

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

**A PATIENT /FAMILY CARE STUDY ON PEPTIC ULCER DISEASE**

**BY**

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

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## **PREFACE**

Nursing now as a profession has evolved through time to be the nursing known today. In the prehistoric era, nursing was “untaught” and instinctive which was performed out of compassion and desire to help others. It was based on experience and observation and was a woman’s function to naturally nurture the child, the sick and aged. Later it evolved and care was given by crusaders, prisoners and religious orders of the Christian Church while receiving on the job training from more experienced nurses. But nonetheless it made no much improvement in health as angry Protestants confiscated properties of hospitals connected with Roman Catholicism. Many nurses therefore fled for their lives. During the 19th and 20th centuries however, nursing developed as there were many wars, arousal of social consciousness and increased educational opportunities offered to women and the enormous role played by Florence Nightingale that cannot be over emphasized. The training of nurses in diploma program, licensing of nurses, specialization of hospitals and diagnosis, development of baccalaureate and advance degree programs and scientific and technological development as well as social changes mark this period. More than ever, today’s nurses need to think critically, creatively, and compassionately to reach out to all.

The nursing process is a deliberate problem-solving approach for meeting a person’s health care and nursing needs. It consists of a sequence of steps in the following order: assessment, diagnosis, outcome identification (objective/outcome criteria), planning, implementation, and evaluation. Assessment is the systematic collection of data to determine the patient’s health status and identify any actual or potential health problems. Diagnosis is identification of actual, potential and collaborative patient problems whereas planning is the development of goals and outcomes, as well as a plan of care designed to assist the patient in resolving the diagnosed problems and achieving the identified goals and desired outcomes. Implementation is the actualization of the

plan of care through nursing interventions and evaluation is determination of the patient's responses to the nursing interventions and the extent to which the outcomes have been achieved.

The patient/family care study forms part of the assessment of every final year student. It is a prerequisite for every candidate in order to partially fulfill the award of diploma certificate in Registered General Nursing by the Nursing and Midwifery Council of Ghana. It affords the student the opportunity to develop his/her skills for future use. The patient/family care study is a comprehensive account of the comprehensive nursing care rendered to the patient and family from the day of admission through the day of discharge, review and follow up visits.

The confidentiality of the patient and family were ensured by the use of patient/family initials instead of their full names.

The comprehensive care rendered was made possible by the employment of skills and knowledge in such disciplines as psychology, public health nursing, medical nursing, surgical nursing, pharmacology and nutrition and dietetics to meet the patient/family's needs and the community at large.

## **ACKNOWLEDGEMENT**

The greatest thanks giving goes to the Almighty God for given me the strength and wisdom to pursue this three-year course and also writing this care study.

I will also like to show my appreciation to my patient Madam J.T. and his family for their understanding and consent in the process of executing my nursing care and procedures.

My sincere thanks also goes to my supervisor Ms. Bridget Dzigbede, Mr Alhassan Ibrahim and the whole staff of Holy Family Nursing and Midwifery Training College, Berekum, not forgetting the staff of Dormaa Presbyterian Hospital, especially those of females ward.

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## INTRODUCTION

The client and family care study is the report of the nursing care rendered to a client and her family.

It involves interaction between the client and the health team.

Mrs J.T. was admitted to Presbyterian Hospital, Dormaa Ahenkro in the Bono region of Ghana, on the 24<sup>th</sup> November, 2021. She was admitted with the following complaints; abdominal pain, vomiting, insomnia, fever, Poor appetite and Knowledge deficit.

She was diagnosed of peptic ulcer disease after taking the history and physical examination made.

She was placed on oral, intravenous and intramuscular drugs examples are; IV Morphine 10mg stat Iv omeprazole 80mg stat, Intramuscular Buscopan 20mg stat, Capsule omeprazole 20mg bd x 5 days, Intramuscular promethazine 50mg stat prn x 3days, Intravenous omeprazole 40mg dly x 24hrs ,Suspension Nugal 15mls tid, Tablet paracetamol 1g x tid x 3 days, Intravenous 5% dextrose 500ml of 20 drops, IV Clindamycin 300mg qid x 24hrs and Tab Metronidazole 400mg Tid x 7days.

Some laboratory investigations included, Blood film for malaria parasite, H. pylori test and Full blood count. Madam J.T, during her period of hospitalization, six health problems were identified of which nursing objectives were set for all problems. All of the objectives were achieved during her discharge.

Health education was given to my patient /family members. With the help of the ward staff competent nursing care was rendered to my patient which resulted in her speedy recovery.

I made my first home visit to my patient on 26<sup>th</sup> November 2021 with the purpose of assessing both external and internal environment of my patient. On the 28<sup>th</sup> November, 2021 madam J.T. was discharged due to improvement in her condition as a result of her cooperation coupled with good nursing and medical care.

My second home visit was on 5<sup>th</sup> December, 2021 with the aim of checking on my patient to assess the progress of her condition and know whether she's adhering to the treatment after discharge.

My final home visit was on 10<sup>th</sup> December, 2021 to check on her as usual and to terminate my care.

The study has been arranged in five chapters in line with the generally accepted steps that is assessment, diagnosis, planning, intervention and evaluation.

Chapter one deals with assessment of client, admission, and patient's concept of illness and the literature review of the disease condition.

Chapter two deals with the analysis of data collected and the comparison of data with standards, finding out patient's problems as well as finding nursing diagnosis for them.

Chapter three deals with the nursing care plan which solves the client's problems identified during hospitalization.

Chapter four involves the implementation of client and family care plan, summary of actual nursing care and subsequent home visits and follows ups for continuity of care.

Chapter five covers the evaluation of care rendered to client and family, amendment of care plan for partially met or unmet goals, termination of care, summary and conclusion of the care study.

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## **CHAPTER ONE**

### **ASSESSMENT OF PATIENT AND FAMILY ON ADMISSION**

#### **1.0 Introduction**

This is the first phase of the nursing process and the patient/family care study. This phase requires the nurse to obtain both objective and subjective data from primary and secondary sources. That entails the collection of physiological, developmental, social, spiritual, emotional and psychological information about the patient/family (Brabin, 2017)

Relevant and accurate data collection is very necessary in order to care for the patient's problems effectively. My main source of information was from the patient and her family members. Other sources are members of health team and the literature review of the disease condition. The techniques used in data collection include interview, observation, physical examinations and patient's folder.

#### **1.1 Patients Particulars**

Patient's particulars are biographical details and other fact about the patient which are written down and kept as records (Renault, 2019).

Madam J. T., aged 26 years is a Ghanaian by nationality and a Bono by ethnicity hence speaks Bono Twi and English but she can speak Kassem. She was born on 8<sup>th</sup> November, 1995. She comes from Navrongo, the capital of the Kassena-Nankana District in the Upper East Region of Northern Ghana. She resides currently at Dormaa Ahenkro with house number; Koraso, Opposite Nana Sumakwa Street with a house number of KO94/4. She was born to Mr. K.T and Madam A. T. Madam J. T. is dark in complexion. She weighs 85kg. Madam J. T. is about five feet tall.

Mr. H. A. is her next of kin (her first born). She is married to Mr. A.Z. and was blessed with one child. According to the patient, she had her Basic Education at Presby Junior High School at Dormaa Ahenkro. She had formal education up to Senior High school (Sirigu Senior High) and started as a Pupil Teacher at House of Hope International School, Dormaa Ahenkro. She supports her family with the income she generates. Her husband is a peasant farmer who supports their family with his farm produce as he grows yam, cassava, plantain, cocoa and other vegetables. According to her, she has four (4) siblings which are all males and are all alive.

According to the patient, she is not allergic to any food. She doesn't smoke nor drinks and neither is she not a physically impaired person.

### **1.2 Patient/Family Medical History.**

Medical history is a collection of information about a client which includes current medical data, the patient past history of medical issues, the patient family history and vital health information a health care provider needs to formulate a diagnose and render care to patient and family (Dusbinarg, 2017).

According to Madam J.T. said her grandparents are deceased. They died of old age. Her parents and siblings are alive and healthy. There is no identified hereditary disorder like diabetes mellitus, asthma, sickle cell, epilepsy nor any mental disorders in the family. However, the relatives present during her history taking said that, periodically, they do suffer some ailments like malaria, headache, fever and abdominal pains which are treated by self-medication (using both over-the-counter drugs and traditional medicines) but if symptoms persist, they report to the hospital.

### **1.3 Patient/Family Socio-economic History**

The economic and sociological history combine total measure of a person's work experience of an individual's or family's economic and social position in relation to others. Examinations of socio-economic status often reveal inequities in access to resources, plus issues related to privilege, power and control (Dusbinarg, 2017).

Madam J. T.'s family has a very good relationship and cohesion. Socially the family is not noted for smoking or drinking alcohol. Family members are always willing to support each other in times of financial hardships. Patient doesn't depend much on his extended family for financial support but rather depends on her salary and her husband. Her family members are well known for their enormous participation in religious activities, their kindness and generosity. Patient said they have no taboos in their family, rather they conform to the rules and believes of the Islamic religion. She also indicated that the National Health Insurance Scheme cover most of her bills whenever he seeks for treatment at the hospital. The family has no known allergies for foods and drugs.

The patient and family lived in a semi-compound house built from blocks, cement and roofed with zinc. There was a toilet facility for her family. She is not the sole breadwinner of the family but earns about GH¢500 to GH¢600 a month which is used in addition to support her husband and the family including their child who is schooling. She has five dependents that include her child and her other four siblings. Their main source of water is from pipe borne.

### **1.4 Patient Developmental History**

Development is defined as the process of growth and differentiation. Growth, as well, is the progressive development of a living thing, especially the process by which the body reaches its point of complete physical development. (Weller, 2016).

According to the patient, she said she had a normal intrauterine life and was delivered at the hospital on 8<sup>th</sup> November, 1995 at Navrongo Government hospital.

She further said her mother told her that she was successfully delivered per-vaginal after a period of nine (9) Months of pregnancy. She said she was told that she had immunization against vaccine preventable diseases such as TB, measles and poliomyelitis, a scar on her right deltoid muscle confirmed this.

She further said that her mother said she started crawling when she was about 6 months old, started teething at the eight (8<sup>th</sup>) month. She started uttering words like “Mama”, “Dada” and stood up around the fourteenth (14<sup>th</sup>) month. She started walking after a short period of sitting and crawling and also breast fed for one and half years, after which her mother complemented to her breast milk with porridge like ‘Hausa koko’ and ‘tom brown’.

The patient said she was well nursed by her parents and was not exposed to any poor up bring. She also said she had formal education up to the Senior High School level but didn’t continue because of financial difficulties. Madam J. T. got married at the age of twenty-four years and she is now blessed with one child.

Erik Erikson (1902 to 1994) focused on cultural and societal influences as determinants of behaviour. Erikson was also concerned with the growth of ego, the conscious, organized and rational part of the personality. He described eight stages of ego development that encompass the life span. Each stage is characterized by a distinct conflict or crisis, relating to the person’s physiologic maturation and to what society expects of a person at that stage. According to Erik Erikson’s psychosocial development theory my patient is now in her early adulthood (20-35) where there is conflict between intimacies versus isolation. Erik Erikson stated that once self-

identity is established after adolescence, it can be merged with another's in an intimate relationship. The adult seeks love commitment and intimacy of an intense lasting relationship. Erikson believed that without a secure personal identity, a person cannot form a love relationship. The result is a person who is isolated. I am convinced that my patient is in the intimacy dimension of Erik Erikson's psychosocial development because she stays with her husband, she visits her parents often and her grandmother in her home town and has built a strong relationship to establish her own family.

