HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

A PATIENT / FAMILY CARE STUDY ON ACUTE EXERCEBATION OF PEPTIC ULCER DISEASE

BY

CAMPION LIMUUB COLLINS

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A PATIENT / FAMILY CARE STUDY SUBMITTED TO 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 existed as far as the first human being lived on planet earth. It entails giving care to the needed beings. Parents give care to their young ones by nourishing them until they are able to provide their necessary day to day activities. Also, the aged has to be supported in their daily doings to make life endurable for them. The modern day nursing has gone through series of changes with the help of science, technologies and various researches. Nursing has been accepted as a profession and it entails comprehensive and individualized care of patients. New techniques are employed into the scope of patient's care making nursing as a fully accepted profession in this 21st century.

The study forms part of the academic programme of all Diploma nursing students in Ghana which require the student to carry out total nursing care to patient and their family from time of admission to discharge. The care study takes into account of the physical, psychological, social and spiritual welfare of the family which aid in the recovery of the patient. Patient's home is visited on a number of occasions to ensure patient adhere to treatment regimen and education. Also through the study, patient and family will have insight into the condition and improve upon their health status through the interaction and various education they receive from the student nurse.

The study equips the student nurse with certain qualities such as practical skills on the condition, patient and family interactions, as well as therapeutically communicating to family when there is fear and anxiety. Also the student is able to practice a wide range of nursing activities acquired during the three years training as a nurse using specifically the nursing process.

The nursing and midwifery council uses the care study as evaluation tool in assessing and awarding the student a certificate to practice as a certified nurse. In the write up of the study, initials of patient was used instead of names in order to maintain confidentiality.

ACKNOWLEDGEMENT

All praises and thanks be to the Almighty God, the sustainer of life who gave me the strength to start and complete this care study successfully.

This study and its write up has been successful through the help obtained from certain personalities.

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Further, Special thanks goes to my wonderful mom, Mrs. Agnes Campion and my late dad, Mr. Francis Kofi Campion and my sweet sisters: Suzy, Doris, Abigail, Rebecca and Lucy for their unending emotional, moral, spiritual, and financial support throughout the period of the study. They taught me the value of respect, hard work and patience.

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I also owe much to the nurse-in-charge and entire staffs of the St. Theresa's Hospital, Nkoranza especially the Male Medical ward for their assistance during the study.

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May God bless you.

Finally, I acknowledge and thank all authors and publishers whose works have been used as references in this care study.

INTRODUCTION

Nursing entails rendering care to the needy; that is either sick or well, the aged or young and even dying beings for a peaceful death. It caters for the physical, social, psychological and the spiritual wellbeing of patients using the various steps in nursing process; that is assessment, analyzing (diagnosis), planning, implementation and evaluation. Nursing care study is a written report on care rendered to patient/ family for a period of time and it's a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment of the award of license to practice as a professional Registered General nurse.

This study was carried out on Mr. A.A, 75 years old man who currently reside at Nkoranza Old Zongo in the Bono-East Region. Mr. A.A was admitted at the Male Medical ward of the St. Theresa's Hospital, Nkoranza on 23rd November, 2021 through the Out Patient Department and was discharged on the 28th November, 2021. Patient spent six days on the ward. He was diagnosed and confirmed as acute exacerbation of Peptic Ulcer Disease upon series of examinations. I introduced myself to patient and family as a final year student at Holy Family Nursing and Midwifery Training College and I would like to use him for a study and they agreed.

Data was obtained from patient/ family through observation, direct interview, patient's folder and other laboratory investigations. Several health problems were obtained on patient during different periods of assessment. Various objectives were formulated to meet the health needs of patient/ family. Nursing activities as well as pharmacologic measures were performed to meet the health needs. Mr. A.A was discharged without any complication.

Also patient's house was visited (three times) during the period of admission and after discharge to assist in the determination of major predisposing factors of the condition, affirm the continuity of care and inspect the practice of various health education rendered during admission. The family appreciated the care rendered to them during admission and thanked the ward's staffs when discharged.

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ASSESSMENT OF PATIENT/ FAMILY

1.0 Introduction

Assessment is the systematic collection of data to determine the patient's health status and any actual or potential health problems (Smeltzer et al., 2010). It is the first phase in the nursing process which deals with collection of data on patient health from the patient, family and friends and review of existing data through observation, investigations such as laboratory results and x-ray reports, interviewing and physical examination from which analysis can be made to help in planning and implementation of care. This chapter includes patient's particulars, patient/family medical and surgical history, patient's socioeconomic history, patient's developmental history and patient's lifestyle. All the information about my patient was gathered from the patient and his relatives as well as his folder.

1.1 Patient's Particulars

Patient refers to a person who receives treatment from a doctor or other medically educated person (Livio, 2009).

According to Elamine (2009), particulars refers to a fact or detail especially one that is officially written down, usually of an individual's personal details such as name, address. The name of the patient is Mr. A.A a seventy-five year old man, born on 15th June, 1946 to the late Mr. A.J and Ms .A.A. He comes from Kologu in the Upper East Region, but currently stays at Nkoranza Old Zongo in the Bono-East Region with house number G355. Mr. A.A is married to Ms. A.A and has six (6) children with her, three (3) boys and three (3) girls of which one of the girls is dead. He is a Christian and attends Field Light International. Master A.K; his eldest son is his next of kin who stays at Nkoranza with the family members. Mr. A.A is dark in complexion and weighs 54kg, and he is 1.68m in height. He had no formal education with the reasons being that, there was no schools until the 1960's and after the introduction of school his parents were ignorant and didn't know the importance of schooling and also schools were not easy to access at that time. Mr. A.A is a farmer in occupation. He is Frafra by ethnicity who speaks Frafra and Twi. His folder number is (015088/13), St. Theresa's Hospital, Nkoranza.

1.2 Family's Medical/Surgical History

Medical and Surgical history is a set of events pertaining to diseases or surgical procedures and complications if any that a particular person has had (Farlex, 2012). According to Mr. A.A, there is no known chronic illness such as asthma, hypertension, diabetes mellitus, sickle cell, epilepsy as well as mental illness such as psychosis neither do they have any communicable disease such us chicken pox and tuberculosis in the family. However, the family members sometimes suffer from minor illnesses like coryza, fever, headache, diarrhoea and abdominal pains. This was confirmed by his wife who was present during the history taking. With this they usually manage with traditional and orthodox medication which is bought from over the counter pharmacy. But if symptoms persist, they visit the nearest medical facility for treatment as needed. I used this opportunity to educate them on the negative effect associated with these over the counter medications and encouraged them to visit the nearest health care facility for medical care anytime they are suffering from any condition. According to Mr. A.A, his parents died as a result of old age. Food and drug allergies have never manifested in any family member. Mr. A.A said that when it comes to the nuclear family no family member has undergone any surgical procedure which was also confirmed by his wife. My client is insured with National Health Insurance Scheme (NHIS) which takes care of his bills.

1.3 Family Socio-economic History

This comprises of both the social and economic status of the patient. According to Mr. A.A he is the bread winner of the family and is supported by his wife and eldest son. The relationship between their family members is cordial and friendly. They attend Church on Sundays.

According to Mr. A.A, he and his wife are farmers. They cultivate crops such as cassava, maize, cowpea, plantain and yam. Mr. A.A said they sometimes sell some of the crops for the up keep of the family. He also said the family depends on the money generated from the sale of the farm produce. Though the income earned is not sufficient for the family, there is little financial support from other family members specifically Mr. A.A's nephew (Mr. P. A) Who helped both financially and physically when Mr. A.A was hospitalized .The money earned is used to cater for their children's school fees whiles the rest is used to feed the family and cater for other family matters. According to my patient,

they are all insured on the National Health Insurance Scheme and they all depend on it for their medical care but also depend on their income if the insurance is not able to cater for all their medical needs. They are exposed to so many dangers in relation to their work such as cut from cutlass been used, bite from snakes, sting from scorpions and so many others. According to Mr. A.A he believes there are family values, taboos and cultural practices but they are not known to him.

1.4 Patient's Developmental History

Growth occurs when there is gradual increase in size and composition of an organism. (Macmillan, 2007). Development refers to the biological, psychological and emotional changes that occur in human beings between births to the end of adolescent as the individual progress from dependency till increasing autonomy (Macmillan, 2007).

Maturation is the physical growth and development of the body, brain and the nervous system (Livio, 2009). Mr. A.A. voiced out his developmental process as told by his mother (deceased). He was born spontaneously per vaginum at term on 15th June, 1946 at Kologu in the Upper East Region. He was delivered in the house with the help of a doula (traditional birth attendant) with no complication. He was not immunized against the childhood vaccine preventable diseases as evidenced by absence of Bacilli Calmet Guerin (BCG) scar on his right shoulder. Mr. A.A was breastfed exclusively for some months before he was introduced to some food supplement. He progressed through the normal milestone of development. This includes sitting up at the 7th month, crawling at the 10th month, walking, talking and running between the ages of one and three. According to Mr. A.A, he indicated he saw the development of his secondary sexual characteristics at the age of 15 years which includes the growth of pubic hairs and having a deep voice.

As specified by Jarvis (2000), Erik Erikson (1902 to 1994) focused on cultural and societal influences as determinants of behavior. Erickson was concerned with the growth of ego**,** the conscious, organized, rational part of the personality.

According to Erik Eriksons psychological theory, individual goes through eight (8) stages of development with their corresponding ages. Mr. A.A is 75 years old so he is in Integrity versus Despair.

Completing this stage successfully leads to a strong sense of self-esteem and confidence that remains throughout life. Upon communicating with him, I found out that he had identified himself because he had a dream of expanding his farm activities in future. Outwardly, he seemed shy but has a good personal and social interaction with other people.

1.5 Patient's Lifestyle and Hobbies

Mr. A.A normally goes to bed around 8:30pm and wakes up around 6:00am to prepare for farm. According to my patient, when he wakes in the morning he washes his face and head after which he uses toothbrush and toothpaste to clean his teeth. He normally baths twice daily thus morning and evening. On week days, he goes through the normal routine in the morning and prepares to go to his farm. He takes his breakfast before going to the farm, which is mostly porridge or left overs of the previous day's food. TZ and Suri is his favourite food. He gets to the farm around 9:30am and returns in the evening around 4:00pm.

Mr. A.A added that after supper around 6:30pm, he sits in front of his house and converse with wife and children or listen to the radio, after which he goes to bed around 8:30pm.

On Sundays, the whole family go for church service, after church service he rest or sleep for few hours. From Mr. A.A, his major stress is working in the farm for long hours and the money he gets from his occupation also is not enough to support the family and pay for the children's school fees. As a way of coping, he's planning of getting a bigger land in order to increase the farming activities. What he enjoys doing most is watching television with the wife and children anytime they are less busy. From his wife, children and nephew, he is very calm, understanding and sociable. From my point of view my patient is very interesting, a good listener and an introvert. Mr. A.A said the game he likes best is Dondo thus a game mostly played at their hometown.

1.6 Patient's Past Medical/Surgical History

Patient's past medical history involves patient's health status prior to the presenting problems he brought to the hospital (Soanes, et al., 2006). Past medical history revealed that Mr. A.A had ever been admitted to the hospital on account of hypotension and acute elephantiasis which was treated at St. Theresa's Hospital, Nkoranza around the middle of June, 2015.

Mr. A.A added that occasionally, he goes for over-the-counter drugs for minor ailments such as common cold, fever, headache, and abdominal upsets. Mr. A.A also said access to healthcare facility was not difficult and he does not go for medical checkups.

Mr. A.A has no history of accidents or any form of serious injury. Mr. A.A said he has no known allergy to drugs or animals. From my observation, the patient has no physical disabilities.

