x24hours	Antibiotics	Kills bacteria	Bacteria activities was suppressed and patient gradually relieved from symptoms.	Flatulence, headache, dizziness, constipation and depression was managed. Constipation was experienced by client and was served with high roughage diet and sips of water at frequent intervals.

**Comments from the pharmacology of drugs administered to the patient**

From the table above it can be seen clearly that Miss FB. was given the drugs accordingly and did not display any sign of undesired effects of the drugs administered. Patient's manifestations that could be associated to side effects of pharmacological therapy were also managed in the course of treatment successfully.

### **Complications**

With reference to the literature review the client did not show any complication of peptic ulcer like perforation, stenosis or Malena throughout the period of hospitalization which resulted in her early recovery.

**Table 9: Comparison of Complications of My Patient Was With Those Outlined In Literature Review.**

<b>Complications In Literature Review</b>	<b>Patient's Complications</b>
Haemorrhage with hematemesis	Haemorrhage with hematemesis was absent
Pyloric obstruction	Pyloric obstruction was not experienced
Perforation	Perforation was not experienced
Melena	Melena was not experienced
Anaemia	Anaemia was not experienced

### **Comments on complications**

No complication was observed during the period of interaction.

## **2.2 Patient and Family's Health Problems**

Health problems refer to any physical, psychological, stress or social limitations on a patient's health status which may hinder her recovery process.

The following were the health problems identified through assessment of the patient:

1. Patient complains of epigastric pains-14/11/21
2. Patient had episodes of vomiting-14/11/21
3. Patient complains of constipation-14/11/21
4. Patient complains of loss of appetite-15/11/21
5. Patient had deficit knowledge on peptic ulcer disease-15/11/21

### **2.3 Patient and Family's Strengths**

This involves activities the patient and family can perform in helping the patient recover.

(Lewis, 2012)

1. Patient can verbalize the intensity and locate of pain.
2. Patient can tolerate intravenous fluids
3. Patient can eat at least one third of food served.
4. Patient can verbalize the presence of constipation.
5. Patient is willing to learn about the condition

### **2.4 Nursing Diagnosis**

The following nursing diagnoses were made;

1. Acute pain (epigastric pain) related to ulceration of the stomach mucosa evidenced by pain relieved by antacid. (14/11/21)
2. Imbalance nutrition (less than body requirement) related to loss of appetite (anorexia) and abdominal pains evidenced by inadequate dietary intake. (14/11/21)
3. Risk for fluid volume deficit related to episodes of vomiting (14/11/21)

4. Impaired bowel elimination (constipation) related to side effect of medications (omeprazole) and lack of dietary bulk evidenced by infrequent passage of hard, formed stool. (15/11/21)
5. Deficient knowledge (patient and family) related to inadequate information on the disease condition evidenced by inaccurate follow-through with treatment regimen and lifestyle modifications. (15/11/21)

## CHAPTER THREE

### PLANNING FOR PATIENT AND FAMILY CARE

#### 3.0 Introduction

Planning is a stage of the nursing process in which the nurse and the patient consider the goals to achieve in meeting the patient's identified or potential problems in daily life and produce an individual care plan (ICN, 2018).

Planning for the care of patient and family is a process that involves formulation of nursing strategies that are required in reducing the actual and potential health problems of the patient and family, be it physical social, emotional or even spiritual that were identified during the analysis phase. When the problems were identified, nursing diagnoses are formulated, priorities are set and expected outcomes designed. It also involves setting goals and objectives which are evaluated continuously until the patient is discharged.

Planning for patient and family care is the process of designing nursing strategies required to reduce, eliminate or prevent patient's health problems that have been diagnosed.

It involves series of actions designed to fulfill the purpose of nursing care and maintain plan for Miss F.B.

#### 3.1 Objectives/Outcome Criteria For Patient and Family Care.

Objectives are something you plan to achieve after rendering nursing care on patients, (weller, 2019)

The following objectives and criteria were set for patient based on nursing diagnoses set.

1. Patient will be relieved of epigastric pains within 24 hours as evidenced by;
  - a. Patient verbalizing relief of epigastric pain
  - b. nurse observing patient having a relaxed facial expression
2. Patient's nutritional status will be restored within 48 hours as evidence by;
  - a. Patient verbalizing that he could eat well as he used to eat before hospitalization.
  - b. Nurse observing patient eat more than half of food served.

3. Patient will maintain normal body fluid volume within a period of 48hours as evidenced by;
  - a. Patient maintaining a normal skin turgor.
  - b. Nurse observing the absence of signs of dehydration
  
4. Patient will resume his normal elimination pattern within 48 hours as evidenced by;
  - a. patient verbalizing that he is able to pass normal semi solid stool without difficulties.
  - b. patient reporting urge to defecate, as appropriate.
  
5. Patient and relatives will gain adequate knowledge about the condition throughout the period of hospitalization as evidenced by;
  - a. Patient and relatives verbalizing that they have a better understanding of the condition.
  - b. Nurse observing that client and relatives are able to answer some question correctly when asked on the disease condition.

**Table 9: Nursing care plan for Miss F.B**

<b>DATE/ TIME</b>	<b>NURSING DIAGNOSIS</b>	<b>NURSING OBJECTIVE/ OUTCOME CRITERIA</b>	<b>NURSING ORDERS</b>	<b>NURSING INTERVENTIONS</b>	<b>DATE/ TIME</b>	<b>EVALUATION</b>	<b>SIGN</b>
14/11/21 1:30pm	Acute pain (epigastric pain) related to ulceration of the stomach mucosa evidenced by pain relieved by antacid.	Patient will be relieved of epigastric pains within 24hours as evidenced by: i. Patient verbalizing relief epigastric pain. ii. The nurse observing patient having a relaxed facial expression.	1. Reassure the patient/family about the competencies of the healthcare providers in her care. 2. Assess the pain level of the patient, using the pain rating scale. 3. Ensure noise reduction to encourage rest. 4. Involve patient in diversion therapy.	1. Patient/family were reassured that they were in safe hands and medications prescribed were to relieve pain and also to improve her general health. 2. Pain level of the patient was assessed using the pain rating scale and recorded 8 out of 10. 3. All forms of noise were reduced e.g., by restricting visitors, reducing volume of radio and television. 4. Patient was involved in conversations, watching of television, etc., to divert her	15/11/21 1:30pm	Goal partially met as patient verbalized not fully relieved from epigastric pain.	A.A

			<p>5. Identify factors contributing to pain and intervene accordingly</p>	<p>mind off her pains and worries.</p> <p>5. Through interactions with the ward nurses and doctors, excess secretion of gastric acid, and irregular food intake were identified as precipitating factors to her pain. Omeprazole and Nugal O' were administered as prescribed to aid in suppressing acid release and reducing her pain.</p>			
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**Table 9: Nursing care plan for Miss F.B Cont'd**

