

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

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

**PEPTIC ULCER DISEASE**

**BY**

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

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## **PREFACE**

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

The patient/family care study forms part of the assessment of the student nurse to qualify him/her for the award of a license to practice as a nurse in Ghana. It also enables, the student nurse put into practice all the knowledge and skills acquired during the three years training to give a comprehensive nursing care to selected client using the nursing process approach. The patient/family care study gives the vivid account of the actual nursing care that was given to the patient/family from the day of admission through discharge, home visit, and review to termination of care based on the patient's health problems identified. The confidentiality, privacy, and anonymity of the patient and family were ensured by the use of patient/family initials instead of their full names.

## **ACKNOWLEDEMENT**

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## INTRODUCTION

The patient and family care study is an aspect of nursing which deals with the comprehensive nursing care of patient and family from the day of admission to the termination of care.

The study was written on Madam A.A.G who was admitted to the females' ward of Sunyani Municipal Hospital on the 5<sup>th</sup> of December, 2022, with diagnosis of Peptic Ulcer Disease. Effective nursing interventions were rendered to her during admission, discharge, and during follow up visits. An interaction with patient and family was terminated on the 20<sup>th</sup> of December, 2022 during my last home visit.

The study has been grouped into six (6) chapters;

Chapter one gives information on the assessment made on the patient and her family, it involves client's particulars, developmental history, past and presents medical history, hobbies and lifestyle, family medical and socio-economic history and literature review.

Chapter two gives the reader an insight into the pharmacology of drugs used to treat patient and the comparison of laboratory investigation conducted on Madam A.A.G. with standard. Also, it gives a brief outline of the comparison made on the signs and symptoms presented by patient in relation to those in the literature review as well as the health problems.

However, chapter three discuss the actual nursing care rendered to relieve client of his problems encountered during hospitalization.

Chapter four gives a summary of nursing care implementation and preparation of patient for discharge to ensure continuity of care.

Chapter five involves evaluation of the care rendered together with any amendments on unmet goals during the care and how the client and family were prepared towards termination of nursing care.

Furthermore, chapter six marks the end of the patient/family care study where all information collected from patient/family and the care rendered are summarized.

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## **CHAPTER ONE**

### **ASSESSMENT OF PATIENT AND FAMILY**

#### **1.0 Introduction**

Assessment is the gathering of information about the patient's health status, analysis and synthesis of the data and the making of a clinical nursing judgment (Weller, 2014)

Assessment can be done through observations, physical examination, interviewing and investigations such as laboratory results, x-ray reports of the patient. It includes the patient's particulars, patient/family medical and surgical history, patient's socioeconomic history, patient's developmental history, patient's lifestyle and hobbies, patient past medical and surgical history, patient present medical and surgical history. It also includes admission of patient, patient and family concept of her illness, literature review on the condition from which analyses will be made identify the patient problems and validation of data. These help the nurse to determine the health status of patient and her family in order to plan an effective nursing care towards recovery. All information was gathered from patient and her relatives and information on the Hospital Administration Management System (HAMS).

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

Patient is a person who is ill or is undergoing treatment for a disease (Miller-Keane, 2020). The name of the patient is Madam. A.A.G. She is a 21years old young lady, born on the 4<sup>th</sup> of February, 2001 to Mr. A.P and Mrs. A.M. She comes from Bolga in the northern region of Ghana and resides currently at Penkwase, Sunyani. She is dark in complexion, 1.4m tall and weighs 58kg. Madam A.A.G. is a Christian who worships with Roman Catholic Church in Sunyani. .She is the second born of four children. Her next of kin is her mother Mrs. A.M. who resides at the same place as the patient. Madam A.A.G is a student. She completed Ayopia Jnr High School in Bolga. She is yet to attend to Snr. High School. She speaks only Frafra, Twi and english. Madam A.A.G is a National Health Insurance beneficiary. She has no physical impairment or disabilities.

#### **1.2 Family's Medical/Surgical History**

Health history is a holistic assessment of all factors affecting a patient's health status, it is designed to assess the effects of health care deviations on the patient and family, to evaluate teaching needs, and to serve as the basis of an individualized plan for addressing wellness

(Miller-Keane, 2020), and According to Madam A.A.G, her mother and father are alive and healthy. She said, her mother is a farmer and her father was a doctor but now on pension. There is no identified hereditary disorder like asthma, sickle cell, epilepsy, diabetes, neither mellitus nor any mental disorder in the family. relatives present during her history taking said that, they periodically, do suffer some ailments like headache and fever which they treat by self-medication (by using both over-the-counter medications and traditional medicines) but if symptoms persist, they report to the hospital. Patient and family were educated on the effects of the use of over-the-counter medications based on the information they gave and were urged to seek medical attention from any health center when suffering from any condition. The source of medical treatment for Madam A.A.G and family are both orthodox and herbal medicine.

### **1.3 Family Socio-economical History**

The economic and sociological history combined total measure of a person's work experience of an individuals or family's economic and social position in relation to others. Examination of socio-economic status often reveals inequities in access to resources, plus issues related to privilege, power and control (Dusbinarg, 2017).Madam A.A.G. has a very good relationship and cohesion with her family. Family members are willing to support each other in times of financial hardships despite the low economic status of most family members. She said most of her family members are civil servants. Madam A.A.G depends much on her family for financial support. Family members are known for their kindness and generosity despite their economic status. They also involve themselves in religious activities, family members attend different churches. She said all of her family members depend on the National Health Insurance Scheme (NHIS) for medical care. There are no taboos governing the family.

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

Development is the process of growth and differentiation; it comprises the cognitive, psychosexual and psychosocial development. Growth is the progressive development of living thing, especially the process by which the body reaches its point of complete physical development. Maturation is the process of developing (Weller, 2014). The developmental history of Madam A.A.G. was given herself as told to her by her mother. Her mother went through the normal pregnancy of nine months' gestation without any pregnancy associated disorders and had

spontaneous vaginal delivery with assistance of the staff at Sunyani Regional Hospital. She was born without any congenital abnormalities and was immunized against the childhood vaccine preventable diseases as evidenced by Bacilli Calmette Guerin (BCG) scar on her right deltoid muscle.

Madam A.A.G was breastfed for one year and was introduced to complementary foods. She went through a normal development milestone. These includes sitting up at the 7<sup>th</sup> month, crawling at the 10<sup>th</sup> month and started walking at the 15<sup>th</sup> month. Madam A.A.G around the age of thirteen begun to experience secondary sexual characteristics such as development of breast, broadening of hips, growing of pubic hair and had her menarche around that same age. She started her basic education at Ayopia primary school at Bolga.

Erikson's theory of psychosocial development in 1964 describes the human life cycle as a series of eight egos developmental stage from birth to death. Each stage is characterized by a distinct conflict, or crisis, relating to the person's physiologic maturation and to what society expects of a person at that age and it includes;

1. Trust versus mistrust (Birth to 18 months); the first stage in the theory that centers on the infant's basic need being met by the parents and this interaction leading to trust or mistrust.
2. Autonomy versus shame and doubt (18 months to 3years); here the child begins to gain control over eliminative functions and motor abilities and begin to explore their surroundings. The parent patience and encouragement help foster autonomy in the child while highly restrictive parents are more likely to instill a sense of doubt and reluctance to accept new challenges.
3. Initiative versus guilt (3 to 6 years); at this stage the child wants to begin and complete their own actions for a purpose. They may feel guilt when this initiative does not produce desired results.
4. Industry versus inferiority (6 to 12 years); through social interactions children begin to develop a sense of pride in their accomplishments and abilities. If children are encouraged to make and do things and are praised for their accomplishment, they begin to demonstrate industry by being diligent, preserving at task until completed and putting work before pleasure. If instead

child is ridiculed or punished for their efforts or if they are found incapable of meeting the expectations of their parents and teachers, they develop feelings of inferiority.

5. Identity versus role confusion (12 to 20 years) where the adolescent explores their independence and develop a sense of personal identity. Most adolescents achieve a sense of identity regarding who they are and where their lives are headed and are confronted by the need to re-establish boundaries for themselves and to do this often in a potentially hostile world.

6. Intimacy versus Isolation (20 to 35 years); young adults are still eager to blend their identity with friends and explore personal relationships because they want to fit in. Those who are successful at this stage will have the ability to love and have a committed and secured relationship.

7. Generativity versus Stagnation (35 to 65); the middle adult is concerned with guiding the next generation. When a person makes a contribution during this period, perhaps by raising a family or working toward the betterment of society, sense of generativity; a sense of productivity and accomplishment results. In contrast, a person who is self-centered and unable or unwilling to help society move forward develops a feeling of stagnation.

8. Integrity versus Despair (65 to death); it is during this time that we contemplate our accomplishments and are able to develop integrity if we see ourselves as leading a successful life. If we see our life as unproductive, or feel that we did not accomplish our goals, we become dissatisfied with life and develop despair, often leading to depression and hopelessness.

In respect to patient's age and psychosocial behavior Madam A.A.G falls under the Intimacy versus Isolation since she is twenty-one years old. At this stage, people tend to seek companionship and love. Some also begin to settle down and start a family. People seek intimacy and satisfying relationship, but if unsuccessful; isolation may occur. Significant relationship at this stage is marital partners and friends. Through an interaction with Madam A.A.G, it was made clear that she has attained intimacy because she is in an intimate relationship with the family. She also said she will get married when the time is due.

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

Lifestyle is the pattern of daily living that an individual develops (Weller, 2014). Madam A.A.G goes to bed round 8pm. She wakes up around 6am pray before she steps out. She maintains her oral hygiene with the use of tooth brush and tooth paste. She then sweeps her compound if it is her turn to sweep as she lives in a compound house, empties her bowel, takes her bath with tepid water and sets out for her school. Madam A.A.G takes in porridge with bread as breakfast. She said, she mostly arrives at her school around 7:00am and closes at 2:00pm. When she gets to the house, she finds something to eat then she prepares food for her family after returning from the school. Around 7:00pm to 7:30pm she brushes her teeth and takes her bath. On Saturdays she washes the clothes of her young children and hers before going to Saturday classes. On Sundays she gets ready for church and after church prepares herself for the following week. Madam A.A.G has no known food or drug allergies. Her favorite food is Tz and ayoyo soup. Madam A.A.G is an introvert, caring and kind. My personal impression of Madam A.A.G is that she is calm.

## **1.6 Patient's Past Medical/Surgical History**

Past medical history according to Farlex (2020) is a comprehensive statement of facts pertaining to past health gathered, ideally from the patient by directed questioning. Madam A.A.G did not experience any childhood illness likes measles, whooping cough, poliomyelitis, tetanus, tuberculosis, and diphtheria and has no allergy to drugs, animals or insects. She said she usually suffers from minor ailments like headache and common cold which she treats with over-the-counter medications, when symptoms become worse, she visits a nearby hospital or clinic. Madam A.A.G said she has not had any accident or injuries. Madam A.A.G has been hospitalized once on account of malaria at Sunyani Regional Hospital.