### **1.5 Patient's Lifestyle/Hobbies**

Lifestyle/ hobbies are the way in which an individual lives and the activities he/she does regularly in his/her leisure time for pleasure and releasing stress. (Weller, 2017).

Madam J.T. observes her personal hygiene and environmental hygiene daily. She accordingly observes them by maintaining oral hygiene with 'pepsodent' tooth paste and 'pepsodent' tooth brush every morning. She baths twice daily with 'geisha' soap, personal sponge and towel. She cleans around her surroundings, keeps her hair clean and combed and also trims her finger and toe nails once they are grown. She does her daily prayers as a Muslim.

According to Madam J. T., the food she likes best is 'fufu' with light soup which she usually takes as supper but enjoys three-square meals. At her leisure, she enjoys playing 'ludo', watching television, listening to gospel music and playing around with her kid. She taboos nothing. However, Madam T. J. verbalized that she does not drink alcohol or smoke. She enjoys attending marriages as her favorite social activity.

She described herself as an introvert who has interest in watching television, reading and listening to radio. Patient usually uses both verbal and non-verbal communication styles such as eye contact

and gestures to register his displeasure when his children go wrong. She dislikes dishonesty and all sorts of immoralities but likes generosity and hard work. She pays for her children's school fees as she helps her husband and gives spiritual and financial support to her family. My personal impression about her is that, she is very benevolent and generous. She also seems to be very concerned about her children's education and their success in life.

During the weekdays, she usually wake up around 5:30am, she performs her personal hygiene and prepares for school. She usually close from school around 3pm. She takes her breakfast and lunch in school. She prepares her own supper when she returns home around 6:00pm.

On Fridays she leaves school early to attend to the mosque for prayers.

According to her she washes the cloths of the family and rest during the weekends. She prepares food for the whole week during the weekends. She sometime attends funerals and weddings. She has no difficulty sleeping, dressing or eating. She has no major stressors and has good coping mechanisms. She sometimes communicates through both verbal and non - verbal styles.

### **1.6 Patient/Family past Surgical/Medical History**

According to Madam J.T., her grandparents are deceased. They died of old age. Her parents and siblings are alive and healthy. There is no identified hereditary disorder like diabetes mellitus, asthma, sickle cell, epilepsy nor any mental disorders in the family. However, the relatives present during her history taking said that, periodically, they do suffer some ailments like malaria, headache, fever and abdominal pains which are treated by self-medication (using both over-the-counter drugs and traditional medicines) but if symptoms persist, they report to the hospital. The source of medical treatment for Madam J.T's family are both orthodox and herbal medicine. There

are no known allergies in the family. She is a known Peptic ulcer disease patient, therefore she occasionally have perineal abdominal pains and treat with antacids.

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

Present medical history refers to the chief complaint, when and how it started, the medical interventions sought and the possible precipitating or exacerbating factors (Gandutre, 2018).

According to the patient, she was apparently well and healthy when leaving for work on 23<sup>rd</sup> November, 2021 until later at work she started experiencing abdominal pain and vomited three times that day and pain intensified after eating. She took magnesium triscilicate mixture on the same day which was bought from over-the-counter drug store. On the next day, 24<sup>th</sup> November, 2021, she realized that there was no improvement with feeling of weakness as well. She could not bear the discomfort no more hence informed her husband. They decided to report to the Dormaa Ahenkro Presbyterian Hospital. She was brought to the Emergency Ward at exactly 11:50am by her husband. Her vital signs were checked and recorded.

Diagnostic investigations ordered which include Blood film for malaria parasite (MPs), Full blood count (FBC), Urine routine examination and Pregnancy Test after which client was diagnosed of peptic ulcer through additional physical examination conducted and history taken.

Medications given to him include IV Morphine 10mg stat, IV omeprazole 80mg stat, Suspension Nugal 15ml stat, Intramuscular Buscopan 20mg stat and Intravenous dextrose 5% 500ml of 20 drops. The doctor ordered for the patient to be sent to the females ward for admission.

## 1.8 Admission of Patient

Admission of a patient is a series of event that a healthcare providing team goes through to admit a patient comfortably to a particular ward without any stress on the patient or relative and to ensure quick and possible recovery (World Health Organization, 2020).

Madam J. T. was admitted on Wednesday 24<sup>th</sup> November, 2021 at the Dormaa Ahenkro Presbyterian Hospital. She was brought into the female Medical Ward at exactly 2:42pm through the emergency unit by her husband, accompanied by a nurse which I happened to be around during clinical practice and I was fortunate to be asked by the ward in-charge to admit her into the ward. She came in ambulatory with an assistant from the husband and was diagnosed of Peptic Ulcer Disease.

I welcomed them warmly into the female medical ward and made them comfortable on a chair. I took the hospital card since they are using the Electronic Folder System from the accompanying nurse and mentioned the name written on it to identify the patient to which she responded. The patient was offered an already prepared simple unoccupied bed because she was weak and restless while her husband was asked to sit on the chair. Her vital signs were taken and recorded at the ward level as;

Temperature .....37.8°C

Pulse .....88 beats per minute

Respiration..... 21 cycle per minute

Blood pressure ..... 100/60 mmHg

Her temperature was slightly high so the temperature was rechecked and recorded to know whether the temperature is reducing to normal and patient was served with cold water to help reduce body temperature.

I also told them that we will do all our best to help madam J. T. recover from her health problem within the shortest possible time by God's grace and that their concern and co-operation was needed to help us attain this goal.

The complaints of the patient included the following; General bodily discomfort, vomiting after eaten, poor appetite, abdominal pain, chills and fever.

The following drugs were prescribed and administered as prescribed by the doctor at the emergency unit;

1. IV Morphine 10mg stat
2. IV omeprazole 80mg stat
3. Intramuscular Buscopan 20mg stat
4. Intravenous dextrose 5% 500ml of 20 drops.

The following drugs were later ordered for patient at the ward.

1. Capsule omeprazole 20mg bd x 5 days
2. Intramuscular promethazine 25 mg stat x 24hrs.
3. Intravenous omeprazole 40mg dly x 24hrs
4. Suspension Nugal 15mls tid

The following laboratory investigations has already been ordered to rule out other causes of her condition (PUD).

1. Blood film for malaria parasite (MPs).
2. Full blood count (FBC).
3. Urine routine examination.
4. Helicobacter pylori test
5. Pregnancy Test

Patient was oriented to time, place and person. She was also oriented to the ward annexes. I also informed her about medication times, source of drinking water, meals, time, doctor's rounds and visiting hours as routines of the ward. She was told where the washroom could be located. The patient was insured under the national insurance scheme. Patient's information were entered into the admission and discharge book and any other relevant documents. I decided to choose this patient for the study because I wanted to know why although Peptic Ulcer Disease occurs in everyone, they become severe and cause problems in some individuals.

I reintroduced myself to patient as a final year student nurse of the Nursing and Midwifery Training College, Berekum, who would like to take her and the family for my care study. Madam J. T. was informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfilment towards the award of Diploma in Registered General Nursing. I explained to the patient the concept of the patient/family care study and assured them of privacy and confidentiality.

It was added that a report will be written after the entire event. Madam J. T. agreed to my request and promised to offer me the necessary information and assistance. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus they will continue the care at home once he is well.

Later the client consented to be the patient for this care study was requested. How the project would be done from commencement to termination including home visits were explained to her, which she agreed.

Patient and her relative were made aware that her stay at the ward is temporal and that she will be discharged to go home and continue with her work if her condition gets better and the necessary health education regarding the cause, signs and symptoms, treatment and preventive measures will be provided during her stay.

### **1.9 Patient's concept of illness.**

The psychosocial believe of a patient about the cause of a particular disease condition and her suggested ways to regain good health.

After explaining the disease process to the patient which included the causes, mode of transmission, signs and symptoms, prevention, complications and mode of treatment. She did not relate her illness to any evil spirit or the handy work of any family member. Patient has adequate knowledge about her condition because she was encouraged to avoid spicy food and also gas forming food such as beans since it can aggravate her condition. She stated that after her discharge from the ward, she will not come back with similar condition because all that I told her will be put into practice.

## **1.10 Literature review on Peptic Ulcer Disease.**

### **BRIEF ANATOMY AND PHYSIOLOGY OF THE STOMACH**

According to Grant, Ross and Willson (2014), the stomach is a J-shaped dilated portion of the alimentary tract situated in the epigastric, umbilical and left hypochondriac regions of the abdominal cavity. It is continuous with the esophagus at the cardiac sphincter and with the duodenum at the pyloric sphincter and it has two curvatures; the posterior lesser curvature and the anterior greater curvature. The stomach is divided into three regions: the fundus, the body and the pylorus. At the distal end of the pylorus is the pyloric sphincter, guarding the opening between the stomach and the duodenum.

**Figure 1: Diagram Showing the Anterior View of The Stomach**



<https://www.google.com/url/2016/01.what-is-stomach-in-human-body.com>

### **WALLS OF THE STOMACH**

The walls of the stomach as described by (Allison, 2014) are formed by four layers of tissue:

1. Outermost adventitia or serosa called peritoneum
2. Muscular layer consisting of three layers of smooth muscle fibre

An outer layer of longitudinal fibre

A middle layer of circular fibre

An inner layer of oblique fibre

3. Sub mucosa consisting of loose areola connective tissue containing collagen and some elastic fibre which binds the muscle layer to the mucosa.

4. Mucosa: When the stomach is empty the mucous membrane lining is thrown into longitudinal folds or rugae, and when full the rugae are 'ironed out' and the surface has a smooth, velvety appearance. Numerous gastric glands are situated below the surface in the mucous membrane and open onto it. They consist of specialized cells that secrete gastric juice into the stomach. (Medilexican, 2018)

## **OVERVIEW OF ACID SECRETION/ GASTRIC JUICE AND FUNCTIONS OF THE STOMACH**

According to Cheever (2010), acid is secreted by parietal cells in the proximal two thirds (body) of the stomach. Gastric acid aids digestion by creating the optimal pH for pepsin and gastric lipase and by stimulating pancreatic bicarbonate secretion. Acid secretion is initiated by food: the thought, smell, or taste of food effects vagal stimulation of the gastrin-secreting G cells located in the distal one third (antrum) of the stomach. The arrival of protein to the stomach further stimulates gastrin output. Circulating gastrin trigger the release of histamine enterochromaffin-like cells into the body of the stomach. Histamine stimulates the parietal cells through their H<sub>2</sub> receptors. The parietal cells secrete acid, and the resulting drop in pH causes the antral D cells to release somatostatin, which inhibits gastrin release (negative response mechanism). According to Smelters

and Bare, acid secretion is present at birth and reaches adult levels by age 2. There is a decline in acid output in elderly patients who develop chronic gastritis, but acid output is otherwise maintained throughout life. Stomach size varies with the volume of food it contains, which may be 1.5 liters or more in an adult. When a meal has been eaten, the food accumulates in the stomach in layers (mucosa, sub mucosa, muscular is and serosa), the last part of the meal remaining in the fundus for some time. Mixing with the gastric juice takes place gradually and it may be some time before the food is sufficiently acidified to stop the action of salivary amylase. The activity of gastric muscle consists of a churning movement that breaks down the bolus and mixes it with gastric juice and peristaltic waves that propel the stomach contents towards the pylorus. When the stomach is active the pyloric sphincter closes. Strong peristaltic contraction of the pylorus forces chime, gastric contents after they sufficiently liquefied, through the pyloric sphincter into the duodenum in small spurts. Parasympathetic stimulation increases the motility of the stomach and secretion of gastric juice; sympathetic stimulation has the opposite effect (Medilexican, 2018)

## **PEPTIC ULCER DISEASE**

### **DEFINITION**

Peptic ulcer as an excavation that forms in the mucosal wall of the stomach in the pylorus in the duodenum or in the esophagus (Miibot, 2018).A peptic ulcer is frequently referred to as duodenal, esophageal or gastric ulcer depending on the location or as peptic ulcer disease.