<b>DATE/ TIME</b>	<b>NURSING DIAGNOSIS</b>	<b>NURSING OBJECTIVE/ OUTCOME CRITERIA</b>	<b>NURSING ORDERS</b>	<b>NURSING INTERVENTIONS</b>	<b>DATE/ TIME</b>	<b>EVALUATION</b>	<b>SIGN</b>
14/11/21 1:35pm	Imbalance nutrition (less than body requirement) related to loss of appetite(anorexia) and abdominal pains evidenced by inadequate dietary intake	Patient's nutritional status will be restored within 48 hours as evidences by; i. Patient verbalizing that she could eat well as he used to eat before being admitted. ii. Nurse observing patient eat more than half of food served.	1. Assist patient with mouth care. 2. Serve patient's well-balanced diet attractively. 3. Encourage patient to chew food slowly and allowing time to swallow. 4. educate patient not to take irritating and strong spicy foods as they might precipitate her pain 5. Serve patient's food in bits and in frequent intervals.	1. Patient was assisted with mouth care before and after meal 2. Patient's well-balanced food was served attractively to stimulate appetite 3. Patient was encouraged to chew food slowly and allowing time to swallow to enhance easy digestion. 4. Patient was educated not to take irritating foods such as spicy food. 5. Patient's food were served in bits and relatives	16/11/21 1:35pm	Goals fully met as; 1. Patient verbalized that she could eat well as she used to eat before being admitted. 2. Nurse observed patient ate more than half of food served.	A.A

			<p>6. Remove easily-nauseating substances or articles from patient seen.</p> <p>7. Plan diet with patient and family taking into consideration her favourites.</p> <p>8. Assess and record patient's weight</p>	<p>encouraged to always provide food in frequent intervals</p> <p>6. All nauseating substances such as bed pan was removed from the environment to prevent loss of appetite and by extension, vomiting.</p> <p>7. Diets were regularly planned with patient and relatives and served in bits.</p> <p>8. Patient's weight was assessed and recorded as 65kg</p>			
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**Table 9: Nursing care plan for Miss F.B Cont'd**

<b>DATE/ TIME</b>	<b>NURSING DIAGNOSIS</b>	<b>NURSING OBJECTIVE/ OUTCOME CRITERIA</b>	<b>NURSING ORDERS</b>	<b>NURSING INTERVENTIONS</b>	<b>DATE/ TIME</b>	<b>EVALUATION</b>	<b>SIGN</b>
14/11/21 1:40pm	Risk for deficient fluid volume related to episodes of vomiting.	Patient will maintain normal body fluid volume within a period of 48 hours as evidenced by; a. Patient maintaining a normal skin turgor. b. Nurse observing the absence of signs of dehydration	<ol style="list-style-type: none"> <li>1. Assess patient's fluid status and monitor strictly.</li> <li>2. Observe patient for signs of dehydration such as pitting of the skin and appearance of the skin.</li> <li>3. Maintain and keep strict intake and output.</li> <li>4. Encourage patient to drink more than 1500 mls of fluids per day.</li> <li>5. Remove unpleasant articles from patient bedside or seen</li> </ol>	<ol style="list-style-type: none"> <li>1. Patient fluid status was constantly assessed and monitored with strict input and output monitoring form and findings reported.</li> <li>2. Patient was observed for signs of dehydration such as skin turgor and the appearance of the skin.</li> <li>3. Patient's intake and output was maintained in the chart.</li> <li>4. Patient was encouraged to drink more than 1500 mls of liberal fluids per day to replace fluid loss.</li> <li>5. Unpleasant articles such as bed pan and urinals were removed from patient's sight.</li> </ol>	17/11/21 1:40pm	Goals fully met as; 1. Patient maintained a normal skin turgor 2. Nurse observed the absence of signs of dehydration	<b>A.A</b>

			<p>6. Provide frequent oral care for patient.</p> <p>7. Administer prescribed IV fluids to augment liberal fluids</p>	<p>6. Frequent oral care was provided for patient to boost his appetite.</p> <p>7. Prescribed ringers' lactate, normal saline and dextrose fluid were administered accordingly</p>			
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**Table 9: Nursing care plan for Miss F.B Cont'd**

<b>DATE/ TIME</b>	<b>NURSING DIAGNOSIS</b>	<b>NURSING OBJECTIVE/ OUTCOME CRITERIA</b>	<b>NURSING ORDERS</b>	<b>NURSING INTERVENTIONS</b>	<b>DATE/ TIME</b>	<b>EVALUATION</b>	<b>SIGN</b>
15/11/21 2:00pm	Impaired bowel elimination (constipation) related to side effect of medications (omeprazole) and lack of dietary bulk evidenced by infrequent passage of hard, formed stool.	Client will be relieved of constipation within 48 hours as evidenced by; i. Patient verbalizing that she is able to pass normal semi solid stools without straining. ii. Patient reporting urge to defecate, as appropriate.	1. Reassure patient/family. 2. Serve patient with light diets. 3. Engage patient in passive exercise. 4. Encourage patient to take in adequate fluid to promote her bowel functions. 5. Educate patient on the importance of responding to his bowel as soon she feels the urge. 6. Educate patient on the side effects of her drugs.	1. Patient/family was reassured to allay anxiety. 2. Patient was served with light diets (such as soup and porridge) to help soften stool. 3. Patient was encouraged to perform mild to moderate exercise to facilitate bowel movement. 4. Patient was encouraged to take in more fluids to promote her bowel functions. 5. Patient was educated to attend to her bowel when the need arises. 6. Patient was educated on the purpose and side effects of the drug (omeprazole).	17/11/21 2:00pm	Goals fully met as patient verbalized that she could pass stool freely without straining or difficulty.	A.A

**Table 9: Nursing care plan for Miss F.B Cont'd**

<b>DATE/ TIME</b>	<b>NURSING DIAGNOSIS</b>	<b>NURSING OBJECTIVE/ OUTCOME CRITERIA</b>	<b>NURSING ORDERS</b>	<b>NURSING INTERVENTIONS</b>	<b>DATE/ TIME</b>	<b>EVALUATION</b>	<b>SIGN</b>
16/11/21 3:15pm	Deficient knowledge (patient and family) related to inadequate information on the disease condition evidenced by inaccurate follow-through with treatment regimen and lifestyle modifications.	Client and relatives will gain adequate knowledge about the condition within the period of hospitalization as evidenced by: i. Client and relatives verbalizing that they have a better understanding of the condition. ii. Nurse observing that client and	1. Create a conducive atmosphere for learning. 2. Assess patient and families' knowledge about the condition and build on their preoccupied knowledge 3. Explain the causes, signs and symptoms and treatment to the patient and family to enable them obtain sufficient knowledge about the condition. 4. Encourage patient and family to ask questions about the condition and provide answers tactfully.	1. A conducive atmosphere for learning was provided such as reducing TV/radio volume. 2. Patient and families' knowledge was assessed and scientific information given to them. 3. The condition including the causes, sign and symptoms and treatment were explained them and they offered understanding. 4. Patient and family was encouraged to ask questions about the condition and tactful answers were provided.	18/11/21 7:15am	Goals fully met as Client and relatives verbalizing that they have a better understanding of the condition.	A.A

		relatives are able to answer some question correctly when asked on the disease condition.	5. Evaluate and reassess the education by asking questions for feedback.	5. Education was evaluated and reassessed by asking questions and they mentioned gastric pains, heart burns, nausea and vomiting as some of the signs and symptoms of peptic ulcer diseases			
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## CHAPTER FOUR

### IMPLEMENTING PATIENT/FAMILY CARE PLAN

#### 4.0 Introduction

This chapter is the fourth part of the nursing process, which deals with the detail description of the actual nursing care rendered to the patient and family during the period of hospitalization. The implementation of nursing orders in the care plan ensures that the nurse performs established activities on the patient. Such activities are geared towards the promotion of patient's recovery and to limit complications if any.

