HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE,

BEREKUM

A PATIENT/FAMILY CARE STUDY ON GASTRITIS

TUAH ESTHER

(4120190140)

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

AUGUST, 2022

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PREFACE

Although the origins of nursing predate the mid-19th century, the history of professional nursing traditionally begins with Florence Nightingale. Nightingale, the well-educated daughter of wealthy British parents, defied social conventions and decided to become a nurse. The nursing of strangers, either in hospitals or in their homes, was not then seen as a respectable career for well-bred ladies, who, if they wished to nurse, were expected to do so only for sick family and intimate friends. In a radical departure from these views, Nightingale believed that well-educated women, using scientific principles and informed education about healthy lifestyles, could dramatically improve the care of sick patients. Moreover, she believed that nursing provided an ideal independent calling full of intellectual and social freedom for women, who at that time had few other career options. Nursing care has evolved from just caring for the sick and the dying, to an era of assisting people who seek health guidance and counselling, as well as promoting the health of individuals, their families and the entire community. There has also been an extension of care to the sick person's family and community, at large, in all aspects of health care. Nursing in the past four decades have brought emphasis on nursing research and the use of scientific data at the bedside.

Nursing care has broadened from care of the sick to care of the people both in sickness and health and also extend to the patient's family and community at large in all aspects regardless of the background.

The Patient/ family care study is a detailed account of nursing care rendered to the Patient and family to meet their needs. The study is designed to give a comprehensive nursing care to both patient and family from the time of admission till when patient is finally discharged to go home, as well as follow-ups or home visits for continuity of care. The study provides a systematic way of collecting data, analysing information, and reporting the results of nursing care. This

Patient/Family care study is based on holistic care, taking into account all factors impinging on the health of the patient.

The Patient/Family care study forms an integral part of the curriculum for educating nursing students hence a prerequisite for completing the nursing course and also a partial fulfillment of the requirement for the award of professional license by the Nursing and Midwifery Council of Ghana. Using the nursing process in caring for a patient, emphasis is based on health promotion, maintenance and restoration or enhancing a peaceful death depending on the patient's condition. The nursing process is a series of organized steps designed for nurses to provide excellent care. This involves five phases, including assessing, diagnosing, planning, implementing and evaluating. The purpose of nursing process is that, it offers a framework for thinking through problems and provides some organization to nurse's critical thinking skills. It's important to point out that this process is flexible and not rigid. It is a tool to use in nursing care, but one that should allow for creativity and thinking outside the box.

The study is carried out to enable the student nurse put into practice the knowledge and skills acquired from the three-year training period in school to ascertain how best the theoretical knowledge would be used to nurse patients who will come under his or her care in the near future. Initials were used instead of the patient's full name to maintain confidentiality. The study serves as a reference paper for other student nurses and qualified health personnel who may be interested in its content.

ACKNOWLEDGEMENT

I would like to extend wholeheartedly my gratitude and praise to the ever loving and merciful God for touching and bringing those people who literally shared their abundant resources, talents, skills, time and effort for the completion of the study.

I deem it expedient to express my profound thanks to the Principal of the Holy Family Nursing and midwifery Training College-Berekum, Monica Nkrumah, for being my source of guidance and motivation during this study.

This care study would not have been successful without the directions and constructive criticism of my supervisor, Mr. Emmanuel Ali who equipped me with the knowledge and guidelines whilst writing this care study and all the tutors of Holy Family Nursing and Midwifery Training College, Berekum, for their support and the pieces of advice they gave me throughout this study.

My sincere gratitude goes to Madam V.Y. and her family for being approachable, cooperative and for spending their time in answering all the questions asked, which meant so much for the completion of this study. I am also grateful to the medical doctors and the staff nurses of the Female Medical Ward at Holy Family Hospital, Berekum.

Further, Special thanks goes to my wonderful parents for their unending emotional, moral, spiritual, and financial support throughout the period of the study.

Lastly, I am very grateful to all the publishers and authors whose books I used during the course of my Study.

May God bless you all.

INTRODUCTION

Presented in this care study is a report of nursing care rendered to Madam V.Y. who diagnosed of gastritis. She was admitted to the female medical ward of Holy Family Hospital, Berekum on 11th December, 2021 at 12:30pm and stayed there for five (5) days.

With the use of nursing process, the problems identified were developed into nursing diagnosis with nursing orders which were implemented to help solve these problems and promote recovery.

Using the nursing care plan, effective nursing care was carried out on the patient to ensure full recovery of Madam V.Y. Among the care provided to her were 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.

The following were health problems identified with the client during the period of hospitalization. They include;

1. Patient complained of epigastric pain
2. Patient was vomiting
3. Patient had fever (38.5^{0}c)
4. Patient and family were anxious
5. Patient could not eat well
6. Patient could not sleep well at night
7. Patient and family had inadequate knowledge about the disease condition

Nursing diagnosis for Madam V.Y. are as follows;

1. Abdominal pain related to inflammation of the gastric mucosa
2. Risk for fluid and electrolyte imbalance related to vomiting
3. Pyrexia (38.5^{o}C) related to infectious process

4. Anxiety (patient and family) related to unknown outcome of condition
5. Risk for imbalance nutrition (less than body requirement) related to loss of appetite anorexia.
6. Insomnia related to ambient noise and nursing procedures
7. Knowledge deficit related to inadequate information about condition, its causes and treatment modalities

Diagnostic investigations requested for Madam V.Y. included;

1. Full blood count
2. Blood film for malaria parasites
3. Stool for routine examination
4. Gastroscopy

The drugs below were prescribed for Madam V.Y. to treat her condition:

1. Intravenous Omeprazole 400milligram stat
2. Capsule Omeprazole 200milligram twice daily x5days
3. Suspension Nugel (Magnesium trisilicate + Aluminum hydroxide) 15millitres three times daily x5days
4. Capsule Amoxicillin 500mg three times daily x 14 days
5. Tablet Metronidazole 400mg three times daily x 4 days
6. Injection Tramadol 100mg stat
7. Tablet Paracetamol 1gram three times daily x3days

She was discharged on 15th December, 2021 when her condition had improved and was declared fit to go home with no complains. Goals were fully met during evaluation of care. She reported to the hospital for review on the 25th December, 2021. Three home visits were embarked on. The first home visit was done while patient was still on admission on 12th December, 2021, second home visit was on 20th December, 2021 and third home visit was on the 27th December, 2021. The care was finally terminated on 27th December, 2021 after

handing over her to the public health nurse. This care study report has been organized into six chapters in line with the phases of the nursing process.

Chapter one: Assessment of Madam V.Y. and her family family.

Chapter two: Analysis of data.

Chapter three: Implementation of care for Madam V.Y. and her family family.

Chapter four: Evaluation of care for Madam V.Y. and her family family.

Chapter six: Summary and conclusion of the care study.

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CHAPTER ONE

ASSESSMENT OF PATIENT/FAMILY

1.0 Introduction

According to Weller (2019), assessment is an evaluation of the health status of an individual by performing a physical examination after obtaining a health history. In the nursing process, assessment is the systematic and continuous collection, organization, validation and documentation of data or information. All phases of the nursing process depend on the accurate and complete collection of data.

