HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

A PATIENT/FAMILY CENTERED NURSING CARE STUDY ON

PEPTIC ULCER

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

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PREFACE

Nursing has progressed significantly throughout time. Florence Nightingale (1820-1910), a woman who led the way and gave great respect to the profession by means of her vision, is responsible for most of its body of knowledge. Nursing has essentially progressed from caring for the ill to including family members and the society at large by means of the application of scientific methodologies and procedures to assist in problem solving.

During the Crimean War, Florence Nightingale and 38 volunteer nurses were sent to the main British camp in Turkey. Nightingale and her colleagues immediately set about cleaning the hospital and arranging patient care. Nightingale was a proponent of hospital sanitation changes and a pioneer in the use of statistical data graphing techniques.

The patient/family care study is a report of nursing care rendered to a client and family by a final year student nurse in which a patient is selected from the ward, nursed from the day of admission till discharge and possible follow – up visits are made to maintain optimum level of health of the patient.

The care study forms part of the assessment of the final year student nurse for the award of the Registered General Nurse (Diploma) Certificate by the Nursing and Midwifery Council of Ghana and a license to practice as a nurse in Ghana.

The patient and family care study allows the student nurse to do more research, communicate with other members of the health team, and collaborate with them to provide comprehensive and high–quality health care to people and the community at large.

The course also gives the student nurse a chance to use scientific methods and a comprehensive approach to nursing care. It assists the student nurse in putting his or her theoretical knowledge into practice so that he or she can get the required skills and knowledge for professional employment.

The care study boosts the student nurse's confidence and prepares him or her to take on full responsibility for a patient and his or her family.

Finally, it gives the student nurse some level of competence in rendering accurate nursing care using the nursing process approach

ACKNOWLEDGEMENT

First and foremost, I thank the Almighty God for His direction, knowledge, power, and wisdom in bringing this work to life.

Mrs. J.A. and her family deserve special thanks for their cooperation during the treatment and for giving me all of the information I required for the study.

I appreciate my supervisor's efforts in providing me with useful insights, direction, and support as I worked to complete this work.

I also appreciate the efforts of the Nursing Staff of the female medical unit of Kintampo Municipal Hospital.

I am highly grateful to all authorities, various authors and publishers of all the references used for this piece of work.

Finally, I am grateful to my parents for their upbringing and supervision, as well as my brothers, sisters, and friends, who all helped to make this patient and family care study a success in many ways.

INTRODUCTION

The patient/family care study is a report of the nursing care rendered to a patient and his/her family and the community as a whole.

This care study was carried out on Mrs. J.A. a 36-year-old woman. Mrs. J.A. arrived on the Female Medical Ward of Kintampo municipal hospital on 19th November, 2022 at 6:30pm per ambulation by a staff nurse and her sister with the diagnosis of Peptic Ulcer Disease. On arrival patient was fairly ill. Patient was fully conscious and alert. She presented with history of nausea, epigastric pain and headache.

Vital signs were checked and recorded accurately as follows:

- Temperature 36.9^{o}
- Pulse 82bpm
- Respiration 25cpm
- Blood Pressure 130/90mm/Hg
- SPO2 96%

Investigations carried out on her were:

1. Pregnancy Test was conducted
2. Full blood count was conducted
3. BF for malaria parasite was conducted
4. Routine urine examination was conducted
5. Abdominal USG
6. H pylori test

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

1. Intravenous Omeprazole 40mg bd x4 days

2. Intravenous Amoxiclav 1.2g tds x4 days
3. Intravenous Metronidazole 500mg tds x4 days
4. Suspension Nuge'0' 15mls tds for 5 days
5. Intravenous DNS 1liter for 24hours
6. Tab paracetamol 1g tds x 5 days
7. Injection tramadol 100mg stat in 500mls normal saline
8. IV hyoscine butylbromide 40mg bd x3 days

Mrs. J.A. spent four days on the ward and was discharged on 22ndNovember, 2022 after recovering fully from the signs and symptoms presented. She was told to report for review on 29th November, 2022. Her first home visit was made on 20th November, 2022, second home visit was on 24th November, 2022 and last home visit was on 1st December, 2022.

The nursing process approach is made up of five (5) phases, which includes: Assessment, Analysis, Planning, Implementation and Evaluation.

The description of the detailed care study is in six (6) chapters.

Chapter one involves Assessment of the patient and family, literature review and validation of data. Chapter two involves Analysis of data. Chapter three involves Planning for patient family care. Chapter four involves Implementation of the care plan. Chapter five involves Evaluation of the care rendered to the patient/family and Chapter six deals with Summary and conclusion.

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CHAPTER ONE

ASSESSMENT OF PATIENT AND FAMILY

1.0 Introduction

Assessment is the systematic collection of data to determine the patient's health status and any actual or potential health problems (Hinkle & Cheever, 2014). It is the first stage and a vital tool in the nursing process. Assessment can be done through observations, interviewing and investigations such as laboratory results, x-ray reports and physical examination 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 his illness, literature review on the condition from which analysis will be made to identify the patient problems and validation of data. These help the nurse to determine the health status of the patient and her family in order to plan an effective nursing care towards recovery. All information was gathered from the patient and his relatives, as well as the patient's Lightwave Health Information Management System (LHIMS).

1.1 Patient's Particulars/Biographical Data

Patient refers to a person who is receiving medical treatment in a hospital (Hornby, 2006). Particulars is defined as details or information about a person, especially when officially recorded (McIntosh, 2013). Mrs. J.A. is a 36-year-old woman, born on 13thMarch,1986 to Mr. M.A. and Mrs. E.A. She comes from Petiansa at Agogo in Ashanti Akin north municipality in Ashanti region of Ghana and currently resides at Kintampo Magazine with house number OPO698. Her digital address is BD-0288-3601. She is fair in complexion, 1.45m tall and weighs 49kg with a Body Mass Index (BMI) of 23.3kg/m^2 which clearly indicates that she is not overweight. She is not married. Mrs. J.A. has two children.

Mrs. J.A. is a Christian who worships with the Jehovah witness church at Kintampo. She is the first born of eight children. Mrs. J.A. is a teacher at Living Spring Academy at Kintampo. Her next of kin is her younger sister Miss R.A. who also resides at the same place as the patient. The languages she speaks are; Twi, English, Hauza and Gonja. Mrs. J.A. is a National Health Insurance beneficiary. She has no physical impairments or disabilities. Her LHIMS number is BE-A04-AAA3460.

1.2 Family's Medical/Surgical History

Health history is a series of questions used to provide an overview of the patient's current health status. Attention is focused on the impact of psychosocial, ethnic, and cultural background on a person's health. Information is obtained on both paternal and maternal sides of family (Hinkle & Cheever, 2014). Mrs. J.A. stated clearly that her grandparents are deceased. Her grandmother died as a results of stroke but grandfather died as a result of old age. According to Mrs. J.A. her parents gave birth to ten children, five boys but one is deceased and five girls. So her parents and the eight other siblings are alive and healthy. There is no hereditary disorder like hypertension, diabetes mellitus, asthma, sickle cell, epilepsy or any mental disorders in the family. However, the relatives present during her history taking said that, periodically, they do suffer some ailments like headache, fever and abdominal pains which are treated by self-medication (using both over-the-counter drugs and traditional medicines) but if symptoms persist, they report to the hospital. With this information I educated the patient and family about the effects of the use of over the counter drugs and urged them to seek medical care from any health center when they are suffering from any condition. She has never been hospitalized .The source of medical treatment for Mrs. J.A. and family are both orthodox and herbal medicine. There are no known allergies in the family.

1.3 Family Socio-Economic History

Socio-economic history captures sources of support, coping styles, strengths, and fears (Bickley & Szilagyi, 2017). Mrs. J.A. has a very good relationship and interrelation with her family. Socially the family is not noted for smoking or drinking alcohol. She revealed that some of her family members are into teaching whiles others are health workers. Her father is a health inspector and mother works at the education office. Mrs. J.A. does not depend much on her extended family for financial support but rather depends on her own income. Her family members are well known for their massive participation in religious activities, kindness and generosity. Mrs. J.A. herself is a member of the bible study group at church. In terms of religious believes she revealed that, some of her family members are Christians while others are Muslims. She revealed that most of her family members are registered with the NHIA which helps them in their medical expenses. According to Mrs. J.A. the pressure mounted by her Proprietress to make sure the last student leaves the school before she also leaves always create tension for her because she do not like it working under pressure, she revealed that she always overcome this by been patient and tolerant to prevent misunderstanding between her and the proprietress. Mrs. J.A. could not state any specific amount she gains as profit from her work but she made it quite clear that most of the parents of her students are supportive who gives her cash and other gift most time. Moreover, her numerous gifts come when the children are celebrating “our day”. She stated that there are no taboos governing the family. Family members are always ready and willing to support each other in times of financial hardships. According to the patient the father of her child, mother and church are the major source of support system she has.

1.4 Patient’s Developmental History

Development refers to the process of growth and differentiation which involves cognitive, psychosexual and psychosocial processes (Weller, 2014).

Maturation is the process of developing (Weller, 2014). Growth is the progressive development of a living thing, especially the process by which the body reaches its complete physical development (Weller, 2014). The developmental history was given by patient herself as told by her mother. Mrs. J.A. indicated that her mother went through normal pregnancy of nine months' gestation without any pregnancy associated disorders and had spontaneous vaginal delivery with the help of medical staff at Salaga Municipal Hospital. She was born without any congenital abnormality such as cleft lip or palate, hydrocephalus and was immunized against the childhood vaccine preventable diseases as evidenced by Bacille Calmette Guerin (BCG) scar on her right shoulder. Mrs. J.A. was breastfed exclusively for six months and was introduced to supplementary foods. She went through a normal developmental landmark. This includes sitting up at the 7^{th} month, crawling at the 10^{th} month, walking, talking and running between the ages of one and three. Mrs. J.A. around the age of fourteen began to experience secondary sexual characteristics such as enlargement of breast, broadening of hips, growing of pubic hairs and had her menarche around the age of sixteen. Patient stated that she had it easy understanding what was taught in class so did not want to miss class because she pick what is been taught when she always has an eye ball contact with her teacher at school. Patient is not married at the moment but has two children. Upon asking patient about the aspirations and career plans, she said she wanted to be a doctor but her decision changed because she was afraid of blood. So she changed that idea, to be a nutritionist when she realized she was good in nutrition at SHS.

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

Each stage is characterized by a distinct conflict, or crisis, relating to the person's physiologic maturation and to what society expects of a person at that age. According to Erik Erickson's psychosocial development which encompasses eight stages, Patient is now in her adulthood age group where there is conflict between intimacy versus isolation (19 to 40 years), As youth move even deeper into adulthood, developing intimate relationships becomes particularly salient. Importantly, intimacy here involves both romantic and platonic relations- it is about sharing oneself with others. Indeed, once individuals develop a reasonable sense of identity, they are then prepared to share that identity with others in order to develop successful intimate relations. If people cannot form these relationships, perhaps because of their own needs, a sense of isolation may result arousing feelings of darkness and danger (Pastorino & Portillo, 2012). Patient has demonstrated beyond reasonable doubt that she has achieved a sense of identity due to the fact she has been able to involve in numerous relationships. I am sincerely convinced that patient is in the intimacy dimension of Erickson`s psychosocial development.

1.5 Obstetric History

According to patient she had her menarche around the age of sixteen. Mrs. J.A. indicated that she has ever had an abortion before. She gave birth to all her children through spontaneous vaginal delivery with no complications. She revealed that she has never used any oral contraceptives to prevent herself from getting pregnant. She also revealed that she has a regular menstrual cycle and that she usually gets her menses at the first week of every month but do not know the exact number of days. she was educated on some of the situations which can cause the menses to flow even if she is not expecting it and the need to know the days too.

1.6 Patient's Lifestyle and Hobbies

Life style is defined as the pattern of daily living that an individual develops (Weller, 2014). Mrs. J.A. goes to bed around 8:30 pm, she always prays before going to bed. She wakes up at 4:00am and says her morning prayers and does her morning devotion.