#### 4.1 Summary of Actual Nursing Care Rendered to Patient and Family

The nursing care rendered to miss FB started on the very day of admission (14/11/21) and continued until termination of care. The management aimed at making Patient comfortable, promoting her early recovery and preventing complications. The summary of care was written on daily basis as follows:

##### 4.1.1 Day of Admission (14/11/21)

Miss F.B was admitted to the Females ward on bed13 on 14th November, 2021 at 1:30pm, ambulatory in the company of a nurse and two other relatives. On arrival, they were welcomed into the ward, patient particulars got checked, mainly folder as a confirmation if the patient was indeed admitted into the ward. On observation, patient was weak and facial expressions suggesting she's in pain. Patient did complain of constipation, vomiting, loss of appetite and epigastric pain, so she was diagnosed of peptic ulcer disease. Her vital signs were checked and recorded as follows:

Temperature	35.6 <sup>0</sup> C
Pulse	101bpm

Respiration	24cpm
Blood pressure	110/80mmHg
Weight	65kg

The Patient was to be Managed On the Following Medications;

Intravenous Amoxiclav 1.2g tds x 24hours

Oral Amoxiclav 625mg bd x 7days

Intravenous Metronidazole 500mg tds x 24hours

Oral Metronidazole 400mg tds x 7days

Suspension Nugal O 15mls tds x 7days

Intravenous Dextrose in Normal Saline 2 liters x 48hours

Intravenous Omeprazole 40mg daily x 48 hours

Rangers Lactate 1litre x 24 hours

Intramuscular Buscopan 40mg stat

Cap Omeprazole 20mg bd x 7days

Intramuscular Promethazine 25mg stat

Ordered laboratory investigations were;

Blood film for malaria parasite

BUN (Blood Urea Nitrogen) and creatinine

Full blood count (FBC)

## Stool analysis for Helicobacter Pylori

Miss F.B was assisted to maintain a prone position in bed as her preferred position that minimizes her pain. She was introduced to other patients at the ward together with her daughter. She was reassured and psychologically prepared. She was educated on all procedures, treatment and the nature of her condition. Stat doses of Intramuscular Promethazine 25mg, intramuscular Hyoscine Butyl Bromide 40mg and intravenous Omeprazole 40mg were administered as prescribed. Blood sample was taken and sent to the laboratory for examination of malaria parasites, full blood count, BUN (Blood Urea Nitrogen) and creatinine.

Miss FB's mother was orientated to the ward environment, all ward's protocol such as visiting times, was communicated to her. Patient's particulars were entered into the admission and discharge book, nurse's notes, and the care rendered to the patient also documented. The ward in-charge and other nurses available were informed about the intention to use the patient for care study and they gave the go-ahead. The patient and family were also informed about using them for the study and they also gave their permission after thorough explanation of what it entails. They were assured of total confidentiality in whatever information they let out, as the study is mainly to help them and for academic purpose. They were told that, they would be discharged home once the patient's condition is stable and that they were not going to be on the ward forever, therefore the family should be prepared to help the patient in whatever kind including financing her bills. They were also informed that, as part of the care, visiting their home is paramount, and it is going to be done during hospitalization and continued short while after discharge.

Patient complained of upper abdominal pain (epigastric pain) at 1:30pm a nursing diagnosis of Acute pain (epigastric pain) related to ulceration of stomach mucosa was formulated., an objective was set to reduce the epigastric pain within 24 hour then gradually relieve her totally

from the pains. Miss F.B. was reassured with the measures put in place to help relieve the pain to allay her anxiety. She was assisted to assume the prone position to help relieve the pain. Miss FB's level of pain was also assessed by using the pain rating scale, of which she scored 8 out of 10. Factors that aggravated the pain such as spicy foods and beverages that contain caffeine were reviewed and patient was encouraged to avoid them. Diversional therapy such a conversing with the patient was ensured. Medications connecting to relieving her pains (Omeprazole, tramadol, Buscopam, and Nugel O antacid) were administered already and hoping to achieve its desire effects.

At 1:35 pm patient complained of loss of appetite as evidenced by patient not been able to eat as expected so a nursing diagnosis of risk for impaired nutrition less than body requirement related to decrease intake of nutritious diet was formulated. An objective of restoring her appetite and nutritional status within 48 hours was formed. Miss F.B's lunch was served attractively to stimulate appetite. She was assisted with mouth care before and after taking her meals. Patient was educated to avoid irritating foods such as spicy foods. Patient was also encouraged to chew food slowly and allowing time to swallow to enhance easy digestion. The patient's food was served in bits with her favourite meal. All nauseating substances such as bed pans or urinals were removed from the environment.

At 2:00pm vital signs were checked and recorded as indicated as follows.

Temperature	36.4 degree Celsius
Pulse	102bpm
Respiration	26cpm
Blood pressure	110/90mmHg

Patient took banku with groundnut soup. After 30 minutes patient vomited all the food she ate. At 2:30pm, a nursing diagnosis of fluid volume deficit (potential) related to episodes of vomiting was made when the patient complained of vomiting which was confirmed by the

nurses on duty at that time. An objective was set for patient to maintain normal body fluid volume within a period of 48 hours. Patient was encouraged to drink at least 1000mls of liberal fluids as per her choice daily to replace lost fluid. An intake and output chart were maintained to know the balance between fluid intake and fluid output. Signs and symptoms of dehydration such as sunken eyes, oliguria and loss of skin turgor were assessed. All nauseating items such as bed pan and urinals were removed from the environment to avoid precipitating her vomiting. Miss FB's weight was monitored to note any changes there may be. Prescribed Antiemetic Intramuscular Promethazine 25mg stat was administered as prescribed.

All procedures and routines carried out on the patient were explained to her before initiation to ensure her cooperation. Patient and family were also encouraged to ask questions and answers were provided in simple terms to their level of understanding. Miss F.B and family were educated on the disease condition disease process, signs and symptoms, treatment and the outcome of care given to allay their anxiety. Patient and family were interacted in a relaxed manner. They were also encouraged to participate in care and to provide emotional support to patient. She was served with rice and stew at 5:30pm.