Data is obtained from the patient, the family or significant others, health team members, health record and pertinent nursing and medical literature. Each source provides information about the patient's level of wellness, risk factors, health practices and goals, patterns of illness as well as information relevant to the patients' health care need. The physical examination and diagnostic investigation and laboratory test are also source of data. The nurse uses interview, the nursing health history, the physical examination and results of the laboratory test as means of data collection. The chapter entails patient particulars, family medical history, family's socio-economic history, patient's developmental history, patient's obstetric history, patient's lifestyles and hobbies, patient's past medical and surgical history, patient's present medical and surgical history, admission of the patient, patient concept of illness, literature review and validation of data.

1.1 Patient's Particulars

Patient's particulars refer to factual demographic data about the client. It includes patient's name, address, age, sex, marital status, occupation, religious preference, health care financing, and usual source of medical care (American Psychological Association, 2020).

Madam V.Y. the patient for this care study is a Forty-three (43) year old woman born on 4th February, 1979 to Madam R.A. and Mr. K.F. She is the third (3rd) born among eight siblings. She hails from Drobo in the Jaman South District of the Bono region of Ghana with house number FM 84 but currently stays at Magazine. Patient is married to Mr. M.G. and they have 5 children, 3 boys and 2 girls. Madam V.Y. is "Bono" by tribe and speaks Bono Twi. She is a literate but had her education up to J.S.S 3. Madam V.Y. is dark in complexion, 1.69m tall and weighs 64kg with a Body Mass Index (BMI) of 22.4kg/m^2 which clearly indicates that she is not overweight or obese. Patient has no physical impairments. Patient is a National Health Insurance beneficiary with card number 8596215. She is a Christian by religion and worships with the Pentecost Church of Ghana at Magazine. Her next of kin is Madam L.T. her daughter who resides with her at Magazine.

1.2 Family Medical History

The purpose of this is to obtain data about immediate and blood relatives in order to determine whether the client is at risk for illnesses of genetic or familial nature and to identify areas of health promotion and illness prevention. It also provides information about family structure, interaction, and function that may be useful in planning care.

According to Madam V.Y. both parents died and also there are no known chronic disease such as diabetes, hypertension, asthma and tuberculosis in the family. There is no history of mental disorders in the family. She said the elderly persons in the family who have joined the ancestors died as a result of old-age associated diseases which she had no idea of. According to patient her parents and siblings are alive and healthy. Family members who encounter minor ailments such as headache, fever, chills, diarrhea and constipation among other unforeseen injuries are treated on out-patient basis. She also said her five children rarely suffer ailments but if they do, they mostly suffer headaches of which her first line of action is to buy over the counter drug

like paracetamol and later on go to the hospital if it becomes severe. Based on this information I educated the patient and relatives on the effects of the use of over- the- counter drugs and urged them to go for medical care from any health center when they are suffering from any condition. There are no known allergies among the family and their major sources of medical treatment is orthodoxically. Most hospitalizations in the family are related to child birth.

1.3 Family's Socio-economic History

According to her, most of her family members are government workers whilst the rest of them including her are self-employed. She also added that both parents are farmers at Drobo. As farmers, they are exposed to occupational hazards such as cuts, snake bites, toxic exposure to farm chemicals and others hence they were advised to put on protective farm wears such as farm boots, nose mask and goggles during farm activities. The family upkeep and financial assistance is mainly catered for by her earnings from her small trade. All the family of Madam A.Y. are registered with the NHIS (National Health Insurance Scheme) and believes that with the help of NHIS, she would be able to pay her bills and be discharged. The patient could not recollect any family taboos or norms. The family is not known for smoking or drinking. They are well-liked in their community, and the entire family is kind and welcoming. They are Christians. Members of the family partake in church roles such as ushers and choristers.

1.4 Patients Developmental History

Development is the process in which someone or something grows or changes and becomes more advanced. Growth is the series of physical changes that occur from conception through maturity. Maturation is the biological processes involved in an organism's becoming functional or fully developed (American Psychological Association, 2020).

Although Madam V.Y. could not recall vividly, the events regarding her birth and development from infancy through youth to adulthood, she was able to give the following as told her by her

mother. According to Madam V.Y. she was delivered at full term through spontaneous vaginal delivery at St. Mary's Hospital, Drobo with the assistance of a midwife. She could not tell when her teeth erupted as well as when she started sitting, crawling and walking but attested going through the milestone of infancy and childhood. She testified to being immunized against the six childhood killer diseases now as vaccine preventable diseases as told her by her mother, and it was evidenced by a mark on the deltoid of the right shoulder. From the verbal history taken from her, she did not suffer from any childhood diseases. Madam V.Y. said she moved from Faaman to Sebrenya a small village near Sampa in the Brong Ahafo region of Ghana with her parents when she was six years old and that was where she started schooling. Since the father had cocoa farm at Faaman she went with him whenever he visited his cocoa farm. Her education was terminated at J.S.S 3 because her family was experiencing financial difficulties at the time. She said, her mother introduced her to a family member who was a baker for whom she became an apprentice to learn the vocation but it was her aspiration to be a nurse. According to her, she was able to learn the vocation within 2 years after which she established her own shop. She became a trader when she moved to settle with her husband at Berekum where she started baking. According to her, she experienced menarche around age 14 with normal flow for at least 5 days and no menstrual pain. She also started experiencing female sexual characteristics such as enlargement of breast, broadening of hips, growing of pubic hairs. She didn't have any relationship until about 19 years.

According to Erickson's theory of psychosocial development (1963), Erickson describes the human life cycle as a series of eight ego developmental stages from birth to death. Each stage presents a psychosocial crisis, the goal of which is to integrate physical, maturation and societal demands. The theory focuses on psychosocial task that are accomplished throughout the life cycle. An unsuccessful resolution leaves the individual emotionally handicapped. As a woman in the generativity versus stagnation stage according to Erick Erickson's psychoanalytic theory

of development, Mrs. V.Y. empathizes with others and looks outside herself to offer help to others. She is happy with her personal achievements as a mother and as a farmer who is been able to cater for her children. She is married to Mr.M.G., She has therefore attained the generativity dimension of Erickson's theory of psychosocial development as she said she genuinely cares about the welfare of her children. All her children are schooling.

1.5 Patient's Obstetric History

According to Madam V.Y. she gave birth to her first child when she was 24 years old and had two subsequent pregnancies, and no abortions. She revealed that she had never taken in oral contraceptives to prevent herself from getting pregnant but she has been practicing natural family planning. She said she has five children, 3 boys and 2 girls, which all were normal deliveries (spontaneous vaginal delivery) at St. Mary's Hospital, Drobo and Holy Family Hospital, Berekum and are all alive. No complications were experienced after her deliveries. She also revealed that she has a regular menstrual cycle and that she usually gets her menses every twenty-seven days.

1.6 Patient's Lifestyles and Hobbies

Madam V.Y. is the outspoken type of person who does not exclude herself in social gatherings and shows much interest in public issues and discussions including state of the nation affairs; she has a quite number of friends of which the most are males. She always put on a smiling face which always makes people approach her easily. Madam V.Y. brushes her teeth once a day, baths twice daily and keeps short well-kept nails. She wakes up around 4:00am each day except Sundays and goes to bed around 10:00pm at night.