She maintains her oral hygiene with the use of tooth brush and tooth paste. After that she sweeps her compound, empties her bowel, takes her bath with warm water and sets off to school. Mrs. J.A's favourite food is banku with pepper and sardine. But for her condition she was educated to reduce or better still desist from the pepper since it can irritate the stomach to make her case worse. Mrs. J.A. does not have any fixated habit such as drinking, smoking, gossiping etc. For breakfast, patient mostly takes porridge with bread or Kenkey. Mrs. J.A. indicated that she normally gets to school by 6:00am and closes at 4:00pm.But gets home around 6:00pm because she has to make sure all her students have been taken up by their parents or care takers. She usually does not go to the market but gives her list to a woman at her house to get her the food stuffs. Due to the demanding nature of her work, she does not usually spend time cooking evening meals because she prepares all meal for the week on Saturdays and stores it in the refrigerator to prevent it from spoiling. At 7:30pm to 8:30pm she brushes her teeth and takes her bath. She is not fun of television, so she just goes to bed after her bath. On Saturdays she washes her cloths and that of her children, does home cleaning, prepares food, stew and soup for the week, then prepare herself for bible studies on Sunday. On Sundays she prepares herself for Sunday service at the Jehovah witness Church in Kintampo. She described herself as an extrovert who likes to chat with siblings and neighbours a lot. Patient has no known allergy to food or drugs. Patient cited that she mostly does not take three square meals per day thus breakfast, lunch and supper because of her work and sometimes losses appetite. She sometimes enjoys snacks. Patient does not experience any difficulties when it comes to food preparation because she does that during

the weekends. Her major medium of transportation in town is tricycle(okada). Through our interaction patient revealed that her major stress is the fact that she is always thinking about the wellbeing of her family, she passionately believes that success will come their way. Patient indicated that she does a lot of crying whenever she is stressed up.

Patient cited that she likes honest people but dislikes promise and fail individuals. Patient is an active member of the bible studies at church. My personal impression about my patient is that, she is very calm, benevolent and generous.

1.7 Patient's Past Medical/Surgical History

Past medical history is a narrative or record of past events and circumstances that are or may be relevant to a patient's current state of health (MediLexicon, 2009). Mrs. J.A. never experienced any childhood illness like whooping cough, poliomyelitis, measles, tetanus, tuberculosis, and diphtheria and has not identified any allergy to drugs, animals or insects. She revealed that she usually suffers from minor ailments such as headache and abdominal pains which she treats with over-the-counter medications. When symptoms persist or become worse, she visits a nearby hospital or clinic. Mrs. J.A. said she has never had any major accident but cited that she sometimes suffers from minor cuts or slips.

1.8 Patient's Present Medical/Surgical History

The history of the present health concern or illness is the single most important factor in helping the health care team arrive at a diagnosis or determine the patient's needs. The physical examination is helpful but often only validates the information obtained from the history. A careful history assists in correct selection of appropriate diagnostic tests (Hinkle & Cheever, 2014). Also, according to Bickley & Szilagyi (2014), History of present illness is a complete, clear, and chronologic account of the problems prompting the patient to seek care.

According to patient on 18th November, 2022 she had severe abdominal pains and was accompanied by her sister to the Accident and Emergency Centre at Kintampo municipal Hospital, at 4:30am. She was detained at the Accident and Emergency Centre and subsequently admitted to the Female Ward the next day at 6:30pm.

At the emergency ward patient pain was managed and the labs below was ordered for her; pregnancy test, Full Blood Count, Blood Film for malaria parasite and routine urine examination. FBC results were not ready and was transferred to the Females ward, so the nurses was tasked to do follow up on that and if not available, they should do haemoglobin test.

He was reviewed by a Medical officer and after history and physical assessment the doctor diagnosed her of Peptic Ulcer disease. The medication below was ordered for her; IV Omeprazole 40mg bd x1, IV Amoxiclav 1.2g tds x 1 day, IV Metronidazole 500mg tds x 1 day, DNS 1L, and Tab Paracetamol 1g tds x1 days, Injection tramadol 100mg stat in 500mls normal saline, Suspension Nugel'0' 15mls tds for 5 days.

1.9 Admission of the Patient

Mrs. J.A. arrived on the Female Medical Ward on 19th November, 2022 at 6:30pm per ambulation accompanied by a staff nurse, rotational nurse and her sister. On arrival patient was fairly ill and weak. Patient was fully conscious and alert.

Patient had been detained at the Accident and Emergency Centre of Kintampo municipal Hospital for one day with the diagnosis of Peptic Ulcer Disease with history of headache, epigastric pain and malaise. It was a planned admission. As student nurse free that time I was tasked to do the admission of this patient to the ward. I personally collected the patient particulars from the accompanying staff nurse. The patient's identity was verified by mentioning her name for her to respond. She was then warmly welcomed and immediately

made comfortable in a simple unoccupied bed. Her particulars such as name, sex, age, and residential address were entered into the admission and discharge book and the daily ward state.

Vital signs were checked and recorded accurately as follows:

1. Temperature 36.90^{o}C
2. Pulse 82bpm
3. Respiration 25cpm
4. SPO2 96%
5. Blood Pressure 130/90mm/Hg

Patient was introduced to her roommates; she was also introduced to the staffs present and was assured of the competency of the healthcare team. Hospital policies regarding visiting periods, payment of bills and the time vital signs will be checked were explained. Patient was properly orientated to the ward environment and its annexes. Physical examination on the patient was performed from head to toe and no abnormalities were seen. At the time of admission, assessment revealed that the abdominal pain was severe and colicky at the epigastric region and was non-radiating. Pain was relieved after eating and hunger aggravated the pain.

The following treatment plan were ordered:

1. To follow up on full blood count or haemoglobin test
2. Intravenous Omeprazole 40mg bd x 1 day.
3. Intravenous amoxiclav 1.2g tds x 1 day.
4. Intravenous metronidaxole 500mg tds x 1 day
5. Suspension Nugel'0' 15mls tds for 5 days

6. Intravenous DNS 1litre for 24 hours.
7. Tab paracetamol 1g tds x 5 days.
8. Injection tramadol 100mg stat in 500mls normal saline.

The following laboratory investigations were ordered in addition to those at the Emergency, Urine R/E, Endoscopy, H pylori test and abdominal ultrasound.

Patient was weak hence IV Dextrose Normal saline 1L was set up. Patient looked anxious. She was reassured to allay all fears and anxiety. I reintroduced myself to patient as a final year student nurse of the Holy Family Nursing and Midwifery Training College, Berekum, who would like to take her and her family for my care study. Mrs. J.A and her sister were informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment towards the award of license to practice as a professional Registered General Nurse. I explained to the patient and her sister the concept of the patient/family care study and assured them of privacy and confidentiality. It was added that a report will be written after the entire event. Mrs. J.A. and her sister agreed to my request and promised to offer me the necessary information and assistance. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus, they will continue the care at home once she is well. Looking at how common peptic ulcer disease is, I decided to choose this patient for the study to know more to help educate people to overcome this disease and to prevent it from occurring at all.

1.10 Patient's Concept of Illness

Mrs. J.A. did not attribute her illness to any spiritual cause in spite of her spiritual believes as a Christian. She was of the opinion that some conditions like epilepsy and other mental disorders can have spiritual implications. She does not know the exact cause of her condition. Patient verbalized without doubt that her condition probably has a link with prolonged starvation and intake of certain fruits such as oranges, lemons and some carbonated drinks.

Patient believes that the treatment planned for her, in the hospital, will help treat her illness and prevent any complications.

1.11 Literature Review

Review of Anatomy of the Gastrointestinal System

The GI tract is a 23- to 26-foot-long (7 m to 7.9 m) pathway that extends from the mouth to the esophagus, stomach, small and large intestines, and rectum to the terminal structure, the anus (Hinkle & Cheever, 2014).

The stomach is situated in the left upper portion of the abdomen under the left lobe of the liver and the diaphragm, overlaying most of the pancreas. A hollow muscular organ with a capacity of approximately 1500 mL, the stomach stores food during eating, secretes digestive fluids, and propels the partially digested food, or chyme, into the small intestine. The gastro esophageal junction is the inlet to the stomach. The stomach has four anatomic regions: the cardia (entrance), fundus, body, and pylorus (outlet). Circular smooth muscle in the wall of the pylorus forms the pyloric sphincter and controls the opening between the stomach and the small intestine.

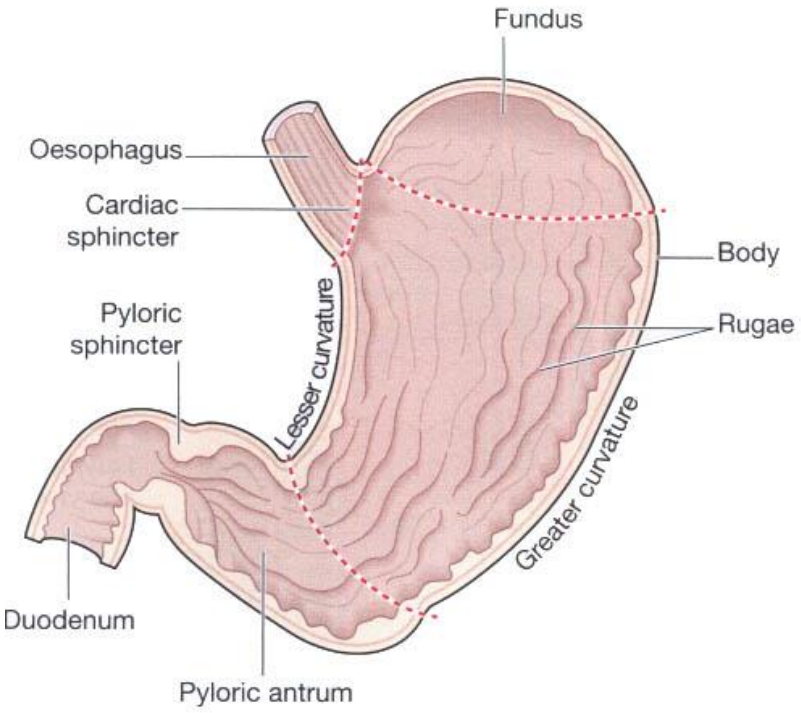

Figure 1. 1: Diagram of the stomach

(Wagh & Grant, 2014)

The stomach is located in the upper left quadrant of the abdominal cavity, to the left of the liver and in front of the spleen. Although part of the alimentary tube, the stomach is not a tube, but rather a sac that extends from the esophagus to the small intestine. Because it is a sac, the stomach is a reservoir for food, so that digestion proceeds gradually and we do not have to eat constantly. Both mechanical and chemical digestions take place in the stomach. The cardiac orifice is the opening of the esophagus, and the fundus is the portion above the level of this opening. The body of the stomach is the large central portion, bounded laterally by the greater curvature and medially by the lesser curvature. The pylorus is adjacent to the duodenum of the small intestine, and the pyloric sphincter surrounds the junction of the two organs. The fundus and body are mainly storage areas, whereas most digestion takes place in the pylorus.

When the stomach is empty, the mucosa appears wrinkled or folded. These folds are called rugae; they flatten out as the stomach is filled and permit expansion of the lining without tearing it. The gastric pits are the glands of the stomach and consist of several types of cells; their collective secretions are called gastric juice. Mucous cells secrete mucus, which coats the stomach lining and helps prevent erosion by the gastric juice. Chief cells secrete pepsinogen, an inactive form of the enzyme pepsin. Parietal cells produce hydrochloric acid (HCl); these cells have enzymes called proton pumps, which secrete H+ ions into the stomach cavity. The H+ ions unite with chlorine ions that have diffused from the parietal cells to form HCl in the lumen of the stomach. HCl converts pepsinogen to pepsin, which then begins the digestion of proteins to polypeptides, and also gives gastric juice its pH of 1 to 2. This very acidic pH is necessary for pepsin to function and also kills most microorganisms that enter the stomach. The parietal cells also secrete intrinsic factor, which is necessary for the absorption of vitamin B12. Enteroendocrine cells called G cells secrete the hormone gastrin. Gastric juice is secreted in small amounts at the sight or smell of food. This is a parasympathetic response that ensures that some gastric juice will be present in the stomach when food arrives. The presence of food in the stomach causes the G cells to secrete gastrin, a hormone that stimulates the secretion of greater amounts of gastric juice. The external muscle layer of the stomach consists of three layers of smooth muscle: circular, longitudinal, and oblique layers. These three layers are innervated by the mesenteric plexuses of the enteric nervous system. Stimulatory impulses are carried from the CNS by the vagus nerves (10th cranial) and provide for very efficient mechanical digestion to change food into a thick liquid called chyme.