Miss FB took her bath and went to bed at 8:30 pm.

At 10:00 pm her vital signs were checked and recorded as:

Temperature                      36.0 degree Celsius

Pulse                                100 beats per minute

Respiration                      20 cycles per minute

Blood Pressure                 110/70mmHg

At 10:00 pm, IV amoxiclav1.2g and IV Metronidazole 500mg were administered. Also, Suspension Nugal-O 15mls was administered to help relieve patient of the epigastric pain. After 10pm medications the patient went into sleep again and this time, the nurses assured her of no interruption till next morning.

#### **4.1.2 Second Day of Admission (15/11/21)**

Miss F.B woke around 5:30am to perform her oral hygiene. At 6am her vital signs were assessed and recorded as;

Temperature - 35.6<sup>0</sup> C,

Pulse -101bpm,

Respiration -24cpm,

Blood pressure -110/80mmHg.

Due medications IV Tramadol and 200mg in 500mls of Normal Saline and Syrup Nugal O were administered. She took her bath at 7:30am. She took tea and bread as her breakfast. The ward doctor came around 8:30am for routine ward rounds and reviewed miss FB. The doctor ordered that; she should continue treatment as prescribed on the day of admission.

At 1:30pm the objective set to relieved patient of epigastric pain was evaluated and goal was partially met as patient was still complaining of epigastric pain and hence the objective was extended for another 24hours.

Capsule Omeprazole 20mg and Suspension Nugal-O 15mls were served either an hour before or two hours after food, and vital signs checked and recorded at 2pm as

Blood Pressuer-120/90mmgh,

Pulse-70bpm, Respiration 18cpm.

The patient in the morning did complain of not able to pass stool, but it associated to poor and inadequate feeding. She was asked to observe her bowel movement till afternoon. At 2:00 pm patient had not pass stool and she could associate it to the previous medications. Nursing diagnosis of impaired bowel movement (constipation) related to side effects of medication (omeprazole) was made and an objective was set for patient to regain her normal stool elimination within 48 hours.

Miss FB was reassured that she will regain her normal bowel elimination pattern after necessary care has been rendered. Patient was made comfortable in a bed free from creases and crumbs, patient was served with light diet such as soup and porridge, patient was encouraged to engage in passive exercise. Also, patient was served with fibre-rich diet such as wheat and Okro containing food, patient was also encouraged to drink a lot of water as well as educated on the side effects of the drug (omeprazole).

Patient took rice ball and groundnut soup as her lunch. Vital signs were checked and recorded.

Suspension Nugal-O 15mls, IV amoxiclav 1.2g, IV Metronidazole 500mg were administered.

At 3:15pm am during interactions with the patient, it was evident that miss FB has less knowledge on causes and management of her condition. A nursing diagnosis of knowledge deficit related to inadequate information on the disease condition (PUD) and an objective was set for patient to enable her have knowledge on the disease condition within 4 hours

Since the patient was relieved from her previous abdominal discomfort, she was taken to a side room of complete confidentiality and conducive atmosphere for learning. The family was asked to join in the education process. The condition including signs and symptoms and treatment were explained to miss FB and family. They were encouraged to ask question about the condition and tactful answers were provided, education was evaluated by asking patient for feedback which she answered correctly.

Miss FB ate fufu and garden eggs soup as her supper.

At 6:00 pm, Capsule Omeprazole 20mg was administered and vital signs were checked and recorded as Blood Pressuer-110/90, Pulse-80, and Respiration-19. Patient took her bath and went to bed at 8:45 pm.

At 10:00 pm patient's vital signs were checked and recorded as;

Temperature            35.3-36.6 degrees Celsius

Pulse                    101-108 beats per minute

Respiration 22-42 cycles per minute

Blood pressure 109-120/64-82 mmHg

Suspension Nugal-O 15mls was served at 10:00pm.

#### **4.1.3 Third Day of Admission, (16/11/21)**

On the 16<sup>th</sup> November, 2021, Miss FB woke up at 5; 20am, brushed her teeth and took her bath. Her vital signs were checked and recorded. Due medications were administered. She had wheat porridge as advised for her breakfast which was served in bits.

Capsule Omeprazole 20mg and Suspension Nugal-O 15mls were served.

The ward doctor came as usual at 8am for routine ward rounds to review the patients including miss FB. This time he asked the patient about current complains but miss FB said she is doing well as all her abdominal pains has subsided, not vomiting anymore and has regain her appetite. The patient told the doctor that, she was able to pass stool once in the night but not as she used to pass when she was not on medications.

When patient's mother came to visit and was about leaving to prepare for her daughter's lunch, she was spoken to about home visit to assess the environment and also to verify all information given. The mother agreed and led me to the home visit. The patient's mother promised to bring rice meal to the patient for lunch

Patient took rice and stew as her lunch. Patient's food was served attractively, and she was encouraged to chew food slowly and allowing time to swallow to enhance digestion.

At 1:30pm the objective that was extended for 24hours on 15<sup>th</sup> November to relieve patient of epigastric pain was evaluated and goal was fully met as patient verbalised the relieve of epigastric pain

At 1:35pm, the objective set to restore patient's nutritional status on 14<sup>th</sup> November, 2021 was evaluated and goal was fully met as patient verbalizes that she could eat well as she used to eat before being admitted.

At 1:40pm, the objective set to maintain patient's normal fluid volume throughout the period of hospitalization on 14<sup>th</sup> November, 2021 was evaluated and goal was fully met as nurse observing the absence of signs of dehydration.

At 2:00 pm Suspension Nugal-O 15mls, and oral metronidazole 500mg were served to relieve patient of pain and to inhibit bacteria activity respectively. The objective set to relieved patient of constipation as patient verbalizes that she able to pass semi solid stools freely. Patient vital signs were checked and recorded.

Patient took banku and okro soup as her supper.

At 6:00 pm Capsule Omeprazole 20mg and tablet Amoxiclav administered.

Patient took her bath and went to bed at 9:00 pm.

At 10:00 pm patient's vital signs were checked and recorded as follows

Temperature	36.degrees Celsius
Pulse	88 beats per minute
Respiration	20cycles per minute
Blood pressure	110/70 mmHg

Suspension Nugal-O 15mls was served and recorded.

#### **Fourth Day of Admission (17/11/21)**

Miss F.B woke up at 5:20 am, performed oral hygiene and took her bath as it marks the third day of her admission. Patient took tea and bread as her breakfast.

Patient's condition was good since the problems which were identified were all being worked on so as to relieve her of all of them and possibly prevent complications from setting in.

At 6:00 am, patient's vital signs were checked and recorded as

Blood Pressure	-130/90,
Pulse	-84bpm

Respiration -21.cpm

Capsule Omeprazole 20mg, Tablet amoxiclav 625mg, Tablet metronidazole 400mg and Suspension Nugal-O 15mls were administered under direct observed therapy.