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

This history refers to the chief complaint, when and how it started, the medical intervention sought and the possible precipitating or exacerbating factors (Gandutre, 2018). On the 3<sup>rd</sup> of December, 2022 patient was performing her daily chores when she started experiencing abdominal pain and fever. She went to a clinic for treatment but the symptoms worsen and she

decided to come to the Accident and Emergency unit of Sunyani Municipal Hospital on the 5<sup>th</sup> of December, 2022 at 7:00am where she was diagnosed with peptic ulcer. She was detained for few hours then admitted to the Females Ward on the same day at 4:00pm.

### **1.8 Admission of Patient**

Admission is allowing a patient to stay in a hospital for over 24hours for observation, treatment and care.(Weller, 2019).

Madam A.A.G was trans-out into the female's ward from the Accident and Emergency unit on 5<sup>th</sup> December, 2022 at 4:00pm in a wheel chair accompanied by a staff nurse, student nurse and a relative. Madam A.A.G had been on detention at the Accident and Emergency unit of Sunyani Municipal Hospital for nine hours with diagnose of Peptic Ulcer Disease with history of burning epigastric pain, chest pain and difficult on assessment. Patient was weak but fully conscious. Being at nurse's station with the shift in charge at time of patient's arrival, I was charged to carry out her admission to the ward. The admission was a planned one. Patient was warmly welcomed to the ward and her identity was verified by mentioning her name and she responding, she was reassured to alley anxiety. She was introduced to the staff on duty, other patients at the ward and was made comfortable in an admission bed. Her vital signs were checked and recorded as;

1. Temperature - 36.2 °C (degrees Celsius)
2. Pulse - 72 beats per minute
3. Respiration - 18 cycles per minute
4. Blood pressure - 120/100 millimeters of mercury

#### **The following diagnostic investigations were done;**

1. Full blood count
2. Helicobacter pylori test
3. Upper GI endoscopy
4. Malaria test card

She was managed on;

1. Intravenous Normal Saline 1L
2. Intravenous Ringers Lactate 1L
3. Intravenous Dextrose Normal Saline 1L
4. Intravenous Paracetamol 1g tid x 24hs
5. Intravenous omeprazole 80mg stat then 40mg bid for 24hrs
6. Suspension Nugal O' 15mls

Physical examination on patient was conducted and no abnormalities seen. At time of admission, assessment revealed that patient had abdominal pain at the epigastric region and suspension Nugal O' 15mls was given to reduce the pain. After pain subsides, patient was oriented to the ward and its annexes, Hospital protocol regarding visiting hours, time for checking vital signs were explained to patient. Physical examination on patient was conducted and no abnormalities seen. Patient's particulars were entered into the admission and discharge book and the daily ward state. I reintroduced myself to her as a final year student Holy Family Nursing and Midwifery Training College, Berekum and as a requirement by the Nursing and Midwifery Council of Ghana that I had to fulfill as a partial fulfillment towards the award of License to Practice as a Professional Registered General Nurse in the country. As part of the requirement, I am to take a patient and condition and then take care of the patient and family throughout their admission. And also visit their home during admission and after discharge. I explained that I would like to take her and her family for my case study, I explained to her and her family the concept of the study and reassured them of privacy and confidentiality. Madam A.A.G and her family agreed and said they are willing to give me the necessary information and assistance needed in the study. I thanked them and expressed my sincere gratitude to them. Discharge planning was initiated with the relative, thus, they will continue the care at home once she is well. I chose her because I wanted to know more about Peptic ulcer disease.

With patient's complains nursing diagnosis was formulated as follows;

1. Acute pain related to ulceration of the gastric mucosa as evidenced by pain at the left upper quadrant.
2. Deficient knowledge related to inadequate information on peptic ulcer disease as evidenced by inadequate knowledge on causes of peptic ulcer disease (PUD).

Patient's medications and IV fluids were served and she was made comfortable in bed around 10:30 pm.

### **1.9 Patient's Concept of Illness**

This entails the understanding retained in the mind, from experience, reasoning or imagination about patient illness (Pack, 2013). Madam A.A.G did not attribute her illness to any spiritual cause in spite of her spiritual believes as a Christian. She does not know the exact cause of her condition. Patient verbalized with doubt that her condition probably has a link with prolonged starvation. Patient believes that the treatment planned for her, in the hospital, will help treat her illness and prevent any complications.

### **1.10 Literature Review**

According to Hinkle and cheever (2018), Peptic Ulcer Disease is an excavation formed 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 instestine), or in the esophagus.This section deals with documented information about Madam A.A.G's diagnosis that is Peptic Ulcer Disease. Literature review of a condition gives a detailed insight into the condition. It talks about the established and laid down facts about the disease condition, which aids in the medical and nursing diagnoses and the appropriate management for that particular disease. It also entails the standard with which the patient's clinical manifestations, diagnostic investigations, treatment and others are compared. It comprises of the following:

1. Definition of peptic ulcer disease
2. Incidence of peptic ulcer disease
3. Aetiology/Causes of peptic ulcer disease
4. Types of peptic ulcer disease
5. Pathophysiology of peptic ulcer disease
6. Clinical features of peptic ulcer disease
7. Diagnostic investigations of peptic ulcer disease
8. Medical management of peptic ulcer disease

9. Nursing management of peptic ulcer disease
10. Prevention of peptic ulcer disease
11. Complications of peptic ulcer disease

## **Review of Anatomy and Physiology of the Gastro-Intestinal Tract (GIT)**

According to Hinkle and Cheever (2014), the GI tract is a pathway 7 to 7.9 meters (23 to 26 feet) in length that extends from the mouth to the esophagus, stomach, small and large intestines, and rectum, to the terminal structure, the anus.

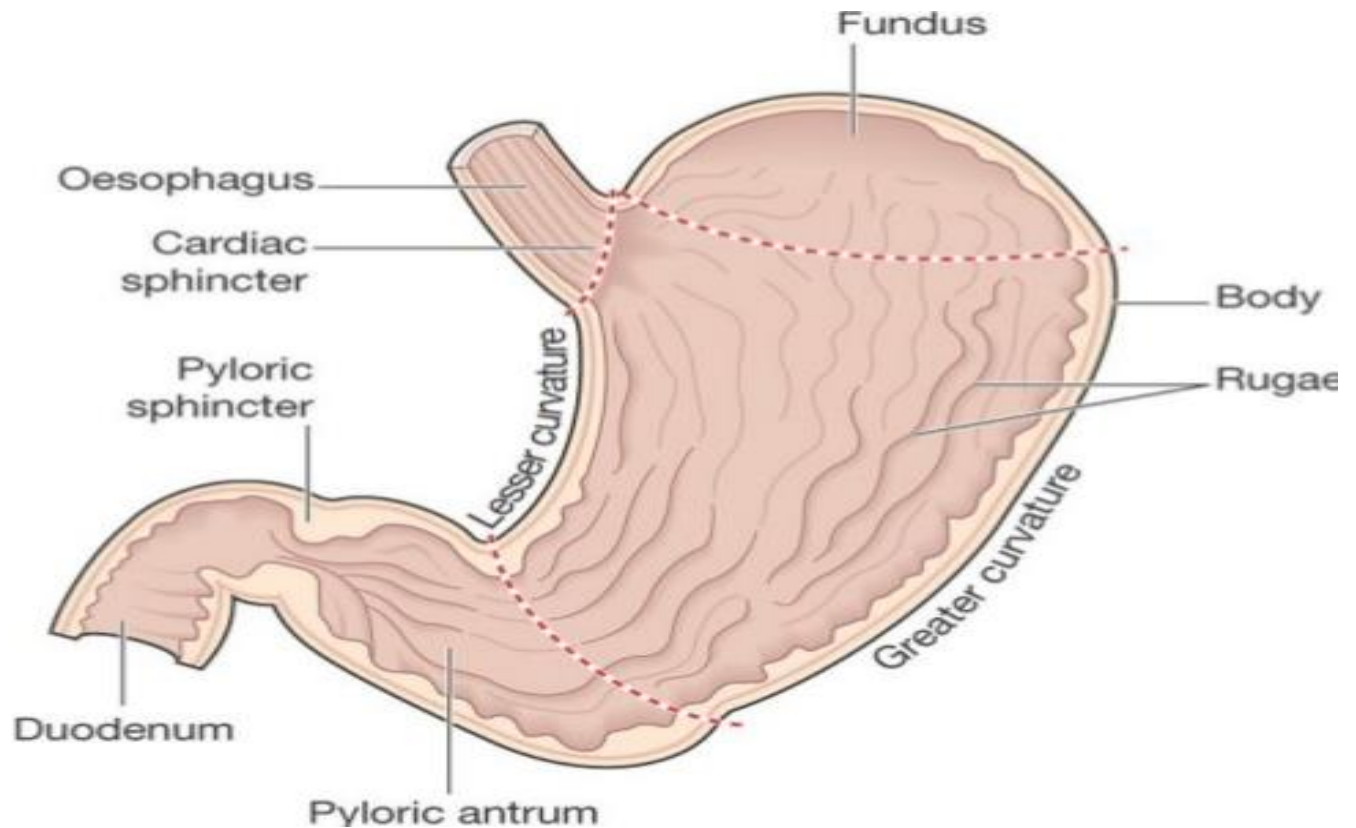
### **The Esophagus**

According to Waugh and Grant (2014), the esophagus is 25cm long and about 2cm in diameter and lies in the median plane in the thorax in front of the vertebral column behind the trachea and the heart. It continues with the pharynx above and below the diaphragm it joins the stomach. Once food has been chewed and mixed with saliva in the mouth, it is swallowed and passed down the esophagus. The esophagus has a stratified squamous epithelial lining which protects the esophagus from trauma; the sub mucosa secretes mucus from mucous glands which aid the passage of food down the esophagus. The lumen of the esophagus is surrounded by layers of muscle- voluntary in the top third, progressing to involuntary in the bottom third and food is propelled into the stomach by waves of peristalsis.

### **The Stomach**

The stomach is situated in the left upper portion of the abdomen under the left lobe of the liver and the diaphragm, overlaying most of the pancreas. A hollow muscular organ with a capacity of 1,500 ml, the stores food during eating, secretes digestive fluids and propels food or chime, into the small intestine (Hinkle & Cheever, 2014). The stomach is a 'j'-shaped organ, with two openings-the esophageal and the duodenal- and 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 (Tortora & Derrickson, 2009).According to Wagh and Grant (2014), 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.



**Source:** (Wagh & Grant, 2014). **figure 1: Diagram of the stomach**

### **Functions of the Stomach**

As specified in Tortora and Derrickson (2009) the stomach performs the following functions:

1. Mixes saliva, food, and gastric juice to form chyme.
2. Serves as a reservoir for food before release into small intestine.
3. Secretes gastric juice, which contains HCl (kills bacteria and denatures protein), pepsin (begins the digestion of proteins), intrinsic factor (aids absorption of vitamin B12), and gastric lipase (aids digestion of triglycerides).
4. Secretes gastrin into blood.

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

1. Parietal cells which secrete hydrochloric acid.
2. Chief cells which secrete pepsin.
3. Entero-endocrine cells which secrete regulatory hormones (Tortora & Derrickson, 2009).