She goes to bake even on Saturdays but goes to church on Sundays. She does not experience any difficulties in carrying out activities of daily living like eating, grooming, dressing and walking. Patient sometimes attend weddings and funerals on the weekends. According to

Madam V.Y. she attends to nature call whenever she feels the urge and hardly experience constipation. She is a non-smoker, do not like coffee and does not take illicit or recreational drugs like pethidine and morphine. She takes normal three regular meals daily and cooks most of the time and has a great preference for spiced foods. She does not exercise regularly and likes watching local movies. She does not have any known allergies to food and drugs. Her favorite food is fufu with palm-nut soup and snail. Her favorite sport is soccer and she revealed that she is a strong supporter of Kotoko Football Club. She is caring and uses non-verbal communication to speak to her children to desist from doing certain things. She worries a lot about her family's well-being and the educational outcome of her children and it is her highest priority that her children have education to the possible highest level. Personally, I think Madam V.Y. is an extrovert, caring, kind and a philanthropist but stressors from her role as a single parent of two sometimes present as a challenge. She is a mother who openly expresses her dissatisfaction about wrong behaviors put up by her children. She sometimes blinks her eyes to signal her children to stop misbehaving. She is a very good person to interact with, she is loving, open, fair, firm, disciplined, respectful and God fearing to mention a few. She dislikes frowning and likes healthy relationships. She is a friendly and easy-going woman.

1.7 Patient's Past Medical and Surgical History

According to Madam V.Y. she has never been so sick to warrant hospitalization, but suffers minor ailments such as headaches and body pains as a result of her work but she treats them using over the counter medications and seeks out-patient treatments when such ailments become severe. She said, her only periods of hospitalizations are during deliveries and she has never undergone any surgical procedure. She could not recall any childhood diseases such as whooping cough or measles. Despite her easy access to healthcare, she does not attend regular check-ups. Madam V.Y. has never had an accident and does not have any known allergies. Patient does not have any physical disabilities as a result of illness.

1.8 Patient's Present Medical and Surgical History

Patient was apparently well until 11th December, 2021 at 6:00am, when she started experiencing vague abdominal (epigastric) pains. The pains were initially intermittent but later became severe. The pain was associated with yellowish vomiting, a loss of appetite and a feeling of nausea which was gradual. She was rushed to medical emergency unit at the Holy Family Hospital, Berekum where she was seen by Dr. O.Y. and was diagnosed of gastritis and then transferred to the female medical ward for treatment to be continued on the same day.

1.9 Admission of the Patient

On the 11th day of December 2021, the nurse in charge of the female medical ward of the Holy Family Hospital, Berekum received a call from the emergency unit at 11:45am informing her that, a patient by name Madam V.Y. with a diagnosis of gastritis was coming on an unplanned or emergency admission to the female medical ward with the family and so an admission bed was prepared for her. At exactly 12:10pm, patient was brought to the ward ambulatory and was accompanied by one nurse and a relative, who is a co-tenant, in a conscious state. The nurse handed over to me the patient folder. The Patient was identified and confirmed by mentioning name and other particulars.

Diagnostic investigations requested for Madam V.Y. included;

1. Full blood count
2. Blood film for malaria parasites
3. Stool for routine examination
4. Gastroscopy

The drugs below were prescribed for Madam V.Y. to treat her condition:

1. Intravenous Omeprazole 400milligram stat

2. Capsule Omeprazole 200milligram twice daily x5days
3. Suspension Nugel (Magnesium trisilicate + Aluminum hydroxide) 15millitres three times daily x5days
4. Capsule Amoxicillin 500mg three times daily x 14 days
5. Tablet Metronidazole 400mg three times daily x 4 days
6. Injection Tramadol 100mg stat
7. Tablet Paracetamol 1gram three times daily x3days

Madam V.Y. and relatives were welcomed to the nurses' station and made comfortable by offering them a seat and introduction of self and other staffs that were on duty was done. All necessary documents, admission notes and other information were collected from the accompanying nurse. According to the accompanying nurse, injection tramadol 100mg stat was already given and so Madam V.Y. was sent to the bed side and introduced to other patients near her. Madam V.Y. was brought to the ward with the complaints of epigastric pains, headache and vomiting. She and her relative were reassured of the readiness of the health team to do their best to bring about recovery and the effectiveness of prescribed medications to aid in recovery. She had already gone for her drugs and so treatment was started immediately.

Vital signs were checked and recorded as;

1. Blood pressure was 110/70 millimeters of mercury (mmHg)
2. Pulse rate was 67 beat per minutes (bpm)
3. Respiration was 21 cycles per minutes (cpm)
4. Temperature was 38.5 degrees Celsius.

Weight was 64 kilograms

On admission, vital signs checked revealed that patient had fever (38.5^{0C}). At 3:30pm, a nursing objective was set to reduce patient's body temperature to normal ($36.2 – 37.2^{0C}$) within 3hours.

Patient/family was once again reassured that the various nursing interventions like tepid sponging will be done to reduce the pyrexia. Other nursing interventions carried out included; opening of nearby windows, loosening of clothing and serving of prescribed medication such as anti-pyretic drugs (1 gram of tablet paracetamol) to abate the fever.

On this same day at 3:30pm, patient complained of epigastric pains. A nursing objective was set to relieve patient of pain within 24 hours. The following nursing interventions were carried out; reassurance of patient about effectiveness of prescribed analgesics to relieve pain, assessment of pain on a numeric scale of 0-10 and its rating as moderate (6), supervision of patient to take in rice and tomato stew and the need for such meal was explained to patient, serving of prescribed medications and observation for its therapeutic and adverse effects.

An intravenous line was secured and Intravenous Omeprazole 400milligram stat was administered as prescribed. She was also assisted to change into night gown. Mrs. V.Y. and relatives were oriented to the ward and it annexes. She was introduced to the patients around her and she was told to call for help when needed. She was also made aware of the items she would need during admission. She was also taken through the ward routines such as time of serving medications, rounds and visiting hours. The cash and carry system as well as the National Health Insurance Scheme (NHIS) was explained to her. She is a registered member of the National Health Insurance Scheme and it was explained to her that certain drugs and treatment which is not covered by the National Health Insurance Scheme (NHIS) would have to be paid for. When the patient was stable, I went to engage her in a therapeutic conversation where I made my intention known to her that I am a student from Holy Family Nursing and Midwifery Training College, Berekum and I informed them I would like to use her and her family for my care study as a partial fulfillment of the award of license by Nursing and Midwifery Council of Ghana to practice as a professional registered nurse. My reasons for using her was made known to them that I would like to render a comprehensive nursing care

until she recovers fully and discharged home because she could get a whole lot of complications of her illness if proper care is not given. I requested them to co-operate with me throughout the care giving. I also informed them that as part of my care, I would visit them at home while she was still on admission and after she has been discharged. Upon series of conversations with them they agreed to my request and further promised me that they would provide me with every bit of information I needed after I explained the level of confidentiality and privacy to them. I expressed my heartfelt gratitude to them. I decided to choose this patient for the care study because I wanted to have adequate knowledge on gastritis and its management. Nutritional assessment carried out on patient revealed patient was having a very good nutritional status prior to her admission since patient showed no signs of malnutrition. The preparation for discharge started from the day of admission and they were also informed that admission to the hospital was temporal and would be discharged home as soon as the condition subsides. Patients name and other particulars were entered into admission and discharge book and onto ward bed state and care rendered written in the nurse's note.