At 8:30am the ward doctor came to review the patient and ordered that she should continue her medications and possibly will be discharge next day as her condition has improved as desired.

At 2:00pm vital signs were checked and recorded as follows;

Temperature 35.9 degree Celsius

Pulse 88 beats per minute

Respiration 22 cycles per minute

Blood pressure 115/72 mmHg

Suspension Nugal-O 15mls and tablet metronidazole were administered after assessing vital signs.

At 2; 00pm, the goal set on 16/11/21 with the aim of patient regaining her normal level bowel movement was evaluated and goal was fully met as patient verbalized that she could pass stool freely. Patient took fufu and groundnut soup as her supper

At 6:00pm capsule Omeprazole 20mg and tablet Amoxiclav 625mg were administered

Patient took her bath and went to bed at 9:00 pm.

At 10:00pm patient vital signs were checked and recorded, vital signs checked and recorded as follows;

Temperature 35.4 degree Celsius

Pulse 98 beat per minute

Respiration 26 cycle per minute

Blood pressure 120/90 mmHg

Suspension Nugal-O 15mls and tablet metronidazole 400mg were administered and patient went to sleep again

**Fifth Day of Admission (18/11/21/ Day of Discharge)**

On the fourth day of admission, Patient woke up at 5:10 am, brushed her teeth and took her bath all without assistance. According to the night nurse patient had a sound sleep. Patient took tom brown and bread as her breakfast.

Miss FB vital signs were checked and recorded at 6:00am as follows

Temperature        35.9 degree Celsius

Blood Pressure    110/70mmHg

Pulse                90 beat per minute

Respiration        24 cycle per minute

At 7:15am the objective set to help patient and relatives gain adequate knowledge on 15<sup>th</sup> November, 2021 was evaluated and goal was fully met as patient and relative verbalizes that they have a better understanding on the condition.

The ward doctors on their usual rounds reviewed the patient and declared her fit to go home and continue her medication especially the Peptic Ulcer regimen.

The need to avoid stress was emphasized. The patient was also advised to avoid caffeinated and spicy foods, and avoiding missed meals as well as eating in bits and on frequent basis. Miss was educated on how to take the drugs, its therapeutic and adverse effects and the need to comply with it was emphasized. Patient was discharged and to continue the following drugs;

Capsule Omeprazole 20 mg bd x 7

Suspension Nugal-O 15mls tid x 7

Tablet Metronidazole 400mg tds x 7days

Tablet Amoxiclav 625mg bd x 7days

Miss FB was scheduled to come back for review on 2<sup>nd</sup> December, 2021 and was encouraged on the need to stick to the review date. Patient was encouraged to report to the hospital earlier than the scheduled review date if she feels the condition is relapsing. Arrangements were made with the patient and her family about second home visit on the 22<sup>nd</sup> November, 2021. The family were excited that their ward feels fine and has been discharged.

The doctor prepared and signed the discharge summary. Patient's date of discharge, diagnosis and state of her condition were entered into the Admission and Discharge book and Daily ward state sheet. They were helped to pack their belongings. The father was accompanied with Patient's folder to accounts department to settle any addition bills and subsequently to the pharmacy to collect additional prescribed drugs. Clearance note from the accounts department was received by the father and also medications collected from dispensary. Family thanked the staff and the student nurses on duty for their fabulous care rendered to miss FB and the family at large and also assured to stick by all medical advice given to them. They were then accompanied to the road side and bid goodbye. They took a tricycle from the roadside and assured to call the ward when the reach home. The bed linen was removed and discarded into a receptacle to be taken to the laundry. The bed and the side locker were disinfected with a 0.5% bleach solution and left to dry.

#### **4.2 Preparation of the Patient/Family for Discharge and Rehabilitation.**

Preparation of patient/family for discharge started from the day of admission when the patient was informed that the hospital was not going to be her permanent living environment but rather, she will be discharged home as soon as her condition was stable. During admission, it was observed that, the patient and her relatives were disturbed about the condition and the long stay at the hospital. They were therefore reassured of the competent team she is involved with, and

that she will recover soon and be discharged home through their cooperation with the health team.

Through these encouraging words they were relieved of their worries. They were educated on the disease condition (disease process, signs and symptoms, complications, treatment) and the outcome of care given.

Miss F.B. was asked to have adequate rest and sleep. She was also educated on the significance of rest and sleep as it enables the body to function without disturbance in metabolism. She was encouraged to take her drugs as prescribed to prevent relapse of her condition and complications. Patient was also encouraged to come back for review on the Tuesday, 2<sup>nd</sup> December 2021, and was encouraged to report earlier to the hospital when she noticed any signs and symptoms. Miss FB and family were advised to avoid purchasing over-the-counter drugs and the use of herbal preparation but rather come to the hospital anytime unusual symptoms appeared. Patient and family were further educated on the significance of a well balance diet in maintenance of good health. They were also advised to continue taking balanced diet and also avoid purchasing of food from outside and to avoid excessive intake of spices, caffeinated foods and alcohol. Patient was encouraged to avoid missing meals and food should well chewed, eaten in bits and on regular intervals. Patient and family were also educated on the significance of exercise which was tolerable.

As part of the preventive measures, the patient and family were educated on the need to keep their environment clean by weeding bushes, cleaning gutters and disposing of refuse properly to reduce the risk of getting infections as it could lower their immunity.

In addition, they were taught the need for good nutrition such as well-balanced meals rich in proteins and vitamins to protect and aid in quick healing of wounds.

### **4.3 Follow up/Home visits/Continuity of Care.**

Follow up or home visit is a friendly but purposeful visit to the patient house environment with the aim of identifying problems, preventing disease, promoting and maintaining health and prolonging life through health education, counselling and nursing care. The visit is also to assess the use of available resources at patient's home as well as in the community that can be used to solve actual and potential health problems. It also helps to monitor patient's progress after discharge.

#### **First Home Visit (16th November, 2021)**

The first home visit was made on the second day of admission while Miss FB was still on admission on the 16<sup>th</sup> of November, 2021. The objective for the visit was to be familiarized with patient's home environment, whilst gathering enough information that will be relevant in the care and education of the client. The visit was also to identify any factor that has contributed to her illness. The journey from the hospital to their house was about 10 minutes' drive.

Upon arrival to the house with client's mother, careful observations were made in the environment. The house was not located at outskirts. Mrs P.D, the patient's mother did the introduction and the greeting upon arriving to the house. Quickly Miss F.B's apprentices asked how she was doing after their visit to her the other day. The patient's mother answered them according to her current state as she is picking-up gradually and hopes to be discharged as soon as possible. Their house was located at the back of a popular radio station (Fabea FM) owned by the current Member of Parliament in Nkoranza South Constituency. They were using a locally made rubbish bin without a cover. Mosquito net was well fixed in their various rooms, but they said they don't often use them. They had this small kitchen that accommodates another family in addition to the client's family. They drink from both pipe-borne water and sachet mineral water, but mostly depend on pipe water for most drinking, cooking and washing. They cook

their own food ranging from fufu, banku, T-Z, rice ball and rice, kenkey, and many more fries and bakeries. They eat all kind of meats be it bush or domestic.