1.7 Patient's Present Medical/Surgical History

History of present illness is a complete, clear, and chronologic account of the problems prompting the patient to seek care. According to Mr. A.A, he was feeling well until 20th November, 2021 when he started experiencing abdominal pain, fever, vomiting and diarrhea in the evening. The signs persisted till 23rd November, 2021 and he reported to the Out-Patient Department of St. Theresa's Hospital, Nkoranza around 11:30am with his wife and nephew for medical attention. Vital signs were checked and recorded on arrival as required. Blood samples were taken for investigation. He was then reviewed and diagnosed of Acute Exacerbation of Peptic Ulcer by PA O. He was then admitted to the medical ward of the St. Theresa's Hospital, Nkoranza.

1.8 Admission of the Patient

Admission is the process of receiving a patient into the ward in order to ensure continuity of the nursing care to enhance the smooth and faster recovery and to prevent any complications from arising (McIntosh, 2013). On the 23rd November, 2021 at about 1:00pm, Mr. A.A. was admitted to the Male Medical ward of the St. Theresa's Hospital, Nkoranza through the Out Patient Department per ambulatory with the help of two relatives. They were warmly welcomed to the ward and given a seat, after which his folder was glanced through to confirm the diagnosis and his particulars.

On observation, he complained of heartburns, general body weakness, epigastric pain, vomiting, headache, loss of appetite and slight epigastric tenderness. Mr. A.A was well hydrated, alert, conscious and well oriented to time, place and person even though he was weak and restless. He was helped into an already prepared admission bed with the bed number MM-5. Mr. A.A and relatives were reassured of competent nursing care by the health team that was present during his admission to improve his current health status. The folder was again cross-checked to confirm the information on the patient which includes his name, age, residential address and religion. A quick assessment of his general appearance was made, vital signs and weight was checked and recorded as;

1. Temperature 36.5^{o}C
2. Pulse 105bpm
3. Respiration 18cpm
4. Blood Pressure 114/66mmHg
5. SpO_2 99%

Patient's weight was measured and recorded on admission as 54kg.

Mr. A.A's name was recorded in the admission and discharge book.

The laboratory investigations requested were;

1. Blood for Full Blood Count.
2. Blod Film for Malaria Parasite.
3. H. Pylori test.

Mr. A.A was admitted to the male ward with a treatment as follows;

1. Intravenous Omeprazole 80mg stat, 40mg bd for 48hours.
2. Intravenous Metronidazole 500mg tid for 48hours.
3. Intravenous Amoxiclav 1.2mg tid for 48hours.
4. Intravenous Dextrose Normal Saline 1.5L for 48hours.
5. Intravenous Ringers Lactate 1.5L for 48hours.

On admission he did not have any valuables like gold watches which are not allowed to be kept by the nurses as required by the hospital's policy but rather had few belongings such as clothes and some items that would enable him stay in the hospital. Client's relatives were assisted to arrange these items like soap, tooth paste, brush, toilet roll, cup and other materials into his bed side locker. Client's relatives were again informed about the hospital protocol of not keeping patient valuables like gold watches so it is important to send it home. Patient and relatives were oriented to the ward by showing them the nurse's station and introducing staffs available at the shift. They were shown the various types of waste bins thus the general waste and infectious waste as well as the sharps box of which they were educated to put various waste in their respective bins. They were also introduced to the other patients who share the same cubicle with them to relieve him of anxiety. They were also shown the patients washroom. I then introduced myself to Mr. A.A and relatives as a student of Holy Family Nursing and Midwifery Training College and also informed them of my interest in taking them for my care study. I continued by explaining to them that the patient/family care study will enable me to render adequate individualized comprehensive nursing care until discharged and even a follow up care will be given after discharge. I also informed them that this is a requirement by the Nursing and Midwifery Council (N.M.C) that I had to fulfill as a partial fulfillment for the award of license to practice as professional

Registered General Nurse in the country. Patient and relatives were very happy and agreed to my request and promised to co-operate fully in caring for Mr. A.A. I made patient and relatives aware of visiting hours which starts in the morning at 6:00am to 6:30am, and in the evening 4:00pm to 4:30pm. I added the time for ward rounds, medication and other ward routines to make them aware of these routines and activities which is mostly conducted at the ward. Since Mr. A.A had registered with the National Health Insurance Authority, no deposit was made. I also explained to him that some of the drugs may not be covered by NHIS and therefore needed to be paid for when he is discharged. I started preparing patient towards discharge on this day of admission. Patient was educated not to engage in strenuous activities and have enough rest. Patient's wife was educated not to add spices and irritating food stuffs like pepper to the diet that will be prepared for Mr. A.A Care plan was quickly drawn to care for patient and family immediately I informed the nurse in-charge during my shift. I decided to choose this patient for the study because I wanted to use the knowledge I had in Peptic Ulcer Disease to render individualized care and also to learn more about the disease.

1.9 Patient's Concept of Illness

Mr. A.A did not attribute the illness to any spiritual cause, however he said it is normal for one to fall sick but his conception about his condition was that his condition was due to sore in the stomach. With this conception, he was willing to take any medical advice since he believed it could lead to his recovery and he was hoping to recover sooner or later with prayers and the help of the health team.

1.10 Literature Review

According to Smeltzer et al. (2010) the Gastro-Intestinal tract is a 23- to 26-foot-long (7m to 7.9m) pathway that extends from the mouth to the esophagus, stomach, small and large intestines, and rectum to the terminal structure, the anus.

Anatomy and Physiology of the Upper Gastro-intestinal Tract.

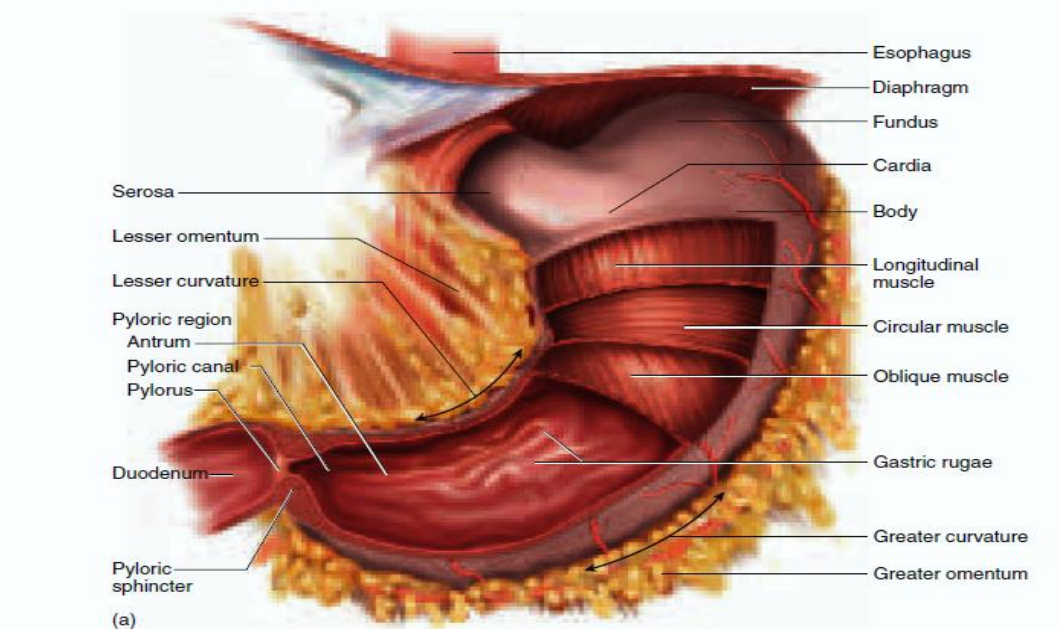
The Stomach

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. (Wagh & Grant, 2014).It has four regions-the cardiac, fundus, body and pylorus. Each region performs different functions; the fundus collects digestive gases, the body secretes pepsinogen and hydrochloric acid, and the pylorus is responsible for mucus, gastrin and pepsinogen secretion. The stomach is continuous with the esophagus at the cardiac sphincter and with the duodenum at the pyloric sphincter. It has two curvatures; the lesser curvature and the greater curvature. When the stomach is empty, the mucosa appears wrinkled or folded. These folds are called rugae.

Microscopically, different areas of the stomach contain different types of cells which secrete compounds to aid digestion

Figure 2: Diagram of the Stomach

Source: (Saladin, 2003)



Functions of the Stomach

According to Waugh and Grant (2014), the following are the main functions of the stomach:

1. Temporary storage allowing time for the digestive enzymes, pepsins, to act
2. Chemical digestion – pepsins break proteins into polypeptides
3. Mechanical breakdown – the three smooth muscle layers enable the stomach to act as a churn, gastric juice is added and the contents are liquefied to chyme. Gastric motility and secretion are increased by parasympathetic nerve stimulation
4. Limited absorption – water, alcohol and some lipid soluble drugs
5. Non-specific defense against microbes – provided by hydrochloric acid in gastric juice.

Definition of Peptic Ulcer

A peptic ulcer may be referred to as a gastric, duodenal, or esophageal ulcer, depending on its location. A peptic ulcer is an excavation (hollowed-out area) that forms in the mucosal wall of the stomach, in the **pylorus** (the opening between the stomach and duodenum), in the **duodenum** (the first part of the small intestine), or in the esophagus. (Smeltzer B.et al., 2010) It is caused by the erosion of a circumscribed area of mucous membrane.

Epidemiology

As cited by Smeltzer, Bare, Henkle and Cheever (2010);

1. Peptic ulcers are found in rare cases in patients with tumors that cause secretion of excessive amounts of the hormone gastrin.
2. Peptic ulcer disease occurs with the greatest frequency in people between the ages of 40 and 60 years.
3. It is relatively uncommon in women of childbearing age, but it has been observed in children and even in infants.
4. After menopause, the incidence of peptic ulcers in women is almost equal to that in men.
5. Peptic ulcers in the body of the stomach can occur without excessive acid secretion but rather can be as a result of infection from grams negative bacteria known as H. Pylori.

Types of Peptic Ulcer Disease

Smeltzer, Bare, Henkle and Cheever (2010) stated that peptic ulcer can be classified according to the location or site of mucosal erosion.

1. Esophageal Ulcer: This is an excavation formed in the mucosal wall of the lower oesophagus. It is less common type of peptic ulcers
2. Gastric Ulcer: This is an excavation formed in the mucosal wall of the stomach.
3. Duodenal Ulcer: This is an excavation formed on the mucosa wall of the duodenum.

According to Smeltzer and Bare (2010) peptic ulcer can further be classified as acute or chronic ulcers depending on the degree of mucosal involvement.

1. The acute ulcer is associated with superficial erosion and minimal inflammation. It is of short duration when identified and treated early.
2. The chronic ulcer is one of long duration, eroding through the muscular wall with the formation of fibrous tissue. It can be present continuously for months or intermittently throughout the person's lifetime.

Table 1: Differences between Gastric and Duodenal Ulcer

Smeltzer et al (2010) identified the following differences between gastric and duodenal ulcer;

Duodenal Ulcer	**Gastric Ulcer**
80% of peptic ulcers are duodenal	15% of peptic ulcers are gastric
Hypersecretion of stomach acid (HCl)	Normal—hyposecretion of stomach acid (HCl)
Pain is relieved by the intake of food	Pain is stimulated by intake of food
Burning, cramping pain across the epigastrum occurring 2-3 hours after eating	Dull, gnawing pain or burning sensation in the mid-epigastrum or back occurring 30minutes-1hour after eating
Vomiting uncommon	Vomiting common
It risk factors are commonly *H. pylori,* alcohol, smoking, cirrhosis and stress	It risk factors are commonly *H. pylori*, gastritis, alcohol, smoking, use of NSAIDs, stress
Common in blood type O	Common in blood type A
More common between ages 25 and 50	More common in persons older than age 50
Rapid weight gain	There is rapid weight loss

Etiology/Causes

Peptic ulcer has been associated with bacterial infection such as Helicobacter pylori (H. pylori) (Smeltzer, Bare, Hinkle, & Cheever, 2010). H. pylori infection in the gastrointestinal tract impairs the mucosal membrane protection thereby allowing acid from gastric secretions to penetrate the mucosal membrane. Pre-disposing factors of peptic ulcer as cited by Smeltzer B. et al (2010) include;

1. Emotional stress. This also increase vagal nerve stimulation causing hypersecretion of hydrochloric acid
2. Chronic use of non-steroidal anti-inflammatory drugs (NSAIDS)
3. Excessive smoking
4. Family history of peptic ulcer
5. Blood type; duodenal ulcer is common in blood type O and gastric ulcer in blood type A
6. Irregularities in hormonal secretion

   Other predisposing factors are;

7. Trauma to the stomach
8. Excessive intake of alcohol
9. Irregular meals
10. Extreme starvation
11. Sex (Gastric ulcer is common in middle age people; it occurs in women more than men).