1.10 Patient Concept of Illness

Madam V.Y. did not attribute her illness to any spiritual cause, though she did not know the specific cause (s) of the illness. She was anxious because it was the first time, she was sick to warrant an admission and was also worried because she would miss days of trade at the market. She was looking forward to a speedy recovery once she was receiving treatment so that she can be discharged home to continue her trade. I took this opportunity to educate her on gastritis; its causes, signs and symptoms, treatment, prevention and the need for the admission.

1.11 Literature Review

Review of Anatomy and Physiology of The Stomach

According to Waugh and Grant (2018), the stomach is a J-shaped dilated portion of the alimentary tract situated in the epigastric, umbilical and left hypochondriac regions of the abdominal cavity. It is continuous with the esophagus at the cardiac sphincter and with the duodenum at the pyloric sphincter and it have two curvatures; the posterior lesser curvature and the anterior greater curvature.

The stomach is divided into three regions: the fundus, the body and the pylorus. At the distal end of the pylorus is the pyloric sphincter, guarding the opening between the stomach and the duodenum.

Walls of The Stomach

The walls of the stomach as described by Waugh and Grant (2018) are formed by four layers of tissue:

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

- An outer layer of longitudinal fibers
- A middle layer of circular fibers
- An inner layer of oblique fibers

3. Sub mucosa consisting of loose areolar connective tissue containing collagen and some elastic fibers, which binds the muscle layer to the mucosa.
4. Mucosa: When the stomach is empty the mucous membrane lining is thrown into longitudinal folds or rugae, and when full the rugae are 'ironed out' and the surface has a smooth, velvety appearance. Numerous gastric glands are situated below the surface in the mucous membrane and open onto it. They consist of specialized cells that secrete gastric juice into the stomach.

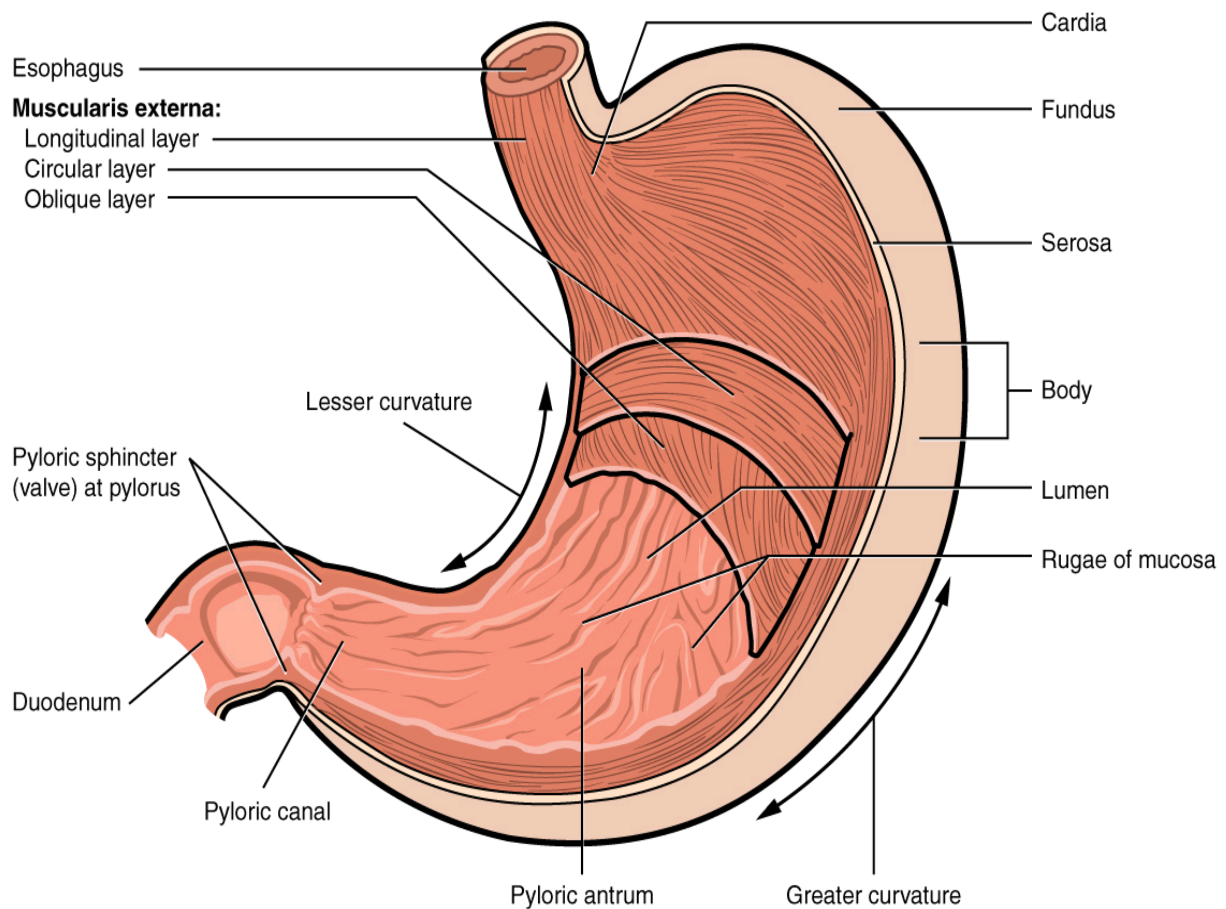

Figure 1: Walls of the Stomach

Overview of Acid Secretion/ Gastric Juice and Functions of The Stomach

According to Waugh and Grant (2018), acid is secreted by parietal cells in the proximal two thirds (body) of the stomach. Gastric acid aids digestion by creating the optimal pH for pepsin and gastric lipase and by stimulating pancreatic bicarbonate secretion. Acid secretion is initiated by food: the thought, smell, or taste of food effects vagal stimulation of the gastrin-secreting G cells located in the distal one third (antrum) of the stomach. The arrival of protein to the stomach further stimulates gastrin output. Circulating gastrin triggers the release of histamine enterochromaffin-like cells into the body of the stomach. Histamine stimulates the parietal cells via their H2 receptors. The parietal cells secrete acid, and the resulting drop in pH causes the antral D cells to release somatostatin, which inhibits gastrin release (negative response mechanism).

According to Hinkle and Cheever (2018), acid secretion is present at birth and reaches adult levels (on a weight basis) by age 2. There is a decline in acid output in elderly patients who develop chronic gastritis, but acid output is otherwise maintained throughout life.