The pyloric sphincter is usually contracted when the stomach is churning food; it relaxes at intervals to permit small amounts of chyme to pass into the duodenum. This sphincter then contracts again to prevent the backup of intestinal contents into the stomach.

Definition

Peptic ulcer is an excavation formed in the mucosal wall of the stomach, duodenum, or esophagus. It is frequently referred to as gastric, duodenal, or esophageal ulcer depending on its location. It is caused by the erosion of a circumscribed area of mucous membrane. Peptic ulcer more likely to occur singly, but there may be several present at one time (Hinkle & Cheever, 2014).

Stress ulcer is the term given to the acute mucosal ulceration of the duodenal or gastric area that occurs after physiologically stressful events, such as burns, shock, severe sepsis, and multiple organ traumas. These ulcers are most common in ventilator-dependent patients after trauma or surgery.

Peptic ulcer can be classified according to the location or site of mucosal erosion.

1. Oesophageal Ulcer: This is the less common type of Peptic Ulcer where there is an excavation in a part of the mucosal lining of the esophagus.
2. Gastric Ulcer: This is an excavation formed in the mucosal wall of the stomach.
3. Duodenal Ulcer: This is an excavation formed on the mucosa wall of the duodenum.
4. Stress Ulcer

Table one below shows the difference between gastric and duodenal ulcer.

Table 1. 1: Differences between Gastric and Duodenal ulcer

According to Hinkle and Cheever (2014), the difference between gastric and duodenal ulcer includes;

Gastric Ulcer	**Duodenal Ulcer**
Pain is aggravated by the intake of food	Pain is relieved by the intake of food
There is loss of weight	Rapid weight gain

There is vomiting	Vomiting is rear
Often occurs in people with blood group A	Often occurs in people with blood group O
Pain will not occur in sleep	Pain awakes patient from sleep usually in the middle of the night.
There is gastro intestinal bleeding	Bloody stool
Associated with NSAIDS, alcohol, H. pylori, smoking, stress, gastritis	No association with NSAIDS
Age: Usually 50 and over	Age: 30 -60
15% of PUD are gastric	80% of PUD are duodenal
Male: female 1:1	Male: female 2-3:1
Malignancy: occasionally	Malignancy: Rare
Risk factors: Associated with NSAIDS, alcohol, H. pylori, smoking, stress, gastritis	**Risk factors:** Alcohol, H. pylori, smoking, stress, gastritis, cirrhosis

Incidence

The disease can occur anywhere, but it is common only in some area. Peptic Ulcer Disease occurs more in men than women with the ratio of 3:1. London areas were obtained 20 years ago and duodenal ulcer was two to three times common than gastric ulcer. The prevalence of peptic ulcer is higher in Scotland and the North of England than in the South. In the developed world, duodenal ulcer is commoner than gastric ulcer and occurs in younger age. Gastric ulcer becomes relatively common in elderly. After menopause, the incidence of peptic ulcer in women is almost equal to that of men with duodenal ulcer (Hinkle & Cheever, 2014).

Etiology / Causes/Predisposing Factors

Peptic ulcer was once believed to be directed result of acid over secretion in respond to stressful life events. According to Hinkle and Cheever (2014) the following are some causes or predisposing factors of peptic ulcer:

1. Infection by the organism Helicobacter pylori.
2. The side effect of Non-steroidal anti-inflammatory drug (NSAID) administration.
3. Emotional stress and depression.
4. Excessive alcoholism
5. Excessive smoking
6. Irregularities in hormonal secretion
7. Excessive secretion of histamine
8. Blood type; duodenal ulcer are common in blood type O and gastric ulcer in blood type A
9. Gastritis
10. Hyper secretion of HCL
11. Presence of H. Pylori in the GIT

Pathophysiology

Peptic ulcers occur mainly in the gastro duodenal mucosa because this tissue cannot withstand the digestive action of gastric acid (HCl) and pepsin. The erosion is caused by the increased concentration or activity of acid-pepsin, or by decreased resistance of the mucosa. A damaged mucosa cannot secrete enough mucus to act as a barrier against HCl. The use of non-steroidal anti-inflammatory drugs (NSAIDs) inhibits the secretion of mucus that protects the mucosa. Patients with duodenal ulcer disease secrete more acid than normal, whereas patients with gastric ulcer tend to secrete normal or decreased levels of acid. Diarrhoea and steatorrhea (unabsorbed fat in the stool) may be evident (Hinkle & Cheever, 2014).

The most common complaint of gastric ulcer is epigastric pain. Patients may present with Gastro intestinal bleeding as evidenced by the passage of tarry stools. A small portion of patients who bleed from an acute ulcer have had no previous digestive complaints, but they develop symptoms thereafter.

Figure 1. 2: Ulcer formation

(Hinkle & Cheever, 2014)

Clinical Manifestation

According to Hinkle and Cheever (2014), the following are some signs and symptoms of peptic ulcer:

1. Upper abdominal pain
2. Anorexia
3. Weight loss
4. Nausea
5. Vomiting
6. Heartburns

7. Burning epigastric pain
8. Epigastric tenderness
9. Diarrhoea
10. Constipation
11. Bleeding

Diagnostic Investigation

According to Hinkle and Cheever (2014), The under listed are some diagnostic investigation of peptic ulcer:

1. Upper gastro intestinal tract endoscopy.
2. Stool analysis reveals occult blood.
3. Barium X-ray of the intestinal tract reveals changes in the mucosa.
4. Computed tomography scan of the stomach and duodenum.
5. Physical exam
6. History from patient.
7. Presenting signs and Symptoms.
8. Gastric analysis.
9. Biopsy and histology to rule out cancer.
10. Full blood count.
11. Helicobacter pylori test

Medical Management

According to Smelter and Bare (2010), advances in drug therapy have dramatically changed the management of Peptic Ulcer Disease and significantly improved its effectiveness. A variety of changes exist and the specific protocol for any particular patient is determined

based on the preference of the physician and the patient's unique profile. Drug therapy control peptic ulcer symptom effectively often in a matter of days;

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

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. According to Smelter and Bare (2010), surgical procedures adopted include:

1. Vagotomy

   Severing of the vagus nerve. Decreases gastric acid by diminishing cholinergic stimulation to the parietal cells, making them less responsive to gastrin. May be performed through open surgical approach, laparoscopy or thoracoscopy.

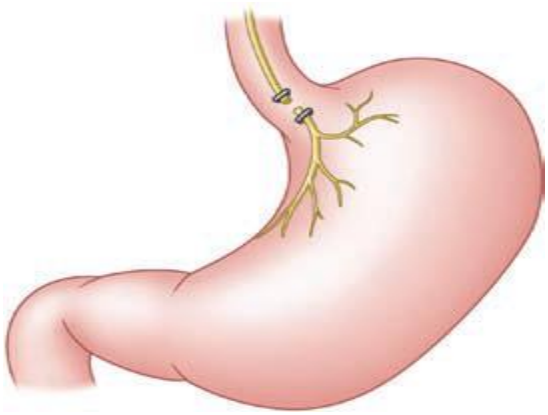

Figure 1. 3: Vagotomy

Source: (Hinkle & Cheever, 2014)

2. Pyloroplasty

Longitudinal incision is made into the pylorus and transversely sutured closed to enlarge the outlet and relax the muscle

3. Billroth I (Gastroduodenostomy): Removal of the lower portion of the antrum as well as a small portion of the duodenum and pylorus. The remaining segment is anastomosed to the duodenum.

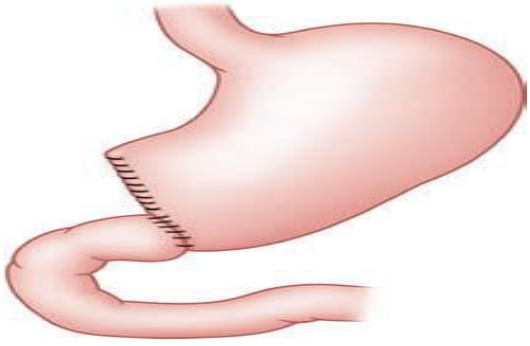

Figure 1. 4: Gastroduodenostomy

Source: (Hinkle & Cheever, 2014)

4. Billroth II (Gastrojejunostomy): Removal of lower portion (antrum) of stomach with anastomosis to jejunum. Dotted lines show portion removed (antrectomy). A duodenal stump remains and is over sewn.

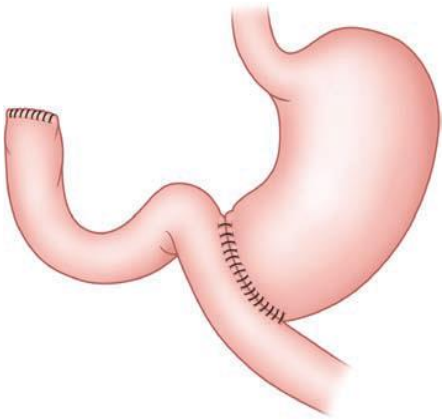

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Figure 1. 5: Gastroduodenostomy

Source: (Hinkle & Cheever, 2014)

Lifestyle Changes

1. Stress reduction.
2. Dietary changes.
3. Smoking cessation.

Nursing Diagnosis

1. Acute pain related to the effects of gastric acid secretion and damage to tissue.
2. Anxiety related to coping to acute diseases.
3. Imbalance nutrition related to dietary changes.
4. Deficient knowledge about preventing symptoms and managing the condition.

Nursing Management

Reassurance

1. Patient is reassured that he/she is in the hands of competent and well trained staff that are always ready to offer care and support to ensure good health.
2. Client is also introduced to other patients who have similar conditions as him/her and has had their treatment waiting to be discharged.
3. Relatives are also reassured that all necessary procedures will be done for client.
4. Diversional therapy such as watching of televisions and the use of slide pictures are provided to divert patients mind from their condition.

Reliving pain and improving nutrition

1. Give prescribed medication.
2. Avoid aspirin, which is anticoagulants and caffeinated foods.
3. Patient to eats at regular intervals in relaxed atmosphere.
4. Encourage relaxation techniques.

Reliving anxiety

1. Assess what patient wants to know about the disease.
2. Explain diagnostic test and medication schedules.
3. Encourage family to participate in care giving.
4. Allow them to ask question and clear misconceptions.
5. Interact in a relaxed manner and avoid stressors.

Monitoring complications

1. If hemorrhage is concern assess faintness or dizziness and nausea.
2. Insert indwelling catheter to monitor intake and output.
3. Monitor laboratory values, RBCs.
4. Insert NG tube, give lavage as ordered.
5. Give and Monitor oxygen administration.

6. Place patient in recumbent position.
7. Treat for shock.
8. If perforation occurs note and report symptoms sudden abdominal pains.
9. If penetration occurs note and report symptoms of back and epigastric pain.

Position

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

Rest and sleep and stress reduction

1. A quiet environment is provided by reducing noise to allow patient to get enough rest.
2. Windows were opened to allow ventilation.
3. Visitors are also restricted to allow patient gets enough rest and sleep.
4. All nauseating materials such as bedpans and dirty linens are removed.
5. Bed is been made free from creases and cramps by straighten the bed linen.
6. Warm beverages are served.
7. Warm bath is given with warm water, soap, sponge and towel in order to relax patient and to induce sleep.

Observation

1. Patient's level of consciousness is observed to know whether client was unconscious, semiconscious, or fully conscious.
2. Vital signs were also checked and recorded which comprises of temperature, pulse, respiration and blood pressure.

3. Intake and output chart are also monitored by observing intake and output chart to know patient's fluid and electrolyte balance. Intravenous infusion is also monitored by observing the site of intravenous cannula for abnormalities such as swelling or pain at the site. The intravenous flow rate is also observed for the normal flow rate.