Pathophysiology

Peptic ulcers occur mainly in the gastroduodenal mucosa because this tissue cannot withstand the digestive action of gastric acid (HCl) and pepsin.

The erosion is caused by the increased concentration or activity of acid–pepsin or by decreased resistance of the mucosa. A damaged mucosa cannot secrete enough mucus to act as a barrier against HCl there by leading to the signs and symptoms patient exhibits such as pain and discomfort.

The use of NSAIDs inhibits the secretion of mucus that protects the mucosa. Patients with duodenal ulcers secrete more acid than normal, whereas patients with gastric ulcers tend to secrete normal or decreased levels of acid. Damage to the gastroduodenal mucosa results in decreased resistance to bacteria, and thus infection from H. pylori bacteria may occur.

Stress ulcer is the term given to the acute mucosal ulceration of the duodenal or gastric area that occurs after physiologically stressful events, such as burns, shock, severe sepsis, and multiple organ traumas or physical stressors such as intake of acidic foods.

These ulcers, which are clinically different from peptic ulcers, are most common in ventilator-dependent patients after trauma or surgery. Fiberoptic endoscopy within 24 hours of trauma or surgery reveals shallow erosions of the stomach wall; by 72hours, multiple gastric erosions are observed. As the stressful condition continues, the ulcers spread. (Smeltzer S. C., Bare, Hinkle, & Cheever, 2010)

Clinical Manifestation

Smeltzer et al. (2010) identified the following as clinical manifestations of peptic ulcer;

1. Dull, gnawing pain and a burning sensation in the mid-epigastrium or in the back
2. Epigastric pain is relieved by eating or taking alkali; once the stomach has emptied or the alkali wears off, the pain returns
3. Sharply localized tenderness is elicited by gentle pressure on the epigastrum
4. Pyrosis (heartburns)
5. Anemia (if the ulcer has bled)
6. Constipation or diarrhea may be present
7. Vomiting due to obstruction of the gastric outlet but rare in uncomplicated duodenal ulcer
8. Presence of occult blood in stool (15% of patients with gastric ulcers)
9. Night awaking: this normally occurs in patients with duodenal Ulcer due to severe pains which is relieved by eating.
10. Bloating (abdominal distention)

Diagnostic Investigations

According to Smeltzer, Bare, Henkle and Cheever (2010), the diagnosis of PUD is as follows:

1. A physical examination may reveal pain, epigastric tenderness, or abdominal distension. Pain that is relieved by ingesting food or antacids and absence of pain on arising are also highly suggestive of an ulcer.
2. Barium study of upper GIT:
3. Endoscopy: inflammatory changes, ulcers and lessions (gastric mucosal biopsy can be taken)
4. Stool R/E: occult blood
5. H. pylori infection: biopsy and histology and culture. Serologic test for antibodies to H. pylori antigen
6. Duodenoscopy
7. CT scan

Medical Management

Once the diagnosis is established, the patient is informed that the condition can be controlled. According to Ministry of health (2010) Recurrence may develop; however, peptic ulcers treated with antibiotics to eradicate *H. pylori* have a lower recurrence rate than those not treated with antibiotics. The goals are to eradicate H. pylori and to manage gastric acidity. Methods used include:

1. Medications
2. Lifestyle changes
3. Surgical intervention.

The following are some of the medications used in the management of peptic ulcer disease (Smeltzer, Bare, Hinkle, & Cheever, 2010):

1. **Histamine 2 (H2) Receptor Antagonists**: e.g. Cimetidine (Tagamet), Ranitidine (Zantac): Inhibits acid secretion by blocking the action of histamine on the histamine receptors of the parietal cells in the stomach.
2. **Proton (Gastric Acid) Pump Inhibitor**: e.g. Omeprazole (Prilosec), Lansoprazole (Prevacid), Rabeprazole (Aciphex): Decreases gastric acid secretion by slowing the hydrogen-potassium adenosine triphosphatase (H+, K+-ATPase) pump on the surface of the parietal cells.
3. **Cytoprotective Medications:** e.g. Misoprostol (Cytotec): A synthetic prostaglandin; protects the gastric mucosa from ulcerogenic agents; also increases mucus production and bicarbonate levels
4. **Antacids**: e.g Sodium carbonate, Aluminum Hydroxide are given to neutralize the HCL secreted by the parietal of the stomach
5. **Analgesics** such as tramadol, paracetamol are given to help manage pain depending on the client level of pain.

Lifestyle Changes

1. Stress reduction and rest: Patient needs the help and cooperation of family members in modifying physical and psychological stressful lifestyles.
2. Smoking cessation: Smoking decreases the secretion of bicarbonate from the pancreas into the duodenum, resulting in increased acidity of the duodenum and reduced ulcer repair.

Surgical Intervention

Smeltzer and Bare, Henkle and Cheever (2010) outlined these as indications for surgery in peptic ulcer; Failed medical treatment, Chronicity, Complications such as haemorrhage, perforation or pyloric obstruction. Surgical procedures adopted as cited by Smeltzer and Bare (2010) include;

1. **Gastroduodenostomy (Billroth I):** Partial gastrectomy with removal of antrum and pylorus of stomach. The gastric stump is anastomosed with the duodenum.
2. **Gastrojejunostomy (Billroth II):** Partial gastrectomy with removal of antrum and pylorus of stomach. The gastric stump is anastomosed with the jejunum.
3. **Total gastrectomy:** Also called an esophagojejunostomy. Removal of the stomach with attachment of the esophagus to the jejunum or duodenum.
4. **Pyloroplasty:** A longitudinal incision is made in the pylorus, and it is closed transversely to permit the muscle to relax and to establish an enlarged outlet. Often, a vagotomy is performed at the same time.
5. **Vagotomy:** The surgical division of the vagus nerve to eliminate the impulses that stimulate HCL secretion. There are three types: selective vagotomy, which severs only the branches that interrupt acid Secretion; truncal *vagotomy*, which severs the anterior and posterior trunks to decrease acid secretion and gastric motility; and parietal Vagotomy, which severs only the part of vagus that innervates the parietal acid-secreting cells. Traditionally performed by laparotomy, the vagotomy procedure can also be done using a laparoscope.

Nursing Management

Relieving Pain

1. Patient should prevent aspirin, foods and beverages that contain caffeine, and decaffeinated coffee, and meals should be eaten at regularly paced intervals in a relaxed setting.
2. Teach relaxation techniques to help manage stress and pain
3. Prescribed pain medications such as tramadol and paracetamol should be served as prescribed
4. Some patients benefit from learning relaxation techniques to help manage stress and pain.

Observation

1. Assess for faintness or dizziness and nausea, before or with bleeding; test stool for occult or gross blood, monitor vital signs frequently (tachycardia, hypotension, and tachypnea).
2. Insert an indwelling urinary catheter and monitor intake and output; insert and maintain an IV line for infusing fluid and blood.
3. Monitor laboratory values (hemoglobin and hematocrit).
4. Insert and maintain a nasogastric tube and monitor drainage; provide lavage as ordered.
5. Monitor oxygen saturation and administering oxygen therapy.
6. Place the patient in the recumbent position with the legs elevated to prevent hypotension, or place the patient on the left side to prevent aspiration from vomiting.
7. Note and report symptoms of penetration (back and epigastric pain not relieved by medications that were effective in the past).
8. Note and report symptoms of perforation (sudden abdominal pain, referred pain to shoulders, vomiting and collapse, extremely tender and rigid abdomen, hypotension and tachycardia, or other signs of shock).

Reducing Anxiety

1. The Nurse should assess the patient's level of anxiety which may not be obvious.
2. Appropriate information is provided at the patient's level of understanding, all questions are answered, and the patient is encouraged to express fears openly.
3. Explaining diagnostic tests and administering medications on schedule also help to reduce anxiety.

Maintaining Optimal Nutritional Status:

1. Assesses the patient for malnutrition and weight loss.
2. After recovery from an acute phase of peptic ulcer disease, the patient is advised about the importance of complying with the medication regimen.
3. The patient eats food that can be tolerated and avoids those that produce pain. Certain substance such as spicy food cause severe pain and has to be avoided.
4. Smoking should be avoided as it has been shown to delay ulcer healing regardless of the therapy.
5. Plan diet with a dietician and the patient to meet nutritional requirement of patient.
6. Advise patient to reduce carbohydrate intake to minimize the occurrence of rapid gastric emptying.
7. Serve easily digestible foods to prevent abdominal cramping and pain.
8. Give milk which cannot only neutralize gastric acidity but contains prostaglandins and growth factors both of which are known to protect the gastrointestinal mucosa from injury.

Patient Education

1. Client should be educated to complete prescribed dosage even if they are not experiencing signs and symptoms any longer
2. Client should be educated on predisposing factors or causes such as smoking, stress, caffeine use and excessive alcohol intake.
3. Client should be educated on the need to report to the hospital for review.

4. Explain pathophysiology of condition to patient and family.
5. Educate client to avoid over– the counterdrugs unless prescribed by doctor.

Complications

The following are some of the complication as result of peptic ulcer disease as specified by (Smeltzer S. C., Bare, Hinkle, & Cheever, 2010):

1. Haemorrhage (bleeding from the ulcer as a result of the activities of the stomach which is characterized by passage of melena stools).
2. Perforation (erosion of the ulcer through the gastric serosa into the peritoneal cavity)
3. Penetration (erosion of the ulcer through the gastric serosa into adjacent structures such as the pancreas, biliary tract).
4. Pyloric obstruction (gastric outlet obstruction which is cause as a result of inflammation or scaring from ulcer).

1.11 Validation of Data

According to Farlex (2012), validation of data simply means to establish the soundness, accuracy or legitimacy of the data gathered so that it will be free from errors and misinterpretations. Data gathered from Mr. A.A. and his wife was confirmed to be absolutely true after episodes of interview conducted with patient relatives during my first home visit. Data gathered on Mr. A.A. and diagnostic investigations carried out were in line with those in the literature review. Based on these cross checks I concluded by saying information being gathered is absolutely valid and suitable for this care study.

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

Analysis is the act of determining the component parts of a substance (Weller, 2014). As the second component of the nursing process, data analysis deals with the sorting out of information gathered on and about the patient in chapter one in order to draw conclusion and bring out the exact problems so as to formulate the appropriate interventions. The chapter comprises of all the information collected from the patient's medical history, nursing interventions, laboratory investigations and literature review of the condition. In data analysis, critical and logical study with arrangement is done about an object under study (patient).

2.1 Comparison of Data with Standards.

This is where data collected from Mr. A.A, relative and significant others is compared with those in the literature review to find more understanding about patient course of treatment and their effectiveness in patient's improvement.

This comparison includes;

1. Diagnostic investigations / test
2. Causes
3. Clinical features
4. Treatment
5. Complications

2.1.1 Diagnostic Investigation\Test

Diagnostic investigations are procedures performed to determine the nature of a disease (Weller, 2014). Test is a procedure intended to establish the quality, performance, or reliability of something, especially before it is taken into widespread use (Simpson, 2017).The following are list of investigations carried out on Mr. A.A during his period of hospital; Full Blood Count, Blood Film for Malaria Parasites and H. pylori antigen test.