Stomach size varies with the volume of food it contains, which may be 1.5 liters or more in an adult. When a meal has been eaten, the food accumulates in the stomach in layers, the last part of the meal remaining in the fundus for some time. Mixing with the gastric juice takes place gradually and it may be some time before the food is sufficiently acidified to stop the action of salivary amylase. The activity of gastric muscle consists of a churning movement that breaks down the bolus and mixes it with gastric juice and peristaltic waves that propel the stomach contents towards the pylorus. When the stomach is active the pyloric sphincter closes. Strong peristaltic contraction of the pylorus forces chime, gastric contents after they sufficiently liquefied, through the pyloric sphincter into the duodenum in small spurts. Parasympathetic stimulation increases the motility of the stomach and secretion of gastric juice; sympathetic stimulation has the opposite effect.

Composition of Gastric Juice

Hinkle and Cheever (2018) described that about 2 liters of gastric juice are secreted daily by specialized secretory glands in the mucosa and it consists of:

1. Water-produce by gastric gland
2. Mineral salt-produce by gastric gland
3. Mucus secreted by mucous neck cells in the glands and surface mucous cells on the stomach surface
4. Hydrochloric acid--produce by produce by parietal cells
5. Intrinsic factor Inactive enzyme-parietal cells.

Functions of Gastric Juice

The functions of gastric juice as outlined by Waugh and Grant (2018) include;

1. Water further liquefies the food swallowed
2. Hydrochloric acid functions by:

- Acidifies the food and stops the action of salivary amylase
- Kills ingested microbes
- Provide acidic environment needed for effective digestion by pepsin

3. Pepsinogens are activated to pepsins by hydrochloric acid

4. Intrinsic factor (a protein) is necessary for absorption of vitamin B12 from the ileum

5. Mucus prevents mechanical injury to the stomach wall by lubricating the contents. It prevents chemical injury by acting as a barrier between the stomach wall and the corrosive gastric juice.

Functions of The Stomach

The functions of the stomach were described by Waugh and Grant (2018) to include;

1. Temporary storage allowing time for digestive enzymes and pepsin to act
2. Chemical digestion-pepsin convert proteins to polypeptides
3. Mechanical digestion-muscular layers churn food into chyme
4. Limited absorption of water, alcohol and some lipid soluble drugs
5. Non-specific defense against microbes by HCL
6. Preparation of iron for absorption further along the tract due the acidic environment
7. Production and secretion of intrinsic factor needed for absorption of vitamin B12 in the ileum
8. Regulation of the passage of gastric contents into the duodenum
9. Secretion of the hormone gastrin.

Gastritis

Hinkle and Cheever (2018), describes gastritis as the inflammation of the gastric or stomach mucosa. It is a common gastrointestinal problem. It may be acute or chronic. However, it may be the first sign of an acute systemic infection. Gastritis is any inflammatory process of

the mucosal lining of the stomach. The inflammation may be contained within one region or be patchy in many areas. Gastric structure and function are altered in either the epithelial or the glandular components of the gastric mucosa. The inflammation is usually limited to the mucosa but some forms involve the deeper layers of the gastric wall.

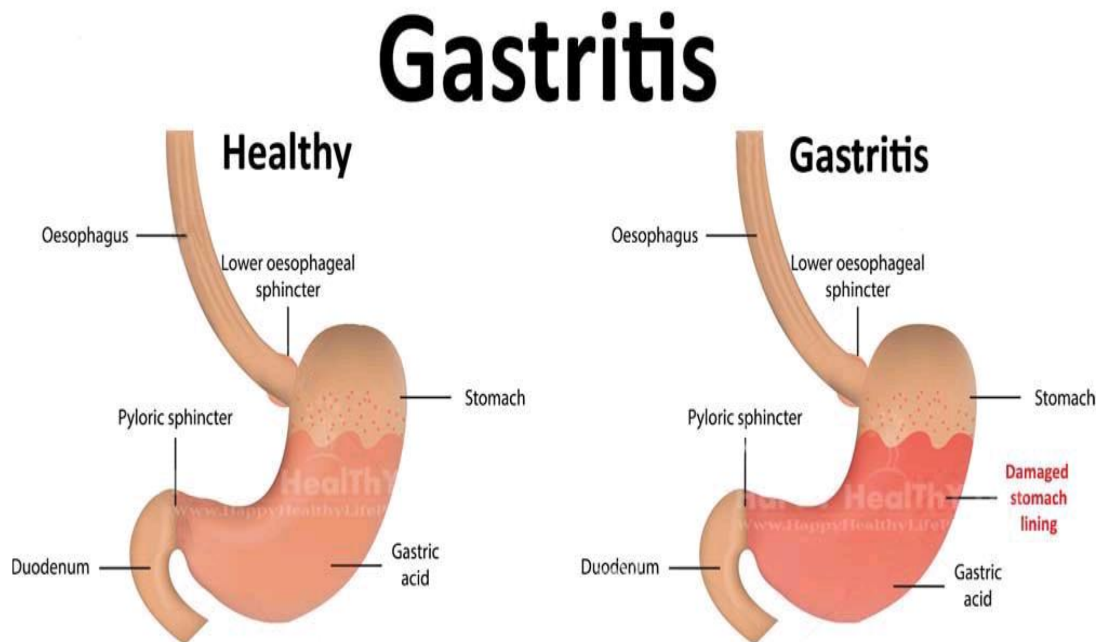

Figure 2: Inflamed gastric mucosa

Epidemiology

Acute gastritis occurs in men more than women. Chronic gastritis occurs more frequently in women than in men. In the United States, it accounts for approximately 1.8-2.1 million visit to doctor’s offices each year. It is especially common in people older than 60 years (Hinkle & Cheever, 2018).

Types

Hinkle and Cheever (2014), classifies gastritis into two major types:

1 **Acute Gastritis**

2 **Chronic Gastritis**

Acute gastritis: It is a term covering a broad spectrum of entities that induce inflammatory changes in the gastric mucosa. The inflammation may involve the entire stomach (e.g. pan gastritis) or a region of the stomach (e.g. antral gastritis). Acute gastritis can be sub-divided into 2 categories: erosive (e.g. superficial erosions, deep erosions, hemorrhagic erosions) and non-erosive, generally caused by Helicobacter pylori.

According to Hinkle and Cheever (2018), acute gastritis lasts for several hours to a few days and it is often caused by dietary indiscretion—a person eats food that is irritating, too highly seasoned, or with disease-causing microorganisms. Other causes of acute gastritis include overuse of aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs), excessive alcohol intake, bile reflux, and radiation therapy. A more severe form of acute gastritis is caused by the ingestion of strong acid or alkali, which may cause the mucosa to become gangrenous or to perforate. Scarring can occur, resulting in pyloric stenosis or obstruction. Acute gastritis also may develop in acute illnesses, especially when the patient has had major traumatic injuries; burns; severe infection; hepatic, renal, or respiratory failure; or major surgery. Gastritis may be the first sign of an acute systemic infection.