Mrs PD also notified that; they draw water from the town's bored hole during pipe water outage. The water is always carried to the house on a 'motor king' and stored in a barrel and some bottles. They also have a plastic rubber which they keep their refuse which was seen without a lid. The method of refuse disposal is public collection and dumping by Zoomlion Company. Near to the entrance of their kitchen, there were empty bottles without caps and some, half-way filled with water. They were asked to either empty the bottles or cover them tight to prevent mosquitoes' breed. They were again educated on water, food and environmental hygiene to help them improve their health. They were emphasized on the need to drain any pool of water found in their environment. They were further educated to pour oil-base agents on waters that can't be drained, to interrupt the life cycle of mosquitoes. They were asked to find a cover to their rubbish bin. They were applauded for having fixed nets in all rooms and encourage to always use them. They were asked to continue eating hot-food hot and cool-food cool, and should learn the balance of food contamination to the normal, and treat them accordingly. The family were educated on the causes/risk factors of peptic ulcer disease including excessive alcohol intake, psychological stress, Helicobacter Pylori infection and genetic predisposition. Miss F.B parents were taken through the preventive measures of the condition which included stress reduction since a hectic lifestyle and an irregular schedule may interfere with regular feeding. Avoidance of smoking and excessive alcohol intake, limiting the intake of caffeinated beverages, the need to adhere to personal and environmental hygiene methods to prevent infection, and also the need to avoid over-the-counter medications such as Aspirin, Diclofenac and Ibuprofen ingestion were also emphasized.

There were also advised to limit the buying of food from food vendors. All questions were answered to satisfaction in a tactful manner. Permission was sought to adjoin the conversation

to another time. They were goodbye and thanked for their cooperation. On arrival to the hospital, the observations and adjustments made during the home visit was communicated to the patient to also adhere to them for complete wellbeing in the house environment.

### **Second Home Visit (22<sup>nd</sup> November, 2021)**

On the 22<sup>nd</sup> November, 2021, second home visit schedule with the client and families' permission. The objective of the visit was to assess the health status of the patient after discharge, to remind patient and relative of review date/day, to find out whether the adjustments made on the previous visit had been adhered to, and to stress on the need for completion of treatment regimen.

Upon arrival to the house at 1:30pm, miss FB and her family was met sitting in the hall with television on. They were greeted and they offered a seat. They already knew about the reason for the visit, which was briefed to them on phone before the journey. They were told the mission of the visit and they showed glad humour about the visit.

On assessment, Miss F.B's condition had improved more after discharge. There were no vomiting, headache, fever nor could abdominal pains and she eat well. She has been taking her drugs accordingly and had not experienced any major side effects since discharge. On a quick look around, there were no bottles near the kitchen entrance nor any stagnation of water around their house. The Patient and family were applauded for sticking to the previous advice. They were encouraged to maintain such a good living practice.

Miss F.B and family also verbalized that they are constantly sleeping in mosquito nets and are also adhering to the preventive measures of peptic ulcer disease that they were educated on. Miss F.B. was encouraged to take the remaining medications as prescribed. They were reminded again on the need to maintain good personal and environmental hygiene, and also the review date as scheduled on 2<sup>nd</sup> December, 2021.

Miss FB and family were informed about handing them over to a community health nurses during next home visit for continuity of care. After chatting for about thirty minutes, permission was sought to leave. An escort to the roadside were made where a tricycle was taken for the return journey.

**Day of Review (2<sup>nd</sup> December, 2021).**

On 2<sup>nd</sup> December, 2021, miss FB came alone and was met doing well at the Out Patient Department during assessment and greetings. She was assisted to retrieve her folder from the records department. Her vital signs were checked and recorded at 8:30am as:

Temperature	36.9oC
Pulse	90bpm
Respiration	22cpm
Blood pressure	110/70mmHg

Her weight was also checked and documented as 67kg. She proceeded to the consulting room where she was reviewed by a physician assistant. There were no complaints on the day of review. Miss FB was declared fit but asked to continue with her medication during the consultation with the doctor. The doctor encouraged her to avoid spicy foods, red pepper, irregular eating, herbal and Over-The-Counter medications, for a better health outcome. The patient brought in some drugs to the doctor to verify if she could take them. She was reminded on the dosage and asked to continue taking as advised. Patient was advised on a balanced diet, observation of her personal and environmental hygiene. Patient was reminded of third, and probably last home visit to properly terminate care. She was escorted to the hospital gate and bid farewell and to extend greetings to her entire family and the apprentices.

**Third Home Visit (6<sup>th</sup> December, 2021)**

The last home visit was made on 6<sup>th</sup> December, 2021. The main aim of the visit was to find out how Miss F.B and her family members were doing and to terminate the care by introducing them officially to the Community Health Nurses who is to continue with the care.

Patient and family were happy on seeing an accompanied community health nurse. They were all fine with no complains. The environment was in good order. All adjustment in the house environment was followed as advised.

They were educated on the need for periodic medical check-ups, stress reduction, drug regimen and dietary regimen.

They were officially introduced to the community health nurse, Miss A. K. who promised to do the follow up visit and give any health information which would be needed by patient and family.

Though it was a difficult task terminating the care with the family, as usual it did happen. The interaction was officially brought to a halt while the community health team, through Miss A. K. offered to continue the visit as and when possible but often. The family expressed their gratitude about the knowledge acquired assured to follow all advices. They were thanked for cooperation and permission sought to leave.

## **CHAPTER FIVE**

### **EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY**

#### **5.0 Introduction**

Evaluation in simple terms is the outcome of nursing actions against the anticipated goals and it is the final step in the nursing process, (Smeltzer, et al 2014). It entails the continuous assessment of the care and finding out whether the set objectives for meeting family/patient health needs have been achieved. The chapter gives information about the statement of evaluation, amendment of nursing goals and the termination of the care rendered to the patient and family.

#### **5.1 Statement of Evaluation**

Throughout the period of admission of miss FB, five health problems were identified and objectives were set to solve them. Below is the summary of the interventions carried out and to what extent the goals were met.

##### **Patient was relieved of epigastric pain**

On the 14th November, 2021 on admission at 1:30pm, a nursing diagnosis of acute pain (epigastric pain) related to ulceration of the stomach mucosa. Objective was set to help relieve patient's pain within 24 hours. Various nursing interventions were carried out to meet the objective set. Patient was reassured of measures put in place to help relieve the pain to allay anxiety. Patient was encouraged to assume the prone position to help relieve the pain. Patient's level of pain was assessed on a scale of 0-10 to know its severity. Factors that aggravate the pain such as spicy foods and beverages that contain caffeine were reviewed and patient was encouraged to avoid them.