Table 2.1: Comparison of diagnostic investigations done for Mr. A.A. with standards

Diagnostic Investigation as stated in Literature	**Diagnostic investigation done for patient.**
1. Physical Examination	Medical history and physical examination was done
2. Barium Study of Upper GIT	Barium Study of the Upper GIT was not done
3. Endoscopy	Endoscopy was not done
4. Stool R/E	Stool R/E was not done for patient
5. Blood for H. pylori infection	Blood for H. pylori infection was done
6. Duodenoscopy	Duodenoscopy was not done for Mr. A.A
7. Abdominal CT scan	Abdominal CT scan was not done.
8. Full blood count is not indicated in the literature for Peptic Ulcer	Full blood count was done for Mr. A.A
9. Blood Film for Malaria parasites is not indicated in the literature for Peptic Ulcer	Blood film for malaria parasites was done for patient

With reference to the comparison of investigation conducted on Mr. A.A. with the literature, most of the diagnostic investigation was not conducted because diagnosis was made on the medical history that was collected from patient and H. pylori infection tested positive. He also had investigations such as Blood Film for Malaria parasites to rule out malaria though not indicated by literature. Full Blood Count was also conducted to rule out infections and to estimate patients Haemoglobin (Hb) level but is not indicated as diagnostic investigation of Peptic Ulcer Disease.

Table 2.2: Results of Diagnostic Investigations Carried Out on Patient

Date	Specimen	Investigations	Results	Normal Range	Interpretation	Remarks
23/11/21	Blood	**FULL BLOOD COUNT:**				
		White Blood Cell (WBC) count	$21.81x10^3/\mu L$	$3.5\text{-}10.5\ x10^3\mu L$	Values deviating from normal range (high)	IV Metronidazole was given
		Red Blood Cell (RBC) count	$3.00x10^3/\mu L$	$3.90\text{-}5.03\ x10^6\mu L$	Values below normal range indicating anemia.	Iron III Polymaltose 15mls was given

		Haemoglobin level (Hb)	9.0g/dL	Males: 12-18g/dl Females: 11.5-16g/dl	Values slightly deviating from normal range (low) indicating anemia.	Iron III Polymaltose 15mls was given
		Platelets	$135x10^3/\mu L$	$150x10^3/\ \mu L$ - $400x10^3/\ \mu L$	Values below normal range.	Iron III Polymaltose 15mls was given

Results of Diagnostic Investigations Carried Out on Patient cont'd

Date	Specimen	Investigation	Result	Normal Range	Interpretation	Remarks
23/11/21	Blood	BLOOD FILM FOR MALARIA PARASITES	No malaria parasites seen	No malaria parasites should be present	Patient has no parasite in blood indicating his symptom is not as result of malaria.	No treatment was given.
23/11/21	Blood	H.PYLORI ANTIGEN TEST	Test revealed positive.	No bacteria should be present	Rise in the number of the organisms in the blood.	An antibiotic such as IV Metronidazole 500mg and IV Amoxiclav 1.2mg were given

2.1.2 Causes of Patient's Condition

With reference to the literature on the causes and risk factors of peptic ulcer, it could be deduced that Mr. A.A's condition could probably be as a result of emotional stress and starvation due to his farming activities which lead to occasional skip of meals and poor eating habit and eventual infection with helicobacter pylori.

2.1.3. Clinical Features/ Signs and Symptoms

Table2.3: Clinical Features of Mr. A.A. Compared with those in the Literature Review

Clinical manifestation according to literature	**Clinical manifestation presented by Mr. A.A**
Dull, gnawing pain and a burning sensation in the mid-epigastrium	Mr. A.A complained of burning sensation in the mid –epigastrium
Epigastric pain	Mr. A.A experienced pain at the umbilical region and the epigastric area
Sharply localized tenderness is elicited by gentle pressure on the epigastrum	Localized tenderness was elicited after physical assessment
Constipation or diarrhea may be present	Diarrhea was present in Mr. A.A's complains
Vomiting and Nausea	Mr. A.A complained of nausea and vomiting
Presence of occult blood in stool (15% of patients with gastric ulcers)	There was no occult blood in Mr. A.A's stool
Night awaking	Mr. A.A complained of interrupted sleep
Bloating (abdominal distension)	Mr. A.A complained of abdominal distention
Pyrosis (Heartburns)	Heartburns was experienced by Mr. A.A
Anaemia	Mr. A.A was anemic

From the table above it can be noticed that Mr. A.A presented with most of the signs and symptoms of Peptic Ulcer disease as indicated in the literature.

2.1.4 Specific Medical Treatment

Treatment is the application of medicines, surgery, psychotherapy, etc., to a patient or to a disease or symptoms (Harper, 2016).

Mr. A.A was managed on the following medications;

1. Intravenous Omeprazole 80mg stat, 40mg bd for 48hours.
2. Intravenous Metronidazole 500mg tid for 48hours.
3. Intravenous Amoxiclav 1.2mg tid for 48hours.
4. Intravenous Metoclopromide 10mg tds for 24hours.
5. Intravenous Dextrose Normal Saline 1.5L for 48hours.
6. Intravenous Ringers Lactate 1.5L for 48hours.
7. Intravenous Buscopan 40mg bd for 24hours.
8. Intravenous Tramadol 200mg in 500mls Ringers Lactate for 4hours.
9. Syrup Nugel‘O’ 15mls tid for 7days.
10. Syrup Zincovit 15mls bd for 7 days.
11. Syrup Iron III Polymaltose 15mls tds for 7days.
12. Tablet Metronidazole 400mg tds for 7days.
13. Tablet Amoxiclav 625mg bd for 7days.

Table 2. 4: Treatment Given to Patient as Compared with Literature Review

Treatment according to literature	Treatment given to Mr. A.A
1. H_2- Receptor Antagonist example cimetidine (Tagamet), ranitidine (Zantac).	No Histamin 2- Receptor Antagonist was given to patient.
2. Proton Pump Inhibitors example Omeprazole(Prilosec), Lansoprazole(Prevacid), Pantoprazole(Protonix).	Intravenous Omeprazole 80mg stat, 40mg bd for 48hours was given.
3. Cytoprotective medication example misoprostol.	Cytoprotective agents was not given.
4. Antacids example Nugel O, magnesium hydroxide, calcium carbonate.	Syrup Nugel'O' 15mls tid for 7days was given to patient.
5. Analgesics example paracetamol.	Intravenous Tramadol 200mg in 500mls Ringers Lactate for 4hours and Tablet Paracetamol 1g tid for 5days was given.
6. Oral iron preparations example ferrous sulfate and iron III Polymaltose was not indicated in the literature for the management of peptic ulcer.	Syrup Iron III Polymaltose 15mls tds for 7days was given to Mr. A.A.
7. Intravenous Dextrose Normal Saline not stated in standard for the treatment of peptic ulcer.	Intravenous Dextrose Normal Saline 1.5 liters was given for 48hours.
8. Antiemetics example metoclopramide are not indicated in the literature for the management of peptic ulcer.	Intravenous Metoclopramide 10mg tds for 24hours.

Table 2. 4: Treatment Given to Patient as Compared with Literature Review cont'd

Treatment according to literature	Treatment given to Mr. A.A
9. Intravenous Ringers Lactate was not indicated in the literature review for management of peptic ulcer.	Intravenous Ringers Lactate 1.5 liters was given for 48hours.
10. Multivitamins example Zincovit was not indicated in the literature review for management of peptic ulcer.	Syrup Zincovit 15mls bd for 7 days.
11. Antibiotics example metronidazole, amoxiclav and ciprofloxacin.	Intravenous Metronidazole 500mg tid for 48hours, Tablet Metronidazole 400mg tds for 7days and Intravenous Amoxiclav 1.2mg tid for 48hours, Tablet Amoxiclav 625mg bd for 7days.

By comparing the treatment given to Mr. A.A with that of the literature in the table above, I can say that treatment given is in line with the literature review which contributed to his speedy recovery. I.V Metoclopramide was given to patient since he was vomiting and syrup Iron III Polymaltose was also given since patient was slightly anemic. Intravenous Ringers Lactate and Dextrose Normal Saline were given to correct the fluid and electrolyte imbalance since much was lost when patient was vomiting.

Table 2. :5 Pharmacology of Drugs Given to Mr. A.A

Date	Drug	Dosage and route of administration according to literature	Dosage and route of administration given to Mr. A.A	Classification	Desired effect	Actual effect	Side effects/Remarks
23/11/21	Intravenous Dextrose Normal Saline	**Dosage:** Depends on the person's fluid and electrolyte requirement and age. **Route:** Intravenously	**Dosage:** 1.5liters was given in 48hours **Route:** Intravenously as prescribed by physician	Isotonic solution of sodium chloride	It is a crystalloid solution that corrects fluid and electrolyte imbalance and increase blood volume	Patient's fluid and electrolyte was balanced as needed by the body and hypovolaemia was also corrected	Oedema, hypocalcaemia, Over hydration. None was observed in Mr. A.A throughout his stay.
24/11/21	Syrup Iron III Polymaltose	**Dosage**: Depends on the age of the individual adult patient receive 15-30mls **Route**: Orally	**Dosage:** 15mls tds for 7days was prescribed to patient **Route:** Orally	Oral Iron Preparation	To treat Iron deficiency and improve haemoglobin level	Patient's haemoglobin level was increased gradually to normal and iron deficiency was corrected.	Nausea and vomiting, constipation and diarrhoea was not experienced by patient.

Pharmacology of Drugs Given to Mr. A.A continued

23/11/21	Intravenous Ringers Lactate	**Dosage:** Depends on the person's fluid and electrolyte requirement and age. **Route**: Intravenously	**Dosage:** 1.5liters was given for 48hours **Route:** intravenously as prescribed by physician	Isotonic solution	It is a crystalloid solution that corrects fluid and electrolyte imbalance and increase blood volume	Patient's fluid and electrolyte was balanced as needed by the body and hypovolaemia was also corrected.	Oedema, hypocalcaemia, Over hydration. None were observed in Mr. A.A throughout his stay.
25/11/21	Syrup Zincovit	**Dosage:** Depends on the age of the individual adult patient receive 15-30mls **Route**: Orally	**Dosage:** 15mls bd for 7days was prescribed to patient **Route:** Orally	Multivitamins	To improve appetite	Patients appetite was improved	Diarrhea and black stool. Patient did not manifest these side effects.
24/11/21	Tramadol	**Dosage:** Depends on the patient level of pain not to exceed 300mg per day **Route:** Intravenously, Intramuscular and Orally	**Dosage:** Intravenous Tramadol 200mg in 500mls Ringers Lactate for 4hours was prescribed for patient. **Route:** Intravenously	Opioid analgesic	Inhibit pain level by acting on the opioid receptors to produce pain relief	Patient pain subsided after the administration of the drug	Hallucinations, nausea, constipation, dizziness. None were observed in patient.