Personal Hygiene

Body hygiene is done by giving an assisted bed bath twice daily with warm water, soap, sponge and towel to prevent offensive odour and to remove microorganisms from the skin. Bony prominences which are prone to be sore are well cared for by treating the area to prevent bed sore. Soiled bed linens are also changed when dirty or wet to prevent bad odour and harboring of microorganisms. Oral hygiene is also done twice daily with toothpaste and toothbrush. This is done to prevent oral offensive smell and to prevent the harboring of micro bacteria. Client's hair is also cared for by washing it with soap and water and drying it with a towel. Patient's hands and feet are 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.

Nutrition / Diet

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. These can be minimized by avoiding extremes of temperature and over secretion from consumption of meat extracts, alcohol, and coffee (including decaffeinated coffee, which also stimulates acid). Dietary compatibility becomes an individual matter. The patient eats food that can be tolerated and avoids those that produce pain. Certain substance such as spicy food cause severe pain and has to be

avoided. Smoking should be avoided as it has been shown to delay ulcer healing regardless of the therapy. Serve small frequent and bland foods. Avoid alcohol and give milk in between meals. Patient is encouraged to take enough roughage to enhance bowel elimination. Vitamin and minerals foods such as fruits like orange, banana, pawpaw should be encouraged to boost up the immune system.

1. Balance diet.
2. Eliminate food that causes pain and stress.
3. To avoid coffee and other caffeinated foods alcohol and carbonated drinks.
4. Spicy foods to be avoided.
5. Low fibre diet should be served.
6. Food should be attractive to induce appetite, remove nauseating items around patient.
7. Provide food on time regularly served but in bits.
8. Avoid extremely hot or cold food.
9. Take time to chew and swallow to avoid indigestion.

Complications

The following are some complications of peptic ulcer (Hinkle & Cheever, 2014):

1. Hemorrhage with hematemesis and melena: it occurs as a result of rupturing of the blood vessels due to the actions of the HCL.
2. Pyloric Stenosis or obstruction (Gastric outlet obstruction): it is the narrowing or blockage of part of the stomach (the pylorus) that leads into the small intestines.

3. Perforation: it is the erosion of the ulcer through the gastric serosa into the peritoneal cavity without warning.
4. Stenosis and obstruction: it occurs as a result of scar tissue formation narrowing and occluding the lumen of the oesophagus or small intestines.
5. Anaemia: this occurs as a result of excessive bleeding from ruptured blood vessels.
6. Malignant changes: it happens when the condition is not managed in time and allowed to progress causing long term and serious complications in the GIT.

1.12 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, 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 and home visit. Also, the patient's LHIMS provided the information to confirm 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 groups under study in relation to another given variable (Weller, 2014). This chapter deals principally with analysis of data collected in chapter one. It comprises of all the information collected from the patient's medical history, nursing

interventions, laboratory investigations and literature review of the condition. In data analysis, critical and logical study with arrangement is done about an object under study. This is an approach to help in the interpretation of data which were collected in chapter one as mentioned earlier on. Areas to be analysed under this chapter consist of:

1. Diagnostic investigations
2. Causes
3. Clinical features
4. Treatment
5. Complications
6. Patient strength
7. Patient problems
8. Nursing diagnosis

2.1 Comparison of Data with Standard.

Information which were analytically obtained from patient are compared to what is standardized in literature in other to solicit for more understanding about patient course of treatment and their effectiveness in patient's improvement.

2.1A. Diagnostic Investigation\Test

Diagnosis is the determination of the nature of a disease and Test is defined as an examination or trial. Investigation refers to procedures performed to establish a diagnosis, to monitor a person's health, disease or the effectiveness of treatment (Weller, 2014). Investigations which were carried out on Mrs J.A. during her period of hospitalization are; full blood count, routine urine R/E, M.P for malaria parasite, pregnancy test, upper GI endoscopy, Abdominal ultrasound and helicobacter pylori test.

Table 2.1: Comparison of Test Done to Literature

Test outlined in literature review	Test Carried out on Patient
1. Upper gastro intestinal endoscopy	1. Upper GI Endoscopy was not done.
2. Stool analysis	2. Stool analysis was not conducted
3. Barium X-ray of the intestinal tract	3. Barium X-ray of the intestinal tract was not done
4. Computed tomography scan	4. Computed tomography scan was not done
5. Physical examination	5. Physical examination was conducted which revealed pain and epigastric tenderness.
6. History from patient	6. History from patient was taken
7. Presenting Signs and symptoms	7. Signs and symptoms were taken
8. Gastric analysis	8. Gastric analysis was not done
9. Biopsy and histologic examination	9. Biopsy and histologic examination were not conducted
10. Full blood count	10. Full blood count was conducted
11. Helicobacter pylori test	11. Helicobacter pylori test was done

With reference to the table, Stool analysis, Barium X ray in the intestinal tract, CT scan, Gastric analysis, Biopsy and histologic examination, were not carried out because the diagnosis was arrived at and confirmed by H. pylori test, Patient History, Physical Examination, Full Blood Count, and Presenting Signs and Symptoms.

Urine pregnancy test, BF for malaria and parasite and routine urine examination were ordered even though it was not in the literature review to rule out pregnancy, malaria and urinary tract infection respectively.

Abdominal ultrasonography was also done even though it is not in the literature review to rule out pancreatitis.

Table 2.2 : Results of Diagnostic investigations carried Out on Patient

Ordered Date	**Specimen**	**Investigations**	**Results**	**Normal values**	**Interpretation**	**Remarks**
19/11/22	Blood	**Full Blood Count** Haemoglobin	10.4g/dL	**Males:** 14 g/dL -17.5g/dL **Females:** 11.3 g/dL - 15.3g/dL	Haemoglobin level was low	Patient was advice to take in diet rich in iron to help raise the haemoglobin level. Since it was not too low for blood transfusion.
		Haematocrit	31.0%	**Males:** 41.5%-50.5% **Females:** 36.9%-44.6%	Haematocrit count was little below normal	No treatment given
		Red Blood Cell	$4.8x10^{12}/L$	**Males:** 4.5 $x10^{12}/L$ -5.9 $x10^{12}/L$ **Females:** 4.1 $x10^{12}/L$-5.1 $x10^{12}/L$	RBC count was normal	No treatment given
		White Blood Cell	$10.92x10^{9}/L$	4.5 $x10^{9}/L$ -10.0 $x10^{9}/L$	WBC count was little above normal	IV Amoxiclav 1.2g tid x 3,days IV Metronidazole 500g tid x 3days

Table 2.2 Results of Diagnostic investigations carried Out on Patient

Ordered Date	Specimen	Investigations	Results	Normal Values	Interpretation	Remarks
21/11/22	Liver, Gallbladder, Spleen ,Kidneys and Abdominal cavity	Abdominal Ultra Sonography	**Liver;**The is of size measuring 15.1cm, contour with homogeneous parenchymal echopattern and smooth surface. No discrete mass, intra or extra hepatic biliary duct dilatation noted. **Gallbladder:** uniform wall thickness with no intraluminal pathologies seen. **Pancreas:** Normal sonography appearance. **Spleen:** Normal sized spleen, capsular contour and normal echogenicity measuring 8.4cm.No focal mass seen.	No discrete mass, intra or extra hepatic biliary duct dilatation should be seen. There should be uniform wall thickness with no intraluminal pathologies. Normal sonography appearance. No focal mass should be seen. There should be no pelvicalyceal dilataion, mass or lymphadenopathy	No evidence of pancreatitis.	No treatment given

			Kidneys:Both kidneys are normal in size and architecture with good corticomedullary and sinus differentiation.No pelvicalyceal dilataion, mass or lymphadenopathy seen. **Abdominal Cavity**: No ascites, intrabdominal mass or lymphadenopathy seen	seen. No ascites, intrabdominal mass or lymphadenopathy seen		

Ordered date	Specimen	Investigation	Results	Normal values	Interpretation	Remark
19/11/2022	Urine	Pregnancy test	Negative	Positive or Negative	No evidence of pregnancy	No treatment given
19/11/2022	Whole blood	BF for malaria parasite	No MPS seen	No Malaria parasite should be seen	No evidence of Malaria	No treatment given
20/11/22	Blood	Helicobacter pylori test	Positive	No Helicobacter pylori should be seen	Patient had ulcerations in the stomach	IV Omeprazole 40mg bd x 3days, Syrup Nugel'0' 15mls tds x 5days

Ordered date	Specimen	Investigation	Results	Normal values	Interpretation	Remark
19/11/2022	Urine	Appearance Color PH SG Protein Glucose Blood Ketones Leukocyte Epithelial cells Bacteria	clear Straw 6.5 1.020 Negative Negative Negative Negative Negative 4 Absent	clear Amber 5.5-8.0 1.005-1.030 Negative Negative Negative Negative Negative <5 Absent	Patient had normal urinalysis results	No treatment given

2.1B Causes of Patient's Condition

With references to the literature review on the causes of peptic ulcer disease and the diagnostic investigations carried out on Mrs. J.A. the exact predisposing factor of patient's condition was as a result of helicobacter pylori infection since patient tested positive to the bacteria, starvation and intake of citrus fruit on an empty stomach.

2.1C Clinical Features/ Signs and Symptoms

Table 2.3 Clinical Features of Mrs. J.A. Compared with those in the Literature Review

Clinical Features in Literature Review	Clinical Features Exhibited by Patient
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 experience vomiting.
6. Heartburns	6. Patient did not experience heartburns.
7. Burning epigastric pain	7. Patient complained of burning epigastric pain.
8. Epigastric tenderness	8. Patient complained of epigastric tenderness
9. Diarrhoea	9. Diarrhoea was not experienced by patient
10. Constipation	10. Constipation was not experienced by patient.
11. Bleeding	11. Patient stated that, her stool were dark in colour

The above comparison indicates that my patient's condition is truly peptic ulcer disease since most of her exhibited signs and symptoms appeared in literature

2.1 D Specific Medical Treatment Given to Patient

According to Weller (2014), Treatment refers to the mode of dealing with a patient or disease. Peptic ulcer disease may be treated surgically or medically. Mrs J.A. was treated medically with the aim of relieving pain and preventing the occurrence of the pain.

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

1. Injection tramadol 100mg stat in 500mls normal saline.
2. Intravenous Omeprazole 40mg bd for 3 days
3. Intravanousn amoxiclav 1.2g tds x3 days.
4. Intravenous DNS 1litre
5. Tab Paracetamol 1g tds for 5 days
6. Suspension Nugel'0' 15mls tds for 5 days
7. Intravenous Metronidazole 500mg tds for 3 days
8. Intravenous hyoscine Butyl bromide 40mg bd x 24 hours

Table 2.4: Treatment Given to Patient as Compared with Literature Review

Treatment as in literature review	**Treatment given to my patient**
1. Antacids e.g.; Magnesium Trisilicate, Aluminum Hydroxide.	Suspension Nugel 'O' was given.
2. Histamine 2 receptor antagonist eg: Cimetidine, Ranitidine	None was ordered for my patient
3. Proton-pump inhibiters e.g.; Omeprazole,	Intravenous Omeprazole was given to

Lansoprazole	patient
4. Mucosal Protective Agent eg: Sucralfate, Misoprostol	None was ordered for my patient
5. Antimicrobial agent eg: Metronidazole, Amoxicillin	Patient was given IV Metronidazole and IV Amoxiclav
6. Analgesics e.g.; Paracetamol, Tramadol	Patient was given Tablet Paracetamol and IM Tramadol
7.Surgery I. Vagotomy II. Antrectomy III. Pyloroplasty	No surgical treatment was given to my patient.

From the above table, comparison of treatment in the literature review with treatment given to patient, the treatments given to patient were in line with the literature. Injection Buscopan was also given because patient was experiencing muscle spasms (cramps) in the stomach. No surgical intervention like Vagotomy, Pyloroplasty and Antrectomy was done for patient

Table 2.5: Pharmacology of Drugs Administered to Patient

Date	Drug	Dosage/ Route of Administration (Literature)	Dosage/ Route of Administration Given to Patient	Classification	Desired Effect	Actual Action Observed	Side Effect/ Remedies
19/11/22	Omeprazole	**Dosage:** 40 mg once daily for 4-8 weeks in gastric ulcer. In severe cases 40mg daily prevent relapse in gastric ulcer. **Route** IV, Oral	**Dosage** 40mg twice daily x 3 days **Route** Intravenously	Proton pump inhibitor	Proton pump inhibitors inhibit gastric acid secretion by blocking the hydrogen-potassium adenosine triphosphatase enzyme system (the 'proton pump') of the gastric parietal cell.	Patient's condition improved due to reduction in her abdominal pains	Agitation, Impotence Patient experienced no side effects.