Diversion therapy such as watching of television and engaging patient in a conversation was provided. Omeprazole 20mg and Suspension Nugal-O 15msl were administered to relieve the

pain. However, time of evaluation elapsed, but patient was not fully comfortable as she was still experiencing slight epigastric pains. Due to this, the nursing interventions were reviewed by 24 hours.

### **Patient's nutritional status will be restored**

On 14th November, A nursing Diagnosis of Imbalance nutrition (less than body requirement) related to loss of appetite (anorexia) and abdominal pains. An objective was therefore set to restore patient's nutritional status within 48 hours. Patient's food was served attractively to stimulate appetite. Patient was assisted with mouth care before and after meals. Patient was educated to avoid irritating foods such as spicy foods. Patient was encouraged to chew food slowly and allowing time to swallow to enhance easy digestion. Patient's food was served in bits with her favorite meal. All nauseating substances such as bed pan were removed from the environment to prevent loss of appetite. On 16th November, at 1:35pm, Goal was fully met as patient verbalized that she could eat well as she used to eat before hospitalization and was observed eating more than half of food served to her.

### **Patient will maintain normal body fluid volume**

On the day of Admission (14/11/21) A Nursing diagnosis of Risk for deficient fluid volume related to episodes of vomiting. An objective was set that Patient will maintain normal body fluid volume throughout hospitalization. In other to meet this set goal Patient was encouraged to drink at least 1500mls of water daily to replace lost fluid. An Intake and output chart was maintained to know the balance between fluid intake and fluid output. Signs and symptoms of dehydration such sunken eyes, oliguria and loss of skin turgor were assessed. All nauseating items such as bed pan were removed from the environment to prevent vomiting. Patient's weight was checked daily. Prescribed Antiemetic (Promethazine) was administered with therapeutic

and side effects observed. On 16th November, 2021 at 1:40pm, Goal was fully met as patient maintained a normal skin turgor and had no signs of dehydration.

### **Patient will be relieved of constipation**

On 15th November, 2021, a nursing Diagnosis of Impaired bowel elimination (constipation) related to side effect of medications (omeprazole) and lack of dietary bulk. An objective was set for patient to resume her normal elimination pattern within 48hours. Patient was reassured that the problem is manageable and the staff is ever ready to help in caring for her. Patient was served with light diet (such as porridge and soup). Patient was encouraged to engage in passive exercises to help relieve constipation. She was also served with fiber diet such as okro containing foods. Patient was encouraged to drink a lot of water to help soften stools. Patient was educated on the purpose and side effects of the drug (omeprazole). On 17th November, 2021 at 2:00pm, Goal was fully met as patient verbalized that she was able to pass stools freely.

### **Patient and family will gain adequate knowledge about the condition**

On the 15<sup>th</sup> November 2021, a nursing Diagnosis of Deficient knowledge (patient and family) related to inadequate information on the disease condition was formulated. Objective set to make client gain adequate knowledge into the causes and management of peptic ulcer disease. On th 18<sup>th</sup> November 2021 which the day of discharge evaluation was made and goal was fully met as client gave accurate feedback on information given on peptic ulcer disease.

## **5.2 Amendment of Nursing Care Plan for Partially Met or Unmet Outcome Criteria**

Through comprehensive nursing management and holistic care rendered to patient and family, most goals were fully met except the goal set to relieve patient of epigastric pain within 24 hours. Due to this, the nursing interventions were reviewed by adding 24 more hours. The goal

was fully met later as miss F.B verbalized that she was very well with no pain on 16th November, 2021 at 1:30pm.

**Table 10: Amended care plan for Miss FB**

<b>Date/ Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Interventions</b>	<b>Date/ Time</b>	<b>Evaluation</b>	<b>Sign</b>
15/11/21 1:30pm	Acute pain (epigastric pain) related to ulceration of the stomach mucosa evidenced by pain relieved by antacid.	Patient will be relieved of epigastric pain within 2 hours as evidenced by 1. Patient verbalizing relief of epigastric pain. 2. Nurse observing patient having a relaxed facial expression.	1. Reassure patient and family 2. Apply heat or cold compress if appropriate and according to patient choice 3. Provide patient with small, frequent meals. 4. Assess and note nonverbal pain cues such as restlessness, reluctance to move, abdominal guarding, tachycardia, and diaphoresis.	1. Patient and family were reassured of measures put in place to help relieve anxiety. 2. Heat compress was applied to relieve pain. 3. Patient was provided with small, frequent meals to prevent gastric distention and the release of gastrin. 4. Nonverbal pain cues such as restlessness, reluctance to move, abdominal guarding, tachycardia, and diaphoresis were noted to	16/11/21 1:30pm	Goal fully met as patient verbalized of being fully relieved of epigastric pain.	A.A

			<p>5. Provide diversional therapy.</p> <p>6. Administer prescribed medication (Omeprazole and Suspension Nugel-O) and observe for the therapeutic and side effects of drug.</p>	<p>evaluate extent and severity of the problem.</p> <p>5. Diversional therapy such as watching television and having conversations with her were provided.</p> <p>6. Prescribed medication (Omeprazole and Suspension Nugel-O) were administered to relieve pain and the therapeutic and side effects of the drug were observed.</p>			
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### **5.3 Termination of Care**

Termination of care for the patient and family started on the day of admission till the third home visit. This was done to enable the patient and family accept that the care will not be there forever since the goal was to make miss FB regain her health. On 6<sup>th</sup> December, 2021, home visited to patient and family was done as the third time. Miss FB had no complains and had recovered fully during this visit. They were encouraged on the need to adhere to the education given to them during the period of hospitalization and also encouraged them to report to the hospital anytime they have a health-related problem. The importance of personal and environmental hygiene was again stressed. Taking nutritious diet, periodic medical check-up, stress reduction, compliance to the drug regimen and also to renew the National Health Insurance Scheme (NHIS) when it expired were encouraged.

They were therefore introduced to miss A.K, a community health nurse who promised to continue the follow up visit and give any health information which would be needed by the patient and the family.

## CHAPTER SIX

### SUMMARY AND CONCLUSION

#### 6.0 Summary and Conclusion

According to Cambridge Dictionary Summary is a short description that gives the main facts or ideas about something.

This is the last step of the patient/family care study which entails the student's personal appreciation of the therapeutic relationship with the patient as well as the use of the nursing process.

#### 6.1 Summary

Miss FB was admitted to the female's ward through the Out Patient Department at St. Theresa's Hospital with the diagnosis of peptic ulcer disease on the 14<sup>th</sup> of November, 2021 at 1:30pm. On admission, miss FB complained of pain at the epigastrium, loss of appetite, vomiting and cough. On admission her vital signs were checked and recorded. Five health problems were identified and appropriate nursing interventions were put in place to tackle each of the problems. The five health problems identified include Epigastric pain, episodes of vomiting, loss of appetite, constipation and knowledge deficit.