### **The Small Intestine**

According to Wagh and Grant (2014), the small intestine is the site where most of the chemical and mechanical digestion is carried out, and where virtually all of the absorption of use full materials is carried out. The whole of the small intestine is lined with an absorptive mucosal type, with certain modifications for each section. The intestine also has a smooth muscle wall with two layers of muscle rhythmical contractions force products of digestion through the intestine (peristalsis).

### **The Duodenum**

It forms a 'C' shape around the head of the pancreas. Its main function is to neutralize the acidic gastric contents called 'chyme' and to initiate further digestion; Brunner's glands in the submucosa secrete alkaline mucus which neutralizes the chime and protects the surface of the duodenum (Wagh & Grant, 2014).

### **Definition**

A peptic ulcer is an evacuation (hollowed-out area) that forms in the mucosal wall of the stomach, the pylorus (the opening between the stomach and duodenum), in the duodenum (the first part of the small intestine), or in the oesophagus (Hinkle & Cheever, 2014). As specified in Kumar and Clark (2017), Peptic ulcer consists of a break in the superficial epithelial cells penetrating down to the muscularis mucosa; there is a fibrous increase in inflammatory cells. Walker and Whittlesea (2012) also shared similar view; the term *peptic ulcer* describes a condition in which there is a discontinuity in the entire thickness of the gastric or duodenal mucosa that persists as a result of acid and pepsin in the gastric juice.

## **Incidence**

Peptic ulcer disease occurs with the greatest frequency in people between 40 and 60 years of age. It is relatively uncommon in women of childbearing age, but it has been observed in children and even in infants. After menopause, the incidence of peptic ulcers in women is almost equal to that in men. Peptic ulcers in the body of the stomach can occur without excessive acid secretion. In the past, stress and anxiety were thought to be causes of ulcers, but research has documented that peptic ulcer result from infection with the gram-negative bacteria *H. pylori*, which may be acquired through ingestion of food and water. Person-to-person transmission of the bacteria also occurs through close contact and exposure to emesis.

Although *H. pylori* infection is common in the United States, most infected people do not develop ulcers. It is not known why *H. pylori* infection does not cause ulcers in all people, but most likely the predisposition to ulcer formation depends on certain factors, such as the type of *H. pylori* and other as yet unknown factors (Hinkle & Cheever, 2014).

As specified by Kumar and Clark (2017) Duodenal ulcers affect approximately 10% of the adult population and are two to three times more common than gastric ulcers. Ulcer rates are declining rapidly for younger men and increasing for older individuals, particularly women. Both duodenal and gastric ulcers are common in the elderly. There is considerable geographical variation, with peptic ulcer disease being more prevalent in developing countries related to high incidence of *H. pylori* infection. In the developed world, the percentage of NSAID-induced peptic ulcers is increasing as the prevalence of *H. pylori* declines.

## **Aetiology**

The exact mechanism of causation is unknown. Among some of the causes found by researchers are:

1. *Helicobacter pylori*: this organism is a Gram-negative microaerophilic bacterium found primarily in the gastric antrum of the human stomach (Walker & Whittlesea, 2012).
2. Non-steroidal anti-inflammatory drugs (NSAIDs): Treatment with NSAIDs is associated with peptic ulcers due to impairment of mucosal defences as a result of inhibiting cyclooxygenase 2 (Colledge, Penman, Raltston, & Walker, 2014).

3. Zollinger-Ellison Syndrome (ZES): Consists of severe peptic ulcers which involve extreme gastric hyperacidity (Hinkle & Cheever, 2014).

### **Predisposing Factors Include**

1. Trauma: Critical illness, shock or severe tissue injury from extensive burns or intracranial surgery may lead to stress ulcer.
2. Exposure to irritants: Cigarette smoking appears to encourage ulcer formation by inhibiting pancreatic secretion of bicarbonate by a mechanism involving nicotine.
3. Normal Aging: As one grows the pyloric sphincter may wear down in the course which allows the reflux of bile into the stomach. This appears to be a common contributor to the development of gastric ulcers in the elderly persons.
4. Dietary: Certain foods can cause excessive acid production and irritation of the gastric mucosa leading to peptic ulcer. Highly spiced foods, carbonated beverages, beans and fruits such as lemons, oranges etc. are all ulcerogenic.
5. Stress: Researchers consider stress as a possible cause of the development of peptic ulcer. Stress has been demonstrated to cause production of excess stomach acid and *Helicobacter pylori* thrives well in the acidic medium (Hinkle & Cheever, 2014).

### **Types of Peptic Ulcer**

According to Colledge et al., (2014), There are two main types of peptic ulcer:

1. Gastric ulcer: Ulcer that occurs in the stomach.
2. Duodenal ulcer: Ulcer that occurs in the duodenum

These two types can also be present in acute or chronic forms which depend on the degree of mucosal involvement. Chronic ulcers usually involve both the mucosa and sub mucosal linings. Acute ulcers are usually superficial affecting only the mucosal layer. They may bleed and perforate but heals in a relatively short time.

There are two common forms of peptic ulcer disease; those associated with the organism *H. pylori*, those associated with the use of NSAIDs. Less common is ulcer disease associated with

massive hypersecretion of acid which occurs in the rare gastrinomas (Zollinger-Ellison) syndrome (Walker & Whittlesea, 2012).

### Comparison of Duodenal and Gastric Ulcers

**Table 1.1: Comparison of Duodenal and Gastric Ulcers**

<b>Duodenal ulcers</b>	<b>Gastric ulcer</b>
<b>Incidence</b>	
1. Age 30-60	1. Usually, 50 and over
2. Male: Female 2-3:1	2. Male: Female 1:1
3. 80% of peptic ulcers are duodenal	3. 15% of peptic ulcers are gastric
4. Weight gain	4. Weight loss
5. Pain occur 2-3 hours after a meal	5. Pain occurs 30mins to 1 hour after a meal
6. Ingestion of food relieves pain	6. May be relieved by vomiting
7. Vomiting is uncommon	7. Vomiting is common
8. Haemorrhage less likely done with gastric ulcer	8. Haemorrhage more likely to occur
9. Melena is more common than hematemesis	9. Hematemesis more common than melena
10. More likely to perforate than gastric ulcers	10. Less likely to perforate than duodenal ulcers

### 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 increased concentration of acid-pepsin or by decreased resistance of the mucosa. A damaged mucosa cannot secrete enough mucus to act as a barrier against HCl. The use of NSAIDs inhibits the

secretion of mucus that protects the mucosa. Patients with duodenal ulcer secrete more acid than normal whereas patients with gastric ulcer tend to secrete normal or decreased levels of acid. Damage to the mucosa results in decreased resistance to bacteria, and thus infection from *H. pylori* bacteria may occur. Zollinger-Ellison syndrome is suspected when a patient has several peptic ulcers that is resistant to standard medical therapy. It is identified by the following: hypersecretion of gastric juice, duodenal ulcers and gastrinomas in the pancreas (Hinkle & Cheever, 2014). The underlying pathophysiology associated with *H. pylori* infection involves the production of cytotoxin-associated gene proteins and vacuolating cytotoxins which activates an inflammatory cascade. Gastrin is the main hormone involved in stimulating gastric acid secretion, and gastrin homeostasis is also altered in *H. pylori* infection. This results in *H. pylori*-induced hypergastrinaemia (Walker & Whittlesea, 2012).

### **Clinical Manifestation**

1. Upper abdominal pain (occurring 1-3 hrs after eating meals and relieved by food or antacids)
2. Anorexia
3. Weight loss
4. Nausea
5. Vomiting
6. Heartburn (Walker & Whittlesea, 2012)

Kumar and Clark (2017) added the following:

7. Burning epigastric pain
8. Epigastric tenderness

Hinkle and Cheever (2014) indicated the following features;

9. Diarrhoea
10. Constipation
11. Bleeding

### **Assessment/ Diagnostic Findings**

1. Presenting signs and symptoms
2. History from patient

3. Physical examination may reveal pain, epigastric tenderness
4. Complete or Full blood count (determine blood loss)
5. Biopsy and histologic examination to detect *H. pylori* infection
6. Stool antigen test; can show the presence of *H. pylori*.
7. Endoscopy is the preferred investigation because it allows direct visualization of inflammatory changes, ulcers and lesions.
8. Serologic testing for antibodies against the *H. pylori* antigen (Hinkle & Cheever, 2014).
9. Radiography; is used to detect free abdominal air when perforation is suspected. (Walker & Whittlesea, 2012).

### **Specific Medical Intervention**

The aim of treating peptic ulcer disease includes:

1. To alleviate symptoms of the disease.
2. To prevent recurrence

*H. pylori* eradication is the cornerstone of the therapy for peptic ulcers, as this will successfully prevent relapse and eliminate the need for long-term therapy in the majority of patients (Colledge et al., 2014).

### **Medical treatment**

Advances in drug therapy have dramatically changed the management of Peptic Ulcer Disease and significantly improved its effectiveness. A variety of changes exists and the specific protocol for any particular patient is determined based on the preference of the physician and the patient's unique profile. The goal of the management is to eradicate helicobacter pylori, to manage gastric acidity, promote healing of the ulcer, and prevent re-occurrence and complications and to alleviate symptoms.

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

1. Antacids are given to neutralize the HCL. E.g. Magnesium Trisilicate, Aluminum Hydroxide.
2. Histamine 2 receptor antagonist is given to reduce gastric secretion.  
E.g. Cimetidine and Ranitidine.

3. Proton Pump inhibitors are given to eliminate acid secretions. E.g. Omeprazole, lansoprazole
4. Mucosal Protective Agent is given for protective coat that prevents further excavation. E.g. Sucralfate, Misoprostol.
5. Antimicrobial agent is given to prevent further infection. E.g. Metronidazole, Amoxicillin.
6. Analgesics to relieve pain. E.g. Paracetamol, Tramadol. (Webmely, 2016)

### **Surgical intervention**

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

1. Vagotomy –This is the surgical removal of the vagus nerves. There are three types and these are truncal, selective and highly selective.
2. Antrectomy–This is the surgical removal of the pyloric (antrum) portion of the stomach with anastomosis to the duodenum either (gastroduodenostomy or Billroth I) or jejunum (gastrojejunostomy or Billroth II).
3. Pyloroplasty– This is the surgical removal of the pyloric sphincter (Webmely, 2016)

### **Nursing Management**

Nursing management of patient with peptic ulcer includes;

#### **1. Position**

1. Patient was made comfortable on a well-prepared admission bed with enough pillows for comfort.
2. Patient was made to assume a normal position that was not contrary to her health example supine position.
3. This helps the patient to relax and reduce pain. The patient was positioned to avoid neck pain and joint stiffness.

## **2. Reducing anxiety/ reassurance**

1. The nurse assesses the patient's level of anxiety and reassured that she was in the hands of competent and well-trained staff that are always ready to offer care and support to ensure good health.
2. She was also introduced to other patients who have similar conditions as her and have had their treatment waiting to be discharged.
3. Relatives were also reassured that all necessary procedures will be done for her.
4. Divisional activities such as watching of televisions and the use of slide pictures were provided to divert patients mind from her condition.
5. Patients with peptic ulcers are usually anxious, but their anxiety is not always obvious.
6. Appropriate information is provided at the patient's level of understanding, all questions are answered, and the patient is encouraged to express fears openly.
7. Explaining diagnostic tests and administering medications on schedule also help to reduce anxiety.
8. The nurse interacts with the patient in a relaxed manner, and relaxation methods, such as biofeedback, hypnosis, or behavior modification.
9. The patient's family is also encouraged to participate in care and to provide emotional support.