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…

Date	**Drug**	**Dosage/ Route of Administration (Literature)**	**Dosage/ Route of Administration Given to Patient**	**Classification**	**Desired Effect**	**Actual Action Observed**	**Side Effect/ Remedies**
19/11/22	Dextrose normal saline	Amount depends on patient's fluid and electrolyte level and age as well as by	**Dosage** 1 litre **Route** Intravenously	Isotonic solution	Provides supplementary calories and fluids	Client was hydrated and energy restored.	Glucosuria, confusion, Oedema, over hydration, hypocalcaemia. None of these side effects were observed.

		doctor’s prescription.					

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…

Date	Drug	Dosage/ Route of Administration (Literature)	Dosage/ Route of Administration Given to Patient	Classification	Desired Effect	Actual Action Observed	Side Effect/ Remedies
19/11/22	Paracetamol	**Dosage** 0.5–1 g every 4–6 hours; maximum 4g per day. **Route** Oral, rectal and IV.	**Dosage** 1g tds x 5 daily. **Route** Orally	Anti-pyretic/Analgesic/Non-opioid analgesic	To reduce pain and fever	Patient had a reduction in pain and did not experience any increase in temperature	Acute generalized exanthematouspustulosis, Malaise, skin reactions, Stevens-Johnson syndrome, toxic epidermalnecrolysis Haematological reactions, allergic reactions and liver damage following overdose. Patient experienced no side effects.

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…s

Date	**Drug**	**Dosage/ Route of Administration (Literature)**	**Dosage/ Route of Administration Given to Patient**	**Classification**	**Desired Effect**	**Actual Action Observed**	**Side Effect/ Remedies**
19/11/22	Suspension Nugel O	**Dosage** 15mls tds every 8 hours for adults **Route** Oral	Suspension Nugel O 15mls tid × 5 **Route** Orally	Antacid	Reduce stomach acidity by neutralizing gastric hydrochloric acid by preventing the secretion of	Gastric acid secretion was suppressed resulting in relieve of epigastric pains	Nausea, constipation, diarrhea, headache. Patient experienced no side effects.

					acid.		

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…

Date	**Drug**	**Dosage/ Route of Administration (Literature)**	**Dosage/ Route of Administration Given to Patient**	**Classification**	**Desired Effect**	**Actual Action Observed**	**Side Effects/ Remedies**
20/11/22	Hyoscine butyl bromide	**Dosage** 20 mg 4 times a day for muscle spasms. intravenous injection 20mg repeated after 30 minute. **Route** Oral, IV, IM.	**Dosage** 40mg bd for 24 hours **Route** Intravenously	Antispasmodics	It helps relieve one from gastro-intestinal disorder characterized by smooth muscle spam.	Gastro intestinal disorder was minimized.	Anaphylaxis, Tachycardia and Hypotension. Patient experienced no side effects.

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…

Date	**Drug**	**Dosage/ Route of Administration (Literature)**	**Dosage/ Route of Administration Given to Patient**	**Classification**	**Desired Effect**	**Actual Action Observed**	**Side Effect/ Remedies**
19/11/22	Tramadol	**Dosage** 50-100mg 4-6 hourly **Route** Orally/intravenous	Opoid analgesic	To relief pain at the incision side	Pain was reduced as the patient confirmed that he was not feeling pain anymore	Suppression of central nervous system	Vomiting, diarrhoea, constipation and dry mouth None of these was observed

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…

Date	**Drug**	**Dosage/ Route of Administration (Literature)**	**Dosage/ Route of Administration Given to Patient**	**Classification**	**Desired Effect**	**Actual Action Observed**	**Side Effect/ Remedies**
19/11/22	Metronidazole (Flagyl)	**Dosage** 500mg three times daily. **Route** Oral and IV.	**Dosage** 500mg tds x 3 day **Route** Intravenously	Antibacterial and Antiprotozoal	To treat bacteria and protozoa infection.	Patients condition improved.	Arthralgia, Ataxia, Darkening of urine, Dizziness, Drowsiness, Erythema multiforme, Headache None of these side effects were observed.

Table 2.5: Pharmacology of Drugs Administered to Patient Cont'd…

Date	**Drug**	**Dosage/ Route of Administration (Literature)**	**Dosage/ Route of Administration Given to Patient**	**Classification**	**Desired Effect**	**Actual Action Observed**	**Side Effect/ Remedies**
19/11/22	Amoxicillin + clavulanic acid (Amoxiclav)	**Dosage** 1.2gm eight hourly 5oomg/125 mg eight hourly **Route** Orally/intravenous	**Dosage** 1.2g tds x 3 day **Route** intravenous	Penicillins And Beta lactamase inhibitors	To kill the bacteria and to prevent their growth	Patients condition improved.	Diarrhoea, thrush, vomiting, feeling sick None of these side effects were observed.

2.1 E. Complications

With reference to the complications listed in the literature review such as gastric outlet obstruction, perforation, hemorrhage etc., Mrs. J.A. exhibited no complications throughout the period of hospitalization which resulted in her early recovery. Patient did not develop any complications because of the early seeking of medical help and prompt treatment given to her throughout her period of hospitalization.

2.2 Patient/Family Strengths

Strength refers to the ability to do things that need lot of physical or mental effort (McIntosh, 2013). The following strengths were observed in my patient and family during their period of hospitalization.

1. Patient could express the intensity of the pain.
2. Patient could verbalize her state of anxiety.
3. Patient could sleep for two hours in the day and three hours at night
4. Patient could eat one third (1/3) of the meal served.
5. Patient could sit up in bed with assistance.
6. Patient could answer questions on some of the risk factors of Peptic Ulcer Disease.

2.3 Patient's Health Problems

Problem is defined as a situation, person that needs attention and needs to be dealt with or solved (McIntosh, 2013). From the data collected during assessment, the following health problems were noticed on patient:

1. Patient had pain at her epigastric region (19/11/22).
2. Patient was very anxious about the outcome of the disease condition (19/11/22).

3. Patient was not able to sleep for five hours without interruption at night (20/11/22)
4. Patient complained of loss of appetite (20/11/22)
5. Patient complained of body weakness (20/11/22)
6. Patient had little knowledge about her condition (21/11/22).

2.4 Nursing Diagnosis

According to NANDA International, nursing diagnosis is a clinical judgment concerning human response to health conditions/life processes, or vulnerability for that response, by an individual, family, group, or community (Herdman & Kamitsuru, 2014).

1. Acute pain (epigastrium) related to the effect of gastric acid secretion on damaged tissue (19/11/22).
2. Anxiety related to unknown outcome of disease condition (19/11/22).
3. Altered sleep pattern (insomnia) related to noise at the ward and sleep interruption from nursing procedure. (20/11/22)
4. Imbalanced nutrition (less than body requirement) related to loss of appetite (20/11/22)
5. Activity intolerance related to body weakness (20/11/22).
6. Deficient knowledge related to unfamiliarity with drug therapy and dietary restrictions. (21/11/22)

CHAPTER THREE

PLANNING FOR PATIENT AND FAMILY CARE

3.0 Introduction

According to McIntosh (2013), planning is a stage of the nursing process in which the nurse and the patient consider the goals to achieve in meeting the patient's identified or potential problems in daily life and produce an individual care plan.

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

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

3.1 Objective/Outcome Criteria for Patient and Family

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

1. Patient would be relieved of epigastric pain within 48 hours as evidenced by;
    i. Patient verbalizing that she does not feel the pain anymore.
    ii. Nurse observing patient to have a relaxed facial expression.
2. Patient would be relieved of anxiety within 24 hours as evidenced by;

i. Patient and her family verbalizing that they are no longer anxious

ii. Nurse observing patient being calm and relaxed at the ward.

3. Patient would be able to maintain his normal sleeping pattern within 24hours as evidenced by;

i. Nurse observing that patient sleeps for at least 6-8 hours uninterrupted at night.

ii. Patient verbalizing that she can now sleep for 6-8 hours at night.

4. Patient would be able to attain and maintain adequate nutrition within the period of hospitalization as evidenced by;

i. Patient verbalizing that she has gained appetite for food.

ii. Nurse observing that patient takes in at least two thirds of food served.

5. Patient would be able to perform self-care activities without assistance within 24 hours as evidenced by;

i. Patient verbalizing that she can perform self – care activities without assistance.

ii. Nurse observing patient performing activities of daily living without assistance.

6. Patient and relative would gain adequate knowledge on the disease condition, drug therapy and dietary precautions within 24 hours as evidenced by;

i. Patient and relatives verbalizing that they have a better understanding of the condition.

ii. Nurse observing that patient and relatives are able to answer some questions correctly when asked on the disease condition.

Table 3.1: Nursing Care Plan for Patient

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
19/11/22 6:45pm	Acute pain (epigastrium) related to the effect of gastric acid secretion on damaged tissue	Patient would be relieved of epigastric pain within 48 hours as evidenced by; 1. Patient verbalizing that she does not feel the pain anymore. 2. Nurse observing patient in bed with a relaxed facial expression.	1. Assess pain using the numerical pain rating scale (0-10). 2. Encourage frequent fluid intake. 3. Reduce noise and improve adequate ventilation at the ward to promote relaxation.	1. Patient's pain was assessed using the numerical pain rating scale (0-10) and patient chose 6 to describe the intensity of her pain. 2. Sips of water were served at frequent intervals. 3. All forms of noise were reduced by restricting visitors, reducing volumes of radio and television set, and windows and nearby fans were opened to allow in fresh air to promote patient's comfort and	21/11/22 6:45pm	Goal fully met as patient had a relaxed facial expression and patient verbalized that she does not feel the pain anymore.	A.K.A

			4. Encourage frequent but small intake of food in between meals to reduce the action of the acid on the gastrointestinal walls. 5. Teach relaxation techniques to help alleviate pain. 6. Serve prescribed drugs.	relaxation. 4. Frequent but small intake of food was encouraged 5. Relaxation techniques were taught to patient like the knee-chest position 6. Intravenous Omeprazole 40mg was served to relieve her of epigastric pains.			

Table 3.1: Nursing Care Plan for Patient Continued

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
19/11/22 6:45pm	Anxiety related to unknown outcome of disease condition.	Patient would be relieved of anxiety within 24 hours as evidenced by; 1. Patient and her family verbalizing that they are no longer anxious. 2. Nurse observing patient being calm and relaxed at the ward.	1. Reassure patient competent health team to alleviate anxiety. 2. Orientate patient to the ward. 3. Explain every procedure to patient.	1. Patient was reassured of safe care by competent health team to allay her fears. 2. Patient was orientated to the ward and was introduced to other patients on the ward. All these were done to establish a cordial relationship, allay her fears and to win her co-operation. 3. All procedures performed on patient were explained to	20/11/22 6:45pm	Goal fully met as Patient expressed a relaxed facial expression and verbalized that she and her family are no more anxious.	A.K.A

			4. Employ diversional therapy. 5. Allow patient to ask questions and explain in simple terms. 6. Teach patient relaxation techniques.	gain her co-operation and also allay her fears. 4. Television was switched on for patient to watch. This was to help patient relax. 5. Patient asked questions on her condition, purpose of treatment and possible duration of her hospitalization of which answers were given in simple terms to understanding. 6. Deep breathing exercises were taught.			