Ministry of health (2018), stated that peptic ulcer disease may be duodenal, gastric or esophageal.

Lemon and Burk (2016), defined peptic ulcer disease by a break in the mucosal lining of the gastrointestinal tract where it comes in contact with gastric juice.

## **TYPES OF PEPTIC ULCER DISEASE**

Graham Rogers (2017) categorized the types of peptic ulcer disease into the following;

Gastric ulcers found lying on the lesser curvature of the stomach and are usually single. Acute gastric ulcers are also known as gastric erosions and are multiple small ulcers. It may occur after severe stress such as burns or trauma.

Chronic gastric ulcer develops from untreated acute ulcer. Scar tissues are formed at the healing edges which may lead to complication.

Esophageal ulcers; they are ulcers that occur in the esophagus.

Duodenal ulcer, this is when the erosion of the mucosa is present in the duodenum which usually occur in the first part of the duodenum.

Anastigmatic; which is due to the failure of healing of the wound at where intestinal resection and anastomosis were done.

Also, Boakye-Yiadom (2014), discussed the types of ulcer as follows;

Gastric ulcer; The incidence of gastric ulcer peaks in sixth decade, approximately 10 years later than for duodenal ulcers. Slightly more than half of gastric ulcer is not known since many gastric ulcers are asymptomatic.

Duodenal ulcer is characteristically a chronic and recurrent disease. In contrast to erosion which are superficial and limited to the mucosa, duodenal ulcers are usually deep and sharply demarcated, they penetrate through the mucosa and submucosa often into the muscularis propria.

## **INCIDENCE**

The disease occurs with the greatest frequency in people between the ages of 40 and 60 years as a result of stress ( Benus, 2017). It is relatively uncommon in women of childbearing age but it has been observed in children and even infants. Men are affected three times more often than women but there is some evidence that the incidence in women is increasing. After menopause, that incidence of peptic ulcer in women is almost equal to that in men. Peptic ulcers in the body of the stomach can occur without excessive acid secretion. It is estimated that, 5-15% of the populations in the limited state have ulcers, but only about half of these are recognized. The incidence has declined by 50% over the past 20 years.

Duodenal ulcers are 5-10 times more common than gastric ulcers.

Also, Monahan et al (2012) stated that an increased incidence is found in approximately 10% of the population. Gastric ulcers are more likely to occur during the fourth, fifth and sixth decades of life.

Duodenal ulcers are commonly occurring during the fourth, fifth and sixth decades for men. For women, the occurrence is about ten years later in life. Men are more likely to develop both gastric and duodenal ulcers. Gastric ulcer is also said to be common in people with blood group O.

## **AETIOLOGY/CAUSES**

Many factors are probably involved but the basic ones are; excessive secretion of gastric acid, inadequate protection of the lining of the stomach and duodenum against digestion by acid and pepsin, Helicobacter pylori infection, drugs like non-steroidal anti-inflammatory drugs ( Ministry of Health, 2018).

Peptic ulcer results from infection with the gram negative bacteria Helicobacter Pylori, which may be acquired through ingestion of contaminated food and water. Actual cause of peptic ulcer is unknown (Duncan, 2019).

### **PREDISPOSING OF PEPTIC ULCER DISEASE**

Markus (2014), the predisposing factors of peptic ulcer are;

1. Genetic factors
2. Decreased mucosal blood flow.
3. Factors that impaired the defense of the mucosa of the GIT such as drugs and diet that contain detergent properties.
4. Factors that increase the vague nerve activity such as coffee, nicotine.

Walsh and Alison (2010) stated that the potential contributing factors of peptic ulcer include;

- ❖ Hereditary
- ❖ Stress
- ❖ Blood groups
- ❖ Bile reflux
- ❖ Endocrine secretion
- ❖ Cigarette smoking and high alcohol consumption

- ❖ Drugs such as NSAIDs, corticosteroids.

## **PATHOPHYSIOLOGY OF PEPTIC ULCER DISEASE**

### **THE STOMACH**

The stomach is a muscular organ located on the left side of the upper abdomen. The stomach receives food from the esophagus. As food reaches the end of the esophagus, it enters the stomach through a muscular valve called the lower esophageal sphincter.

The stomach secretes acid and enzymes that digest food. Ridges of muscle tissue called rugae line the stomach. The stomach muscles contract periodically, churning food to enhance digestion. The pyloric sphincter is a muscular valve that opens to allow food to pass from the stomach to the small intestine. (Dusbinarg, 2017).

Peptic ulcer occurs mainly in the gastro duodenal mucosa because the tissue cannot withstand the digestive action of gastric and pepsin( Rogers, 2017). 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 Barrie against HCL. The use of NSAIDS inhibits the secretion of mucus that protects the mucosa.

Patient's with duodenal ulcer disease secretes more acid than normal or decreased level of acid. Damage to the duodenal mucosa allows decreased resistance to bacterial and thus infection from

Helicobacter pylori's bacteria may occur. Zollinger-Ellison syndrome is suspected when a patient has several peptic ulcers or an ulcer that is resistant to medical therapy.

It is identified by the following; Hyper secretion of gastric juice, duodenal ulcers and gastrinomas in the pancreas. 100% of patients with duodenal ulcers are infected with Helicobacter Pylori whereas 70% to 80% of patients are not infected with Helicobacter Pylori, and are usually associated with the use of NSAIDs or the Zollinger-Ellison syndrome. Antibiotic therapy to eradicate Helicobacter Pylori, markedly decrease the recurrence of duodenal ulcers.

#### **CLINICAL MANIFESTATION OF PEPTIC ULCER DISEASE**

- ❖ Dull gnawing pain or burning sensation in the mid epigastrium or in the back.
- ❖ Heart burn
- ❖ Constipation
- ❖ Bleeding
- ❖ Vomiting
- ❖ Vague and poorly localized discomfort in the older adult, dysphasia, weight loss or anemia
- ❖ Melena
- ❖ Manifestation of hemorrhage and shock; pallor, tachycardia, hypotension, and cold clammy
- ❖ Skin.
- ❖ Possible black tarry stool.

**Table 1: Clinical Manufection**

	<b>Gastric Ulcer</b>	<b>Duodenal Ulcer</b>	<b>Oesophageal Ulcer</b>
<b>Sex</b>	Male and Female 2:1 respectively.	Male and Female 3:1 respectively.	All sexes equally
<b>Age</b>	Usually 50 and over	30-60years	60 years and above
<b>Blood group</b>	Blood group A is most common.	Blood group O is most common.	All blood groups are affected
<b>Pain</b>	Pain occurs 1-2 hours after a meal: night time normally relieved by vomiting or lying down	Usually 2-3 hours after meals: night time often awakened between 1 and 2 am.	Pain in swallowing
<b>Appetite</b>	Patient afraid to eat.	Good	Lack of appetite
<b>Hematemesis</b>	Vomiting is common	Vomiting is uncommon	Vomit contains blood
<b>Weight loss</b>	Weight loss is common	Weight loss is uncommon	Weight loss is common
<b>Maleana</b>	Common	Uncommon	Uncommon, very rare

## DIAGNOSTIC INVESTIGATIONS

1. Barium study of the gastrointestinal tract may reveal an ulcer
2. Endoscopy is the preferred diagnostic procedure because it allows direct visualization of inflammatory changes, ulcers and lesions.
3. Physical examination may reveal pain, epigastric tenderness
4. Stool for occult blood.
5. Gastric secretory studies are of value diagnosing achlorhydria and Zollinger Ellison syndrome.
6. Serologic test for antibodies to the Helicobacter Pylori antigen
7. Helicobacter pylori infection may be determined by biopsy and histology with culture.
8. Gastroscopy which allows visualization of the ulcer. Gastric analysis show very high gastric juice and levels in Zollinger-Ellison syndrome (Lemon and Burk, 2016)
9. Upper gastrointestinal series
10. Occult blood test.

### **MEDICAL TREATMENT OF PEPTIC ULCER**

It's, recommended that the current used therapy for peptic ulcer disease is combination of antibiotics, proton pump inhibitors, and bismuth salt that suppress or eradicates Helicobacter pylori (Ferigan, 2018).

Recommended therapy for 10 to 14 days includes triple therapy with two antibiotics such as metronidazole or amoxicillin and clarithromycin plus a proton inhibitor such as lansoprazole or omeprazole.

Histamine-2 (H2) receptor antagonist such as cimetidine and protein pump inhibitors are used to treat NSAIDs induced ulcers and other ulcers not associated with Helicobacter pylori infection.

Stress reduction and rest. Reducing environmental stress both physical and psychological as well as co-operation of family and significant others.

Smoke cessation: research has shown that smoking decreases the secretion of bicarbonate from the pancreas into the duodenum resulting in increased activity of the duodenum.

Dietary modifications: dietary modification for peptic ulcer helps to avoid over secretion of acid and hyper motility in the gastro-intestinal tract. The individual must avoid extreme of temperate of food such as beverages and overstimulation from consumption of meat extracts, alcohol, coffee and diets rich in milk and cream.

## **SURGICAL MANAGEMENT**

According to Dr. Oliver Starr (2017), many people with peptic ulcer experience complications that require surgical interventions for the removal of ulcerated tissue and reductions of the secretion of HCL acid.

- ❖ Vagotomy: this is surgical procedure where part or whole of the vague nerve is cut to reduce the source of vitally stimulated hydrochloric acid.
- ❖ Gastroenterostomy: openings made in the stomach and the jejunum where drain is inserted to divert gastric content into jejunum.
- ❖ Pyloroplasty: surgical repair where the pylorus is enlarged to facilitate passage of food.
- ❖ Gastrectomy: involves removal of a portion of the stomach most commonly the dustier one half or two thirds of the stomach is rejected.
- ❖ Billroth I – part of the stomach is removed and the remaining is anastomosed to the duodenum.

- ❖ Billroth II – the lower part of the stomach is removed and the remaining is anastomosed to the jejunum

### **NURSING ASSESSMENT**

1. Determine location, character, radiation of pain, factors aggravating or relieving pain, how long it last, when it occurs (it is relieved by food? Antacid? Or vomiting?)
2. Ask about eating pattern, regularity, types of food.
3. Take a social history of alcohol consumption and smoking.
4. Ask about medications (especially aspirin, anti-inflammatory drugs).
5. Take vital signs (lying, standing and sitting).

### **NURSING MANAGEMENT**

1. Stress reduction and rest. Reducing environmental stress requires physical and psychological modification on the patient part as well as the aid co-operation of family and significant others.
2. Smoking cessation: studies have indicated that smoking decreases secretion of bicarbonate from the pancreas into the duodenum, resulting in increased acidity of the duodenum.
3. Dietary modification: the intent of dietary modification for patient is to avoid over secretion of acid and hyper motility in the GIT.
4. The nurse should review with patient and family the signs and symptoms of complication to be reported which include; hemorrhage (cold skin, confusion, increased heart rate labor breathing and blood in stool).
5. Reassure patient and relatives that she is in the hands of competent staff and everything will be done to endure speedy recovery.