Causes

According to Hinkle and Cheever (2018), acute gastritis has numerous causes including;

1. The main cause of true gastritis as discussed by is H. pylori infection and is indicated in an average of 90% of gastritis cases.
2. Chronic ingestion of (or an allergic reaction to) irritating foods or beverages, such as hot peppers or alcohol

3. Drugs, such aspirin and other non-steroidal anti-inflammatory agents (in large doses), cytotoxic agents, corticosteroids, antimetabolites, phenylbutazone, and indomethacin.
4. Ingestion of poisons, especially DDT, ammonia, mercury, carbon tetrachloride, and corrosive substances
5. Endotoxins released from infecting bacteria such as staphylococci, Escherichia coli, or Salmonella.

Chronic gastritis: According to Hinkle and Cheever (2018), it results from repeated exposure to irritating agents or recurring episodes of acute gastritis. Prolonged inflammation of the stomach may be caused either by benign or malignant ulcers of the stomach or by the bacteria ***Helicobacter pylori.*** According to Hinkle and Cheever (2018), chronic gastritis may be associated with peptic ulcer disease or gastrostomy, both of which cause chronic reflux of pancreatic secretions, bile, and bile acids from the duodenum into the stomach. Recurring exposure to irritating substances, such as drugs, alcohol, cigarette smoke, or environmental agents, may also lead to chronic gastritis. Chronic gastritis may occur with pernicious anemia, renal disease, or diabetes mellitus. Pernicious anemia is commonly associated with atrophic gastritis, a chronic inflammation of the stomach resulting from degeneration of the gastric mucosa. In pernicious anemia, the stomach can no longer secrete intrinsic factor, which is needed for vitamin B_{12} absorption.

Kumar and Clark (2017), describes three forms of chronic inflammation of the gastric mucosa as;

1. **Superficial chronic gastritis:** Is a term used to describe the initial stages of chronic gastritis, it means that the inflammation is mild and is taking place only at the very surface of the stomach lining, without affecting deeper layers. It is characterized by red, edematous surface epithelium, small erosions and decreased mucus content. However, the gastric glands remain normal.

2. **Atrophic chronic gastritis:** It is the result of chronic gastritis which is leading to atrophy (i.e. decrease in the thickness and wasting away) of the stomach lining. Inflammation extend deeper into the gland area of the mucosa with loss of parietal and chief cells. Atrophic gastritis further develops into the final stage of chronic gastritis.
3. **Gastric atrophy chronic gastritis:** It's the final stage of chronic gastritis and may lead gastric cancer.

According to Kumar and Clark (2017), other forms of gastritis include;

1. **Erosive Gastritis:** This type of gastritis involves an erosion of the mucus layer of the stomach and can lead to bleeding and ulcers in the stomach lining.
2. **Superficial gastritis (or surface gastritis):**
3. **Pan gastritis (or Pan gastritis):** "pan" meaning "whole" or "entire" is a term used to simply state the fact that the inflammation is found around all the stomach's lining.
4. **Antral gastritis**: It is a term used to describe inflammation in the mucosal lining of the antrum (the lower portion of the stomach which releases the contents of the stomach into the duodenum.
5. **Bile gastritis**: this is a stomach inflammation resulting from bile produced by the liver refluxing back into the stomach.
6. **Phlegmonous gastritis**: Is an uncommon form of gastritis caused by numerous bacterial agents including streptococci, staphylococci, Proteus species, Clostridium species and Escherichia coli. It usually occurs in individuals who are debilitated and it is associated with a recent large intake of alcohol, a concomitant upper respiratory tract infection and AIDS. Phlegmonous means a diffuse spreading inflammatory of or within the connective tissue. In the stomach, it implies infection of the deeper layers of the stomach i.e. mucosa and sub mucosa.

Risk Factors of gastritis

The risk factors of gastritis are described by Hinkle and Cheever (2018) to include;

1. Infection with Helicobacter pylori
2. Acquired immunodeficiency syndrome (AIDS)
3. Any condition that requires relief from chronic pain using NSAIDs, such as chronic back pain or arthritis
4. Alcoholism
5. Cigarette smoking
6. Older age
7. Herpes simplex virus or cytomegalovirus
8. Inflammatory bowel disease

Pathophysiology

The pathology as described by Hinkle and Cheever (2018) is that; normally, the gastro-intestinal mucosa is protected by several distinct mechanisms: (1) Mucosal production of mucus and bicarbonate (HCO_3) which creates a pH gradient from the gastric lumen (low pH) to the mucosa (neutral pH) with the mucus serving as a barrier to the diffusion of acid and pepsin (2) Epithelial cells remove excess hydrogen ions(H^+) via membrane transport systems and have tight junctions, which prevent back diffusion of H^+ ions. (3) Mucosal blood flow removes excess acid that has diffused across the epithelial layer. In the presence of factors like stress, chemical substances, like drugs and alcohol, spicy foods, hot or sour foods, etc., there is sympathetic nerve stimulation, particularly that of the valgus nerve. The stimulation leads to increased production of hydrochloric acid in the stomach causing nausea, vomiting and anorexia. There is gastric mucosal cell exfoliation leading to erosion causing the gastric mucosa to lose its protective property. There is invasion of gastric mucosa and inflammatory reaction occurs. Mucosal cell loss cause bleeding. With constant irritation, tissues become inflamed. The gastric mucous membrane becomes edematous and hyperemic (congested with fluid and

blood) and begin to undergo superficial erosion. It secretes scanty amount of gastric juice with very little acid but much mucous.

Signs and Symptoms

According to Kumar and Clark (2017), after exposure to the offending substance, the patient with acute gastritis typically reports a rapid onset of symptoms such as;

1. Epigastric discomfort
2. Headache
3. Nausea
4. Anorexia
5. Vomiting
6. Hiccupping, which can last from a few hours to a few days

While some patients remain asymptomatic, the symptoms if present may last from a few hours few days.

The patient with chronic gastritis may describe similar symptoms as acute gastritis or may have;

1. Pyrosis (heartburn) mostly after meals
2. Belching or bloating
3. A sour taste in the mouth
4. Some patients may have only mild epigastric discomfort or report intolerance to spicy or fatty foods or slight pain that is relieved by eating.
5. Epigastric heaviness after eating.
6. Anemia.

Assessment and Diagnostic Findings

According to Hinkle and Cheever (2018), gastritis is sometimes associated with **Achlorhydria** or **Hypochlorhydria** (absence or low levels of hydrochloric acid) or with hyperchlorhydria (high levels of hydrochloric acid). Diagnosis can be determined by;

1. Patient history
2. Upper gastro-intestinal radiography
3. Endoscopy of the gastric mucosa (Gastroscopy)
4. Histologic examination of a tissue specimen obtained by biopsy.
5. Serum vitamin B12 assessment
6. Helicobacter pylori test
7. Occult stool/ stool for routine examination
8. Full blood count

Treatment/Management

AIMS: Waugh and Grant (2018) describes the aims of treating gastritis to include;

1. Reduce the amount of acid in the stomach and allow the stomach lining to heal
2. To relieve symptoms such as abdominal pains and reduce complications
3. To treat the underlying cause of the condition
4. To promote comfort

Medical Management

According to Kumar and Clark (2017), there are both over the counter and prescription medications for gastritis.