## **3. Rest and sleep**

1. A quiet environment was provided by reducing noise to allow patient to get enough rest.
2. Windows were opened to allow ventilation.
3. Visitors were also restricted to allow patient gets enough rest and sleep.
4. Bed is being made free from creases and cramps by straighten the bed linen.
5. Warm beverages were served.
6. Warm bath was given with warm water, soap, sponge and towel in order to relax patient and to induce sleep.
7. Teach patient rest and relaxation techniques. E.g. guided imagery emphasizes the need to avoid stress.

#### **4. Observation**

1. Vital signs were also checked and recorded which comprises of temperature, pulse, respiration and blood pressure.
2. Intake and output chart were also monitored by observing intake and output chart to know patient's fluid and electrolyte balance.
3. The desired effect and side effect of drugs served were also observed.
4. Side effects of drugs should be observed and reported if any and skin and mucous membrane for signs of dehydration.
5. Physical findings of epigastric or abdominal pain, nausea, vomiting, tarry stools, bleeding were observed.
6. Patient's response to medication therapy, nutritional therapy and emotional rest was observed.

#### **5. Personal hygiene**

1. Body hygiene is done by giving an assisted bed bath twice daily with warm water, soap, sponge and towel to prevent offensive odor and to remove microorganisms from the skin.
2. Bony prominences, which are prone to be sore, are well cared for by treating the area to prevent bed sore.
3. Soiled bed linens are also changed when dirty or wet to prevent bad odor and harboring of microorganisms.
4. Oral hygiene was also done twice daily with toothpaste and toothbrush. This was done to prevent oral offensive smell and to prevent the harboring of micro bacteria.
5. Her hair was also cared for by washing it with soap and water and drying it with a towel.
6. Patient's hands and feet were cared for by soaking them in water and trimming the nails with nail clippers, washing and filling the nails. This will prevent harboring of microbes or prevent injury from scratching.

#### **6. Nutrition/ Diet**

1. The intent of dietary modification for patients with peptic ulcer is to avoid over secretion of acid and hyper-mobility in the gastric intestinal tract.

2. These can be minimized by avoiding extremes of temperature and over secretion from consumption of meat extracts, alcohol, and coffee (including decaffeinated coffee, which also stimulates acid).
3. Dietary compatibility becomes an individual matter. The patient eats food that can be tolerated and avoids those that produce pain.
4. Certain substance such as spicy food causes severe pain and has to be avoided.
5. Smoking should be avoided as it has been shown to delay ulcer healing regardless of the therapy.
6. Serve small frequent and bland foods.
7. Avoid alcohol and give milk in between meals.
8. Patient is encouraged to take enough roughage to enhance bowel elimination.
9. Vitamin and minerals such as fruits like orange, banana, pawpaw should be encouraged to boost up the immune system

## **7. Patient / family education**

1. Patient is educated on the factors that trigger the condition.
2. Modify lifestyle include health processes that will prevent recurrence of ulcer pain and bleeding.
3. Plan for rest periods.
4. Learn to cope with stressful situation.
5. Chew food thoroughly and eat in leisurely manner.
6. Eat meals in regular schedule.
7. Avoid eating large meals, as they tend to over stimulate acid secretion.
8. Adhere to prescribed treatment.
9. Educate patient to report on signs and symptoms.
10. Educate patient that antacids cause changes in bowel movement.
11. Avoid over-the-counter drugs unless prescribed by doctor.
12. Explain pathophysiology of condition to patient and family.
13. Encourage stress-reducing activities.
14. Educate patient on medication to be taken home, its doses, frequency, therapeutic effects and possible side effects and explain maximum compliance.

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

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

According to Webmely, (2016), these are the indications for surgery in peptic ulcer;

1. Perforation; there may be a hole or break in the stomach walls.
2. Persistent ulceration despite adequate medical therapy
3. Recurrent ulcer following gastric surgery
4. Gastric outflow obstruction.

### **Complications**

According to Webmely,( 2016), complications of peptic ulcers include:

**Hemorrhage:** Mild to severe hemorrhage is the most common complication. Symptoms are passage of bloody stools (hematochezia) or black tarry stools (melena) and weakness. Orthostasis, syncope, thirst and sweating are caused by blood loss.

1. **Penetration (confined perforation):** Peptic ulcer may penetrate the wall of the stomach. If adhesions prevent leakage into the peritoneal cavity, free penetration is avoided and confined perforation occurs. Pain may refer to sites other than the abdomen.
2. **Free Perforation:** Ulcer that perforates into the peritoneal cavity unchecked by adhesions is usually in the anterior wall of the duodenum or less commonly in the stomach.
3. **Gastric Outlet Obstruction:** This may be caused by scarring, spasm or inflammation from an ulcer. Symptoms include recurrent large-volume vomiting, occurring more frequently at the end of the day and often as late as 6 hours after the last meal.
4. **Stomach Cancer:** Patients with *H. pylori* associated ulcers have a 3-6-fold increased risk of gastric cancer later in life.
5. **Recurrence:** Factors that affect recurrence of ulcer are failure to eradicate *H. pylori*, continued NSAID use, smoking. The 3-year recurrence rate for gastric and duodenal

ulcers is less than 10% when *H. pylori* is successfully eradicated and greater than 50% when it is not.

### **Post-Operative Complications**

As specified in Webmely,(2016), these are the long-term post-operative complications of peptic ulcer

1. Dumping Syndrome; is the feeling of fullness, weakness, sweating, and dizziness which may occur after a meal following a partial gastrectomy
2. Recurrent ulcer; the ulcer may recur or relapse
3. Diarrhea; passing loose stools
4. Nutritional complications (iron deficiency due to poor absorption, weight loss)

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

1. As far as possible emotional trauma leading to stress and anxiety should be reduced.
2. Individuals belonging to blood group type A and O should adopt good lifestyles in order not to be predisposed to the condition.
3. High intake of spicy and fried foods should be avoided as much as possible.
4. A regular eating pattern should be established and abnormal long periods between meals should be discouraged.
5. Smoking and alcohol intake should be avoided since they irritate the gastric mucosa.
6. Intake of ulcerogenic drugs such as salicylates, other non-steroidal anti-inflammatory drugs and corticosteroids should be avoided.

#### **1.11 Validation of Data**

Validation is the extent to which a measure, indicator, or a method of data collection possesses the quality of being sound or true as far as it can be judged (Weller, Bailliere's nurses' dictionary: for nurses and healthcare workers, 2014). All the information gathered from the patient was found to be true after comparing with information obtained from patient's relative through series of interviews. Also, the patient's information on the HAMS confirms the data

collected. The information from the literature review also confirmed the data gathered. After collecting all this information, I realized that the data collected were similar and so considered valid for the study.

## **CHAPTER TWO**

### **ANALYSIS OF DATA**

#### **2.0 Introduction**

Analysis is a statistic that measures differences among group means and uses a statistical technique to equate the under study in relation to another given variable. (Weller B. F., 2014). The chapter analyses data collected in chapter one, it includes information collected from patient's medical history, laboratory investigations, nursing interventions and literature review on the condition. This helps to interpret and compare with standard. Areas under this chapter include;

1. Diagnostic test/Investigation
2. Causes
3. Clinical manifestations
4. Treatment
5. Complications
6. Patient/Family strength
7. Health problem
8. Nursing diagnosis

#### **2.1 Comparison of Data with Standards**

Here is where information gathered from patient/family and care given are compared with standards in textbooks. It includes diagnostic test, causes, clinical manifestations, treatment and complications found in literature review.

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

Diagnosis is the determination of the nature of a disease; Test is defined as an examination or trial. Investigations are procedures performed to establish a diagnosis, to monitor a person's health, disease or the effectiveness of treatment. (Weller B. F., 2014). Investigations which were carried out on Madam A.A.G during her period of hospitalization compared with literature.

**Table 2: Comparison of Test done on madam A.A.G's Literature**

<b>Test outlined in literature review</b>	<b>Test carried out on patient</b>
1. Physical examination	1. Physical examination was conducted on which revealed pain
2. History from patient	2. Patient history was taken
3. Signs and symptoms	3. Patient exhibited most of the signs and symptoms
4. Full blood count	4. Full blood count was conducted
5. Endoscopy	5. Endoscopy was conducted
6 Biopsy and histological examination.	6. Biopsy and histological examination was not conducted.
7. Stool antigen test	7. Stool antigen test was not conducted
8. Serologic testing	8. Serologic testing was not conducted
9. Radiography	9. Radiography was not conducted
10. Routine urine examination	10. Routine urine examination was conducted
11. Urine pregnancy test	11. Urine pregnancy test was conducted
12. B/F for malaria parasites	12. B/F for malaria parasites was conducted

Per literature comparison with what was conducted on patient, biopsy and histology examination, stool antigen test, radiography was not conducted because the diagnose was confirmed by endoscopy, patient history, physical examination, full blood count, and signs and symptoms exhibited by patient

**Table 3: Results of diagnostic investigation carried on patient**

<b>Date Ordered</b>	<b>Specimen</b>	<b>Investigations</b>	<b>Results</b>	<b>Normal range</b>	<b>Interpretation</b>	<b>Remarks</b>
05/12/22	Blood	Full blood count; White blood cells	9.9x10 <sup>3</sup> /ul	4.5-10.0x10 <sup>3</sup> /ul	Normal	No treatment given
05/12/22	Blood	Platelets	168x10 <sup>3</sup> /ul	<b>Male:</b> 135-317x10 <sup>3</sup> /ul <b>Female:</b> 157-371x10 <sup>3</sup> /ul	Normal	No treatment given
05/12/22	Blood	Red blood cells	4.86x10 <sup>6</sup> /ul	<b>Male:</b> 4.35-5.65x10 <sup>6</sup> /ul <b>Female:</b> 3.92-5.13x10 <sup>6</sup> /ul	Normal	No treatment given
05/12/22	Blood	Hemoglobin level	13.1g/dl	<b>Male:</b> 13.2-16.6g/dl <b>Female:</b> 11.6-15g/dl	Normal	No treatment given
05/12/22	Blood	Hematocrit	38.7%	<b>Male:</b> 38.3-48.6% <b>Female:</b> 35.5-44.9% <b>Children:</b> 42-44%	Normal	No treatment given
05/12/22	Blood	Helicobacter pylori test	Positive	No helicobacter pylori present	Abnormal	Intravenous omeprazole 40mg bd x 5 days Suspension Nugal" O" 15mls x 5days
06/12/22	Upper GI	Endoscopy	Patient had ulceration in the stomach	No ulcerations are present	Patient has gastric ulcer	Intravenous omeprazole 40mg bid x 5 days Suspension Nugal" O" 15mls x 5days

### 2.3 Causes of patient's condition

With reference to the literature review on the causes of peptic ulcer disease and the diagnostic investigations carried out on Madam A.A.G, the exact cause was not known but predisposing factors of patient's condition could be due to poor dietary habit and stress.