Pharmacology of Drugs Given to Mr. A.A continued

24/11/21	Metoclopramide	**Dosage:** Not to exceed 80mg per day **Route:** Intravenously and Intramuscular	**Dosage:** 10mg tds for 24hours was prescribed for patient **Route:** Intravenously	Antiemetic	It antagonize the activity D_2 receptors in the chemoreceptor trigger zone in the central nervous system to prevent nausea and vomiting	Patient's vomiting and nausea subsided	Fatigue, sedation, Impotence, diarrhea none of these were experienced
24/11/21	Buscopan (hyosine)	**Dosage:**20-40mg bd a day **Route:** Orally, Intravenously and Intramuscular	**Dosage:**40mg bd for 48hours **Route:** Intravenously	Antispasmodics	Blocks the action of acetylcholine at the parasympathetic sites at the smooth muscle and secretory glands which reduces spasms	Spasms reduced and helped to reduce patient's pain	Hypotension, tachycardia and itching and none of these were experienced by patient
24/11/21	Nugel O	**Dosage:** 15mls twice daily for adults **Route:** Orally	**Dosage:** 15mls bd for 7days **Route:** Orally	Antacid	Neutralization of acid secretion (HCL) by the stomach	Gastric acid secretion was neutralized helping in relieve of pains	Headache, diarrhea and constipation Patient did not experience these complications

Pharmacology of Drugs Given to Mr. A.A continued

23/11/21 And 25/11/21	Metronidazole (Flagyl)	**Dosage: Adult:** 500mg **Child:** Depends on the weight **Route:** Intravenously and Orally	**23/11/21** **Dosage:** 500mg tid for 48hours **Route:** Intravenously **And** **25/11/21** Dosage: 400mg tds for 7days **Route:** Orally	Antibiotics	It inhibit nucleic acid synthesis by interrupting the DNA of the microbial cells	Patient did not have any infections	Headache, nausea and vomiting, and dizziness. None of these were observed in patient
23/11/21	Omeprazole (Prilosec)	**Dosage:** 20mg daily for 4weeks in duodenal ulcer and 8weeks in gastric ulcer. **Route:** Orally and Intravenously	**Dosage:** Intravenous Omeprazole 80mg stat, 40mg bd for 48hours **Route:** Intravenously	Proton Pump Inhibitor	Suppress gastric secretion by inhibiting H+/K+ AT pase system found at secretory surface of gastric parietal cell	Patient's gastric secretions were suppressed.	Headache, dizziness, abdominal pain and nausea. None of these side effects were experienced

Pharmacology of Drugs Given to Mr. A.A continued

23/11/21 And 25/11/21	Amoxiclav	**Dosage: Adult:** 1.2g tid Intravenously. 1g bd in severe infections and 625mg tid in mild infections for 14 - 15 days orally. **Route:** Intravenously and Orally	**23/11/21** **Dosage:** Intravenous Amoxiclav 1.2mg tid for 48hours **Route:** Intravenously **And** **25/11/21** Dosage: 625mg bd for 7days **Route:** Orally	Beta-Lactam Antibiotic, Pharmacologic; Aminopenicillins	Amino penicillin prevents bacteria cell wall synthesis during replication, causing cell death. Clavulanic acid increases Amoxicillin's effectiveness by inactivating beta-lactamases.	Bacterial infection was combated	CNS; Seizures (high dose) GI; Diarrhea, nausea, vomiting. None were observed.
24/11/21	Paracetamol	**Dosage:**1g three times daily for adult and 500mg three times daily for children Orally **Route:** Orally, Rectal, Intravenously	**Dosage:** 1g tds for 5days **Route:** Orally	Analgesic	To help reduce pain	Patients pain was reduced	Liver damage and Renal damage. None was observed in patient

2.1.5. Complications

With reference to the complications listed in the literature review such as pyloric obstruction, perforation and Haemorrhage. Mr. A.A's hemoglobin was 9.0g/dL indicating anemia. *However, based on timely and efficient nursing and medical care, he did not experience any other complications outlined in the literature review of peptic ulcer disease as indicated in chapter one.*

2.2 Patient / Family Strengths

Strength is the quality that allows someone to deal with problems in a determined and effective way (McIntosh, 2013). *Out of the problems stated by Mr. A.A the following strength were deducted:*

1. The patient could verbalize the intensity and location of the pain.
2. *Patient and relative expressed fears and asked questions about the condition.*
3. *Patient could tolerate passive exercises despite been weak.*
4. Patient was able to sleep when the environment is quiet.
5. Patient was able to eat one third of meal served.
6. Patient was able to verbalize some symptoms of the condition.

2.3 Patient's Health Problems

Health problem is defined as a state in which one is unable to function normally and with pain (Merriam, 2015). The following health problems were identified by assessment throughout period of hospitalization.

1. Patient complained of epigastric pain (23/11/21).
2. Patient and relative were anxious (23/11/21).
3. Patient complained of general body weakness (24/11/21).
4. Patient complained of short sleeping duration (24/11/21).
5. Patient complained of poor dietary intake (25/11/21).
6. Patient and relatives had less knowledge about condition (26/11/21).

2.4 Nursing Diagnosis

According to NANDA International, nursing diagnosis is a clinical judgment about individual, family or community experiences/responses to actual or potential health problems/life process. Nursing diagnosis are developed based on data obtained during the nursing assessment.

1. Acute pain related to the effect of gastric acid secretion on damaged tissue (23/11/21).
2. Anxiety related to acute disease and unknown outcome of the disease condition (23/11/21).
3. Impaired physical mobility related to general body weakness (24/11/21).
4. Insomnia related to abdominal pains (24/11/21).
5. Altered nutritional pattern (less than body requirements) related to anorexia (25/11/21).
6. Deficient knowledge related to inadequate information on causes, management and prevention of the condition (26/11/21).

CHAPTER THREE

PLANNING FOR PATIENT AND FAMILY CARE

3.0 Introduction

Planning is the third phase of nursing process. Planning is the process in which the nurse and patient together consider the goals to achieve in meeting the patient's identified or potential problems in daily life and produce an individual care plan (Weller, Bailliere's Nurses' Dictionary: For Nurses and Healthcare Workers, 2014).

In this phase, there is identification of some specific health problems, formulation of nursing diagnosis, goals setting and objectives to achieve. In nursing, planning deals with development and prioritization of goals, care designed and systematic care rendering to the patient and family continuously forward goals achievement.

Care plan is a holistic quantification of patient problems and appropriate remedies to them. The care plan is prioritized base on urgency. It also serves as a communication link between the health team and the patient. The following are very essential in the care plan.

1. Date/Time
2. Nursing diagnosis
3. Nursing objectives
4. Nursing orders
5. Nursing interventions
6. Evaluation of interventions
7. Signature

3.1 Objective / Outcome Criteria for Patient and Family Care

1. Patient would be relieved of abdominal pain within 24 hours as evidenced by;
    a. Patient verbalizing the absence of abdominal pain.
    b. Nurse observing that patient is relaxed in bed and having a cheerful facial outlook.
2. Patient and relatives would be relieved of anxiety within 24 hours as evidenced by;
    a. Patient and relatives verbalizing that they are no more anxious.
    b. Nurses observing that patient and family look cheerful.
3. Patient would demonstrate a normal mobility within 72 hours as evidenced by;
    a. Patient verbalizing decrease in weakness and fatigue.
    b. The nurse observing that patient can perform self-care and other activities without assistance.
4. Patient would have uninterrupted sleep for 6-8 hours during the night within 48 hours as evidenced by;
    a. Patient verbalizing that he can sleep soundly in the night without any interruption.
    b. The nurse observing patient sleep uninterruptedly for 6 hours in the night.
5. Patient would regain his normal nutritional pattern (good appetite) within 48 hours as evidenced by;
    a. Patient verbalizing that he has gained appetite and can now eat greater part of the meal served.
    b. Nurse observing patient consumes more than half of his meals served.
6. Patient and relatives would demonstrate an adequate knowledge regarding peptic ulcer within 24 hours as evidenced by;
    a. Patient and relatives being able to mention some of the predisposing factors of peptic ulcer.
    b. Nurse observing patient and relatives give correct answers on questions posed on peptic ulcer.

Table 3. 2: Nursing Care Plan for Mr. A.A/Family

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
23/11/21 at 1:30pm	Acute pain related to the effect of gastric acid secretion on damaged tissue.	Patient would be relieved of abdominal pain within 24 hours as evidenced by; a). Patient verbalizing the absence of abdominal pain. b). Nurse observing that patient is relaxed in bed and having a cheerful facial outlook.	1. Reassure patient that measures will be put in place to relieve him of pain. 2. Assess the patient's level of pain. 3. Position the patient on a comfortable bed. 4. Give diversional therapy to help take patient's mind off from pain. 5. Serve prescribed medications to relieve pain. 6.Reassess patient level of pain	1. Patient was reassured that he is in the hands of competent staff. 2. Patient's level of pain was assessed using the numerical rating scale and he pointed out 7 as his intensity of pain. 3. A comfortable bed free from creases and cramps was made for the patient. 4. Patient was allowed to watch television to divert his attention from the pain. 5. Prescribed medications such as omeprazole was served. 6. Patient level of pain was reassessed to identify therapeutic effect of drugs given.	24/11/21 at 1:30pm	Goal was fully met as patient verbalized the absence of pain in the abdomen and nurse observed that patient had a cheerful facial expression and was relaxed in bed.	C.L.C

Table 3. 1: Nursing Care Plan for Mr. A.A/Family cont'd

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
23/11/21 at 2:10pm	Anxiety related to acute disease and unknown outcome of the disease condition.	Patient and relatives would be relieved of anxiety within 24 hours as evidenced by; a). Patient and relatives verbalizing that they are no more anxious. b). Nurses observing that patient and family look cheerful.	1. Reassure patient of competent nursing care. 2. Establish rapport with patient and relative. 3. Educate patient and relative on the need for hospitalization. 4. Explain condition to patient and treatment plan. 5. Encourage patient and relative to ask questions about the condition.	1. Patient and relative were reassured that adequate measures would be put in place to help manage his condition effectively. 2. Rapport was established with patient and relatives to allow them to express their feelings. 3. Patient and relative were educated on the need for hospitalization. 4. Patient's condition was explained to him to gain cooperation. 5. Patient and relative were encouraged to ask questions about the condition and answers were provided to relieve them of anxiety.	24/11/21 at 2:10pm	Goal fully met as patient and relatives verbalized that they are no more anxious and nurses observed that patient and family looked cheerful	C.L.C

Table 3.1: Nursing Care Plan for Mr. A.A/Family cont'd

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
24/11/21 at 7:40am	Impaired physical mobility related to general body weakness.	Patient would demonstrate a normal mobility within 72 hours as evidence by; a). Patient verbalizing decrease in weakness and fatigue. b). The nurse observing that patient can perform self-care and other activities without assistance.	1. Reassure patient of competent nursing care. 2. Assist patient in passive exercise in bed. 3. Assist patient in activities of daily living. 4. Serve a well- balanced diet emphasizing on iron containing diet to boost immunity and to give nutrient. 5. Administer prescribed iron supplements and record.	1. Patient was reassured that he is in the hands of competent staff 2. Patient was assisted to perform passive exercise in bed such as turning side to side. 3. Patient was assisted to perform activities of daily living such as bathing. 4. Patient was given a well- nutritious diet containing protein, carbohydrates, vegetables, fiber and roughages such as palava sauce stew with rice and yam. 5. Prescribed iron supplement such as syrup Iron III Polymaltose was served and recorded.	27/11/21 at 7:40am	Goal was fully met as patient verbalized a decrease in weakness and fatigue and nurse observed that patient perform self-care and other activities without assistance.	C.L.C

Table 3. 1: Nursing Care Plan for Mr. A.A/Family cont'd

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
24/11/21 at 9:00am	Insomnia related to abdominal pain.	Patient will have uninterrupted sleep for 6-8 hours during the night within 48 hours as evidenced by; a) Patient verbalizing that he can sleep soundly in the night without any interruption. b) The nurse observing patient sleep uninterruptedly for 6 hours in the night.	1. Reassure patient that he can sleep during the period of treatment and explain possible reasons of sleep disturbance to him. 2. Provide patient with a comfortable bed. 3. Assess patient's pain level 4. Assist patient to assume a comfortable position. 5. Ensure a noise free environment by putting off radio and television set. 6. Serve prescribed medications to relieve pain.	1. Patient was reassured that measures will be put in place to help him. 2. A comfortable bed free from creases and cramps was made for the patient. 3. Patient's level of pain was assessed using the numerical rating scale and he pointed out 7 as his intensity of pain. 4. Patient was assisted to assume the left lateral position which relieve him of pain. 5. Volume of radio was lowered and television set was turned off to create a noise free environment for patient. 6. Prescribed medications such as buscopan was served.	26/11/21 at 9:00am	Goal fully met as patient verbalized that he was able to sleep soundly in the night without any interruption and nurse observed that patient slept uninterruptedly for 6 hours in the night	C.L.C