6. Relieve anxiety by providing information about the disease condition and answering of patient question's tactfully.
7. Encourage patient enough rest and stress reduction.
8. Reduce environmental stress require physical and mental intervention on the patient part and co-operation family.
9. Regular rest periods during the day.
10. Relaxation therapy. Example; going on holidays.
11. Diet-meal should be taken at regular intervals.
12. Frequent small meals of bland diet are usually recommended. Spicy, fried or vinegary foods should be avoided. Stimulant as coffee, tea, and alcohol beverages should be avoided.
13. Observation of vital signs hourly such as temperature, pulse, respiration and blood pressure.
14. Observe stool for occult blood, elimination pattern for foods that cause diarrhea.
15. Educate patient to avoid smoking and alcohol intake.

## **PROGNOSIS**

Rodger H. (2016) said there is the possibility that ulcer will recur within one year. This is likely to reduce if the predisposing factors to the condition such as smoking, alcoholism, stress and ulcerogenic drugs are avoided.

## **COMPLICATIONS OF PEPTIC ULCER DISEASE**

Milosavljevic T. et al (2011) came out with following complications after surgery.

- **Recurrent ulceration:** Recurrent peptic ulcer disease or gastritis can occur after distal gastrectomy and Billroth II reconstruction when retained antrum tissue **is continuously exposed to the unopposed bicarbonate secretion of the pancreas.**
- **Dumping syndrome:** This syndrome is a complication of gastric bypass surgery or after you have had a surgery that removes part of your stomach. Sometimes with these procedures, the opening between the stomach and small intestine, the pylorus, has been removed.
- **Post vagotomydiarrhea:** Parietal cell vagotomy has been called the "vagotomy without diarrhea." If it also proves to be the vagotomy without recurrent ulcers, it should then be the procedure of choice as far as the prevention of the complication of postvagotomy diarrhea is concerned.
- **Afferent loop syndrome:** Any intrinsic or extrinsic obstructive process along the afferent limb or at the distal anastomosis may result in afferent loop syndrome. Common causes include adhesions, which may result in compression or kinking of the afferent limb, internal hernia, scarring caused by previous ulceration of the gastrojejunostomy, and recurrent disease in patients who underwent surgery for cancer.

- **Bile reflux gastropathy:** Bile (Alkaline) Reflux Gastritis Bile reflux gastritis is a poorly defined entity associated with early satiety, abdominal discomfort, and vomiting; it is thought to be caused by reflux of duodenal contents into the stomach after ulcer surgery. Endoscopic biopsies of the gastric mucosa often show histologic evidence of gastritis. It is not clear whether patients with bile reflux have abnormal bile or whether the stomach is abnormally sensitive to bile.
- **Haematologic complications:** Sometimes an ulcer may involve just the surface lining of the digestive tract. The person may then have a slow but constant loss of blood into the digestive tract. Over time, anemia may develop because of this slow blood loss.
  1. If ulcers become larger and extend deeper into the digestive tract lining, they may damage large blood vessels, resulting in sudden, serious bleeding into the intestinal tract.
  2. If you are vomiting blood and/or material that looks like coffee grounds, or if you have stools that are black, look like tar, or are maroon or bloody, see a doctor immediately. The chances of successfully treating your ulcer are best if you see a doctor when you first notice any bleeding.
- **General Malabsorption:** Surgery that removes part of the small intestine means you have less surface area in your remaining small intestine to absorb nutrients.

### 1.11 Validation of Data

Validation is defined according to Weller, (2014) as the extent to which a data measure, indicator or method of data collection possesses the quality of being sound or true, as far as can be judged. In other words, validation refers to the process by which data retrieved is being confirmed. To ensure that the data gathered was accurate and complete, the information's were gathered systematically and were crosschecked severally. Those given to me by patient and the family were

compared with those in the patient's folder. My visit to the client's house also confirmed most of what patient had told me.

The data collected from client, health workers (medical team and staff nurses), patient's folder, laboratory investigations and physical assessment were checked with literature review to ensure that information collected was free from errors, bias and misinterpretations

## **CHAPTER TWO**

### **ANALYSIS OF DATA**

#### **2.0 Introduction**

According to (Weller B. F., 2018) analysis is the study of a whole in terms of its parts. It is the second phase of the nursing process and it involves the act of deducing fact or information from

data that has been gathered on the client and her condition in order to arrive at the needs of the client and the problems hindering attainment of health and intervening where necessary to promote health and well-being. It comprises;

1. Comparison of data with standard
2. The patient/family's problem
3. Patient/Family strength Health problems
4. Nursing diagnosis

### **2.1 Comparison of data with standards**

The results from laboratory investigation, history or signs and symptoms manifested by the patient are carefully analyzed, comparing them with standard measures to aid in diagnosing the patient's condition. (Weller B. F., 2018). These include diagnostic investigation, causes, signs and symptoms, treatment and complications.

### **2.2 Diagnostic Investigations/Test**

A diagnostic investigation is a procedure performed to confirm or determine the presence of disease in an individual suspected of having the disease usually following the report of symptoms or based on the results of other medical tests. (Weller B. F., 2018).

The following diagnostic tests were carried out on patient;

1. Full blood count
2. Malaria parasites test
3. Helicobacter pylori
4. Urine routine examination
5. Pregnancy test



**Table 1: Below shows the Comparison of diagnostic tests carried out on Madam J.T. with those listed in literature review.**

<b>Diagnostic Tests Outlined In Literature Review</b>	<b>Diagnostic Tests carried out on the patient.</b>
Physical examination	Physical examination was conducted.
Endoscopy	Investigation was not requested for patient
Full blood count	Sample of blood was taken for full blood count.
Barium study of the upper gastro intestinal tract and Gastric analysis	Investigation was not requested for patient
Stool for occult blood and Helicobacter pylori.	Investigation was done for patient
Serologic test for antibodies to the Helicobacter pylori antigen	Investigation was requested for patient
History from the patient to confirm the diagnosis	History from the patient was done to confirm the diagnosis

With reference to the literature review, patient was effectively diagnosed through the history she presented, full blood count, physical examination and stool for routine examination.

**Table 2: Below show the results of the diagnostic investigations performed on the patient.**

<b>Date Ordered</b>	<b>Specimen</b>	<b>Investigation</b>	<b>Results</b>	<b>Normal Value</b>	<b>Interpretation</b>	<b>Remarks</b>
23/11/21	Blood	Haemoglobin Level	13.5g/dl	Male 13.5-17.5g/dl Female 12.0 -15.5g/dl	Not anaemic	No treatment given
23/11/21	Blood film	Malaria parasites	Malaria parasite not present	There should not be plasmodium in blood	No malaria infection	No treatment given
23/11/21	Blood	Helicobacter pylori	H. Pylori antigens detected	There should be no Helicobacter pylori antigens	Infection with H. pylori	Drugs prescribed for the treatment of the infection
23/11/21	Urine	Urine routine examination	Appearance; clear color, amber. Urobenogen; normal Nitrite; negative Sugar; negative	Normal urine; amber. Urobenogen; normal Nitrite; negative Sugar; negative	Nothing abnormal detected	No treatment given

			Blood ; negative Bilirubin; negative Ketones; negative Protein; negative RBC; 0	Blood ; negative Bilirubin; negative Ketones; negative Protein; negative RBC; <9		
23/11/21	Urine	Pregnancy test	Absence of HCG in urine.	HCG should be present in the urine.	Not pregnant.	No treatment given
23/11/21	Blood	Full blood count: White blood cell	3.2 x (10 <sup>3</sup> /uL)	(2.60-8.50)x10 <sup>3</sup> /uL	White blood cell count was within normal range	Antibiotics (metronidazole) was given as prophylaxis after surgery

		Red blood cell	5.35 x (10 <sup>6</sup> /uL)	(4.50-6.50) x10 <sup>6</sup> /uL	Red blood cell count was within normal	No treatment was given
		Hematocrit	47.4%	(40-55)%	Haematocrit level was within normal values	No treatment was given

### 2.3 Causes of patient's condition

As part of the predisposing factors of peptic ulcer disease as stated in the literature review, it was observed that client's condition was predisposed by prolonged stress and eating of spicy food.

**Table 3: Clinical manifestation exhibited by patient compared with those in literature review.**

<b>LITERATURE REVIEW ON CLINICAL MANIFESTATIONS</b>	<b>PATIENT'S CLINICAL MANIFESTATION</b>
Mid-epigastrium pain	Mid-epigastrium pain was absent.
Heart burn	Heart burns were absent
Intermittent pain occurring frequently at night when the stomach is empty.	Intermittent pain was absent.
Severe abdominal pain	Severe abdominal pain was present
Vomiting	Patient was vomiting
Anorexia	Patient had anorexia
Pain and discomfort continue in time and increase by food intake.	Pain and discomfort was present
Constipation and diarrhea	Constipation and diarrhea was absent
Pain occurring in the epigastric area radiating to the back.	Epigastric pain was present
Weight loss	Weight loss was not present

With reference to the literature review, Patient exhibited most of the signs and symptoms as stated in the literature review such as vomiting, weight loss, epigastric discomfort, nausea and anorexia which had a gradual onset.

#### **2.4 Treatment Given To the Patient**

Treatment (medical/surgical) is referred to as a therapy intended to stabilize or reverse a morbid process or state. Treatment may be pharmacologic, using drugs; surgical, involving operative procedures; or supportive, building the patient's strength. It may be specific for the disorder, or symptomatic to relieve symptoms without affecting a cure. (Weller B. F., 2018)

The drugs below were prescribed for patient to treat her condition:

1. IV Morphine 10mg stat
2. IV omeprazole 80mg stat
3. Intramuscular Buscopan 20mg stat
4. Capsule omeprazole 20mg bd x 5 days
5. Intramuscular promethazine 50mg stat prn x 3days
6. Intravenous omeprazole 40mg dly x 24hrs
7. Suspension Nugal 15mls tid
8. Tablet paracetamol 1g x tid x 3 days
9. Intravenous 5% dextrose 500ml of 20 drops
10. IV Clindamycin 300mg qid x 4days
11. Tab Metronidazole 400mg Tid x 7days

**Table 4: Comparison of Treatment Outlined In the Literature Review with Those Given To Patient**

<b>Treatment From The Literature Review On Peptic Ulcer Disease</b>	<b>Drugs administered to patient.</b>
Proton pump inhibitors (PPI's)	i. Capsule omeprazole 20mg bd x 5 days ii. Intravenous omeprazole 40mg dly x 24hrs
Promethazine	Intramuscular promethazine 25 mg stat x 24hrs.
Amoxicillin	Amoxicillin was not given
Antacids	Suspension Nugel 15mls tid
Analgesics	1. Tablet paracetamol 1g x tid x 3 days 2. IV morphine 10mg stat
IV fluids	Intravenous 5% dextrose 500ml of 20 drops
Antibiotics	IV Clindamycin 300mg qid x 24hrs
	Tab Metronidazole 400mg TidX 7days

From the literature review, Patient was given most of the drugss as stated in the literature review such as Omeprazole, promethazine, Nugel, Paracetamol, Dextrose, Clindamycin and metronidazole.