### 2.4 Clinical features/ signs and symptoms

**Table 4: Clinical features of Madam A.A.G compared with those in literature review**

<b>Clinical Features in Literature Review</b>	<b>Clinical Features Exhibited by Patient</b>
1. Upper abdominal pain	1. Patient experience upper abdominal pain
2. Anorexia	2. Patient experienced anorexia
3. Weight loss	3. Patient did not experience weight loss
4. Nausea	4. Patient complained of nausea
5. Vomiting	5. Patient did not vomit.
6. Heartburns	6. Patient experienced heartburns.
7. Burning epigastric pain	7. Patient complained of burning epigastric pain.
8. Epigastric tenderness	8. Patient complained of epigastric tenderness
9. Diarrhoea	9. Diarrhea was not experienced by patient
10. Constipation	10. Constipation was not experienced by patient.
11. Bleeding	11. Bleeding was not experienced by patient

The above comparison indicates that patient's condition is peptic ulcer disease since she exhibited most of the signs and symptoms.

## 2.5 Specific Medical Treatment Given to Patient

Treatment is the mode of dealing with a patient or disease. (Weller B. F., 2014). Peptic ulcer disease may be treated surgically or medically. Madam A.A.G was treated medically with the aim of relieving pain and preventing the occurrence of the attacks.

The following are drugs that were used in the treatment of the condition;

1. Intravenous omeprazole 80mg stat then 40mg bd for 24 hours
2. Intravenous normal saline 1 liter for 24 hours
3. IV DNS 1liter for 24 hours
4. IV paracetamol 1g tds for 24 hours
5. Suspension Nugal'O' 15mls

**Table 5: Treatment Given to Patient as Compared with Literature Review**

<b>Treatment as in literature review</b>	<b>Treatment given to my patient</b>
1. Antacids e.g., suspension Nugal'O'	Suspension Nugal'O' was administered
2. Proton-pump inhibitors e.g., omeprazole, lansoprazole	Intravenous omeprazole was administered
3. Analgesics e.g., paracetamol, morphine	Intravenous paracetamol was administered
4. Sodium hydrochloride (NS)	Intravenous normal saline was administered
5. Dextrose in water (DNS)	Intravenous dextrose in water was administered
6. Surgery I. Antrectomy II. Vagotomy III. Pyloroplasty	No surgical treatment was given to my patient

From the table above, treatment given to patient were in line with literature. No surgical intervention was given because patient had no complications.

**Table 6: Pharmacology of drugs administration**

<b>Date</b>	<b>Drug</b>	<b>Dosage/Route of administration (Literature)</b>	<b>Dosage/Route of administration (Patient)</b>	<b>Classification</b>	<b>Desired effect</b>	<b>Actual action observed</b>	<b>Side effect/remedies</b>
05/12/22	Paracetamol	<b>Dosage</b> 1g usually start doses <b>Route</b> Intramuscular Intravenous Subcutaneous	<b>Dosage</b> 1g start <b>Route</b> Intravenous	Opioid analgesic	Decrease in severity of pain	Patient's pain subsided	Confusion, sedation, dizziness, headache, constipation, itching. None were observed
05/12/22	Omeprazole	<b>Dosage</b> 40mg -80mg bd <b>Route</b> Oral Intravenous	<b>Dosage</b> 80mg stat then 40mg bd <b>Route</b> Intravenous	Proton-pump inhibitor	Suppresses gastric acid secretion	Patient's condition improved due reduction her pain	Drowsiness, fatigue, flatulence, chest pain, fatigue. None were observed
05/12/22	Normal saline	<b>Dosage</b> As required by the patient <b>Route</b> Intravenously	<b>Dosage</b> 1 liter for 24hours <b>Route</b> Intravenously	Isotonic solution of sodium chloride	To prevent dehydration	Patient was well hydrated	Fluid overload, hypertension Patient did not experience any.

**Table 6: Pharmacology of drugs administration cont'd**

<b>Date</b>	<b>Drug</b>	<b>Dosage/Route of administration (Literature)</b>	<b>Dosage/Route of administration (Patient)</b>	<b>Classification</b>	<b>Desired effect</b>	<b>Actual action observed</b>	<b>Side effect/remedies</b>
06/12/22	Nugel'O'	<b>Dosage</b> 15mls three times daily <b>Route</b> Orally	<b>Dosage</b> 15mls tds for 5 days <b>Route</b> Orally	Antacid	Reduces stomach acidity by neutralizing gastric hydrochloric acid by preventing the secretion of acid	Patient was relieved of pain	Constipation, diarrhea, headache Patient did not experience any.
07/12/22	Dextrose in water	<b>Dosage</b> As required by the patient <b>Route</b> Intravenous	<b>Dosage</b> 1 liter for 24hours <b>Route</b> Intravenous	Glucose in water solution	To prevent dehydration	Patient was well hydrated	Fluid overload, hypertension Patient did not experience any.

## COMPLICATIONS

According to Homby (2020), a health problem is an unmet health need to which the patient responds in variety of ways. Madam A.A.G experienced no complication throughout the period of interaction, with reference to literature review. This was due to the early seeking of medical attention and treatment given to her.

### 2.6 Patient Health Problems

Problem is a state of difficulty that needs to be resolved (Lewis, 2015). The following were problems that patient had;

1. Patient complained of abdominal pain. (05/12/22)
2. Patient had less knowledge about her condition (06/12/22)
3. Patient complained of loss of appetite for food. (06/12/22)
4. Patient complained having difficulty falling asleep after awakening. (07/12/22)
5. Patient was anxious about high cost of treatment (07/12/22)

### 2.7 Patient/ Family Strengths

Strength is the ability to do or bear things that needs lot of mental or physical effort (Lewis, 2015). The strengths observed in my patient and family during the period of hospitalization are;

1. Patient rates her pain as 4 on the pain rating scale on the numerical pain rating scale of 0-10. (05/12/22)
2. Patient takes in sips of water. (05/12/22)
3. Patient can eat 1/3 of meals served. (06/12/22)
4. Patient reports resting quietly in her bed after awakening. (06/12/22)
5. Patient asks questions to seek clarification on her condition and available treatment. (07/12/22)
6. Patient verbalizes that the abdominal pain aggravated by eating. (07/12/22)

### 2.8 Nursing Diagnosis

Nursing diagnosis is the clinical judgment concerning a human response to health conditions/life processes, or vulnerability for that response, by an individual, family, group, or community. Information gathered from assessment is used to formulate a nursing diagnosis, nursing diagnosis help as to choose which interventions best suits the diagnosis to achieve a set goal/objective with its outcome criteria. (Obeng P. A., 2020).

1. (05/12/22) Acute pain (abdomen) related to ulceration of the gastric mucosa as evidenced by pain at the left upper quadrant.
2. (06/12/22) Deficient knowledge related to inadequate information on peptic ulcer disease as evidenced by inadequate knowledge on causes of peptic ulcer disease.
3. (06/12/22) Imbalanced nutrition (less than body requirement) related to loss of appetite as evidenced by pain aggravating on eating.
4. (07/12/22) Sleep pattern disturbances related to pain at the left upper quadrant as evidenced by patient finding it difficult to sleep after awakening.
5. (07/12/22) Anxiety related to fear of high cost of treatment as evidenced by expressed concern about prolong treatment.

## CHAPTER THREE

### PLANNING FOR PATIENT/FAMILY CARE

#### 3.0 Introduction

Planning is defined as the process in which the nurse and the 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 B. F., Bailliere's nurses' dictionary for nurses and health care workers, 2014). Planning patient/family care involves setting goals/outcome criteria and selecting nursing orders to be implemented, this depends on the diagnosis made (Obeng P. A., Handbook for nurses' care plan limited edition, 2020).

#### 3.1 Objective/ Outcome Criteria

1. (05/12/22) Patient's pain intensity will reduce to 2 or below on the numerical pain rating scale within 24 hours as evidence by;
  - a. Patient choosing 2 on the numerical pain rating scale of 0-10
  - b. Nurse observing patient have a relaxed facial expression.
2. (06/12/22) Patient will be able to attain and maintain an adequate nutritional level within 48 hours as evidenced by;
  - a. Patient verbalizing that she has gain appetite for food
  - b. Nurse observing that patient takes at least two thirds (2/3) of meal served.
3. (06/12/22) Patient will regain her normal sleeping pattern within 24 hours as evidence by;
  - a. Patient verbalizing that she had less periods of awakenings during the night
  - b. Nurse observing patient sleep 6-8 hours at night.
4. (07/12/22) Patient will be relieved of anxiety within 24 hours as evidenced by;
  - a. Patient cooperating with treatment
  - b. Nurse acknowledging patient's understanding on cost of treatment.
5. (07/12/22) Patient will have adequate knowledge on Peptic Ulcer Disease (PUD) throughout hospitalization as evidenced by;
  - a. Patient being able to answer questions asked her condition.
  - b. Nurse observe patient practice knowledge gained on PUD.

**Table 7: Nursing Care Plan for Madam A.A.G**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
5/12/2022 9:30am	Acute pain (Abdomen) related to ulceration of the gastric mucosa as evidence by complain of pain in the left upper quadrant.	Patient's pain intensity will reduce to 2 or below on the numerical pain rating scale within 24 hours as evidence by; 1. Patient chooses 2 on the numerical pain rating scale of 0-10 2. Nurse observing patient have a relaxed facial expression.	1. Reassure patient of available pain management measures that will be put in place to reduce the pain intensity. 2. Reassess the pain level of patient, using the numerical pain rating. 3. Employ diversional therapy. 4. Assist patient to a comfortable position. 5. Serve prescribed acid controlling drug and analgesic.	1. Patient was reassured those measures have been put in place to relieve pain and to also improve her health. 2. Pain level was reassessed using the pain rating scale and it was rated as 4. 3. Patient was encouraged to watch television. 4. Patient was assisted into a prone position. 5. Prescribed iv omeprazole 40mg and paracetamol 1g intravenous was served.	6/12/22 9:30am	Goal partially met as 1. Patient chooses 4 as level of pain using the numerical pain rating scale. 2. Patient was observed to have a bit of relaxed facial expression.	Y. M

**Table 7: Nursing Care Plan for Madam A. A. G Continued**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
6/12/22 7:40am	Imbalanced nutrition (less than body requirement) related to loss of appetite as evidenced by pain aggravating on eating.	Patient will be able to attain and maintain adequate nutrition within 48 hours as evidenced by; 1. Patient verbalizing that she has gain appetite for food.  2. Nurse observing that patient takes at least two thirds (2/3) of meal served.	1.Reassure patient that she is in competent and safe hands to alley anxiety  2. Serve meals in small quantities at regular interval to meet nutritional needs while reducing pain.  3. Serve meals with right the amount of calories.  4. Encourage patient to thoroughly chew food before swallowing.	1.Patient was reassured that she is in the hands of competent staff who will do their best to help her gain appetite and relieve pain  2. A small bowel of porridge was served in the morning and later another smalls bowel of porridge was served to patient  3. Patient was served with rice ball with peanut butter soup and some bananas.  4. Patient was encouraged to thoroughly chewed food before swallowing hence she chewed all solid foods for about a minute to reduce the activities that will aggravate pain	8/12/22 7:40pm	Goal met as 1. Patient verbalized that she has gain appetite for food. 2. Nurse observed patient eat at least 2/3 of meals served.	Y. M