Table 3. 1: Nursing Care Plan for Mr. A.A/Family cont'd

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
25/11/21 at 8:00am	Altered nutritional pattern (less than body requirements) related to anorexia.	Patient would regain his normal nutritional pattern (good appetite) within would be restored within 48 hours as evidenced by; a). Patient verbalizing that he has gained appetite and can now eat greater part of the meal served. b). Nurse observing patient consumes more than half of his meals served.	1. Reassure patient to allay anxiety. 2. Assist patient to perform proper mouth care. 3. Serve food in an attractive manner. 4. Serve food in bits and at regular interval. 5. Explain to patient on the need to take nutritious diet. 6. Serve prescribed medication.	1. Patient was reassured that all things possible will be done to improve appetite. 2. Patient was assisted to perform mouth care at least twice daily by using tooth paste and brush. 3. Patient food was served in an attractive manner. 4. Patient food was served in bits and at regular interval. 5. Dietician explained to patient on the need to take nutritious diet. 6. Prescribed medication such as Syrup Zincovit was served	27/11/21 at 8:00am	Goal was fully met as patient verbalized that he has gained appetite and can now eat greater part of the meal served and nurse observing patient consumes more than half of his meals served.	C.L.C

Table 3. 3: Nursing Care Plan for Mr. A.A/Family cont'd

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
26/11/21 at 9:30am	Deficient knowledge related to inadequate information on about causes, management and prevention of the condition.	Patient and relatives would demonstrate an adequate knowledge regarding peptic ulcer within 24 hours as evidenced by; a). Patient and relatives being able to mention some of the predisposing factors of peptic ulcer. b). Nurse observing patient and relatives give correct answers on questions posed on peptic ulcer.	1. Assess patient and relative level of knowledge about peptic ulcer. 2. Educate patient and relatives in a language that is clearly understood by them 3. Educate patient and relatives about the condition. 4. Encourage and allow patient to ask questions for clarification. 5. Educate patient on the management and prevention of the disease.	1. Patient and relative knowledge about bleeding peptic ulcer was assessed. 2. Patient and relatives were educated in a language clearly to their understanding. 3. Patient and relatives were educated about the condition. 4. Patient asked about some of the risk factors of the condition and he was answered clearly. 5. Management and prevention of the disease was communicated to patient.	27/11/21 at 9:30am	Goal was fully met as patient and relatives were able to mention some of the predisposing factors of peptic ulcer and nurse observing patient and relatives give correct answers on questions posed on peptic ulcer.	C.L.C

CHAPTER FOUR

IMPLEMENTATION OF PATIENT/FAMILY CARE PLAN

4.0 Introduction

Implementation is the fourth phase of the nursing process. Implementation is the actualization of the nursing care plan through nursing intervention (Smeltzer and Bare, 2010). This chapter describes the actual care rendered to client and family during admission preparation of Mr. A.A and his family toward their discharge, follow-up visit and the subsequent visit during this period of care study. This phase facilitates some specific nursing activities and actions needed to carry out the intervention. The phase permits the continuity assessment of the patient to gather data about patient response to nursing intervention and other newly rising problems.

4.1 Summary of Actual Nursing Care Rendered to Patient/ Family

My nursing care rendered onto Mr. A.A started immediately she was admitted on the 23rd of November, 2021. Most importantly, the main aim of the nursing care is to ensure adequate comfort and promote quick recovery without any complications.

The nursing care rendered also aimed at her physical, psychological and spiritual needs. These cares were summarized on daily basis

4.1.1 First Day of Admission (23rd November, 2021)

On 23rd November, 2021, around 1:00pm, Mr. A.A was admitted into the Male Medical ward from the Out Patient Department of the St. Theresa's hospital, Nkoranza per ambulatory with the help of two relatives with the diagnose of acute exacerbation of peptic ulcer. On observation, he complained of heartburns, general body weakness, epigastric pain, vomiting, headache, loss of appetite and slight epigastric tenderness. They were warmly welcomed to the ward and given a seat, after which his folder was glanced through to confirm the diagnosis and his particulars.

On observation, he complained of heartburns, general body weakness, epigastric pain, vomiting, headache, loss of appetite and slight epigastric tenderness. Mr. A.A was well hydrated, alert, conscious and well oriented to time, place and person even though he was weak and restless. He was helped into an already prepared admission bed with the bed number MM-5. Mr. A.A and relatives were reassured of competent nursing care by the health team that was present during his admission to improve his current health status. A quick assessment of his general appearance was made, vital signs and weight was checked and recorded as;

1. Temperature 36.5^{o}C
2. Pulse 105bpm
3. Respiration 18cpm
4. Blood Pressure 114/66mmHg
5. SpO_2 99%

Patient's weight was measured and recorded on admission as 54kg.

Mr. A.A's name was recorded in the admission and discharge book.

The laboratory investigations requested earlier were;

1. Blood for Full Blood Count.
2. Blood Film for Malaria Parasite.
3. H. Pylori test.

Mr. A.A was admitted to the male ward with a treatment as follows;

1. Intravenous Omeprazole 80mg stat, 40mg bd for 48hours.
2. Intravenous Metronidazole 500mg tid for 48hours.
3. Intravenous Amoxiclav 1.2mg tid for 48hours.
4. Intravenous Dextrose Normal Saline 1.5L for 48hours.
5. Intravenous Ringers Lactate 1.5L for 48hours.

On admission he did not have any valuables like gold watches which are not allowed to be kept by the nurses as required by the hospital's policy but rather had few belongings such as clothes and some items that would enable him stay in the hospital. Client's relatives were assisted to arrange these items like soap, tooth paste, brush, toilet roll, cup and other materials into his bed side locker. Client's relatives were again informed about the hospital protocol of not keeping patient valuables like gold watches so it is important to send it home. Patient and relatives were oriented to the ward by showing them the nurse's station and introducing staffs available at the shift. They were shown the various types of waste bins thus the general waste and infectious waste as well as the sharps box of which they were educated to put various waste in their respective bins. They were also introduced to the other patients who share the same cubicle with them to relieve him of anxiety. They were also shown the patients washroom. I then introduced myself to Mr. A.A and wife as a student of Holy Family Nursing and Midwifery Training College and also informed them of my interest in taking them for my care study. I continue by explaining to them that the patient/family care study will enable me to render adequate individualized comprehensive nursing care until discharged and even a follow up care will be given after discharge. I also informed them that this is a requirement by the Nursing and Midwifery Council (N.M.C) that I had to fulfill as a partial fulfillment for the award of license to practice as professional Registered General Nurse in the country. Patient and relatives were very happy and agreed to my request and promised to co-operate fully in caring for Mr. A.A. I made patient and relatives aware of visiting hours which starts in the morning at 6:00am to 6:30am, and in the evening 4:00pm to 4:30pm. I added the time for ward rounds, medication and other ward routines to make them aware of these routines and activities which is mostly conducted at the ward. Since Mr. A.A had registered with the National Health Insurance Authority, no debt was paid. I also explained to him that some of the drugs may not be covered by NHIS and therefore needed to be paid for when he is discharged. I started preparing patient towards discharge on this day of admission. Patient was educated not to engage in strenuous activities and have enough rest. Patient's wife was educated not to add spices and

irritating food staffs like pepper to the diet that will be prepared for Mr. A.A. Care plan was quickly drawn to care for patient and family immediately I informed the nurse in-charge during my shift. I decided to choose this patient for the study because I wanted to use the knowledge I had in Peptic Ulcer Disease to render individualized care and also to learn more about the disease.

At 1:30pm, nursing assessment was conducted to validate epigastric pain presented by Mr. A.A on admission. Quickly a nursing diagnosis of acute pain related to the effect of gastric acid secretion on damaged tissue was formulated. An objective was set to relieve him of abdominal pain within 24 hours. Nursing interventions rendered were; Patient was reassured that he is in the hands of competent staff, patient's level of pain was assessed using the numerical rating scale and he pointed out 7 as his intensity of pain, comfortable bed free from creases and cramps was made for the patient, patient was allowed to watch television to divert his attention from the pain, prescribed medications such as omeprazole was served, patient level of pain was reassessed to identify therapeutic effect of drugs given.

Upon interacting with patient around 2:10pm, patient seemed anxious. A nursing diagnosis was formulated as anxiety related to acute disease and unknown outcome of the disease condition. Objectives were set to relieve patient of her anxiety within 24 hours and the following interventions were put in place; Patient and relative were reassured that adequate measures would be put in place to help manage his condition effectively, rapport was established with patient and relatives to allow them to express their feelings, patient and relative were educated on the need for hospitalization, patient's condition was explained to him to gain cooperation, patient and relative were encouraged to ask questions about the condition to relieve them of anxiety.

Patient was served with TZ and suri soup as supper and he took very little of the food.

At 6:00pm, patient's vital signs were checked and recorded as shown in the appendix and all due medications were served. Patient slept around 8:30pm.

4.1.2 Second Day of Admission (24th November, 2021)

On the second day of admission, at 7:00am I went to the ward to continue with my nursing care for Mr. A.A, his morning vital signs had already been checked at 6am and recorded as follows;

Temperature	36.3^0C
Pulse	87bpm
Respiration	19cpm
Blood pressure	129/69 mmHg

At 7:40am, I interacted with the client and he complained of feeling weak hence a nursing diagnosis of impaired physical mobility related to general body weakness was formulated. The following nursing actions were implemented to help the patient: Patient was reassured that he is in the hands of competent staff , patient was assisted to perform passive exercise in bed such as turning side to side, patient was assisted to perform activities of daily living such as bathing, patient was given a well- nutritious diet containing protein, carbohydrates, vegetables, fiber and roughages such as palava sauce stew with rice and yam, prescribed iron supplement such as syrup Iron III Polymaltose was served and recorded.

Patient had his breakfast which was Hausa porridge with bread. During the ward rounds at 8:40am, Dr. M attended to Mr. A.A and the plan was to continue his medications with addition of Syrup Nugel 'O' 15ml bd for 7days.

The night nurses reported that client was not able to sleep well and patient also confirmed it at 9:00am, so a nursing diagnosis was formulated as, Insomnia related to abdominal pain. An objective was set to help client regain his normal sleeping pattern within 48 hours. Nursing actions implemented are as follows; patient was reassured that measures will be put in place to help him, a comfortable bed free from creases and cramps was made for the patient, patient's level of pain was assessed using the numerical rating scale and he pointed out 7 as his intensity of pain, patient was

assisted to assume the left lateral position which relieve him of pain, volume of radio was lowered and television set was turned off to create a noise free environment for patient, prescribed medications such as buscopan was served.

At 1:30am, an evaluation of the objective to relieve patient of abdominal pain was done and goal was fully met as patient verbalized the absence of pain in the abdomen and nurse observed that patient had a cheerful facial expression and was relaxed in bed.

Afternoon vital signs were checked and recorded at 2:00pm as indicated in the appendix, Client was later served with his afternoon medications.

At 2:10pm, an evaluation of the set objective to relieve patient and relatives of anxiety within 24 hours was done and goal was fully met as patient and relatives verbalized that they are no more anxious and nurses observed that patient and family looked cheerful.

He took in ampesi with kontomire stew and meat for supper. I embarked on my first home visit this day and that was to know my patient's residence and the environment in which he lives, verify the information given to me, identify the risk factors and stresses that could have led to his condition. At 10:00pm vitals were checked and recorded. Due medications were then served. Patient was made comfortable in bed and he slept around 10:20pm.

4.1.3 Third Day of Admission (25th November, 2021)

On the third day of admission, patient was assisted in brushing his teeth, had his bath and emptied his bowel. Report from the night nurses read that he was able to sleep well upon the measures put in place. Vital signs checked and recorded at 6:00am read as follows:

Temperature	36.4^0C
Pulse	87bpm
Respiration	20cpm
Blood Pressure	103/62mmHg

Due medications were served. Patient was served with Milo with bread for breakfast, he was able to consume just one-third of the Milo. During the ward rounds, Dr. Z attended to Mr. A.A and the plan was to continue his medications and added Syrup Zincovit 15ml bd for 7days, Tablet Metronidazole 400mg tds for 7days, Tablet Amoxiclav 625mg bd for 7days and Tablet Paracetamol 1g tid for 5days.