**Table 5: The table below shows the pharmacology of drugs given to the patient at the emergency unit.**

Date	Drug	Dosage/Route Of Administration From Literature Review	Dosage/ Route Of Administration Of Drug	Classification Of Drugs	Desired effect	Actual action of drug observed	Side effect/ remarks
23/11/21	Morphine	<b>Dosage:</b> 10-20mg stat, prn x 24 hours  <b>Route:</b> Oral and IV	<b>Dosage:</b> 10mg stat  <b>Route:</b> Intravenously	Opiate analgesics	It reduces feelings of pain by interrupting the way nerves signal pain between the brain and the body.	Patient's pain subsided.	Drowsiness. stomach pain and cramps. dry mouth. mood changes, small pupils (black circles in the middle of the eyes, difficulty

							urinating or pain when urinating. None was observed
	Buscopan	<b>Dosage:</b> 20mg-40mg <b>Route:</b> Intramuscular	<b>Dosage:</b> 20mg stat <b>Route:</b> Intramuscular	Antispasmodic drugs	To reduce muscle spasms in the GIT.	Patient epigastric pain was relieved indicating muscles spasm prevention, resulting in low acid	Dry mouth, drowsiness, blurred vision, difficulty in urination. None was observed.

						production	
	Omeprazole	<b>Dosage:</b> 40mg bd x 5days or 80mg daily <b>Route:</b> Oral, IV	<b>Dosage:</b> 80mg stat, prn Route: IV	Proton pump inhibitors	To decrease the amount of acid in the stomach	Gastric acid reduced	Headache, abdominal pain, constipation, diarrhoea, flatulence and nausea/ vomiting. None was observed.

**Table 6: The table below shows the pharmacology of drugs given to the patient.**

<b>Date</b>	<b>Drug</b>	<b>Dosage/Route Of Administration From Literature Review</b>	<b>Dosage/ Route Of Administration Of Drug</b>	<b>Classification Of Drugs</b>	<b>Desired effect</b>	<b>Actual action of drug observed</b>	<b>Side effect/ remarks</b>
24/11/21	Tablets Paracetamol	Tab paracetamol 1G, tds x 5days Orally	Dosage: 1G tds x 3 days Route; Orally	Analgesics and antipyretic	To reduce mild to moderate pain and fever	Patient was relieve of pain	Hepatic damage allergic reactions and kidney
24/11/21	Intramuscular promethazine	Children $\geq 2$ years of age: 0.25–0.5 mg/kg or 7.5–15 mg/m <sup>2</sup> 4–6 times daily.	Dosage: 50mg stat prn x 3days Route: intramuscularly	Antiemetic	It blocks acetylcholine receptors, making it useful to	Vomiting stopped after medication.	Epigastric distress, palpitation, vertigo, tremor, bradycardia tachycardia

		Adult: 25mg-50mg prn x 3 days			prevent and treat nausea, morning sickness and cough.		
24/11/21	Capsule Omeprazole	<b>Dosage:</b> Usually 20mg or 40 mg twice daily <b>Route:</b> Orally	Dosage: 20mg bd x 5days <b>Route:</b> Orally	Proton pump inhibitors	To suppress gastric secretion	Gastric acid formation suppressed	Headache nausea and vomiting diarrhea, and abdominal pain.
24/11/21	Intravenous dextrose 5%	Adults and children: Dosage depends on fluid and caloric requirements	<b>Dose:</b> 500mls x 48 hours <b>Route:</b> IV	Fluid and electrolyte	To restore or maintain fluid and electrolyte balance	Patient was rehydrated.	Cardiac failure phlebitis, edema, cellulitis.

24/11/21	Metronidazole (Flagyl)	<b>Dosage:</b> 400- 800mg three times daily.  <b>Route:</b> Oral and IV.	<b>Dose:</b> 400mg Tid x 7days  <b>Route:</b> Oral	Antibiotics and antiprotozoan.	To treat bacterial and protozoan infection.	H. pylori antibodies present	Nausea and vomiting, rash, itching, heartburns, headache, dizziness, allergic reactions blurred vision, numbness, seizures
24/11/21	Clindamycin	20 to 40 mg/kg/day in 3 or 4 equal doses.  Route: Intravenously and Oral	<b>Dosage:</b> 300mg qid x 4 days  <b>Route:</b> IV	Antibiotics	Treatment of H. pylori bacteria	H. pylori antibodies present	Nausea, vomiting, heartburns, white vaginal discharge, joint pains

## **2.5 Complications developed by patient**

With reference to the complication stated in the literature review such as stomach ulcer, anemia (Vitamin B12 deficiency anemia), perforation, pyloric stenosis among others, patient did not experience any complication due to good medical and nursing care provided which resulted in her early recovery.

## **2.6 Patient and Family Strengths**

Strengths are factors that contribute to a patient's well-being (Hornby, 2000).

The under mentioned strengths were observed on the patient and family.

- 1) Madam J.T. could verbalize the location and intensity of pain.(24/11/21)
- 2) Patient reports the number of times he has vomited. (24/11/21)
- 3) Patient could sleep 3-4 hours in the night. (25/11/21)
- 4) Madam J.T. was able to tolerate cold drinks. (25/11/21)
- 5) Patient could eat small amount of her favorite foods at frequent intervals. (25/11/21)
- 6) The patient and family shows willingness and readiness to learn more about the condition.  
(26/11/21)

## **2.7 Patient's Health Problems**

Health problem is defined as state of inability to function normally (Snadden, 2016).

1. Patient complains of abdominal pain.(24/11/21)
2. Patient complains of severe vomiting (24/11/21)
3. Patient could not have continuous sleep well during the night (25/11/21)
4. Patient has high body temperature (38.9<sup>0</sup>C). (25/11/21)
5. Patient reports loss of appetite.(25/11/21)

6. Patient lack sufficient knowledge about health condition.(26/11/21)

## **2.8 Nursing Diagnosis**

Nursing diagnosis is the patient responses to the actual or potential health problems that required independent nursing interventions (Hendsish, 2018). The major nursing diagnoses for the patient include;

1. Pain related to the effect of gastric acid secretion on damaged tissue. (24/11/21)
2. Risk for fluid volume deficit, related to severe vomiting. (24/11/21)
3. Sleep deprivation (insomnia) related to epigastric pain. (25/11/21)
4. Hyperthermia related to ongoing inflammatory response to tissue damaged. (25/11/21)
5. Risk for nutritional imbalance (less than body requirement) related to poor appetite.  
(25/11/21)
6. Knowledge deficit related to patient's condition, dietary regimen and pharmacological treatment. (26/11/21)

## CHAPTER THREE

### PLANNING FOR PATIENT AND FAMILY CARE

#### 3.0 Introduction

According to Dorland (2007), planning refers to consciously setting forth a scheme to achieve a desired end or goal. Planning involves identification of the patient's problems, formulation of nursing diagnosis and setting of goals and objectives to meet the health needs of the patient. The nursing care plan comprises of the following nursing diagnosis, objective/ outcome, nursing orders, nursing interventions and evaluation were used to carry out the nursing care of patient.

#### 3.1 Objectives / Outcome Criteria

The following objectives were set for the patient and family care during the period of hospitalization to solve their health problems;

1. Patient would be relieved of abdominal pain within 48 hours as evidenced by;
  - a) Nurse observing that, the patient looks relaxed in bed.
  - b) Patient verbalizing pain has subsided.
2. Patient would maintain her normal fluid volume level throughout period of hospitalization.
  - a) Patient verbalizing that there has not being episode of vomiting.
  - b) Nurse observing the absence of signs of fluid volume deficit in patient.
3. Patient would attain her normal sleeping pattern within 48 hours of nursing care as evidenced by;
  - a. Nurse observing that patient is able to sleep for eight hours at night.
  - b. Patient verbalizing that she was able to sleep well at night.
4. Patient temperature would be reduced to normal (36.2°C to 37.3°C) within 24 hours
  - a) Patient verbalizing that she is not warm to touch.

- b) Nurses checking and recording normal body temperature.
5. Patient would maintain her normal eating pattern within 48 hours as evidenced by;
- 1. Nurse observing patient ate at least half of food served.
  - 2. Patient verbalizing, she is able to eat well.
6. Patient and family would gain adequate knowledge on the causes, signs and symptoms and prevention of condition within 24 hours as evidenced by;
- a) Nurse assessing patient's understanding on disease condition.
  - b) Patient/family providing a correct feedback on condition.

### 3.2 Nursing Care Plan for Madam J.T.

DATE/ TIME	NURSING DIAGNOSIS	OBJECTIVE/ OUTCOME CRITERIA	NURSING ORDERS	NURSING INTERVENTIONS	DATE/ TIME	EVALUATION	SIGN
24/11/21 3:00pm	Pain related to the effect of gastric acid secretion on damaged tissue.	Patient would be relieved of abdominal pain within 48 hours as evidenced by; a. Nurse observing that, the patient looks relaxed in bed. b. Patient verbalizing pain has subsided.	1. Reassure patient/family that pain will be reduced 2. Advice patient not to eat spicy food e.g. pepper, ginger. 3. Offer diversional therapy 4. Keep patient in noise free and well ventilated environment. 5. Educate patient on dry fasting. 6. Serve prescribed medications to relieve pain	1. Patient/family was reassured that pain will be reduced with competent nursing care 2. Patient was advised not to take spicy food. 3. Diversional therapy such as watching f cartoons was offered to patient to take his mind off the pain 4. Ventilation and noise free environment provided. 5. Patient was educated on the need to limit fasting in order to help him recover as well to reduce inflammation of the mucosal lining 6. Prescribed medications such as omeprazole was served.	26/11/21 3:00pm	Goal fully met as evidenced by nurse observing that, patient looks relaxed in bed and patient verbalized pain has subsided.	M.S.M.

**Table 7: Nursing Care Plan for Madam J.T. Continued**

<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>
24/11/21 At 4:15pm	Risk for fluid and electrolyte imbalance (Potential) related to vomiting evidenced by showing signs of dehydration.	Patient would maintain her normal fluid volume level throughout period of hospitalization. a. Patient verbalizing that there has not being episode of vomiting. b. Nurse observing the absence of signs of fluid volume deficit in patient.	1. Reassure patient 2. Monitor intake and output. 3. Ensure adequate intake of liberal fluids 4. Identify nauseating factors and eliminate them. 5. Monitor for signs of dehydration 6. Weigh patient daily.	1. Patient was reassured that vomiting will subside with treatment. 2. Intake and output of oral fluids were strictly monitored. 3. Intake of adequate liberal fluids such as water and soft drinks was ensured. 4. Nauseating factors such as bedpans were moved out of patient's view. 5. Patient was monitored for signs of dehydration by assessing skin turgor on admission and during discharge 6. Patient's weight was monitored daily to ensure the progression of her condition.	28/11/21 At 10:15am	Goal fully met as patient verbalized that there is no episode of vomiting and nurse observed the absence of signs of fluid volume deficit in patient.	M.S.M

**NURSING CARE PLAN FOR MADAM J.T. CONTINUED**

<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>
25/11/21 At 7:15am	Sleep deprivation (insomnia) related to epigastric pain.	Patient would attain her normal sleeping pattern within 48 hours of nursing care as evidenced by; a. Nurse observing that patient is able to sleep for eight hours at night. b. Patient verbalizing that she was able to sleep well at night.	1. Reassure patient. 2. Reduce noise at that ward. 3. Ensure adequate ventilation. 4. Provide comfortable wrinkle- free bed for the patient. 5. Give warm baths before sleep. 6. Plan nursing activities in order not to disturb the patient during her sleep.	1. Patient was reassured that she would be able to sleep. 2. Noise was reduced on the ward by making sure radio and television set volumes were reduced. 3. Good ventilation was maintained by opening windows. 4. Comfortable wrinkle-free bed was made for client. 5. Warm bath was given each day before sleep. 6. Nursing activities were planned in order not to disturb clients sleep.	27/11/21 At 7:15am	Goal fully met as nurse observed that patient is able to sleep for eight hours at night and patient verbalizing that she was able to sleep well at night.	M.S.M

<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>
25/11/21 At 10:10am	Hyperthermia related to ongoing inflammatory response to tissue damaged.	Patient temperature would be reduced to normal (36.2°C to 37.3°C) within 24 hours a. Patient verbalizing that she is not warm to touch. b. Nurses checking and recording normal body temperature.	1. Tepid sponge patient 2. Serve patient with cold drink 3. Ensure adequate ventilation by opening louvers and also putting on fans. 4. Ensure enough bed rest. 5. Tell patient to remove extra clothing 6. Serve prescribed antipyretics	1. Patient was tepid sponged. 2. Cold drinks served. 3. Adequate ventilation ensured by opening windows, doors and fans switched on. 4. Enough bed rest was ensured. 5. Patient was informed to remove extra blankets and cloths 6. Prescribed anti-pyretic (IV Paracetamol) was served.	26/11/21 At 10:10am	Goal fully met as patient verbalized that she is not warm to touch and the nurse recorded a body temperature of 37.0°C	M.S.M.