**Table 7: Nursing Care Plan for Madam A. A. G Continued**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
6/12/22 7:40am	Imbalanced nutrition (less than body requirement) related to loss of appetite as evidenced by pain aggravating on eating.	Patient will be able to attain and maintain adequate nutrition within 48 hours as evidenced by; 1. Patient verbalizing that she has gain appetite for food. 2. Nurse observing that patient takes at least two thirds (2/3) of meal served.	5. Encourage patient to take prescribed acid controlling drugs before meals to reduce the corrosive action of acid secreted by food stimulation in the stomach	5. Patient was encouraged to take her acid controlling drugs before meals to reduce the corrosive action of acid secreted by food stimulation in the stomach	8/12/22 7:40pm	Goal met as 1. Patient verbalized that she has gain appetite for food. 2. Nurse observed patient eat at least 2/3 of meals served.	Y. M

**Table 7: Nursing Care Plan for Madam A. A. G Continued**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
6/12/22 6:30pm	Sleep pattern disturbances related to pain at the left upper quadrant as evidenced by patient finding it difficult to sleep after awakening.	Patient will regain her normal sleeping pattern within 24 hours as evidenced by;  1. Patient verbalizing that she had less periods of awakenings during the night  2. Nurse observing client sleep 6-8 hours at night.	1. Ensure a quiet environment.  2. Plan nursing activities in order not to disturb patient during her sleep  3. Educate patient not to take in too much food before bed.  4. Encourage patient to take a warm bath before sleep.  5. Serve prescribed analgesic to relieve pain	1. A quiet environment was ensured by reducing the volume of radio and TV to prevent noise that can wake patient up when asleep.  2. Nursing activities were planned in order not to disturb patient during her sleep  3. Patient was educated not to take in much food before bed, hence small bowl of rice and about 2/3 of it was taken by patient  4. Patient was encouraged to bath with a tepid water to help cool the body and stimulate sleep.  5. Prescribed paracetamol 1g intravenous was served	7/12/22 6:30am	Goal met as;  1. Patient verbalized that she was able to sleep during the night  2. Nurse observed patient slept for 7 hours at night	Y. M

**Table 7: Nursing Care Plan for Madam A. A. G Continued**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
7/12/2022 8:30am	Anxiety related to fear of high cost of treatment as evidenced by expressed concern about prolong treatment	Patient will be relieved of anxiety within 24hours as evidenced by;  1. Patient cooperating with treatment  2. Nurse acknowledging patient's understanding on cost of treatment.	1. Assess patient's level of anxiety  2. Use presence, touch (with permission), verbalization to reassure patient.  3. Encourage expression or clarification of needs, concerns, unknowns and questions  4. Help patient to understand most items are covered by the NHIS  5. Educate patient on other hospital policies concerning treatment cost	1. Patient had mild anxiety because she had minimal physiological symptoms  2. Patient was reassured that staff are supportive, approachable and can communicate with always  3. Patient was encouraged through communication to ask for clarification on issues bothering her (amount being paid for admission)  4. Items like syringes, gloves, infusions and most of her drugs that were covered by the NHIS was explained to patient  5. Patient was educated on other hospital policies favouring patients who sincerely did not have the money to pay their bills	8/12/2022 8:30am	Goal fully met as;  1. Patient cooperated with treatment  2. Nurse acknowledged patient's understood of cost of treatment.	Y. M

**Table 11: Nursing Care Plan for Madam A.A.G Continued**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
7/12/2022 11:30am	Deficient knowledge related to inadequate information on peptic ulcer disease as evidenced by inadequate knowledge on causes of peptic ulcer disease (PUD)	<p>Patient will have adequate knowledge on peptic ulcer disease throughout period of hospitalization as evidenced by;</p> <p>1. Patient being able to provide answers to questions asked on her condition.</p> <p>2 Nurse observe patient practice knowledge gained on PUD</p>	<p>1. Assess patient and family’s level of knowledge on PUD</p> <p>2. Establish good interpersonal relationship with family</p> <p>3. Create a serene environment for learning</p> <p>4. Educate patient on the condition.</p> <p>5. Allow patient to ask questions bothering them and answer correctly</p> <p>6. Assess patient level of understanding and ask for feedback</p>	<p>1. Patient and family’s knowledge on PUD was assessed</p> <p>2. Rapport was established to make them feel at ease and cooperate effectively</p> <p>3. A serene environment was created for learning by minimizing noise at the ward</p> <p>4. Patient was educated on peptic ulcer disease, it’s causes, clinical manifestations etc.</p> <p>5. Patient was allowed to ask questions on PUD and correct answers were provided</p> <p>6. Patient’s understanding was assessed, patient showed understanding of education.</p>	8/12/2022 8:00am	<p>Goal fully met as;</p> <p>1. Patient was able to answer questions asked about condition</p> <p>2.Knowledge gained on PUD were practiced by patient by telling relatives not to serve her foods with too much spices.</p>	Y. M

## **CHAPTER FOUR**

### **IMPLEMENTATION OF PATIENT/FAMILY CARE PLAN**

#### **4.0 Introduction**

Implementation phase is when the nurse carries out the selected nursing orders. This is referred to as intervention; it is detailed, specifying what actually was done for the patient /family (Obeng P. A., Handbook for nurses' care plan limited edition, 2020). This chapter talks about the nursing care rendered to patient/family from day of admission to day she was discharged, and it was based on the health problems that were identified. It also entails review of patient and home visits that was done to ensure continuity of care.

#### **4.1 Summary of Care Rendered to Patient/Family**

The nursing care rendered to patient and family started on the day of her admission which is on the 5<sup>th</sup> of December 2022 to the day care was terminated which was the 8<sup>th</sup> of December 2022. The care and management of patient and her family was planned to meet their physiological, emotional and physical needs. While she was on admission routine nursing care were done and all necessary documentations were also done. The care rendered to the patient/family is discussed on daily basis.

##### **4.1.1 Day of admission (5th December 2022)**

Madam A.A.G was trans-into the female ward from the Accident and Emergency unit on 5<sup>th</sup> December, 2022 at 4:00pm in a wheel chair accompanied by a staff nurse, student nurse and a relative. Madam A.A.G had been on detention at the Accident and Emergency unit of Sunyani Municipal Hospital for nine hours with the diagnose of Acute Exacerbation of Peptic Ulcer Disease. On assessment patient complained of pain at the left upper quadrant. Being at the nurses' station with the shift in charge at the time of patient's arrival, I was charged to carry out her admission to the ward. The admission was a planned one. Patient was warmly welcomed to the ward and her identity was verified by mentioning her name and her responding, she was reassured to allay anxiety. She was introduced to the staff on duty, other patients at the ward and

was made comfortable in a simple unoccupied bed. Her vital signs were checked and recorded as;

1. Temperature - 36.2<sup>o</sup>C (degrees Celsius)
2. Pulse - 72 beats per minute
3. Respiration - 18 cycles per minute
4. Blood pressure - 120/100 millimeters of mercury
5. SpO<sub>2</sub> - 98%

**The following diagnostic investigations were done;**

1. Full blood count
2. Helicobacter pylori test
3. Upper GI endoscopy

**She was being managed on;**

1. Intravenous Normal Saline 1Litre
2. Intravenous Ringer Lactate 1Litre
3. Intravenous Dextrose Normal Saline 1Litre
4. Intravenous Paracetamol 1g tid x 24hrs
5. Intravenous Omeprazole 80mg stat then 40mg bid for 24hrs
6. Suspension Nugal 'O' 15mls

Physical examination on patient was conducted. At time of admission, assessment revealed that patient had abdominal pain at the epigastric region and suspension Nugal 'O' 15mls was given to reduce the pain. After pain subsided patient was oriented to the ward and its annexes, Hospital protocol regarding visiting hours, time for checking vital signs were explained to patient. Physical examination on patient was conducted and no abnormalities seen. On admission patient had abdominal pain located at the epigastric region and was non-radiating. Patient's particulars were entered into the admission and discharge book and the daily ward state. I reintroduced myself to her as a final year student of Holy Family Nursing and Midwifery Training College, Berekum, who would like to take her and her family for my care study. Madam A.A.G and her family were informed that the care study is a requirement by the Nursing and Midwifery Council

of Ghana that I had to fulfill as a partial fulfillment towards the award of License to Practice as a Professional Registered General Nurse in the country. I explained to her and her family the concept of the study and reassured them of privacy and confidentiality. Madam A.A.G and family agreed and said they are willing to give me the necessary information and assistance needed in the study. I thanked them and expressed my sincere gratitude to them. Discharge planning was initiated with the relative, thus, they will continue the care at home once she is well. I chose her because I wanted to know more about Peptic ulcer disease.

With patient's complains nursing diagnosis was formulated as follows; Acute pain (abdomen) related to ulceration of the gastric mucosa as evidenced by pain at the left upper quadrant. With an objective that patient's pain will reduce to 2 or 1. Patient was reassured that measures have been put in place to relieve pain and also improve health, patient was assisted into prone position, and she was made comfortable in bed around 10:30 pm

#### **4.1.2 Second Day of Admission (6th December, 2022)**

At 8:00am on the second day of admission, I went and continue with my care for Madam A.A.G. Her due medications had been served and morning vital signs also checked by the night staffs and recoded as

1. Temperature            36.5<sup>0</sup>C
2. Pulse                    79bpm
3. Respiration            20cpm
4. Blood pressure        120/100mmHg

At 8:30 am patient had her breakfast which was porridge and bread, she was able to consume only one-third of the porridge and complained of the feeling of pain in the abdomen as she eats, so she did not even bite a piece of the bread. Patient in her normal state is able to consume all porridge and bread that will be served for her. Since Madam A.A.G ate only a small amount of the porridge due to the pain she felt while eating. A nursing diagnose was formulated at 8:50am as Imbalanced nutrition (less than body requirement) related to loss of appetite as evidenced by pain aggravating on eating with an objective of patient being able to attain an adequate nutrition within 48 hours. Patient was reassured that she is in the hands of competent staff who will do their best to help her gain her appetite and relieve pain. Few hours later another bowl of porridge

was served to patient but this time a small bowl since patient meal are going to be in smaller quantities and at regular intervals.

At 9:30am, during ward rounds, it was ordered that she should continue her medications.

Patient was encouraged to chew all solid foods that will be served to her before swallowing. Patient chewed all solid foods for about a minute before swallowing. Her 2pm vitals were checked and recorded as in appendix and suspension nugel 'O' 15ml and tablet paracetamol 1g were served. Patient was served with T.Z with Ayoyo soup and some bananas as fruit. At 6pm IV omeprazole 40mg, were served to patient. At 6:30pm, patient complained that she find it difficult to fall asleep when she awakens in the night and she confirmed it to be true and added that it was because of the epigastric pain.