Based on my observation, I conducted a nursing assessment on the patient and it was realized that client had lost appetite.

At 8:00am a nursing diagnosis was formulated as, altered nutritional pattern (less than body requirements) related to anorexia. An objective was set to regain his normal nutritional pattern (good appetite) within 48 hours. The following nursing actions were implemented; Patient was reassured that all things possible will be done to improve appetite, patient was assisted to perform mouth care at least twice daily by using tooth paste and brush, patient food was served in an attractive manner, patient food was served in bits and at regular interval, dietician explained to patient on the need to take nutritious diet, prescribed medication such as Syrup Zincovit was served.

At 2:00pm, Mr. A.A's vital signs were checked and recorded as indicated in the appendix. He had his launch afterwards which was rice and stew. He stayed glued to the ward Television watching some programs for about two hours. He had his evening bath after which he took his supper which was Banku with Okro soup and fish, he was able to consume just a small portion of the food. At 10:00pm, his vital signs were checked and recorded as shown in the appendix, due medications were administered. Patient was recessed to bed at 10:30pm.

4.1.4 Fourth Day of Admission **(26th November, 2021)**

I went to continue the nursing care rendered to patient at 7:30am. Report from night nurses indicated that patient was able to sleep well. His morning vitals had already been checked and recorded at 6:00am as;

Temperature	36.0^0C
Pulse	91bpm
Respiration	18cpm
Blood Pressure	114/70mmHg

Due medications were administered at 6am. Patient had porridge with bread at 8:10am, during the ward routine rounds, treatment was to be continued.

At 9:00am, an evaluation of the objective to help patient have an uninterrupted sleep for 6-8 hours during the night within 48 hours was done and goal was fully met as patient verbalized that he was able to sleep soundly in the night without any interruption and nurse observed that patient slept uninterruptedly for 6 hours in the night.

At 9:30am, patient was engaged in an interaction and it was realized that patient had less knowledge on Peptic Ulcer Disease. The nursing diagnosis formulated was deficient knowledge related to inadequate information on about causes, management and prevention of the condition. An objective was set to help patient and family gain adequate knowledge on peptic ulcer disease within 24 hours. Interventions carried out were; patient and relative knowledge about bleeding peptic ulcer was assessed, patient and relatives were educated in a language clearly to their understanding, patient and relatives were educated about the condition, patient asked about some of the risk factors of the condition and he was answered clearly, management and prevention of the disease was communicated to patient.

At 2:00pm, vital signs were checked and recorded as shown in the appendix and due medications were administered. At 6:00pm vital signs were checked and recorded as indicated in the appendix. Patient had rice-ball and groundnut soup for supper. At 10:00pm, her vital signs were checked and due medications were served. Patient slept around 10:35pm.

4.1.5 Fifth Day of Admission **(27th November, 2021)**

I went to continue the nursing care rendered to my patient at 7:00am. Patient woke up feeling strong and better. His vital signs checked and recorded at 6:00am reads as follows:

Temperature	36.7^0C
Pulse	65bpm
Respiration	18cpm
Blood Pressure	110/70mmHg

The report from the night nurse read that patient had a sound sleep at night. His personal hygiene was maintained.

At 7:40am, an evaluation of the objective to increase patient's tolerance for activity within 72 hours was done and goal was fully met as patient verbalized a decrease in weakness and fatigue and nurse observed that patient perform self-care and other activities without assistance.

Patient took Hausa porridge with some bread as breakfast and his medications were served as ordered.

At 8:00am, an evaluation of the objective to restore his nutritional status within 48 hours was done and goal was fully met as patient verbalized that he has gained appetite and can now eat greater part of the meal served and nurse observing patient consumes more than half of his meals served. During ward rounds that morning, Mr. A.A and the relatives were informed of a possible discharge the following day.

At 9:30am, an evaluation of the objective to help patient and relatives gain knowledge on peptic ulcer was done and goal was fully met as patient and relatives were able to mention some of the predisposing factors of peptic ulcer and nurse observing patient and relatives give correct answers on questions posed on peptic ulcer.

Patient had his lunch at 1:40pm which was rice and bean stew. At 2:00pm, his vital signs were checked and recorded as in appendix. Due medications were served.

In the evening at 6:00pm his vital signs were checked and recorded as in the appendix. Patient was served with TZ and Suri, he was able to eat all the food served. Patient went to bed at 8:50pm.

4.1.6 Day of Discharge/Sixth Day of Admission **(28th November, 2021)**

I went to continue the nursing care rendered to my patient at 7:00am. Patient woke up feeling strong and better. His vital signs checked and recorded at 6:00am reads as follows:

Temperature	36.2^0C
Pulse	68bpm
Respiration	18cpm
Blood Pressure	109/69mmHg

The report from the night nurse read that patient had a sound sleep at night. His personal hygiene was maintained.

Patient took porridge with some bread as breakfast and his medications were served as ordered.

During routine ward rounds, patient was asked to be discharged since his condition was better. His relatives were informed. An amount of seventy-five Ghana Cedis for medications which was not covered by National Health Insurance Scheme was paid. Patient was educated on the need to eat food containing high fiber like whole grains, the entire essential food nutrients, for example protein, vitamins and irons, as well as maintaining good personal hygiene.

Patient was informed to come for review on 6th December, 2021 at the main Out Patient Department. The need to continue with medications was emphasized and review date was stretched on. Patient and his relatives bid the ward inmates and staff goodbye. I accompanied them to the hospital entrance and bid them goodbye and also informed them that I will be coming to their house to check on him. They boarded a tricycle to their home.

4.2 Preparation of Patient and Family towards Discharge and Rehabilitation

Patient's preparation towards discharge started on the day of admission which was 23rd November, 2021. Education on the causes, signs and symptoms, complication, prevention of the disease and the need to report to the hospital early when sick was given to client and relatives. This was done to ensure that care could also be given to patient in the house. Patient was educated not to engage in strenuous exercise, have enough rest and have a well-balanced diet which should be spice free. Mr. A.A was also educated not to take over the counter drugs. Patient was finally discharged on 28th November, 2021 and was asked to come for review on the 6th December, 2021. Patient belongings were packed and I accompanied them to the entrance of the hospital where they boarded a tricycle to their home.

4.3 Follow Up/ Home Visit/ Continuity of Care

Home visiting is a long-established means of helping families cope with changes in their lives. This is carefully planned especially with first visits as it can facilitate relationship, build and assist nurses to demonstrate their contributions that can make in helping families to deal with their current health needs. This can be done whiles patient is still on admission and after discharge of patient.

4.3.1 First Home Visit (24th November, 2021).

My first home visit was made on the 24th November, 2021 while patient was on admission. A planned visit was made from St. Theresa's Hospital, Nkoranza to Old Zongo where patient resides. The purpose of this visit was to know patient's residence and the environment in which he 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 his condition and also to identify any nearest health facility at the area. Patient and his relatives were informed about my intention to visit their home whiles he was still on admission. Mr. A.A's nephew decided that, he will go with me to their house. We left St.

Theresa's Hospital, Nkoranza around 2:50pm and alighted at Old Zongo around at exactly 3:00pm, the tricycle fare I paid was GH¢ 2.00. On arrival to the house, I was offered a seat after I greeted them and introduction was made to patient relatives. Patient relatives were pleased with the visit. It was noticed that the house was clean, patient relatives were cooking at the center of the house and fowls walking by. Mr. A.A and his family lived in a five-bedroom house built with concrete blocks, not painted and roofed with aluminum roofing sheets. In front of the house, there is a kitchen and they had their bathroom and toilet at the back of the house. They have electricity and pipe water at the center of the house. The drainage system in the house was very good. The family members present were applauded for keeping their home environment clean. On observation refuse made in the house were kept in a dustbin and later disposed off in a well-covered dustbin provided by Zoomlion Domestic Waste Limited and emptied regularly. Upon further inspection of the house, ventilation in the house was adequate but whenever they needed to supplement, ceiling and standing fans were available to compensate for the natural ventilation. No identifiable factor to patient's condition was made during the visit but then, there was an uncovered water being used for the cooking, and so I educated them on the need to keep the water clean to prevent any illness. Patient relatives thanked me and assured me that they will ensure that all what I said will be done before I come for my next home visit. I left the house around 4:05pm. Comments made on the condition of the house, education and recommendations were reported to Mr. A.A and he also promised to do everything in his power to ensure that all the recommendations are done. I identified on the first home visit that patient's house was not very far from St. Theresa's Hospital Nkoranza, for this reason I informed a community health nurse about handing over the patient to her.

4.3.2 Second Home Visit (1st December, 2021)

A second visit was made on 1st December, 2021. It was to assess patient's health status, offer necessary education and remind him of the review date. I arrived at patient's house exactly 9:35am on Wednesday. On observation it was noticed that Mr. A.A looked cheerful and happy. I asked about his health and he claimed he was doing very well. I inquired from his wife if he has been taking his drugs and madam A.A confirmed that patient has been taking his drugs as prescribed. Emphasis was made on the need for enough rest and sleep and also the need to avoid spicy foods. Avoidance of alcohol, stress management and regular intake of food was emphasized. Food substances rich in iron such as red meat, liver, groundnut, kidney, heart, legume, cereals and green leafy vegetables were discussed with patient and the need to include them in his diet was emphasized. I prepared patient and family psychologically towards the intended handing over to the community health nurse for continuity of care during my next visit. Patient and family were thankful for my visit and they were also reminded of the review date which was 6th December, 2021. I bade patient and his family fare well and left there around 2:17pm.

4.3.3 Review (6th December, 2021)

On 6th December, 2021, at 10:00am, Mr. A.A and his wife were met at the Out-Patient Department of St. Theresa's Hospital Nkoranza. He was seen at consulting room 5. Vital signs checked and recorded are as follows;

1. Temperature 36.6 degree Celsius
2. Pulse 77 beats per minute
3. Respiration 18 cycles per minute
4. Blood pressure 110/60 millimeter of mercury.

At the consulting room, Mr. A.A gave no complains. But he was given the following medications to prevent exacerbation of Peptic Ulcer;

1. Tablet Omeprazole 20mg bd x 5days
2. Syrup Nugel O 15mls bd x 5days
3. Iron III Polymaltose 15ml x 5days
4. Tablet Paracetamol 1g tid x 5days

Mr. A.A was educated to eat foods rich in iron, vitamins and proteins such as green leafy vegetables, beans, eggs, palm oil etc. Mr. A.A and his wife finally left the hospital around 1:40pm in the afternoon.

4.3.4 Third Home Visit (11th December, 2021)

I embarked on my last home visit on Saturday 11th December, 2021 with the aim of terminating care. Patient and family were doing very well when I visited them and they were once again happy to see me. Madam O.H, a community health nurse accompanied me for the visit. Since I had already informed them about the handing over of the patient to the community health nurse a quick introduction was made, though it was a difficult task ending the interactions with them, but measures were put in place as they were made aware that the interaction has officially ended but will always be at their service whenever the need arises. Mr. A.A's family were very delighted to meet Madam O.H. On direct questioning Mr. A.A gave no complaint. He looked very healthy. Patient and family were advised to visit the hospital anytime any of them fell ill. The community health nurse (Madam O.H) was introduced to them for the continuity of care and they were very thankful.

Patient and family were thanked for their co-operation throughout my study and this ended our interaction. I bade them farewell and patient and family members gave me a handshake as a sign of gratitude and I left the house around 2:15pm.

CHAPTER FIVE

EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY

5.0 Introduction

This is the final phase of the nursing process. It is directed towards determining the patient's nursing intervention and the extent to which the goal set have been achieved. This chapter involves the following; statement of evaluation, amendments of nursing care plan for partially met and unmet outcome criteria and termination of care.