1. The "eradication therapy" is mostly used in treatment of *Helicobacter pylori*-related gastritis which involves the combination of three drugs; a proton-pump inhibitor to reduce acid

production and two antibiotics. Bismuth salicylate (Pepto Bismol) may be used instead of the second antibiotic. This drug, available over the counter, coats and soothes the stomach, protecting it from the damaging effects of acid.

Some of the same drugs used for non- *Helicobacter pylori* gastritis as are used for symptoms (like indigestion) due to ulcers:

2. Antibiotics like Amoxicillin + Clavulanic acid (Amoksiclav), Metronidazole and Ciprofloxacin to help eliminate the bacteria causing the inflammation.
3. Antacids which may relieve heartburn or indigestion. They include;

- Nugel O
- Magnesium hydroxide (Philips' Milk of Magnesia)

4. Histamine 2 (H2) Blockers which reduce gastric acid secretion. They include;

- Cimetidine (Tagamet)
- Ranitidine (Zantac)

5. Proton pump inhibitors which decrease gastric acid production. They include;

- Esomeprazole (Nexium)
- Lansoprazole (Prevacid)
- Omeprazole (Prilosec)

6. Prostaglandin E1 Analogue e.g. Sulcrafate, Misoprostol (Cytotec) protects gastric mucosa against actions of gastric juice by acting as a barrier

The medical management is further described by Hinkle and Cheever (2018) to include;

7. Intravenous (IV) fluids like Dextrose Normal Saline (DNS) may need to be administered to correct electrolyte imbalance.
8. Anti- emetics e.g. Phenergan to reduce vomiting.

9. Analgesics and antipyretics e.g. tramadol to relieve pain and paracetamol for pyrexia respectively.

According to Hinkle and Cheever (2018), in extreme cases, emergency surgery may be required to remove gangrenous or perforated tissue. A gastric resection or a gastrojejunostomy/ Billroth II (anastomosis of jejunum to stomach to detour around the pylorus) may be necessary to treat pyloric obstruction (a narrowing of the pyloric orifice, which cannot be relieved by medical management) or phlegmonous gastritis (gangrene of the stomach).

Chronic gastritis is managed by modifying the patient's diet, promoting rest, reducing stress, recommending avoidance of alcohol and NSAIDs, and initiating pharmacotherapy. For chronic gastritis, occurring as a result of excessive gastric acid secretion, vagotomy may be necessary to decrease parasympathetic secretion of gastric acid.

Nursing Management

Nursing management of gastritis is described by Hinkle and Cheever (2018), to include the following interventions;

Reassuring the patient

There is the need for continuous reassurance of patient and family about readiness of health care team to aid in treatment and the effectiveness of available medications and other supportive treatment modalities in bringing about speedy recovery and remission.

Reducing Anxiety

If the patient has ingested acids or alkalis, emergency measures may be necessary. The nurse offers supportive therapy to the patient and family during treatment and after the ingested acid or alkali has been neutralized or diluted. In some cases, the nurse may need to prepare the patient for additional diagnostic studies (endoscopies) or surgery. The patient may be anxious because of pain and planned treatment modalities. The nurse uses a calm approach to assess

the patient and to answer all questions as completely as possible. It is important to explain all procedures and treatments based on the patient's level of understanding.

Ensuring rest and sleep

The following measures should be implemented to ensure good rest and comfortable sleep to promote recovery;

1. Restrict or limit visitors when necessary and explain to the patient the need for rest and sleep in aiding speedy recovery
2. The environment should be properly ventilated and noise minimized to promote rest and sleep.
3. Put patient in well prepared, comfortable bed and make sure bed is free from creases and cramps
4. Carry out bulk nursing when applicable
5. Encourage patient to take warm bath after meals and warm drinks before bed
6. If patient has pain-related insomnia, serve prescribed analgesics to relieve pain. Also serve prescribed hypnotics and sleep inducers and monitor for therapeutic and adverse effects.

Ensuring elimination

Elimination needs in the patient with gastritis is equally important as is medications in recovery and remission of signs and symptoms. Assess patients' elimination pattern and monitor intake and output of patient. Monitor vomiting and observe vomitus for colour, consistency and content of the vomitus. If vomiting is persistent, prevent dehydration of patient by rehydrating with prescribed intravenous infusions. Administer prescribed anti-emetics and monitor for therapeutic and adverse effects. To prevent infection from elimination, ensure emesis basins, bed pans and commodes served patient to meet elimination needs, contain disinfectants and such products of elimination are properly discarded.

Ensuring personal hygiene

Ensure patients hygienic needs are equally met as other medical needs of the patient are established. The following measures can be followed;

1. Ensure patient takes his/her bath twice a day. Assist or carry out bed bath when necessary
2. Encourage patient to maintain adequate mouth care by brushing his/her teeth at least twice in a day
3. Teach and encourage patient and relatives to observe hand washing techniques after visiting the toilet or coming into contact with patient fluids such as vomitus to prevent spread of *Helicobacter pylori* bacteria.
4. Ensure patient keeps a short and well-kept nail. Carry out hand and feet care when necessary.

Observation and monitoring

1. Continuously monitor vital signs including temperature, pulse, respiration and blood pressure and intervene when appropriate
2. Monitor strict intake and output especially when vomiting persists
3. Monitor patient for therapeutic and adverse effects of administered medications
4. Assess and monitor patient for signs and symptoms of dehydration including, loss of skin turgor, dry mouth and persistent complains of thirst.

Relieving Pain

Measures to help relieve pain include instructing the patient to avoid foods and beverages that may be irritating to the gastric mucosa and instructing the patient about the correct use of medications to relieve chronic gastritis. The nurse must regularly assess the patient's level of pain and the extent of comfort achieved through the use of medications and avoidance of irritating substances.

Promoting Fluid Balance

Daily fluid intake and output are monitored to detect early signs of dehydration (minimal fluid intake of 1.5 L/day, minimal output of 30 mL/h). If food and oral fluids are withheld, IV fluids (3 L/day) usually are prescribed and a record of fluid intake plus caloric value (1 L of 5% dextrose in water_170 calories of carbohydrate) needs to be maintained.

Electrolyte values (sodium, potassium, chloride) are assessed every 24 hours to detect any imbalance.

The nurse must always be alert for any indicators of hemorrhagic gastritis, which include hematemesis (vomiting of blood), tachycardia, and hypotension. If these occur, the physician is notified and the patient's vital signs are monitored as the patient's condition warrants.

Promoting Optimal Nutrition

For acute gastritis, the nurse provides physical and emotional support and helps the patient manage the symptoms, which may include nausea, vomiting, heartburn, and fatigue. The patient should take no foods or fluids by mouth (possibly for a few days) until the acute symptoms subside if possible, thus allowing the gastric mucosa to heal.