A nursing diagnose was formulated as sleep pattern disturbances related to pain at the epigastric region as evidenced by patient finding it difficult to sleep after awakening, an objective was set that patient will regain her normal sleeping pattern within 24 hours. Nursing activities were planned in other not to interrupt patient during her sleep such that time for medications were made known to patient and all due medications and vital signs were all done at a time. A quiet environment was ensured by reducing the volume of radio and TV since they could not be turned off because of other patients.

At 10pm, her vital signs were checked and recorded as in appendix. Suspension nugel 'O' 15ml, tablet paracetamol 1g were served as 10pm medications, patient was made comfortable in bed at 10:30pm.

#### **4.1.3 Third Day of admission (7th December, 2022)**

On the third day of admission, patient was awake when I got to the ward at 6:00 am. Her vital signs checked and recorded as

1. Temperature            35.8<sup>0</sup>C
2. Pulse                    92bpm
3. Respiration            21cpm
4. Blood pressure        110/70mmHg

After the ward rounds patient seemed a bit worried, I enquired from her why and she said she was worried because she was not discharged. At 8:30am a nursing diagnosis was formulated as Anxiety related to fear of high cost of treatment due financial constraints as evidenced by

expressed concern about prolong treatment. And objective was set that patient will be relieved of anxiety within 24hours. Patient level of anxiety was assessed. Patient was reassured and was also encouraged through communication to ask for clarification on issues bothering her (amount being paid on admission). Most items that were covered by the NHIS like syringes, gloves, infusions and some drugs were explained to patient, Patient was educated on other hospital policies favoring patient who sincerely did not have the money to pay their bills. At 11:00am, upon interaction with patient, it was realized that patient had less knowledge on her condition (Peptic Ulcer Disease). A nursing diagnosis formulated was Deficient knowledge related to inadequate information on peptic ulcer disease as evidenced by inadequate knowledge on causes of peptic ulcer disease (PUD). An objective was set that patient will have knowledge on peptic ulcer disease throughout period of hospitalization. Patient and family's level of knowledge on PUD was assessed to build on it and help in education. Rapport was established to make them feel at ease and cooperate effectively. Noise at the ward was minimized to make the place serene for learning, the definition, causes, risk factors, clinical manifestations, diagnoses, treatment, prevent and complications of the condition was made known to patient. She was allowed to ask questions on the condition and she was answered accordingly. The knowledge gained was accessed to know whether she understood what was being thought. Patient took rice with "Kontomire" stew in the afternoon.

Patient due medications and vital signs were checked and recorded at the appropriate times. Patient was made comfortable in bed at 10pm.

#### **4.1.4 Fourth Day of Admission (8th December, 2022)**

I continued the care rendered to my patient at 7:30am. Her vital sign had already been checked and recorded as

1. Temperature            36.7°C
2. Pulse                    79bpm
3. Respiration            20cpm
4. Blood pressure        120/80mmHg

After checking of vital signs, patient was confronted on her nutritional intake as she had been complaining of loss of appetite. Patient told me that she can now take almost all the foods she have been served. At 7:20am, patient was served with porridge and bread. Patient was able to

take two thirds of the porridge served with the bread. Therefore the objective that was formulated on 5<sup>th</sup> December, 2022 that patient will be able to maintain adequate nutrition within 48hours was fully achieved as evidenced by patient verbalizing she has gain appetite for food and nurse observing patient has eat on two-third of meal served. Patient was feeling better with a cheerful facial expression she was cheerful because of the nursing care rendered to her over her period of admission. Then an objective that was set that patient will be relieved of anxiety on the 7<sup>th</sup> of December, 2022 was evaluated as goal fully met as patient cooperated with treatment asked questions concerning cost of treatment and nurse acknowledging her understanding on cost of treatment. At 9:00am, during the ward rounds, upon assessment patient was informed about discharge and was asked to go to the billing point for the bill and its payment. I accompanied her mother to pay all her bills and the mother confirmed that twenty Ghana cedis was paid for some medications that were not covered by the National Health Insurance Scheme. Patient was educated on her medications and emphasis laid on the importance of avoiding spicy foods, reducing the rate at which she fasts and was encourage to eat high fiber diets and also maintain good personal hygiene. Patient was discharged on suspension Nugal 'O' 15mls, tablet Paracetamol 1g, table and capsule Omeprazole 20mg bd for 20 days. She was to come for review on the 15<sup>th</sup> of December 2022. The need for continuity of medication and review date was stressed on. Patient and her mother thanked the staff and bid the ward inmate goodbye. I accompanied Madam A.A.G to the entrance and bid her goodbye and told her that I will visit her to check up on her.

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

Patient preparation for discharge started from her first day of admission to the ward, which was 7:00am on the 5<sup>th</sup> of December 2022 till day of discharge 8th December, 2022. Patient and her family were informed on the day of admission that their stay at the facility was going to be temporal. Prior to the discharge patient was educated on the causes, clinical manifestation, and treatment, management of the condition and also the importance of eating fiber-rich diet, avoiding spicy foods and over the counter medications were reemphasized. Patient was also educated on the need to maintain a good personal and environmental hygiene, then the need to continue medication and report to the facility. She was informed to come for review on the 15<sup>th</sup> of December, 2022.

#### **4.1.7 Follow Up/ Home Visit/ Continuity of Care**

Home visit means visiting the family at their place to assess the health needs, to provide services such as preventive, promotive, curative or rehabilitative services at their door step by the community health nurse or health workers (Sujatha, 2014). The purpose of home visit is to find out needs of patient/family and community in relation to health, socio-economic and cultural aspects, to provide teaching regarding the prevention and control of diseases, to assess the living condition of the patient/family, and to establish a close relationship between the nurses and the patient/family.

#### **4.1.8 First Home Visit (7th December,2022).**

I made my first home visit on the 7<sup>th</sup> of December, 2022 while patient was still on admission. A planned visit was made from the hospital to an area in town called Penkwase where patient resides. The purpose was to know patient's residence and to assess the environment in which she lives, verify the information given and also to identify any risk factor that could lead to patient's condition and to identify any nearest health facility at the area for a possible referral or handing over of patient. Patient and her family were informed. Her mother decided to go with me to the house, we left the hospital around 2:30pm. The house was adjacent a school named "Royal Kids". There were few of their co-tenants in the house on our arrival and I was introduced to them. They lived in a compound house of seven chamber and hall rooms. With two toilets and bathrooms. The house is built with blocks, painted and was well wired.

They had a dustbin with a well-fitting lid in which they dump their wastes. It emptied by the zoom lion waste truck at every two days. They have a pipe as their source of water, the environment was well kept, and patient's room was well furnished to patient's standard with a ceiling fan, bed and a wooden center table. Their toilet is a water closet which is kept clean always. They were encouraged to continue the practice of a good environmental hygiene as it was a good thing. I was able to interact with some of the cotenants available at the moment to verify some of the information given by patient. We left their residence and got back to the hospital around 5:30pm. Education was given and patient's mother promised to adhere to the education. I identified that patient's house was not too far from the hospital though not too close

and for that reason I informed one community health nurse Miss F.O about handing over the patient to her.

#### **4.1.9 Second Home Visit (11th December, 2022)**

On the 11<sup>th</sup> of December, 2022, at 10am, I embarked on my second home visit. This visit was made to find out how patient was doing and to see whether she was following her treatment regimen and to also remind her on the review date which was on the 15th of December,2022.

Patient's environment was still well kept on assessment. Emphasis was made on the need to be taking the medications as ordered and an education on it was done to remind patient. Patient was doing well, looking good and healthy.

Patient family was thanked for their cooperation and permission was sought to leave. I promised to come for another visit which will be the last. Patient escorted me to the road side where I took taxi to my house.

#### **4.2 Day of Review (15th December, 2022)**

On the 15th of December, 2022 patient was met at the Out-Patient Department of Sunyani Municipal Hospital at 9:00am looking cheerful and lovely as noted from facial expression. I accompanied them to go for patient's card. The vital signs checked and recorded as follows;

1. Temperature            37.0°C
2. Pulse                    78bpm
3. Respiration            22cpm
4. Blood pressure        110/80mmHg

At the Out-Patient Department, patient was seen by the medical officer at consulting room 2. Upon assessment by the doctor, Madam A.A.G was healthy. Patient did not have complains. She was told not to hesitate to report to the hospital if she should encounter any health problem. She was encouraged to avoid spicy foods and eat more fiber diets.

She was also encouraged to practice personal and environmental hygiene to protect herself from getting diseases. Patient was assured of a third home visit. I then accompanied them to the hospital entrance where they boarded a taxi to their home.

#### **4.2.1 Third Home Visit (20th December, 2022)**

This visit was done to assess the general well-being of the patient and family, emphasize on the need to comply with the treatment and to terminate the care.

On the 20<sup>th</sup>, I passed by the hospital to inform the community health nurse about what we have discussed earlier, then she accompanied me to patient's house. We were welcomed and were offered seats as well. The purpose of this visit was to terminate the care since patient was in good health following the medication regimen. I introduced the community health personnel to the patient and family. Patient and her family were doing well as they had no complains and looked cheerful. After series of interactions, I handed over the patient to the community health nurse to continue the care. Madam A.A.G thanked me for the work done and accepted to work with the new nurse. The environment was well kept as always, I asked about medications and she said she has been taking them and adhering to the recommended foods. I then emphasized on the need for regular checkups and to seek medical attention whenever they are sick rather than self-medication. Since it was the last day of therapeutic relationship with patient and family, I terminated my care and thanked them for their cooperation which made my study a success. Patient and family showed how grateful they were to me for the support and care given to them. I sought permission to leave and bid them the final farewell.

## CHAPTER FIVE

### EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY

#### 5.0 Introduction

Evaluation is the assessment of patient's condition on the health or illness on continuum, and of the effectiveness of patient care activities in bringing about a in the patient's condition. It is the final phase of the nursing process. (Weller B. F., Bailliere's nurses's dictionary for nurses and health care workers, 2014). The chapter gives information about the statement of evaluation, amendment of nursing goals and the termination of the care rendered to my patient and family.

#### 5.1 Statement of Evaluation

The health problems recorded throughout the period of hospitalization was five and objectives were set to solve them. The summary of the interventions carried out and the extent the goals were met.

##### **a. Madam A.A.G was relieved of abdominal pain**

On admission at 4:00pm Madam A.A.G complained of abdominal pain(epigastric). A nursing diagnosis was formulated as, Acute pain related to ulceration of the gastric mucosa as evidence by complain of pain in the left upper quadrant with and an objective was to reduce patient's pain intensity to 2 or 1 on the numerical pain rating scale within 24 hours.

The following interventions were carried out; Patient was reassured that measures have been put in place to relieve pain. Pain level was reassessed using the pain rating scale and it was rated as 4, patient was encouraged to watch television, patient was assisted into a comfortable position (prone). Prescribed Iv omeprazole 40mg and paracetamol 1g was served.

On the 6th of December, 2022, an objective that was set on the 5th of December, 2022 that patient's pain will be reduced to 2 or 1 was evaluated as goal partially met as patient chooses 3 as level of pain on the pain rating scale and also patient being observed to have a relaxed facial expression.