5.1 Statement of Evaluation

Patient was admitted on the 23rd of November, 2021 at exactly 1:00pm. He was diagnosed of acute exacerbation of Peptic Ulcer Disease. He was nursed using the nursing process approach as a guide. A lot of problems were identified, goals were set and interventions employed to solve them. The outcomes of the goals set for the problems identified are below:

5.1.1 Mr. A.A was Relieved of Acute Pain (24th November, 2021)

On 23rd November, 2021 at 1:30pm, nursing assessment was conducted to validate epigastric pain presented by Mr. A.A on admission. On the numerical rating scale of 0 to 10, Mr. A.A chose 7 as his pain intensity. Quickly a nursing diagnosis of acute pain related to the effect of gastric acid secretion on damaged tissue was formulated. An objective was set to relieve him of abdominal pain within 24 hours. Nursing interventions rendered were; Patient was reassured that he is in the hands of competent staff, patient's level of pain was assessed using the numerical rating scale and he pointed out 7 as his intensity of pain, comfortable bed free from creases and cramps was made for the patient, patient was allowed to watch television to divert his attention from the pain, prescribed medications such as omeprazole was served, patient level of pain was reassessed to identify therapeutic effect of drugs given.

On the 24th November, 2021 at 1:30pm, goal was fully met as patient verbalized the absence of pain in the abdomen and nurse observed that patient had a cheerful facial expression and was relaxed in bed.

5.1.2 Patient and relatives were relieved of anxiety (24th November, 2021)

Upon interacting with patient around 2:10pm on 23rd November, 2021, patient seemed anxious. A nursing diagnosis was formulated 2:10pm as anxiety related to acute disease and unknown outcome of the disease condition. Objectives were set to relieve patient of his anxiety within 24 hours and the following interventions were put in place; Patient and relative were reassured that adequate measures would be put in place to help manage his condition effectively, rapport was established with patient and relatives to allow them to express their feelings, patient and relative were educated on the need for hospitalization, patient's condition was explained to him to gain cooperation, patient and relative were encouraged to ask questions about the condition to relieve them of anxiety.

On 24th November, 2021 at 2:10pm evaluation was conducted and goal was fully met as patient and relatives verbalized that they are no more anxious and nurses observed that patient and family looked cheerful.

5.1.3 Patient Sleeping Pattern was Restored (26th November, 2021)

The night nurses reported that client was not able to sleep well, I interacted with the client and he confirmed it to be true and he indicated that it was as a result of the abdominal pain. So, at 9:00am a nursing diagnosis was formulated as, Insomnia related to abdominal pain. An objective was set to help client regain his normal sleeping pattern within 48 hours. Nursing actions implemented are as follows; patient was reassured that measures will be put in place to help him, a comfortable bed free from creases and cramps was made for the patient, patient's level of pain was assessed using the numerical rating scale and he pointed out 7 as his intensity of pain, patient was assisted to

assume the left lateral position which relieve him of pain, volume of radio was lowered and television set was turned off to create a noise free environment for patient, prescribed medications such as buscopan was served.

On 26th November, 2021 at 9:00am an evaluation was made and goal was fully met as patient verbalized that he was able to sleep soundly in the night without any interruption and nurse observed that patient slept uninterruptedly for 6 hours in the night.

5.1.4 Patient demonstrated an increase tolerance for activities (27th November, 2021)

At 7:40am on 24th November, 2021, I interacted with the client and he complained of feeling weak hence a nursing diagnosis of impaired physical mobility related to general body weakness was formulated. Objectives were set to demonstrate a normal mobility within 72 hours. The following nursing actions were implemented to help the patient: Patient was reassured that he is in the hands of competent staff , patient was assisted to perform passive exercise in bed such as turning side to side, patient was assisted to perform activities of daily living such as bathing, patient was given a well- nutritious diet containing protein, carbohydrates, vegetables, fiber and roughages such as palava sauce stew with rice and yam, prescribed iron supplement such as syrup Iron III Polymaltose was served and recorded.

On 27th November, 2021 at 7:40am, goal was fully met as patient verbalized a decrease in weakness and fatigue and nurse observed that patient perform self-care and other activities without assistance.

5.1.5 Patient nutritional status was restored (27th November, 2021)

On 25th November, 2021. Patient was served with Milo with bread for breakfast, she was able to consume just one-third of the Milo. Based on my observation, I conducted a nursing assessment on the patient and it was realized that client had lost appetite.

At 8:00am a nursing diagnosis was formulated as, altered nutritional pattern (less than body requirements) related to anorexia. An objective was set to regain his normal nutritional pattern (good appetite) within 48 hours. The following nursing actions were implemented; Patient was reassured that all things possible will be done to improve appetite, patient was assisted to perform mouth care at least twice daily by using tooth paste and brush, patient food was served in an attractive manner, patient food was served in bits and at regular interval, dietician explained to patient on the need to take nutritious diet, prescribed medication such as Syrup Zincovit was served.

On 27th November, 2021 at 8:00am goal was fully met as patient verbalized that he has gained appetite and can now eat greater part of the meal served and nurse observing patient consumes more than half of his meals served.

5.1.6 Patient and relatives demonstrated adequate knowledge regarding peptic ulcer. (27th November, 2021)

At 9:30am on 26th November, 2021, patient was engaged in an interaction and it was realized that patient had less knowledge on Peptic Ulcer Disease. The nursing diagnosis formulated was deficient knowledge related to inadequate information on about causes, management and prevention of the condition. An objective was set to help patient and family gain adequate knowledge on peptic ulcer disease within 24 hours. Interventions carried out were; patient and relative knowledge about bleeding peptic ulcer was assessed, patient and relatives were educated in a language clearly to their understanding, patient and relatives were educated about the condition, patient asked about some of the risk factors of the condition and he was answered clearly, management and prevention of the disease was communicated to patient.

On 27th November, 2021 at 9:30am, goal was fully met as patient and relatives were able to mention some of the predisposing factors of peptic ulcer and also giving correct answers on questions posed on peptic ulcer.

5.2 Amendment of the Nursing Care Plan

Mr. A.A presented with six health problems during his period of hospitalization such as abdominal pain, anxiety, weakness, insomnia, loss of appetite, and inadequate knowledge. Objectives were set to relieve patient/family of their health problems. Effective nursing interventions were instituted with the aim of achieving the objective that has been set. All the goals were fully met within the stated time without any complications and hence there was no need for amendment

5.3 Termination of Care

After every nurse-patient relationship, there must be termination. It is a very difficult step to take after a good relationship has been established. The patient and relatives were told that the relationship was temporal and that they will be discharged to go home when condition improved. For this reason, the patient and family were made aware on the day of admission that he will still be under the care of a Community Health Nurse after they are discharged. They were reassured that a Community Health Nurse is going to care for their health needs and anything they need to know about their health. Therefore, on my last home visit I spelt out to them that the interaction was ending that day, which was Saturday 11th December, 2021. I stressed on the need to adhere to the education given to them during the period of hospitalization and the need to report early signs and symptoms of illness for prompt treatment. I explained to them that I was terminating my care officially but would visit them unofficially. I handed him over to a community health nurse Madam O.H to continue the care. Patient and family showed appreciation for my service and I was also very grateful to them, I then thanked them for their co-operation and assistance.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Introduction

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

6.1 Summary

On the 23rd November, 2021 at about 1:00pm, Mr. A.A. was admitted to the Male Medical ward of the St. Theresa's Hospital, Nkoranza through the Out Patient Department per ambulatory with the help of two relatives with the diagnose of acute exacerbation of peptic ulcer. On observation, he complained of heartburns, general body weakness, epigastric pain, vomiting, headache, loss of appetite and slight epigastric tenderness. Laboratory investigations such as full blood count, blood film for malaria parasite and H. pylori test were carried out. Routine cares such as personal hygiene, monitoring of vital signs and administration of drugs were carried out successfully.

During the period of admission, Mr. A.A was put on both oral and intravenous medications such as Intravenous Omeprazole, Intravenous Amoxiclav, Syrup Iron III Polymaltose, Syrup Nugel 'O' and others. Six (6) health problems were identified of which nursing diagnosis, objectives and interventions were made for all these problems. During discharge all the objectives were achieved.

The health problems identified were epigastric pain, anxiety, weakness, altered sleeping pattern, poor dietary intake and knowledge deficit on condition.

Some of the nursing interventions carried out were reassurance, monitoring, adequate ventilation, thorough education on the disease condition, introduction of patient and family to patients with similar conditions who were doing well and drugs administration which includes, intravenous fluids, Proton Pump Inhibitors and Iron Supplements etc. as prescribed by the physician. The discharge planning started from the day of admission till the actual day of discharge on 28th November, 2021.

Three home visits were made thus on 24th November, 2021, 1st December, 2021 and 11th December, 2021 respectively to the patient and family to know the situation of the home environment and identify any problems which would be harmful to health. Health education was given on the problems identified in the house to help prevent the contracting of certain preventable diseases. The care of patient and his family was terminated on the 11th December, 2021 during the third home visit after review when Mr. A.A was very well and was subsequently handed over to the Community Health Nurse for continuity of care.

6.2 Conclusion/Recommendation

This study has impacted me greatly through the understanding of peptic ulcer disease and not barely this condition alone, but it has broadened my concept on other disease conditions and steps in halting them. This study has also enabled me put into practice all that I have learnt during my training as a nursing student. It has also enabled me understand a family's attitude towards illness and behaviors of individuals when they fall sick.

I hope and believe that the additional knowledge and experience I have acquired while nursing Mr. A.A and his family would help me offer expert and comprehensive nursing care to other patients in the health setting and community as a whole.

Also, it is my recommendation that all students should be given the opportunity to embark on the patient/family care study so as to implement the nursing process in order to render individualized comprehensive care to patients/families.

In conclusion, I recommend that all patients should be given individualized, holistic, comprehensive and competent nursing care to help decrease re-occurrences of diseases in our hospitals as well as reducing mortality rate in our various communities.

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Patient folder number is 015088-13.

APPENDIX

Table 6. 2: Vital Signs of Mr. A.A

Date	Time	Temperature (ºC)	Pulse (Bpm)	Respiration (Cpm)	Blood pressure (mmHg)
23/11/21	2:00pm	36.6	100	26	100/80
	6:00pm	36.2	96	21	100/60
	10:00pm	36.1	100	23	120/90
24/11/21	6:00am	36.3	87	19	129/69
	10:00am	36.3	83	18	110/60
	2:00pm	36.2	91	19	120/80
	6:00pm	36.5	79	18	120/60
	10:00pm	36.7	86	19	120/70
25/11/21	6:00am	36.4	87	20	103/62
	10:00am	36.6	83	19	110/60
	2:00pm	36.4	95	21	100/60
	6:00pm	36.5	88	19	100/50
	10:00pm	36.6	95	20	120/60
26/11/21	6:00am	36.0	91	18	114/70
	10:00am	36.5	88	19	120/70
	2:00pm	36.3	84	20	129/80
	6:00pm	36.1	76	18	100/60
	10:00pm	36.0	84	22	120/70
27/11/21	6:00am	36.2	82	19	110/70
	10:00am	36.5	88	19	120/80
	2:00pm	36.6	87	18	120/80

	6:00pm	36.3	80	20	120/70
	10:00pm	36.2	82	18	100/70
28/11/21	6:00am	36.2	68	18	109/69

SIGNATORIES

1. THE STUDENT NURSE

Name: CAMPION LIMUUB COLLINS

Signature:.....

Date: 04/10/2022

2. THE NURSE-IN-CHARGE OF THE MALE MEDICAL WARD (ST. THERESA'S HOSPITAL, NKORANZA)

Name: Mr. NKETIAH STEPHEN

Signature:.....

Date: 04/10/2022

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

Name: Ms. RITA AGYEI BOAKYE

Signature:.....

Date: 05/10/2022

4. THE PRINCIPAL, HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM.

Name: MONICA NKRUMAH

Signature:.....

Date: 05/10/2022

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