DATE / TIME	NURSING DIAGNOSIS	OBJECTIVE/ OUTCOME CRITERIA	NURSING ORDERS	NURSING INTERVENTIONS	DATE/ TIME	EVALUATION	SIGN
25/11/21 At 12:15pm	Risk for nutritional imbalance (less than body requirement) related to poor appetite.	Patient would maintain her normal eating pattern within 48 hours as evidenced by; a. Nurse observing patient ate at least half of food served. b. Patient verbalizing, she is able to eat well.	1. Encourage mouth care in other to boost her appetite. 2. Provide patient her best meal to stimulate her appetite. 3. Serve patient meals in bits and at frequent interval. 4. Serve warm food to patient to avoid gastric irritation. 5. Serve attractive and nutritious meals to patient. 6. Administer prescribed medication.	1. Mouth care encouraged to enhance appetite 2. Patient's best meals served to boost her appetite. 3. Patient served with small food at a time to prevent feeling of fullness 4. Patient was served warm diet 5. Patient served with attractive and nutritious diet to enhance appetite. 6. Vitamin B complex administered as prescribed.	27/11/21 At 12:15pm	Goal fully met as nurse observed that patient ate at least half of food served and patient verbalizing, she is able to eat well.	M.S.M.

<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>
26/12/21 9:15am	Knowledge deficit related to patient's condition, dietary regimen and pharmacological treatment.	Patient and family would gain adequate knowledge on the causes, signs and symptoms and prevention of condition within 24 hours as evidenced by; a. Nurse assessing patient's understanding on disease condition. b. Patient/family providing a correct feedback on condition.	1. Reassure patient and family 2. Educate patient and family on disease condition. 3. Ensure that patient and relatives understand the causes, signs and symptoms and prevention of peptic ulcer 4. Assess patient knowledge on the condition. 5. Encourage patient and relatives to ask question when understanding is not clear. 6. Involve pictures and videos for proper understanding.	1. Patient/Family were reassured to allay anxiety 2. Patient and family were educated on peptic ulcer disease to provide more information on her condition. 3. Patient and relatives were asked several questions to be sure they understand the causes, signs and symptoms of Peptic ulcer. 4. Patient knowledge was assessed on disease condition to ensure they understands the condition. 5. Patient and relatives were encouraged to asked question when understanding is not clear. 6. Pictures and videos of peptic ulcer was shown to patient/family for proper understanding.	27/11/21 9:15am	Goal fully met as nurse assessing patient's understanding on disease condition and patient/family providing a correct feedback on condition.	M.S.M.

## **CHAPTER FOUR**

### **IMPLEMENTATION OF NURSING CARE PLAN**

#### **4.0 Introduction**

This phase of the patients/family care plan is a series of nursing actions for accomplishing the health care plan formulated. These nursing actions may include, dependent, or inter dependent actions. The purpose of implementation is to carry out the nursing care plan developed in the planning component. During implementation, the nursing care plan is tested for effectiveness and accuracy.

#### **4.1 Summary of Nursing Care rendered to Patient**

The nursing management of the client started on the day of admission to the day of discharge. The management aimed at promoting speedy recovery as well as preventing further complications (Guigernsh, 2017). During the period of admission daily routine care was carried out such as bed making, maintaining the personal hygiene and feeding of client and serving of prescribed medication to the client. Client's temperature, pulse and respiration were checked and recorded. Specific care was carried out according to clients need on particular days and is narrated as follows;

#### **FIRST DAY OF ADMISSION (24<sup>th</sup> November, 2021)**

Madam J. T. was admitted on Wednesday 24<sup>th</sup> November, 2021 at the Dormaa Ahenkro Presbyterian Hospital. She was brought into the female Medical Ward at exactly 2:42pm through the emergency unit by her husband, accompanied by a nurse which I happened to be around during clinical practice and I was fortunate to be asked by the ward in-charge to admit her into the ward.

She came in ambulatory with an assistant from the husband and was diagnosed of Peptic Ulcer Disease.

I welcomed them warmly into the female medical ward and made them comfortable on a chair. I took the hospital card since they are using the Electronic Folder System from the accompanying nurse and mentioned the name written on it to identify the patient to which she responded. The patient was offered an already prepared simple unoccupied bed because she was weak and restless while her husband was asked to sit on the chair. Her vital signs were taken and recorded at the ward level as;

Temperature .....37.8°C

Pulse .....88 beats per minute

Respiration..... 21 cycle per minute

Blood pressure ..... 100/60 mmHg

Her temperature was slightly high so the temperature was rechecked and recorded to know whether the temperature is reducing to normal and patient was served with cold water to help reduce body temperature..

I also told them that we will do all our best to help madam J. T. recover from her health problem within the shortest possible time by God's grace and that their concern and co-operation was needed to help us attain this goal.

The complaints of the patient included the following; General bodily discomfort, vomiting after eaten, poor appetite, abdominal pain, chills and fever.

The following drugs were prescribed and administered as prescribed by the doctor at the emergency unit;

5. IV Morphine 10mg stat
6. IV omeprazole 80mg stat
7. Intramuscular Buscopan 20mg stat
8. Intravenous dextrose 5% 500ml of 20 drops.

The following drugs were later ordered for patient at the ward.

5. Capsule omeprazole 20mg bd x 5 days
6. Intramuscular promethazine 25 mg stat x 24hrs.
7. Intravenous omeprazole 40mg dly x 24hrs
8. Suspension Nugal 15mls tid

The following laboratory investigations has already been ordered to rule out other causes of her condition (PUD).

6. Blood film for malaria parasite (MPs).
7. Full blood count (FBC).
8. Urine routine examination.
9. Helicobacter pylori test
10. Pregnancy Test

Patient was oriented to time, place and person. She was also oriented to the ward annexes. I also informed her about medication times, source of drinking water, meals, time, doctor's rounds and visiting hours as routines of the ward. She was told where the washroom could be located. The patient was insured under the national insurance scheme. Patient's information were entered into

the admission and discharge book and any other relevant documents. I decided to choose this patient for the study because I wanted to know why although Peptic Ulcer Disease occurs in everyone, they become severe and cause problems in some individuals.

I reintroduced myself to patient as a final year student nurse of the Nursing and Midwifery Training College, Berekum, who would like to take her and the family for my care study. Madam J. T. was informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfilment towards the award of Diploma in Registered General Nursing. I explained to the patient the concept of the patient/family care study and assured them of privacy and confidentiality.

It was added that a report will be written after the entire event. Madam J. T. agreed to my request and promised to offer me the necessary information and assistance. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus they will continue the care at home once he is well.

Later the client consented to be the patient for this care study was requested. How the project would be done from commencement to termination including home visits were explained to her, which she agreed.

Patient and her relative were made aware that her stay at the ward is temporal and that she will be discharged to go home and continue with her work if her condition gets better and the necessary health education regarding the cause, signs and symptoms, treatment and preventive measures will be provided during her stay.

At 3:00pm, assessment was made in order to validate epigastric pain. A nursing diagnosis of pain related to the effect of gastric acid secretion on damaged tissue was made. Objective was set to

relieve patient of abdominal pain within 48 hours. Nursing interventions implemented were; Patient/family was reassured that pain will be reduced with competent nursing care, patient was advised not to take spicy food, diversional therapy such as watching f cartoons was offered to patient to take his mind off the pain, ventilation and noise free environment provided, patient was educated on the need to limit fasting in order to help him recover as well to reduce inflammation of the mucosal lining, prescribed medications such as omeprazole was served.

At 4:15pm, patient was seen vomiting excessively. A nursing diagnosis of risk for fluid and electrolyte imbalance (Potential) related to vomiting evidenced by showing signs of dehydration was formulated. An objective was set to maintain her normal fluid volume level throughout period of hospitalization. Nursing Actions carried out were; patient was reassured that vomiting will subside with treatment, intake and output of oral fluids were strictly monitored, intake of adequate liberal fluids such as water and soft drinks was ensured, nauseating factors such as bedpans were moved out of patient's view, patient was monitored for signs of dehydration by assessing skin turgor on admission and during discharge, patient's weight was monitored daily to ensure the progression of her condition.

Patient was served with fufu and light soup for supper, 6:00pm vitals was checked and recorded as shown in the appendix.

10:00pm vitals was checked and recorded as in the appendix. Patient slept at 10:30pm.

**SECOND DAY OF ADMISSION (25<sup>TH</sup> NOVEMBER, 2021)**

Patient woke up around 5:30am, oral and body hygiene was performed.

Her 6:00am vital signs were checked and recorded as follows;

Temperature..... 36.2°C

Respiration ..... 21cpm

Pulse ..... 75bpm

Blood pressure ..... 120/70 mmHg

Patient took milo tea and bread for breakfast of which she ate little of the meal. The night nurses reported that patient could not sleep well in the night which was also complained by patient. And so at 7:15am a nursing diagnosis of sleep deprivation (insomnia) related to epigastric pain was made. A goal was set to be achieved a normal sleeping pattern within 48 hours and the necessary interventions were carried out which included; Patient was reassured that she would be able to sleep, noise was reduced on the ward by making sure radio and television set volumes were reduced, good ventilation was maintained by opening windows, comfortable wrinkle-free bed was made for client, warm bath was given each day before sleep, nursing activities were planned in order not to disturb clients sleep.

Again at 10:10am after the 10:00am vital signs it was seen that patient had a high body temperature (38.9<sup>0</sup>C). Quickly a nursing diagnosis of hyperthermia related to ongoing inflammatory response to tissue damaged was formulated. A goal was set to reduce temperature to normal within 24 hours and all nursing interventions carried out were; Patient was tepid sponged, cold drinks served, adequate ventilation ensured by opening windows, doors and fans switched on, enough bed rest was ensured, prescribed anti-pyretics (IV Paracetamol) was served.

At 12pm patient had 'banku' with 'okro' stew as lunch but she ate little of the food. Therefore at 12:15pm a nursing diagnosis of risk for nutritional imbalance (less than body requirement) related to poor appetite was formulated. An objective was set to help patient maintain her normal eating pattern within 48 hours. Nursing actions carried out were; Mouth care encouraged to enhance appetite, patient's best meals served to boost her appetite, patient served with small food at a time

to prevent feeling of fullness, patient was served warm diet, patient served with attractive and nutritious diet to enhance appetite, vitamin B complex administered as prescribed. 2:00pm vitals was checked and recorded as in the appendix, all due medications served.

At 5:30pm patient took rice with kontomire stew for supper. 6:00pm vitals checked and recorded, all due medications was also served. Patient slept around 8:25pm.