##### **b. Patient was able to attain and maintain adequate nutrition**

Madam A.A.G ate only a small amount of the porridge on the 6<sup>th</sup> of December 2022 because she felt pains while eating. A nursing diagnose was formulated at 7:40am as Imbalanced nutrition (less than body requirement) related to loss of appetite as evidenced by pain aggravating on

eating. Objective of patient being able to attain an adequate nutrition was set as; Patient would gain appetite within 24 hours as evidenced by;

- a. Patient verbalizing that she is hungry
- b. Nurse observing patient take in at least 2/3 of her meal

The following interventions were carried out; Patient was reassured that she is in the hands of competent staff who will do their best to help her gain appetite and relieve pain, a small bowl of porridge was served in the morning and later another small bowl of porridge was served to patient, patient was encouraged to thoroughly chew food before swallowing hence she chewed all solid foods for about a minute, patient was served with rice ball and peanut butter soup with some bananas and patient was encouraged to take her drugs before meals to reduce the action of acid secreted by food stimulation in the stomach.

On the 8<sup>th</sup> of December, 2022, at 7:40am an objective set on 6<sup>th</sup> December, 2022 that patient will be able to attain and maintain adequate nutrition within 48 hours, was evaluated as goal fully met as patient verbalized that she has gain appetite for food as she does not feel much pain when she eats and was observed eating 2/3 of the meals she was been served.

**c. Patient regained her normal sleeping pattern**

On the 6<sup>th</sup> of December,2022, the night nurse reported that patient found it difficult to fall asleep when she awakens in the night and she confirmed it to be true and added that it was because of the epigastric pain. A nursing diagnose was formulated as sleep pattern disturbances related to pain at the epigastric region as evidenced by patient finding it difficult to sleep after awakening, an objective was set that patient will regain her normal sleeping pattern within 24 hours.

The following interventions were carried out; A quiet environment was ensured by reducing the volume of radio and TV, nursing activities were planned in order not to disturb patient during her sleep. Patient was educated not to take in much food before bed, hence small bowl of rice and about 2/3 of it was taken by patient, patient was encouraged to take a warm bath to help the body and stimulate sleep. Prescribed paracetamol 1g was served.

On the 7<sup>th</sup> of December, 2022, an objective that was set on the 6<sup>th</sup> of December, 2022 that patient will regain her normal sleeping pattern was evaluated as goal fully met as patient verbalized that she was able to sleep during the night and nurse observing patient sleep at night.

**d. Madam A.A.G was relieved of anxiety**

After the ward rounds on the 7<sup>th</sup> of December, 2022, patient seemed a bit worried, I enquired from her why and said she was worried because she was not discharged. At 8:30am a nursing diagnosis was formulated as Anxiety related to fear of high cost of treatment as evidenced by expressed concern about prolong treatment. An objective was set that patient will be relieved of anxiety within 24hours.

The following interventions were carried out; patient was reassured that staff are supportive, approachable and can communicate with always and was also encouraged through communication to ask for clarification on issues bothering her (amount being paid on admission). Most items that were covered by the NHIS like syringes, gloves infusions and some drugs were explained to patient, Patient was educated on other hospital policies favoring patient who sincerely did not have the money to pay their bills.

On the 8<sup>th</sup> of December, 2022, the objective that was set that patient will be relieved of anxiety on the 7<sup>th</sup> of December, 2022 was evaluated and goal fully met as patient cooperated with treatment and nurse acknowledging her understanding on cost of treatment.

**e. Patient had adequate knowledge on peptic ulcer disease**

On the 7<sup>th</sup> of December, 2022, at 11:30am, upon interaction with patient, it was realized that patient had less knowledge on her condition (Peptic Ulcer Disease). A nursing diagnosis formulated was Deficient knowledge related to inadequate information on peptic ulcer disease as evidenced by inadequate knowledge on causes of peptic ulcer disease (PUD), with an objective that patient will have knowledge on peptic ulcer disease throughout period of hospitalization.

The following interventions were done for patient; Patient and family's knowledge on PUD was assessed, rapport was established to make them feel at ease and cooperate effectively, a serene environment was created for learning by minimizing noise at the ward, patient was educated, patient was allowed to ask questions on PUD and correct answers were provided and patient's understanding was assessed, patient showed understanding of education.

On the 8<sup>th</sup> of December, 2022, the objective set on the 7<sup>th</sup> of December, 2022 that patient will have knowledge on peptic ulcer disease was evaluated and goal fully met as patient was able to answer questions asked about the condition and she practiced her knowledge gained.

## **5.2 Amendment of the Nursing Care Plan**

An objective set on the 5<sup>th</sup> of December, 2022 that patient's pain intensity will reduce to 2 or below on the numerical pain rating scale within 24 hours as evidenced by patient choosing 2 on the numerical pain rating scale of 1-10 was partially met as patient chose 4 as the level of pain. The care plan was therefore amended on the 6<sup>th</sup> of December, 2022 with the same objectives and nursing interventions were continued for 24 hours duration. On the 7<sup>th</sup> of December, 2022 goal was fully met as patient chooses 2 as level of pain on the numerical pain rating scale and was also observed to have a relaxed facial expression.

**Table 8: Table of care for the partially goal met**

<b>Date and Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date and Time</b>	<b>Evaluation</b>	<b>Sign.</b>
6/12/2022 9:30am	Acute pain (Abdomen) related to ulceration of the gastric mucosa as evidence by complain of pain in the left upper quadrant.	Patient's pain intensity will reduce to 2 or below on the numerical pain rating scale within another 24 hours as evidence by; 1. Patient chooses 2 on the numerical pain rating scale of 0-10 2. Nurse observing patient have a relaxed facial expression.	1. Reassure patient of available pain management measures that will be put in place to reduce the pain intensity. 2. Reassess the pain level of patient, using the numerical pain rating. 3. Employ diversional therapy. 4. Assist patient to a comfortable position. 5. Serve prescribed acid controlling drug and analgesic.	1. Patient was reassured those measures have been put in place to relieve pain and to also improve her health. 2. Pain level was reassessed using the pain rating scale and it was rated as 4. 3. Patient was encouraged to watch television. 4. Patient was assisted into a prone position. 5. Prescribed iv omeprazole 40mg and paracetamol 1g intravenous was served.	7/12/22 9:30am	Goal was fully met as 1. Patient chose 2 as level of pain using the numerical pain rating scale. 2. Patient was observed to have a bit of relaxed facial expression.	Y. M

### **5.3 Termination of care**

Care of patient and family ended on the 20<sup>th</sup> of December, 2022, on my last visit to her home. This ended the interaction between Madam A.A.G and her family and the health care team. The preparation for the termination of care started on the day of admission through discharge, review, then third home visit. During these periods, patient and family were educated on various topics. I congratulated the family for the care they had rendered to Madam A.A.G. They were thanked for their co-operation and patient was handed over to a community health nurse. They were told that now that Madam A.A.G health had been restored, the care for her has officially ended. I informed them of my desire to visit them unofficially whenever I get the opportunity. They were happy and noted that they would miss my care and would adhere to all instructions given to them. It was a moment to remember when I told them of my intention to leave. There was no separation anxiety as patient and the relatives had enough psychological preparations from the day of admission till discharge.

## CHAPTER SIX

### SUMMARY AND CONCLUSION

#### 6.0 Introduction

Summary is a comprehensive and usually brief abstract, recapitulation, or compendium of previously stated facts or statements. Conclusion is something that you decide when you have thought about all the information connected with the situation (Weller, 2014). This is the last step of the patient/family care study which comprise of the student's personal appreciation of the therapeutic relationship with the patient and the use of the nursing process.

#### 6.1 Summary

Madam A.A.G 21year old woman was admitted to the Female Medical ward through the Accident and Emergency Ward at the Sunyani Municipal Hospital on 5th of December, 2022 at 4:00pm with an acute exacerbation of Peptic Ulcer Disease with history of abdominal pain. Patient was educated on Peptic Ulcer disease and its management. Patient was also assisted in maintaining her personal hygiene, rest and sleep and adequate nutrition was ensured.

The following drugs were used in the treatment of the condition:

1. Intravenous Normal Saline 1Litre
2. Intravenous Ringer Lactate 1Litre
3. Intravenous Dextrose Normal Saline 1Litre
4. Intravenous Paracetamol 1g tid x24hrs
5. Intravenous Omeprazole 80mg stat then 40mg bid for24hrs
6. Suspension Nugal'O' 15mls

On the 15th of December 2022, patient came for review as scheduled. Three home visits were embarked on. The first one was when patient was on admission 7<sup>th</sup> December, 2022, second home visit was on the 11<sup>th</sup> of December, 2022 and the third was also on the 20<sup>th</sup> of December, 2022. The care of Madam A.A.G and her family was terminated on the 20th of December, 2022 during the last home visit when patient had fully recovered.

#### 6.2 Conclusion/Recommendation

The study has equipped me with knowledge on how to care for a patient as an individual. Through this study, I have been able to put into practice actual and holistic nursing care as has

been learnt theoretically. The study provided a therapeutic environment for nursing patient as an individual and has promoted a good nurse-patient family relationship as well as broadened my knowledge on peptic ulcer disease, it's prevention, management and treatment. It has also helped me to practice my skills acquired in the classroom theoretically. It has deepened my relationship with patients, families and the people in a given community as a whole. The study also provided the platform for the patient/family to receive individualized care. Based on the testimonies given by patients who receive individualized nursing at hospitals, it prompts most of the community members to seek medical help at the various hospitals. This helps to redeem the image of the hospital and the staff nurses as a whole. Also this patient/family care study also helps to change the community's wrong perceptions about staff nurses and also improve the people's attendance to the hospital.

Therefore, it is my recommendation that all students are given the opportunity to embark on the patient/family care study to implement the nursing process in order to render individualized comprehensive care to patients/families. In brief, I really enjoyed every bit of writing this script despite the challenges encountered.

## APPENDIX

**Table 9: Vital signs of Madam A.A.G**

<b>Date</b>	<b>Time</b>	<b>Temperature (°C)</b>	<b>Pulse (Bpm)</b>	<b>Respiration (Cpm)</b>	<b>Blood pressure (mmHg)</b>
5/12/22	4:00pm	36.2	72	18	120/100
6/12/2022	6:00am	36.5	79	20	120/100
	10:00 am	36.6	92	19	110/80
	2:00pm	37.1	93	21	110/90
	6:00pm	36.5	85	18	107/79
	10:00pm	36.4	90	21	100/80
7/12/2022	6:00am	35.8	92	21	110/70
	10:00am	36.1	88	19	100/70
	2:00pm	36.0	90	20	110/80
	6:00pm	36.3	82	20	100/70
	10:00pm	36.9	90	20	120/80
8/12/2022	6:00am	36.7	79	20	120/80
	10:00am	36.5	87	19	110/80
	2:00pm	36.8	78	18	110/70
	6:00pm	36.3	82	18	120/80
15/12/2022	9:30am	37.0	78	22	110/80

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Patient's Folder Number BR-AO1-AAK8884 ( Municipal Hospital, Sunyani)

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SIGNATURE: Mary

DATE: 10th July, 2023

**NURSE IN-CHARGE OF THE FEMALES' WARD, (SUNYANI MUNICIPAL HOSPITAL, SUNYANI).**

NAME: MS. SELINA ACHEAA

SIGNATURE: Ms. Selina (for)

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