Table 3.1: Nursing Care Plan for Patient Continued

Date/ Time	Nursing Diagnosis	Nursing Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
20/11/22 8:30am	Altered sleep pattern (insomnia) related to noise at the ward and sleep interruption from nursing procedure.	Patient would maintain normal sleep pattern within 24 hours as evidenced by; 1. Nurse observes that patient sleeps for at least 6-8 hours uninterrupted at night. 2. Patient verbalizes	1. Reassure patient and his family. 2. Assist patient to take warm bath before he goes to sleep. 3. Groom patient in a light clothing. 4. All nurses activities should be done together	1. Patient and his family were reassured that they were in the hands of trained health team. 2. Patient was assisted to take a warm bath before he goes bed. 3. Patient was groomed in light cotton clothing to help enhance air circulation	21/11/22 8:30am	Goal fully met as nurse observed that patient slept for at least 6-8 hours uninterrupted at night and patient verbalized that she could now sleep 6-8 hours	A.K.A

		that she can now sleep for 6-8 hours uninterrupted at night.	5. Nurse patient in a quiet environment. 6. Restrict all visitors during sleeping hours	4. Vital sign checking and medications were done all together. 5. Patient was nursed in a quiet environment where volumes of television was reduced to ensure noise free environment. 6. All visitors were restricted and was allowed in during visiting hours to help prevent any interruptions during sleep		uninterrupted at night.	

Table 3.1: Nursing Care Plan for Patient Continued

Date/ Time	**Nursing Diagnosis**	**Nursing Objective/ Outcome**	**Nursing Orders**	**Nursing Interventions**	**Date/ Time**	**Evaluation**	**Sign**
20/11/22 8:30am	Imbalanced nutrition (less than body requirement) related to loss of appetite.	Patient would be able to attain and maintain adequate nutrition within the period of hospitalization evidenced by: 1. Patient verbalizing that she has gained appetite for food. 2. Nurse observing that patient takes in at least two thirds of	1. Reassure patient of competent nursing care to restore appetite. 2. Assess the nutritional status of patient to serve as a baseline data for management. 3. Maintain patient's oral hygiene twice a day (morning and evening).	1. Patient was reassured that measures will be taken to restore adequate essential nutrients to balance her nutritional needs. 2. The nutritional status of patient was assessed and this helped to form a baseline data hence aiding in the kind of food to include in her diet for example protein and vitamins	22/11/22 8:30am	Goal fully met as 1. Patient verbalized that she has gained appetite for food 2.Nurse observed that patient was able to eat at least two thirds of food served	A.K.A

		food served	4. Plan meals with patient and dietician in order to provide patient with meals of her choice. 5. Serve nutritious meal in small and attractive manner to patient. 6. Educate patient on the need to take in nutritionally rich diets.	3. Patient's oral hygiene was observed by assisting patient to brush her teeth with the use of tooth brush twice daily (morning and evening). 4. Meals were planned with patient. 5. A fist of 'fufu' and groundnut soup was served to patient. She was able to consume all the meal served. 6. Patient was educated on the need to maintain her nutritional status.			

Table 3.1: Nursing Care Plan for Patient Continued

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
20/11/22 11:40am	Activity intolerance related to body weakness.	Patient would be able to perform self – care activities without assistance within 24hours of hospitalization as evidenced by; 1. Patient verbalizing that she can perform self – care activities without assistance. 2. Nurse observing Patient performing activities of daily living without assistance.	1. Reassure patient of competent nursing care. 2. Accompany patient to bathroom. Encourage and observe her perform self-care activities on her own. 3. Maintain patient's oral hygiene 4. Encourage and educate patient to care for her hands and feet.	1. Patient was reassured that measures will be put in place to bath her, care for her mouth and care for her hands and feet. 2. Patient was accompanied to the bathroom and was encouraged to bath. 3. Patient was encouraged to brush her teeth. This was done to prevent patient from developing any oral infections. 4. Patient cared for her feet and hands using warm water into which	21/11/22 11:40am	Goal fully met as Patient was able to perform activities of daily living without assistance and by patient verbalized that she is able to perform self-care activities.	A.K.A

				she soaked her feet and hands. She used a soft brush was used to scrub her feet to remove any dirt and also her nails were trimmed short to prevent them from harboring dirt.			
			5. Encourage patient to groom her hair.	5. Patient washed and groomed her hair with shampoo and other hair products and combed it nicely.			

Table 3.1: Nursing Care Plan for Patient continued

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
21/11/22 11:00am	Deficient knowledge related to unfamiliarity with drug therapy and dietary restrictions.	Patient and relative would gain adequate knowledge on the disease condition, drug therapy and dietary precautions within 24 hours as evidenced by; 1. Patient and relative verbalizing that they have a better	1. Establish an environment of trust and respect. 2. Educate patient and relatives on the disease condition (gastric outlet obstruction), drug therapy and dietary precautions. 3. Provide text literature of	1. Patient was told that everything discussed was between the two of us and that nobody will ever hear of it. This was to enhance learning and patient having confidence in the nurse. 2. Patient and relative were educated on the importance to restrict certain diets and also the causes of the abdominal pains	22/11/22 11:00am	Goal fully met as patient and relative verbalized they have a better understanding of the condition, drug therapy and dietary precautions needed to be followed and	A.K.A

		understanding of the condition, drug therapy and dietary precaution. 2. Nurse observing that patient and relatives are able to answer some questions correctly when asked on the disease condition.	gastric outlet obstruction to patient and relative. 4. Allow patient and relative to ask questions and provide answers in simple terms that they can understand. 5. Encourage patient to ask questions when in doubt.	3. Patient and relative were provided with leaflet of disease condition, drug therapy and dietary precautions. 4. Tactful answers were provided to questions asked to patient's satisfaction. 5. Patient was encouraged to ask questions.		nurse observed the patient and relative answer some questions correctly when asked on the disease condition, its drug therapy and dietary precautions.	

CHAPTER FOUR

IMPLEMENTATION OF PATIENT/FAMILY CARE PLAN

4.0 Introduction

Implementation is the process by which the nurse and the patient put into practice the planned care. It involves putting into action the nursing and medical orders to meet the patient's needs. During the process of implementation, the patient is the central focus of activities.

4.1 Summary of Actual Nursing Care Rendered to Patient/ Family

4.1.1 First Day of Admission (19th November, 2022)

Mrs. J.A. arrived on the Female Medical Ward on 19th November, 2022 at 6:30pm per ambulation accompanied by a staff nurse, rotational nurse and her sister. On arrival patient was fairly ill with a relative. Patient was fully conscious and alert.

Patient had been on detention at the Accident and Emergency Centre of Kintampo Municipal Hospital for one day with the diagnosis of Acute Exacerbation of Peptic Ulcer Disease with history of headache, epigastric pain and malaise. It was a planned admission. Upon hering her condition, I took it upon myself to do the admission of this patient to the ward. I personally collected the patient particulars from the accompanying staff nurse. The patient's identity was verified by mentioning her name for her to respond. She was then warmly welcomed and immediately made comfortable in a simple unoccupied bed. Her particulars such as name, sex, age, and residential address were entered into the admission and discharge book and the daily ward state. Vital signs were checked and recorded accurately as follows:

1. Temperature 36.9^{o}C
2. Pulse 82bpm
3. Respiration 25cpm

4. SPO_2 96%
5. Blood Pressure 130/90mm/Hg

Patient was introduced to her roommates; she was also introduced to the staffs present and was assured of the competency of the healthcare team. Hospital policies regarding visiting periods, payment of bills and the time vital signs will be checked were explained. Patient was properly orientated to the ward environment and its annexes. Physical examination on the patient was performed from head to toe and no abnormalities were seen. At the time of admission, Assessment revealed that the abdominal pain was colicky in quality (severe pain in the abdomen) located at the epigastric region and was non-radiating and eating as the relieving factor and hunger identified as the aggravating factor.

The following treatment plans were ordered:

1. To follow up on FBC/HB
2. Intravenous Omeprazole 40mg bd x 3.
3. Intravanousn amoxiclav 1.2g tds x3.
4. Suspension Nugel'0' 15mls tds for 5 days
5. Intravenous hyoscine 40mg bd x 24 hours
6. Intravenous metronidaxole 500mg tds x 3
7. Intravenous DNS 1litre
8. Tab paracetamol 1g tds x 5
9. Injection tramadol 100mg stat in 500mls normal saline.

The following laboratory investigations were done on patients;

FBC, Urine R/E, MP for malaria parasite and Pregnancy test, H pylori test and abdominal ultrasound.

IV Dextrose Normal saline 1L was set up. Patient looked anxious. She was reassured to allay all fears and anxiety. I reintroduced myself to patient as a final year student nurse of the Holy Family Nursing and Midwifery Training College, Berekum, who would like to take her and her family for my care study. Mrs. J.A and her sister were informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment towards the award of license to practice as a professional Registered General Nurse. I explained to the patient and her sister the concept of the patient/family care study and assured them of privacy and confidentiality. It was added that a report will be written after the entire event. Mrs. J.A. and her sister agreed to my request and promised to offer me the necessary information and assistance. I gave patient and her relatives a prior notice that I would want to visit their home the following day and permission was granted after they gave me the direction to their house. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus, they will continue the care at home once she is well. I decided to choose this patient for the study to know more to help educate people to overcome this disease and to prevent it from occurring at all.

At 6:45pm, Patient complained of pain for this reason a nursing diagnosis of acute pain (epigastrium) related to the effect of gastric acid secretion on damaged tissue was formulated. An objective was set to help relieve of epigastric pain within 48 hours of hospitalization. The following interventions were carried out; Patients pain was assessed using the numerical pain rating scale (0-10) and patient chose 6 to describe the intensity of her pain, Sips of water was served at frequent intervals, all forms of noise were reduced by restricting visitors, reducing volumes of radio and television set, and windows and nearby fans were opened to allow in fresh

air to promote patient's comfort, frequent but small intake of food was encouraged, relaxation techniques were taught to patient like the knee-chest position and Intravenous Omeprazole 40mg was served to relieve her of epigastric pains.

And also patient manifested a feeling of apprehension as she was not cooperating with care hence a nursing diagnosis of Anxiety related to unknown outcome of disease condition, an objective was set to relieve patient from anxiety within a period of 24 hours. The following interventions were carried out; patient was reassured of safe care by competent health team to allay her fears, patient was orientated to the ward and was introduced to other patients on the ward. All these were done to establish a cordial relationship, allay her fears and to win her co-operation, all procedures performed on patient were explained to gain her co-operation and also allay her fears, television was switched on for patient to watch, this was to relax patient, patient was allowed to asked questions on her condition of which answers were given in simple terms for understanding, purpose of treatment and possible duration of her hospitalization and deep breathing exercises were taught.

She took her supper around 7:00pm which was small TZ and plenty ayoyo soup but could not eat much. At 7:30pm, patient was assisted to take her bath. Patient was engaged in some funny jokes which will aid the food to digest and to lay off anxiety as she waited for the 10:00pm vital signs.

At 10:00pm, vital signs were checked and recorded as indicated in the appendix and due medications were served. Patient was made comfortable in bed and as part of the nursing actions to aid her to sleep, television set were lowed whiles lying on her bed. She slept around 10:30pm.

4.1.2 Second Day of Admission (20thNovember, 2022)

On the second day of admission as I went to the bed side to continue with my nursing care to my patient, Since I was on night shift, I monitored her vital signs, served her due medications, and was recorded at 6am as indicated in the appendix. Patient was assisted to perform her personal hygiene and her bed was straightened to make it free from creases and crumps.

At 8:30am, she was asked how her night was and she said she was not able to sleep; hence the nursing diagnosis of Sleep pattern disturbance related to noise at the ward and sleep interruption from nursing procedure was formulated. An objective was set so that patient will be able to sleep within 24hours. The following intervention was carried out; Patient and his family were reassured that they were in the hands of trained health team, patient was assisted to take a warm bath before he goes bed, patient was groomed in light cotton clothing to help enhance air circulation, Vital sign checking and medications were done all together, patient was nursed in a quiet environment where volumes of television was reduced to ensure noise free environment, all visitors were restricted and was allowed in during visiting hours to help prevent any interruptions during sleep.

Her breakfast was also ready which was rice water with bread, but could not eat much. According to the patient she had loss appetite for food. Hence the nursing diagnosis of Imbalanced nutrition (less than body requirement) related to loss of appetite was formulated. An objective was set so that patient will be able to eat well within the period of hospitalization. The following intervention was carried out; rreassure patient of competent nursing care to restore appetite, assess the nutritional status of patient to serve as a baseline data for management, maintain patient's oral hygiene twice a day (morning and evening), plan meals with patient and dietician in order to provide patient with meals of her choice, serve nutritious meal in small and

attractive manner to patient and educate patient on the need to take in nutritionally rich diets. Afterwards she was made comfortable in bed.