**THIRD DAY OF ADMISSION (26<sup>th</sup> November, 2021)**

Patient's condition showed great improvement this as she was able to perform her personal hygiene including oral care. She expressed how glad she would be if she was discharged but was showing concern as to what causes and exacerbates her condition. I took note of her problem, reassured her and informed her of an educational session I will have with her later concerning her condition.

Her 6:00am vital signs were checked and recorded as follows;

Temperature .....36.0°C  
Respiration ..... 20cpm  
Pulse ..... 72bpm  
Blood pressure..... 100-110 /60 - 80mmHg

All vital signs were within normal. She observed her personal hygiene such as brushing of the teeth and bathing. She drunk warm milo drink with bread in the morning. The physician assistant said that all previous medications should be continued. Nursing care was carried out on my patient with regard to the problem identified so at 9:15am nursing diagnosis formulated as knowledge deficit related to patient's condition, dietary regimen and pharmacological treatment. The goal set

was that patient and family would gain adequate knowledge on the causes, signs and symptoms and prevention of condition within 24 hours. Nursing actions carried out were; Patient/Family were reassured to allay anxiety, patient and family were educated on peptic ulcer disease to provide more information on her condition, patient knowledge was assessed on disease condition to ensure they understands the condition, patient and relatives were encouraged to asked question when understanding is not clear, pictures and videos of peptic ulcer was shown to patient/family for proper understanding.

At 10:10am, an objective that was on 25/11/2021 to help reduce temperature to normal within 24 hours was evaluated and goal was fully met as patient verbalized that she is not warm to touch and the nurse recorded a body temperature of 37. 0°C. I embarked on my first home visit this day and that was to know my patient's residence and the environment in which she lives, verify the information given to me, identify the risk factors and stresses that could have led to her condition Patient took rice with stew for lunch and 2:00pm vitals was checked and recorded as in the appendix. All due medications were served as well.

Again, at 3:00pm an objective that was set on 24/11/2021 to relieve patient of abdominal pain within 48 hours was evaluated and goal was fully met as evidenced by nurse observing that, patient looks relaxed in bed and patient verbalized pain has subsided.

At 6:00pm, vitals were checked and recorded all due medications were served. Patient took banku and groundnut soup.

10:00pm vitals checked and recorded as in the appendix. Patient slept at 10:34pm.

#### **FOURTH DAY OF ADMISSION (27<sup>th</sup> November, 2021)**

This day marked a great improvement in my patient's condition. As part of patient's care, her personal hygiene such as brushing of the tooth, bathing, changing of bed linens was ensured. I reassured her and checked her vital signs and recorded as follows;

Temperature..... 36.5°C

Respiration .....18cpm

Pulse .....71bpm

Blood pressure.....110/80mmHg

Patient's bedside was tidied up thereafter she was fed with 'hausa' porridge and bread. I again administered medications for the morning as ordered.

At 7:15am, an objective that was set on 25/11/2021 to help patient attain her normal sleeping pattern within 48 hours was evaluated and goal was fully met as nurse observed that patient is able to sleep for eight hours at night and patient verbalizing that she was able to sleep well at night.

The physician assistant reviewed her at 8:30am but she made no complaints and he also assessed her and confirmed that she may be fit to be discharged on the next day (28<sup>th</sup> November, 2021).

Patient was doing well because of all the nursing care that was carried out on her.

At 9:15am, an objective that was set on 26/11/2021 to help patient and family gain adequate knowledge on the causes, signs and symptoms and prevention of condition within 24 hours was evaluated and goal was fully met as nurse assessing patient's understanding on disease condition and patient/family providing a correct feedback on condition.

At 12:15pm an objective that was set on 25/11/2021 to help patient maintain her normal eating pattern within 48 hours was evaluated and goal was fully met as nurse observed that patient ate at least half of food served and patient verbalizing, she is able to eat well.

Patient had jollof rice for lunch. 2pm vital signs was checked and recorded as in the appendix and all due medications served.

6pm vital signs checked and recorded. Due medications served, patient ate fufu and light soup. Patient slept around 8:50pm.

#### **FIFTH DAY OF ADMISSION/DAY OF DISCHARGE (28<sup>th</sup> November, 2021)**

Patient woke up at 6:00pm and performed her personal hygiene including bathing and mouth care without any assistance. She verbalized that her condition has really improved. Patient had her breakfast served and due morning medications served. She was able to move around without any assistance. Morning vital signs were checked and recorded as below

Temperature:	-	36.2 <sup>0</sup> C
Pulse	-	78bpm
Respiration	-	22cpm
Blood pressure	-	110/80mmHg

Patient was seen during morning rounds by the doctor on duty and she was in a healthy condition. She was then discharged around 9:40am and was advised to come for review on 6<sup>th</sup> December, 2021 at Dormaa Ahenkro Presbyterian Hospital.

At 10:15am, an objective that was on 24/11/2021 to help maintain her normal fluid volume level throughout period of hospitalization was evaluated and goal was fully met as patient verbalized that there is no episode of vomiting and nurse observed the absence of signs of fluid volume deficit in patient.

Patient was discharged on this day by the doctor with the following treatment; Tablet paracetamol 1g x tid x 3, Capsule omeprazole 20mg bd x 5 days and Tablet metronidazole 500mg bd x 7days. Since patient was registered with the national health insurance scheme, her bills which was covered by the national health insurance scheme was covered. Bills that were not covered was paid. I help her to pack her belongings. It was entered in the admission and discharged book and the daily ward state. The copy of her receipt was also kept in the ward and the original was given to her. Patient was advised on the need to come for the review on the said date. They were told to report immediately to a health facility whenever ill. Medications on discharged were explained to the client concerning the dose to take daily and to report any unusual effect she will face after the intake of any of these drugs. They expressed their gratitude to all staffs and bid farewell to the rest of the patients on the ward. Bed linen was removed and sent to the sluice room. The mattress was also disinfected. I then thanked the patient and her relatives for their cooperation during hospitalization and home visit as well. I again informed them about the second home visit and they agreed.

At 12noon, I escorted them out of the ward to the hospital gate and they went to their house

#### **4.2 Preparation of patient and family toward discharge, rehabilitation follows ups and home visit.**

This discharge plan of Madam J.T. began on the day of admission. Client and family were made to understand that the hospital is just a temporal environment outside home meant to manage her condition and that she would be discharged if she gets better. My patient was made to understand that on the day of discharge, all hospital items and drugs used on her are paid for if only one is not insured. She was encouraged to continue patronizing the health insurance because it helped a lot.

I educated her on the importance on completing medication and how drugs should be taken to prevent relapse. Side effects of drugs were equally explained to them. They were as well educated to observe good personal hygiene and environmental hygiene, good and adequate nutrition and enough rest to prevent the occurrence of disease.

Patient/family gave their comment and asked questions about the disease condition which they didn't understand as they were encouraged to do so. They were made to understand that peptic ulcer disease occurs as a result of some predisposing factors like stress, too much eating of spicy food, excessive intake of alcohol, cigarette smoking and some pharmacological agents and NSAIDs such aspirin, diclofenac. Finally, the schedules of the rest of the home visits/follow ups were made known to them.

### **4.3 Follow ups/home visits/continuity of care**

#### **4.3.1 FIRST HOME VISIT (SUNDAY, 26<sup>TH</sup> NOVEMBER, 2021).**

My first home visit was made on Friday, 26<sup>th</sup> November, to assess Madam J.T. and her family at Dormaa Ahenkro. Two days before patient was discharged from the hospital, her husband who visited her took me to their house. The reason was to know the residence and the environment in which she lives, verify the information given to me as well as to identify the risk factors such as familial tendency and stresses that can lead to her condition and also to identify any nearest health facility at the area. At exactly 11: 20am, we arrived at Madam J.T's residence. Her husband gave me a seat, water and welcomed me. I introduced myself to the other family members who did not know me before. They were happy as it was clearly seen on their faces and they welcomed me. I took time to access the surroundings and their compound which was clean even though animals such as fowls were around.

I asked about their source of drinking water and toilet facility to which Mr. F.E told me that they fetched from a bore hole which was not far from the house. With the toilet facility, he showed me their toilet block which was neatly maintained and detached from their main house.

On moving around the house, I came across their bathroom, there was a good drainage system. When I moved further, I realized that there were some few rubbish floating round. I advised them to always sweep around, gather the rubbish and burry, throw away or burn them every morning after sweeping.

After all these interactions, I asked my patient's husband about her lifestyle in the family. In his reply, he mentioned that his wife (Mrs. J.T.) liked to keep her home in terms of family interactions and hygiene measures. He acknowledged that she is a great companion, advisor and very friendly. Finally, I thanked my patient's family for their co-operation and promised to visit them again. I left the house around 2:30pm.

#### **4.3.2 SECOND DAY OF HOME VISIT (5<sup>th</sup> December, 2021).**

On the 5<sup>th</sup> December 2021 at exactly 3:25pm, I made my second visit to madam J.T. and family. I met madam J.T. and her family since it was a weekend. Madam J.T and her family were very happy and welcomed me by offering me a seat and water as custom demanded.

After that, I saw my client's home environment was all tidied up indicating good compliance to my education. I told them of my mission that was to check on madam J.T's health and to see whether the education which was given to them has being well followed. I congratulated them for the efforts made in helping my client back to her usual health and observing good sanitary measures. I reminded them of their review date the following day and they were urged to arrive in time for necessary proceedings to be done in order to prevent delays.

Finally, I asked for permission to leave and they escorted me to some distance away from their house and bade me good bye.

#### **4.3.3 DAY OF REVIEW (6<sup>th</sup> December, 2021)**

Madam J.T. and her husband reported on the said day at 8:30 am at the OPD for review. After assessment, her vital signs were checked and recorded as follows:

- Temperature: 36.0 degrees Celsius,
- Pulse: 72beats per minute,
- Respiration: 18 cycles per minute
- Blood Pressure: 120/80mmhg.
- Weight 58kg
- Using the pain scale of 1-10, the range of patient pain indication 1

She was examined by the medical officer but no complaints were made. She was informed to report any complications, discomfort and health deterioration urgently to the health facility for immediate management. We thanked the doctor and left. We planned for my next visit, which was my third home visit. I escorted them to the nearby lorry station and bid them good bye and promised to visit them as planned.

#### **4.3.4 THIRD DAY OF HOME VISIT (10<sup>th</sup> December, 2021).**

On the third day, I visited my client with a community health nurse (in accompany), after arrangements had been made about clients handing over. This was done to terminate the care and to ensure the continuity of care. Client and family were doing well with no complains. After

interacting with client and family for a while, I emphasized on the education that had been given to them already and introduction the community health nurse, Madam S.G. to them, and handed over client to her for continuity of care. They were worried but I assured them that she is competent to provide a holistic continuity of care to them. Since it was the last day of my therapeutic relationship, I terminated my care and thanked them for their cooperation which made my study a success. I used that opportunity to remind them of the Covid 19 protocols since it is still with us.

The family was very grateful for the support and care given to them.

## **CHAPTER FIVE**

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

#### **5.0 Introduction**

According to Smeltzer, et al, (2010), evaluation in simple terms is the outcome of nursing actions against the anticipated goals and it is the final step in the nursing process. This is part of the patient/family care study. Here the nurse tries to determine whether the goals and objectives set are fully met by examining the chief responses and comparing them with the behaviors stated in the expected outcome.

#### **1. Patient was relieved of epigastric pain (26/11/21)**

On the 24<sup>th</sup> November, 2021, patient was assessed to validate epigastric and a nursing diagnosis was formulated as pain related to the effect of gastric acid secretion on damaged tissue. Objective

was set to relieve patient of abdominal pain within 48 hours. Nursing interventions implemented were; Patient/family was reassured that pain will be reduced with competent nursing care, patient was advised not to take spicy food, diversional therapy such as watching f cartoons was offered to patient to take his mind off the pain, ventilation and noise free environment provided, patient was educated on the need to limit fasting in order to help him recover as well to reduce inflammation of the mucosal lining, prescribed medications such as omeprazole was served.