Patient was placed on the following medications

1. Intravenous Omeprazole 40mg (Stat)
2. Intramuscular Promethazine 25mg (Stat)
3. Intramuscular Hyoscine Butyl Bromide 40mg (Stat]
4. Capsule Omeprazole 20mg bd x 7days
5. Suspension Nugal-O 15mls tid x 5

6. Intravenous fluid DNS 5% 2liters x 24hours

7. Intravenous fluid R/L 1L x 24hours

Laboratory investigations ordered were;

1. Stool for H. Pylori test

2. Blood film for malaria parasites

3. Blood Urea and creatinine

4. Full Blood Count (FBC) for:

White blood cell count, Red blood cell count and Haemoglobin level estimation.

A care plan was drawn with clear objectives and appropriate nursing interventions instituted to tackle each of the problems and they include reassuring the patient on her condition, encouraging patient to assume the prone position to alleviate pain, engaging patient in diversional therapy to draw her attention from pain. Peptic Ulcer Disease was clearly understood by the client and family, as they were able to explain the causes, signs, symptoms and prevention of the disease. The patient was prepared towards discharge from the first day of admission.

Miss FB recovered within 6days without complication and was scheduled for review. Visitation to her house was initiated while she was on admission and also, continued after discharge. Three home visits were made to ensure continuity of patient's care. During the home visits, education on patient's condition and its management, personal and environmental hygiene was done. Adjustments were also done in their house environment. Care was terminated on the 6<sup>th</sup> December, 2021.

## **6.2 Conclusion**

Both medical and nursing care rendered to miss FB and her family was possible through the positive attitude, understanding and co-operation from the client and family. I enjoyed nursing miss FB, and I am glad for putting into practice most of my acquired knowledge and skills in

helping miss FB regain her health eventually. The care rendered to miss FB has made me gain more knowledge on the condition (Peptic Ulcer Disease) with regards to the cause, clinical features, drug management, nursing management and prevention. It has equipped me with skill on how to render total individual care. It has also helped me improve on my interpersonal relationship with other members of the health team, the patient and family.

I would therefore use this opportunity to recommend that, every student in his/her final year should take this study seriously as it would not only broaden their knowledge but will also improve their practical experience and skills in the profession. Also, it is my recommendation that all students should be given the opportunity to embark on the patient/family care study in order to render individualized comprehensive care to patients/families.

## BIBLIOGRAPHY

- American Psychologist; Retrieved from [www.simplypsychology.org/Erik-Erikson.html](http://www.simplypsychology.org/Erik-Erikson.html)
- Assessment. (2019). Weller, F.B. *Bailliere's Nurses' Dictionary for Nurses and Health Workers*.(pg 33).New York: Bailliere Tindal Elsevier Limited.
- Boeree, C.G (2006). *Personality Theories*. Psychology Department; Shippensburg University.
- Collins English Dictionary (2022). Particulars, definition and meaning  
retrieved from <https://www.collinsdictionary.com/dictionary/.English/.particular>
- Elaine, N., & Katja, H. (2019). *Human Anatomy and Physiology*. New York:  
Benjamin Cummings Ltd.
- Elsevier Saunders. Loeb, S., Hamilton, H.k. and Mcvan, B.F, (2018).*Nursing Student's Guide to  
to  
Drugs*, Pennsylvania and U.S.A., Spring home Corporation.
- Kumar, P. J., & Clark, M. L. (2019). *Kumar and Clark clinical medicine*. Edinburgh;
- McLeod, S.A. (2016). *Erik Erikson Psychosocial Theory of Human Development*.
- Palta P., Szanton S.L., SembaR.D., et al. (2015) financial strain is association with increased  
oxidative stress levels: the women's health and aging studies.  
*Geriatric Nursing (new York, N.Y.)*  
Doi: 10.1016/j.gerinurse.2015.02.020
- Parry, E., & Gill, B. (2020). *Principles of Medicine in Africa*. Singapore:  
TeinsWa(Pte) Ltd.
- Smeltzer, C.S., Bare, G.B., Hinkle, L.J & Cheever, H.K. (2021). *Brunner and Suddarth's  
Textbook for Medical-Surgical Nursing*.  
Philadelphia; PA: JB Lippincott Williams & Wilkins.
- Stoppler, M.C., (2021). Medical definition of history, development.  
Retrieved from [https://www.medicinenet.com/skin\\_pictures\\_slideshow/article.htm](https://www.medicinenet.com/skin_pictures_slideshow/article.htm)
- Student portals (2021). Assessment of patient and family  
retrieved from; <https://www.student-portals.com/2021/17/14/chapter-one-assessment-of-patient-and-family/>.
- Tortora, J.G. & Derrickson, B., (2019). *Principles of Anatomy and physiology*.  
U.S.A. John Wiley & Sons, INC.
- Waugh, A. & Grant A. (2014). *Ross and Wilson Anatomy and physiology in Health and*

*Illness.* Elsevier Limited.

OTHERS

Patient's Folder; Number - 000081-20, St. Theresah's Hospital Nkoranza

## APPENDIX

**Table 11: Vital signs of miss FB throughout the period of hospitalization**

<b>Date</b>	<b>Time</b>	<b>Temperature (°C)</b>	<b>Pulse (bpm)</b>	<b>Respiration (cpm)</b>	<b>Blood Pressure (mmHg)</b>
14/11/21 Day of admission	1:30p	35.6	101	24	110/80
	6:00pm	35.8	87	22	130/80
	10:00pm	36.0	86	20	120/70
15/11/21 first day of admission	6:00am	35.6	101	22	140/90
	2:00pm	35.6	108	42	140/80
	10:00pm	36.0	100	24	120/80
16/11/21 Second day of admission	6:00am	35.8	105	24	130/90
	2:00pm	36.0	103	25	150/80
	10:00pm	35.6	88	20	140/80
17/11/21 Third of admission	6:00am	35.4	83	22	130/80
	2:00pm	35.9	88	22	130/60
	10:00pm	35.5	91	23	140/80
18/11/21 Fourth day of admission (discharged day)	6:00am	35.9	90	24	110/70
2/12/21 Review day	8:30am	36.9	90	22	110/70

SIGNATORIES

THE STUDENT NURSE

NAME: AGYAA ANNA

SIGNATURE: *[Signature]*

DATE: 7th October, 2022

NURSE IN-CHARGE OF FEMALE MEDICAL, ST. THERESA'S HOSPITAL,  
KORANZA

NAME: DANIEL KUSI APPIAH

SIGNATURE: *[Signature]*

DATE: 07/10/2022

THE SUPERVISOR, HOLY FAMILY NURSING AND MIDWIFERY TRAINING  
COLLEGE, BEREKUM

NAME: MR AMPONSAH EDWARD

SIGNATURE: *[Signature]*

DATE: 07-10-2022

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THE PRINCIPAL, HOLY FAMILY NURSING AND MIDWIFERY TRAINING  
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NAME: MONICA NKRUMAH

SIGNATURE: *[Signature]*

DATE: 10th October, 2022

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