At 9:00am, patient was reviewed by the medical team and the plan was to continue the 40mg omeprazole, 1.2g Amoxiclav, 500mg metronidazole for another 24hours and then add 40mg hyoscine injection to the treatment. She was also ordered to do abdominal USG the following day. I told patient I will be embarking on my first home visit this day.

At 11:40am, several assessments revealed that patient was weak hence the nursing diagnosis of Activity intolerance related to body weakness was made. An objective was set so that patient will be able to perform self-care activities without assistance within 24 hours of hospitalization. The following interventions were carried out; patient was reassured that measures will be put in place to bath her, care for her mouth and care for her hands and feet, patient was accompanied to the bathroom and was encouraged to bath, patient was encouraged to brush her teeth. This was done to prevent patient from developing any oral infections, patient cared for her feet and hands using warm water into which she soaked her feet and hands. She used a soft brush was used to scrub her feet to remove any dirt and also her nails were trimmed short to prevent them from harboring dirt and patient washed and groomed her hair with shampoo and other hair products and combed it nicely.

After little interaction with patient at 11:45am,she was made comfortable in bed and was encouraged to have enough rest.

At 2:00pm, her vital signs were checked and recorded in the afternoon as indicated in the appendix. She ate rice and tomato stew in the afternoon after which she was assisted to carry out

walking exercise to prevent prolong stay in bed which can lead to pressure sore and also to make her inactive. Afterwards she was made comfortable in bed to sleep for a while.

At 5pm, she was served with her evening meal.'Fufu' and light soup was served to patient, banana was served as well. She was able to consume all the meal served. Patient was educated on the need to maintain her nutritional status. Patient took her bath afterwards, her 6:00pm vital signs were checked and recorded as shown in the appendix. Patient was then engaged in an interaction geared towards deepening her understanding about her disease condition.

At 6:45pm, an evaluation of the set objective on 19th November, 2022 to help relieve patient from anxiety within 24 hours was done. Goal was fully met as patient expressed a relaxed facial expression and verbalized that she and her family are no more anxious.

At 10pm, her due medications were served, her vital signs were checked and recorded as shown in the appendix. Patient went to bed around 10:20pm.

4.1.3 Third Day of Admission (21st November,2022)

On the third day of admission patient was assisted in maintaining her oral hygiene, she had her bath and emptied her bowel. Report from the night nurses read that she was able to sleep well upon the measures put in place. Her due medications were served and her vital signs had already been checked and recorded at 6:00am as indicated in the appendix. At 7:50am, she was encouraged to take about 500mls of brown porridge with bread.

At 8:30am, evaluation on the set objective on 20th November,2022 to enable patient to be able to sleep within 24hours of hospitalization was done. Goal was fully met as nurse observed that patient slept for at least 6-8 hours uninterrupted at night and patient verbalized that he could now sleep for 6-8 hours uninterrupted at night.

During the ward rounds at 9:30am, patient made no new complains so the medical team ordered for treatment to continue the medications for another 24hours. She was then reminded to do abdominal USG on this day, and to do H-pylori test after discharge. The doctor also made it clear to her that, if no complaints are raised on the following day, she should get prepared for possible discharge the next day. Ampesi and garden eggs stew was served as lunch and was made comfortable to sleep while nearby windows were opened for fresh air.

At 11:00am patient was engaged in an interaction and it was realized that patient had less knowledge on her condition. The nursing diagnosis formulated was Deficient knowledge related to unfamiliarity with drug therapy and dietary precautions. An objective was set to enable patient gain adequate knowledge on peptic ulcer disease within 24 hours of hospitalization. The following interventions were carried out; patient was told that everything discussed was between the two of us and that nobody will ever hear of it. this was to enhance learning and patient having confidence in the nurse, patient and relatives were educated on the disease condition, drug therapy and dietary precautions, patient and relative were provided with leaflet of disease condition, drug therapy and dietary precautions, tactful answers were provided to questions asked to patient's satisfaction, patient was encouraged to ask questions.

At 11:40am, evaluation of the set objective on 20thNovember, 2022 to enable patient perform self-care activities without assistance within 24hours of hospitalization was done. Goals were fully met as patient was able to perform activities of daily living without assistance and patient verbalized that she was able to perform self-care activities.

At 5:30pm, patient was served with Banku and Okro soup as supper. Afterward she took her bath with warm water and brushed her teeth

At 6:30pm, her due medications were served, her vital signs were checked and recorded as shown in the appendix.

At 6:45pm evaluation of the set objective made on 19th November, 2022 to help relieve her of epigastric pain within 48 hours of hospitalization was done. Goal was fully met as patient verbalize there is no pain and nurse observing patient with a relaxed face expression.

Patient was involved in a small walking exercise without assistance as we discuss the benefit of the exercise to patient.

At 10pm, her due medications were served, her vital signs were checked and recorded as shown in the appendix. Patient went to bed around 10:30pm.

4.1.4 Day of Discharge/fourth Day of Admission (22nd November, 2022)

Patient woke up around 5:30am. Patient maintained her personal hygiene. Her due medications had been served and her vital signs were checked and recorded at 6am as indicated in the appendix. According to patient she had a good night sleep. Her bed linen was changed. The bed was laid nicely making sure it was free from creases and cramps. During the ward rounds at 9:00am, patient did not have any complains. The medical doctor then ordered that patient should be discharged. She was very happy upon hearing this because she was hoping to go home today.

At 8:30am patient was served with porridge and bread and was able to eat all. After some interaction with her about her previous state, patient said she is able to eat two third (2/3) and sometimes all the meal been served. Hence an evaluation of the set objective on 20th November, 2022 to help patient regain her appetite within the period of hospitalization was also done. Goals were fully met as patient verbalized that she has gained appetite for food. Nurse observed that patient was able to eat at least two thirds of food served.

After her sisters arrival from town she was informed about the discharge. She was asked to go to the billing office with the LHM number for billing. I called the nutritionist to come and see my patient before she leaves for home. I together with the nutritionist provided Mrs. J.A. and her sister with a clear and understandable education on how she should live her life, creating awareness on her diets and how important it is in the management of peptic ulcer disease. Patient was informed to come for review on 29th November, 2022 at the main Out Patient Department (OPD). The need to continue with medications were emphasized and review date was emphasized on. I assisted in packing patient's belongings, did disinfection of patient bed and locker to enhance infection prevention.

At 11:00am, evaluation of the set objective on 21st November, 2022 to help patient and relatives gain adequate knowledge on peptic ulcer disease within 24hours was done. Goals were fully met as patient and relatives verbalized they have a better understanding of the condition and nurse observed the patient and relatives were able to answer some questions correctly when asked on the disease condition.

At 2:30pm, patient and relative left the ward. Patient and the family bid the other patient and staff goodbye. I accompanied them to the hospital entrance; said goodbye and also informed them that I will be coming to their house to check on her.

4.2. Preparation of Patient/Family for Discharge and Rehabilitation.

Preparation for discharge commenced from the time of admission at the hospital until the day she was finally discharged. This preparation was carried out with the aim of helping the patient and the family to understand the disease condition, causes, signs and symptoms, management, complications and the need for review and follow up care. The patient and family were informed

that staying in the hospital was for a temporal period of time. Education of patient and family on the causes, clinical features and management of peptic ulcer disease were reemphasized. Prior to patient discharge, health education was given to the patient and relative on the importance of diet and avoiding over the counter medication, should neither smoke nor drink alcohol. Patient was encouraged to take in food rich in the essential food nutrients. Patient was also told to exercise more often. Patient and her family were also educated on the need to maintain personal and environmental hygiene to help improve immunity. A great emphasis was made on the need to continue with medication and to report to the hospital if any problem does occur. Patient was informed to come for review on Friday 29th November, 2022. Necessary information was recorded into the admission and discharge book as well as the ward state.

4.3 Follow Up / Home Visit / Continuity of Care

This is the act of visiting the patient in his own home and environment to assess the home situation and see how the patient is faring. This helps to ensure proper evaluation of care to client after discharge, identify health hazards in the home and environment. Home visits can lead to improved medical care through the discovery of unmet healthcare needs (Unwin & Jerant, 1999).

4.3.1 First Home Visit (20th November, 2022)

On 20th November, 2022 on Sunday while patient was still on admission, I visited her house at MZ together with her sister.

The aim of this visit was to know patient's home and the environment in which she lives, validate the information given to me as well as to identify the risk factors such as familial tendency and stresses that can lead to her condition and also to identify any nearest health facility at the area for possible referral. Patient and relatives were informed about my intention to visit their home whiles she was still on admission. On arrival at 4:10pm I was welcomed and offered

seats. Her sister introduced me to those present that I am the nurse taking personal care of Mrs. J.A at the hospital. They were all happy to see me. They live in a boys quarters compound house with other tenants. The house was supplied with well water. They had access to electricity; the room was well ventilated with a two in one louver system at the front and three in one system at the back. All tenants use the same bathroom and toilet facility together with family members which was a water closet and had a refuse disposal site which was about 30 minutes' walk from the house. There was an over the counter drug seller shop in-front of the house. There was also an untarred road in front of the house which leads to a different town. Her relatives were educated on how to prevent and also manage home accident and also practice of good personal hygiene. No identifiable factor to patient's condition was made during the visit. I advised the children in the house to ensure good personal hygiene since they are the most vulnerable group in the house, also stressed on the importance of the parents providing mosquito nets for their children. I identified on the first home visit that the closest health facility to patient's current place of residence was Sunkwa clinic, Kintampo and for that reason I informed a friend who is a nurse about handing over the patient to her and she agreed. Afterwards I left the house around 5:00pm. Comments made on the condition of the house, education and recommendations were repeated to Mrs. J.A. and she also promised to do everything in her power to ensure that all the recommendations are done.

4.3.2 Second Home Visit (25th November, 2022)

My second visit was on 25th November, 2022 after she had been discharged and gone home. I got there at 4:37pm. Mrs. J.A. was doing some washing and cleaning inside, upon hearing the horn of my motor she got out and received me, offered me a seat and water to drink.

As usual, I asked about their health especially about Mrs. J.A. who said she had not experienced any pain until taking grape juice on this day which cause some mild abdominal pain, but she said she was relieved after some few minutes. Mrs. J.A. was advised not to take grape since it triggers pain. I requested for her drugs to ensure that she had really been taking them and was happy to see that she followed the said instruction given her at the hospital.

I also asked if she had done the H pylory test she was to bring when coming for review on the 29th November, 2022. And she said yes.

She expressed her gratitude to me for my care and the education I gave them and promised to adhere to everything I said, especially to lifestyle modifications. We talked about other social matters and later asked permission to leave at 7:00pm after reminding her of the date for her review which was on 29th November, 2022.

4.3.3 Review (29th November, 2022)

On 29th November, 2022 patient and her sister were met at the Out-Patient Department of Kintampo Municipal Hospital at 9:00am looking cheerful and lovely as noted from facial expression. I accompanied them to register patients name into the hospital system. The vital signs checked and recorded as follows;

Temperature	36.2^{o}C
Pulse	65bpm
Respiration	20cpm
Blood pressure	101/76mmHg

At the Out-Patient Department, patient was seen by the medical officer at consulting room. The medical doctor did a general examination from head to toe and declared her very fit. Patient did not have complains. She was told not to hesitate to report to the hospital if she should encounter any health problem. The doctor asked of the H Pylori test, Mrs. J.A. provided the H pylori results to the doctor. The doctor went through and confirmed the diagnosis and the treatment too then continued with his engagement, she was encouraged to adhere to the diet and medication therapy. She was also encouraged to practice personal and environmental hygiene to protect her from getting infected. Patient was assured of a third home visit. I then accompanied them to the hospital entrance where they left to their home.

4.3.4 Third Home Visit (1st December, 2022)

The main reason for conducting the third home visit was to: Assess the general condition of patient and family, reinforce the need to comply with treatment regimen and finally terminate care.