At 3:00pm, objectives set on the 24th November, 2021 were evaluated and goal was fully met as evidenced by nurse observing that, patient looks relaxed in bed and patient verbalized pain has subsided.

## **2. Patient Maintained Her Normal Fluid Volume (28/11/21)**

On the 24<sup>th</sup> of November, 2021, patient reported episodes of vomiting. A nursing diagnosis set was risk for fluid and electrolyte imbalance (Potential) related to vomiting evidenced by showing signs of dehydration. An objective was set to ensure patient maintain her normal fluid volume level throughout the period of hospitalization. The following nursing interventions were carried out; patient was reassured that vomiting will subside with treatment, intake and output of oral fluids were strictly monitored, intake of adequate liberal fluids such as water and soft drinks was ensured, nauseating factors such as bedpans were moved out of patient's view, patient was monitored for signs of dehydration by assessing skin turgor on admission and during Discharge and patient's weight was monitored daily to ensure the progression of her condition.

An evaluation was made on the objective set on the 24th November, 2021 to maintain her normal fluid volume level throughout period of hospitalization, goal was fully met as evidenced by the

patient verbalizing that there has not being episode of vomiting and the nurse observing the absence of signs of fluid volume deficit in patient.

### **3. Patient Sleeping Pattern was Restored (27/11/21)**

On the 25<sup>th</sup> November, 2021, the night nurses reported that patient could not sleep during the night of which a nursing diagnosis were formulated as sleep deprivation (insomnia) related to epigastric pain. A goal was set to be achieved a normal sleeping pattern within 48 hours and the necessary interventions were carried out which included; Patient was reassured that she would be able to sleep, noise was reduced on the ward by making sure radio and television set volumes were reduced, good ventilation was maintained by opening windows, comfortable wrinkle-free bed was made for client, warm bath was given each day before sleep, nursing activities were planned in order not to disturb clients sleep.

At 7:15am on the 27<sup>th</sup> November, 2021, evaluation was made and goal was fully met as nurse observed that patient is able to sleep for eight hours at night and patient verbalizing that she was able to sleep well at night.

### **4. Patient Body Temperature was Reduced (26/11/21)**

On 25<sup>th</sup> November, 2021, patient had a high body temperature after 10am vitals. A nursing diagnosis of hyperthermia related to ongoing inflammatory response to tissue damaged was formulated. A goal was set to reduce temperature to normal within 24 hours and all nursing interventions carried out were; Patient was tepid sponged, cold drinks served, adequate ventilation ensured by opening windows, doors and fans switched on, enough bed rest was ensured, prescribed anti-pyretics (IV Paracetamol) was served.

At 10:10pm, objectives set on the 25th November, 2021 was evaluated and goal was fully met as patient verbalized that she is not warm to touch and the nurse recorded a body temperature of 37.0°C

#### **5. Nutritional Status Was Restored (27/11/2021)**

On the 25<sup>th</sup> November, 2021, Mrs. J.T. complained of poor appetite and a nursing diagnosis was formulated as risk for nutritional imbalance (less than body requirement) related to poor appetite. A goal was set to be achieved throughout the period of hospitalization and all nursing interventions carried out which includes mouth care encouraged, patient's best meals served to boost appetite, patient served with small food at a time to enhance appetite, patient was served warm diet, patient served with attractive and nutritious diet and vitamin B complex administered as prescribed to provide her with nutrients.

On 27th November, 2021 at 12:15pm, the objective that was set on 25th November, 2021 at 12:15pm to help patient restore nutritional status was evaluated and goal was fully met as nurse observed that patient ate at least half of food served and patient verbalizing, she is able to eat well.

#### **6. Patient\Family Understanding of the Condition Improved (27/11/21)**

Upon the interactions with Mrs. J.T., she was observed to have little knowledge on her condition. A nursing diagnosis of knowledge deficit related to patient's condition, dietary regimen and pharmacological treatment was formulated. An objective set was to ensure patient/family gain knowledge about the disease condition within 24 hours was the goal set to be achieved. The following were the nursing interventions performed for my patient; Patient/Family were reassured to allay anxiety, patient and family were educated on peptic ulcer disease to provide more information on her condition, patient knowledge was assessed on disease condition to ensure they understands the condition, patient and relatives were encouraged to asked question when

understanding is not clear, pictures and videos of peptic ulcer was shown to patient/family for proper understanding.

On 27<sup>th</sup> November, 2021 at 9:15am, the objective that was set on 26<sup>th</sup> November, 2021 at 9:15am to help patient/family gain knowledge about the disease condition was evaluated and goal was fully met as nurse assessing patient's understanding on disease condition and patient/family providing a correct feedback on condition.

All these nursing interventions led to my patient's quick recovery which made her and her family happy and they expressed their warm gratitude for the care rendered.

### **5.1 Amendment of nursing care plan for partially met, unmet outcome criteria**

For the five days stay in the hospital, all objectives and goals set for the care of my patient were fully met and therefore no amendment of the care plan was needed.

### **5.2 Termination of care**

This is usually the last phase of nurse/patient relationship. This termination of care started on the day of admission during which I told my patient and her husband that if she cooperated with treatment, she would soon be well and be discharged. I made them aware that the separation was something inevitable. However, it would be a gradual process. This was to prevent them from developing separation anxiety.

On 10<sup>th</sup> December 2021, I visited my client with a community health nurse (in accompany), after arrangements had been made about clients handing over. This was done to terminate the care and to ensure the continuity of care. Client and family were doing well with no complains. After interacting with client and family for a while, I emphasized on the education that had been given to them already and introduction the community health nurse, Madam S.G. to them, and handed over client to her for continuity of care. They were worried but I assured them that she is competent

to provide a holistic continuity of care to them. Since it was the last day of my therapeutic relationship, I terminated my care and thanked them for their cooperation which made my study a success. I used that opportunity to remind them of the Covid 19 protocols since it is still with us.

The family was very grateful for the support and care given to them.

My patient/family expressed their gratitude for the care rendered to them and the visits I made to their home. I also thanked them for their co-operation and support throughout the care and encouraged them to keep it up likewise, I advised her to report to the hospital if there is any problem.

## **CHAPTER SIX**

### **SUMMARY AND CONCLUSION**

#### **6.0 Introduction**

This chapter is the last chapter of the nursing care plan that summarizes the care provided to the patient throughout the nursing process by reviewing the thematic issues that arose in the care study from admission to the last home visit after discharge.

#### **6.1 Summary of care rendered to patient**

Mrs J.T. was admitted to Presbyterian Hospital, Dormaa Ahenkro in the Bono region of Ghana, on the 24<sup>th</sup> November, 2021. She was admitted with the following complaints; abdominal pain, vomiting, insomnia, fever, Poor appetite and Knowledge deficit.

She was diagnosed of peptic ulcer disease after taking the history and physical examination made.

She was placed on oral, intravenous and intramuscular drugs examples are; IV Morphine 10mg stat Iv omeprazole 80mg stat, Intramuscular Buscopan 20mg stat, Capsule omeprazole 20mg bd x 5 days, Intramuscular promethazine 50mg stat prn x 3days, Intravenous omeprazole 40mg dly x

24hrs ,Suspension Nugal 15mls tid, Tablet paracetamol 1g x tid x 3 days, Intravenous 5% dextrose 500ml of 20 drops, IV Clindamycin 300mg qid x 24hrs and Tab Metronidazole 400mg Tid x 7days. Some laboratory investigations included, Blood film for malaria parasite, H. pylori test and Full blood count. Madam J.T, during her period of hospitalization, six health problems were identified of which nursing objectives were set for all problems. All of the objectives were achieved during her discharge.

Health education was given to my patient /family members. With the help of the ward staff competent nursing care was rendered to my patient which resulted in her speedy recovery.

I made my first home visit to my patient on 26<sup>th</sup> November 2021 with the purpose of assessing both external and internal environment of my patient. On the 28<sup>th</sup> November, 2021 madam J.T. was discharged due to improvement in her condition as a result of her cooperation coupled with good nursing and medical care.

My second home visit was on 5<sup>th</sup> December, 2021 with the aim of checking on my patient to assess the progress of her condition and know whether she's adhering to the treatment after discharge.

My final home visit was on 10<sup>th</sup> December, 2021 to check on her as usual and to terminate my care.

## **6.2 Conclusion**

A successful client and family care depend greatly on the cooperation of the client and family members with the nurse's preparedness to help. This care study has not only broadened my knowledge on Gastroenteritis but also put the knowledge and skills acquired from three-year diploma nursing course into practice. It has also helped me to improve upon my interpersonal relationship with client. My study on Madam J.T. has enabled me to understand family conception and different behaviours of people when they are sick. It has enabled me to practice individualized

nursing care and has given me much insight into the condition. The study is essential because it is a form of research which helps identify certain health problems in specific areas and the necessary intervention is given mainly through health educations. In the nut shell, I have really enjoyed every bit of writing this script despite the challenges I uncounted including financial constraints and getting the needed information from patient and family.

I recommend that, the idea and principle behind the adoption of the nursing process which is the core approach to the writing of patient and family care study should be embrace by all nurses to ensure total patient care.

**APPENDIX**

**Table 7: vital signs of Madam J. T.,**

<b>Date</b>	<b>Time</b>	<b>Temperature (<sup>0</sup>C)</b>	<b>Pulse (Bpm)</b>	<b>Respiration ( Cpm)</b>	<b>Blood pressure (mmHg)</b>
24/11/2021	2:00pm	37.0	88	20	100/60
	5:00pm	36.1	68	21	120/60
	9:00pm	36.3	70	19	110/70
25/11/2021	5:00am	36.0	62	16	110/70
	9:00am	36.3	75	19	110/70
	1:00pm	36.0	72	21	110/80
	5:00pm	36.2	76	19	110/70
	9:00pm	36.9	77	20	120/80
26/11/2021	5:00am	37.0	70	18	110/70
	9:00am	36.8	78	20	110/70
	1:00pm	36.7	72	21	120/70
	5:00pm	36.4	70	18	120/80
	9:00pm	36.5	78	19	120/7
27/11/2021	5:00am	36.5	72	20	120/70
	9:00am	36.8	69	19	110/60
	1:00pm	36.6	70	18	110/70
	5:00pm	36.8	72	21	120/80

	9:00pm	37.0	84	23	110/70
28/11/2021	5:00am	36.1	81	20	110/70
	9:00am	36.5	84	22	120/70
	1:00pm	36.4	76	19	120/80
	5:00pm	36.6	78	20	120/70
	9:00pm	36.6	77	19	120/70
06/12/2021 (Review day)	9:15am	36.4°C	74	19	120/80

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Patient folder number -06912/19, Dormaa Presbyterian Hospital.

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Signature: *Mensah Serwaa Mary*

Date: 4th October, 2022

**2. Nurse In-Charge of the Females Ward, Dormaa Presbyterian Hospital.**

Name: *FATIMA A 212*

Signature: *MARSA (M)*

Date: 04/10/2022

**3. The Supervisor, Holy Family Nursing and Midwifery Training College, Berekum**

Name: Mrs. Bridget Dzibgede

Signature: *Bridget Dzibgede (Mrs)*

Date: 04/10/2022

**4. The Principal, Holy Family Nursing and Midwifery Training College, Berekum**

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