I called my friend and a nurse at Sunkwa Clinic to inform her about what we had previously discussed and so she accompanied me to patient's house. We were welcomed and offered seats. The purpose of this visit was to terminate care since patient was in good health and also was adhering to the treatment regimen. I introduced the nurse to the patient and her relatives. Patient and family were doing well as they looked cheerful and had no complains. I handed over patient to the community health nurse to continue with care. I also told them it was the end of my clinical period. They were very grateful for the help and care rendered to her and told me I am always welcome to their place. Since it happened to be my 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. Again, patient and her family expressed their gratitude by showing how grateful they were to me for the support and care given to them. I eventually sought permission to leave and bid them the final goodbye.

CHAPTER FIVE

EVALUATION OF CARE RENDED TO PATIENT AND FAMILY

5.0 Introduction

Evaluation is the process of measuring the effectiveness of nursing actions, medical care and forms of health care by other providers. It helps to determine whether outcome criteria have been met and how care for the patient might be improved (medical dictionary for the health professions, 2012).

5.1 Statement of Evaluation

The nursing care was based on the nursing process. During the period of her stay at the hospital a nursing care plan was designed to aid in delivery of quality care to the client with emphasis on the nursing diagnosis. During the nursing care, actual and potential problems were identified, objectives were set, plans for patient's and family care implemented and later evaluated.

a. Patient was relieved of epigastric pian

On 19th November, 2022 at 6:45pm, patient complained of pain for this reason a nursing diagnosis of Acute pain (epigastrium) related to the effect of gastric acid secretion on damaged tissue was formulated. An objective was set to help relieve of epigastric pain within 48 hours of hospitalization. The following interventions were carried out; Patients pain was assessed using the numerical pain rating scale (0-10) and patient chose 6 to describe the intensity of her pain,

Sips of water was served at frequent intervals, all forms of noise were reduced by restricting visitors, reducing volumes of radio and television set, and windows and nearby fans were opened to allow in fresh air to promote patient's comfort, frequent but small intake of food was encouraged, relaxation techniques were taught to patient like the knee-chest position and Intravenous Omeprazole 40mg daily was served to relieve her of epigastric pains.

On 21st November, 2022 at 6:45pm, evaluation of the set objective on 19th November, 2022 to relieve patient of epigastric pain within 48 hours of hospitalization was done. Goals were fully met as patient had a relaxed facial expression and patient verbalized that she does not feel the pain anymore.

b. Patient was relieved from anxiety

On 19th November, 2022 at 6:45pm, patient manifested a feeling of apprehension as she was not cooperating with care hence a nursing diagnosis of Anxiety related to unknown outcome of disease condition was made. An objective was set to relieve patient from anxiety within a period of 24 hours. The following interventions were carried out; patient was reassured of safe care by competent health team to allay her fears, Patient was orientated to the ward and was introduced to other patients on the ward. All these were done to establish a cordial relationship, allay her fears and to win her co-operation, all procedures performed on patient were explained to gain her co-operation and also allay her fears, television was switched on for patient to watch. this was to relax patient, patient asked questions on her condition, purpose of treatment and possible duration of her hospitalization of which answers were given in simple terms to understanding and deep breathing exercises were taught.

On 20th November, 2022 at 6:45pm, an evaluation of the set objective on 19th November, 2021 to help relieve patient from anxiety within 24hours was done. Goals were fully met as patient expressed a relaxed facial expression and verbalizing that she and her family are no more anxious.

C. Patient was able to maintain his normal sleeping pattern

On the 20th November,2022 at 8:30am,patient verbalized that she was not able to sleep all day hence the nursing diagnosis of Sleep pattern disturbance related to change in environment was formulated. An objective was set so that patients sleeping pattern will be restored within 24 hours of hospitalization. The following interventions were carried out; Patient and his family were reassured that they were in the hands of trained health team, Patient was assisted to take a warm bath before he goes bed ,patient was groomed in light cotton clothing to help enhance air circulation ,patient was served with cold drink such as Milo beverage to help induce sleep ,patient was nursed in a quiet environment where volumes of television was reduced to ensure noise free environment ,all visitors were restricted to help prevent any interruptions during sleep

On 21st November, 2022 at 8:30am, evaluation on the set objective on 20th November,2022 to restore the sleeping pattern within 48 hours of hospitalization was done. Goals fully met as patient was verbalize and nurse observed that patient slept for at least 6-8 hours uninterrupted at night and patient verbalized that he could now sleep well at night.

d. Patient nutritional status was restored and maintained

On 20th November, 2022 at 8:30am, Patient verbalized that she had lost appetite hence the nursing diagnosis of Imbalanced nutrition (less than body requirements) related to loss of appetite was formulated. An objective was set so that patient's nutritional status will be restored and maintained within the period of hospitalization. The following interventions were carried out; patient was reassured that measures will be taken to restore adequate essential nutrients to balance her nutritional needs, the nutritional status of patient was assessed and this helped to form a baseline data hence aiding in the kind of food to include in her diet for example protein and vitamins, patient's oral hygiene was observed by assisting patient to brush her teeth with the use of tooth brush twice daily (morning and evening), meals were planned with patient and dietician to provide patient with meal of choice, and patient was educated on the need to maintain her nutritional status.

On 22nd November, 2022 at 9:30am, evaluation of the set objective on 20th November, 2022 to restore and maintain patient's nutritional status within the period of hospitalization was done. Goals were fully met as patient verbalized that she has gained appetite for food and nurse observed that patient was able to eat at least two thirds of food served.

e. Patient energy for daily activities was restored

On 20th November, 2022 at 11:40am, several assessments revealed that patient was weak hence the nursing diagnosis of Activity intolerance related to body weakness was made. An objective was set so that patient will be able to perform self-care activities without assistance within 24 hours of hospitalization. The following interventions were carried out; patient was reassured that measures will be put in place to bath her, care for her mouth and care for her hands and feet, patient was accompanied to the bathroom and was encouraged to bath, patient was encouraged to

brush her teeth. This was done to prevent patient from developing any oral infections, patient cared for her feet and hands using warm water into which she soaked her feet and hands. She used a soft brush was used to scrub her feet to remove any dirt and also her nails were trimmed short to prevent them from harboring dirt and patient washed and groomed her hair with shampoo and other hair products and combed it nicely.

On 21st November , 2022 at 11:40am, evaluation of the set objective on 20th November, 2022 to enable patient perform self-care activities without assistance within 24hours of hospitalization was done. Goals were fully met as patient was able to perform activities of daily living without assistance and patient verbalized that she was able to perform self-care activities.

f. Patient gained adequate knowledge on her diseases condition

On 21st November, 2022 at 11:00am, patient was engaged in an interaction and it was realized that patient had less knowledge on her condition. The nursing diagnosis formulated was Deficient knowledge related to unfamiliarity with drug therapy and dietary precautions. An objective was set to enable patient gain adequate knowledge on peptic ulcer disease within 24 hours of hospitalization. The following interventions were carried out; patient was told that everything discussed was between the two of us and that nobody will ever hear of it. this was to enhance learning and patient having confidence in the nurse, patient and relative were educated on the disease condition, patient and relative were provided with leaflet of disease condition, tactful answers were provided to questions asked to patient's satisfaction and patient was encouraged to ask questions.

On 22nd November, 2022 at 11:00pm, evaluation of the set objective on 21st November, 2022 to help patient and relatives gain adequate knowledge on peptic ulcer disease within the period of

hospitalization was done. Goals were fully met as patient and relatives verbalized they have a better understanding of the condition, drug therapy and dietary precautions and nurse observed the patient and relative were able to answer some questions correctly when asked on the disease condition, its drug therapy and dietary precautions.

5.2 Amendment of Nursing Care

The objectives and goals that were set during the nursing care of Mrs. J.A. were fully met hence no amendments were made.

5.3 Termination of Care

This is the time in which the nurse brings to an end the therapeutic treatment and nursing care with the patient and family. Every nurse-patient relationship at the hospital needs to be terminated. However, this is a very difficult step to take after a good rapport has been established. Because of this, the reality of termination of care has to be made known to both patient and family from the day of admission. Termination of care for Mrs. J.A. and the family started on the day of admission, 19th November, 2022. Patient and family were given a gradual psychological preparation; they were told that, our relationship was a therapeutic one and was temporal, which would last for a reasonable period.

During my visit to her home especially the third time, I observed that her general condition was encouraging and therefore terminated my care with her on 1st December, 2022 by finally advising her on eating balanced meals and having enough rest and officially handed over to a colleague nurse. I wished her the best in life and told her to report to the hospital whenever she is feeling ill.

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 the end or finish of an event, process or test. This is the last step of the patient/family care study which entails the student's personal appreciation of the therapeutic relationship with the patient as well as the use of the nursing process.

6.1 Summary

Mrs. J.A. arrived on the Female Medical Ward of Kintampo Municipal Hospital on 19th November, 2022 at 6:30pm per ambulation accompanied by a staff nurse and her sister on account of Acute Exacerbation of Peptic Ulcer Disease with history of headache, epigastric pain and malaise. It was a planned admission. Patient spent four days at the ward. Full blood count, Helicobacter pylori test were diagnostic investigation carried on the patient also pregnancy test, BF for malaria parasite, routine urine examination and abdominal ultra sonography was also

conducted to rule out pregnancy ,Malaria ,UTI and Pancreatitis respectively, Intravenous medications like Omeprazole, hyoscine Butyl bromide, injection tramadol 100mg stat in 500mls normal saline, Amoxiclav, Nugel 'O' suspention, metronidazole etc and intravenous infusions like DNS were administered to the patient.

During her stay at the hospital six problems which were identified were epigastric pain, anxiety, difficulty sleeping, loss of appetite, body weakness and little knowledge about her condition. These problems were developed into nursing diagnosis with nursing orders which were implemented to help solve the problems and promote recovery.

Using the nursing care plan, effective nursing care was carried out on the patient to ensure full recovery of patient. Among the care provided to her were, assisted mouth wash, regular assisted exercise, bed making, monitoring of vital signs (temperature, pulse, respiration, and blood pressure), proper positioning in bed, administration of medication, and patient / family education on personal hygiene. She was discharged on 22nd November, 2022 when her condition had improved and was declared fit to go home with no complains.

Goals were fully met during evaluation of care. Three home visits were paid to her to assess progress of her condition at home. She reported to the hospital for review on the 29th November, 2022. There was termination of care on 1st December, 2022.

6.2 Conclusion

The patient care study has helped me gain knowledge about nursing care rendered to clients, this study has also helped me to know how to collect relevant information from patients, identify health problems, analyze and formulate a nursing care plan using the nursing process approach. Patient/family and the Medical team, were commended for their opinions and appraisal, co-

operation and support towards the achievement of goals which promoted the well-being of patient / family physically, psychosocially and spiritually.

This study has enabled me to put into practice the knowledge acquired during my three year training in the institution, it has helped me to be prepared to nurse clients effectively in the near future regardless of their condition with the help of the nursing process adopted.

I therefore recommend that the patient/family case study should be maintained as a facade of the nurse trainee and be fully established in the country health care delivery system to aid in the improvement of health care for the country.

APPENDIX

Table 6.1: Observation of Vital Signs Chart for Mrs. J.A.

Date	**Time**	**Temperature (°C)**	**Pulse (bpm)**	**Respiration (cpm)**	**Blood Pressure (mmHg)**	**SPO_2 (%)**
19/11/22	6:30pm	36.9	82	25	130/90	96
	10:00pm	37.0	85	19	110/60	98
20/11/22	6:00am	36.2	80	20	100/60	99
	10:00am	36.3	82	20	100/70	95
	2:00pm	36.5	72	21	100/60	96
	6:00pm	36.3	76	20	110/60	98
	10:00pm	36.8	73	20	100/60	97
21/11/22	6:00am	35.9	73	20	100/60	99

	10:00am	36.2	69	21	100/60	97
	2:00pm	35.7	60	21	110/70	98
	6:00pm	36.5	72	20	110/60	97
	10:00pm	36.4	70	17	100/70	96
22/11/22	6:00am	36.1	62	22	110/60	96

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2. NAME OF WARD IN-CHARGE

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DATE.....05/07/2023.....

3. NAME OF SUPERVISOR

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