If intravenous therapy is necessary, the nurse monitors fluid intake and output along with serum electrolyte values. After the symptoms subside, the nurse may offer the patient ice chips followed by clear liquids. Introducing solid food as soon as possible may provide adequate oral nutrition, decrease the need for intravenous therapy, and minimize irritation to the gastric mucosa. As food is introduced, the nurse evaluates and reports any symptoms that suggest a repeat episode of gastritis. The nurse discourages the intake of caffeinated beverages, because caffeine is a central nervous system stimulant that increases gastric activity and pepsin secretion. It also is important to discourage alcohol use. Discouraging cigarette smoking is important because nicotine reduces the secretion of pancreatic bicarbonate, which inhibits the neutralization of gastric acid in the duodenum. When appropriate, the nurse initiates and refers

the patient for alcohol counseling and smoking cessation programs. Also ensure patient takes in a bland diet and serve small meals at frequent intervals

Nutrition and dietary Supplements

Following these nutritional tips may help reduce symptoms:

1. Eating antioxidant foods, including fruits (such as blueberries, cherries and tomatoes), and vegetables (such as garden eggs and cucumber)
2. Intake of foods high in B vitamins and calcium, such as almonds, beans, whole grains (if non-allergic), dark leafy greens (such as spinach and kale) and sea vegetables
3. Avoid refined foods such as white breads, pastas, and sugar
4. Use healthy oils, such as olive oil
5. Reduce or eliminate trans-fatty acids, found in commercially-baked goods, such as cookies, crackers, cakes, onion rings, donuts and margarine.
6. Avoid beverages that may irritate the stomach lining or increase acid production including coffee (with or without caffeine), alcohol and carbonated beverages.
7. Drink 6 to 8 glasses of filtered water daily
8. Identify and eliminate food allergies

The following supplements may help with digestive health:

1. A multivitamin daily, containing the antioxidant vitamins A, C, E, the B vitamins, and trace minerals, such as magnesium, calcium, zinc and selenium.
2. Omega-3 fatty acids, such as fish oil, may help decrease inflammation. Fish oil may increase the risk of bleeding.
3. Probiotic supplement (containing *Lactobacillus acidophilus*). Probiotics or friendly bacteria may help maintain a balance in the digestive system between good and harmful bacteria, such as Helicobacter pylori. Probiotics may help suppress Helicobacter pylori infection, and may also help reduce side effects of taking antibiotics, the treatment for a Helicobacter pylori

infection. People who have weakened immune systems, or who are taking immune-suppressive drugs, should take probiotics only under the direction of their physician.

Education

1. Educate patient/family about the condition
2. Educate patient/family on the need to take prescribed medications
3. Educate patient/family on the restriction of offending agents like alcohol or highly seasoned foods
4. Educate patient on the need to ensure rest
5. Educate patient/family on the need for follow-up

Promoting Home and Community-Based Care: Teaching Patients Self-Care

According to Hinkle and Cheever (2018), the nurse evaluates the patient's knowledge about gastritis and develops an individualized teaching plan that includes information about stress management, diet, and medications. Dietary instructions take into account the patient's daily caloric needs, food preferences, and pattern of eating. The nurse and patient review foods and other substances to be avoided (e.g. Spicy, irritating, or highly seasoned foods; caffeine; nicotine; alcohol). Consultation with a dietician may be recommended. Providing information about prescribed antibiotics, bismuth salts, medications to decrease gastric secretion, and medications to protect mucosal cells from gastric secretions may help the patient to better understand why it is important to follow information given.

Prevention

According to Hinkle and Cheever (2018), certain simple points can be followed to reduce the risk of developing gastritis. These include:

1. Wash your hands with soap and water regularly and before meals. This can reduce the risk of being infected with *helicobacter pylori*

2. Cook foods thoroughly. This also reduces the risk of infection
3. Avoid alcohol or limit your alcohol intake
4. Avoid NSAIDs or only use them infrequently. Consume NSAIDs with food and water to avoid symptoms.

Complications

The complications of gastritis were described by Hinkle and Cheever (2018) to include;

1. Stomach Ulcer mostly from chronic gastritis
2. Anemia (Vitamin B12 deficiency anemia): This occurs as a result of destruction of intrinsic factors.
3. Pyloric stenosis mostly occurs from malignant changes of gastric mucosa
4. Malignant changes of gastric mucosa
5. Hemorrhage or bleeding from an erosion or ulcer
6. Gastric Outlet Obstruction due edema limiting the adequate transfer of food from the stomach to the small intestine
7. Dehydration from vomiting

1.12 Validation of Data

Validation as defined by the Merriam-Wester, (2020) is "the process of establishing the suitability of a mechanism or system to performing a particular task". To ensure that the data gathered was accurate and complete, the information's were gathered systematically and were cross checked severally. Those given to me by Madam V.Y. and the accompanying co-tenant were compared with those in the patient's folder. My visit to the client's house also confirmed most of what Madam V.Y. had told me. The data collected from client, health workers (medical team and staff nurses), patient's folder, laboratory investigations and physical assessment were checked with literature review to ensure that information collected was free from errors, bias

and misinterpretations. Patient was also reassessed when symptoms had abated to confirm information provided on admission. This therefore makes the data valid for the study since no difference was seen in the entire sources.

CHAPTER TWO

ANALYSIS OF DATA COLLECTED

2.0 Introduction

According to Weller (2016), analysis is the study of a whole in terms of its parts. It is the second phase of the nursing process and it involves the act of deducing fact or information from data that has been gathered on the client and her condition in order to arrive at the needs of the client and the problems hindering attainment of health and intervening where necessary to promote health and well-being. It comprises;

1. Comparison of data with standard
2. Patient/Family strength
3. Health problems
4. Nursing diagnosis

2.1 Comparison of Data with Standards

This is where the data collected on the health of the patient is compared with those in the literature review. These includes diagnostic investigations, causes, signs and symptoms, treatments and complications.

A. Diagnostic Investigations/Test

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

The following diagnostic tests were carried out on client;

1. Full Blood Count
2. Blood Film for malaria parasites

3. Stool for routine examination
4. Gastroscopy

Table 1: Comparison of Test Done on Patient to Literature

Test in literature review	Test done on patient
History taking	History taking was done for the patient.
Upper gastro-intestinal radiography	Upper gastro-intestinal radiography was not requested
Endoscopy of the gastric mucosa (Gastroscopy)	Endoscopy of the gastric mucosa (Gastroscopy) was requested
Histologic examination of a biopsy tissue specimen	Histologic examination of a biopsy tissue specimen was not requested.
Serum vitamin B12 assessment	Serum vitamin B12 assessment was not requested
Helicobacter pylori test	Helicobacter pylori test was not requested
Occult stool/ stool for routine examination	Stool for routine examination was requested
Full blood count	Full blood count was requested
Blood Film for malaria parasites was not in literature review	Blood Film for malaria parasites was requested

From the table above, it is noted that history, gastroscopy, stool for routine examination and full blood count, were requested for patient to help in the confirmation of patient's condition. Diagnostic investigations such as upper gastro-intestinal radiography, histologic examination of a biopsy tissue, serum vitamin B12 assessment and helicobacter pylori test were not requested for patient because the confirmation of diagnosis was aided by the requested investigations.

Blood film for malaria parasite was requested because patient had a high body temperature and the possibility of malaria needed to be ruled out.

Table 2: Results of Diagnostic investigations carried Out on Patient

Ordered Date	Specimen	Investigations	Results	Normal values	Interpretation	Remarks
11/12/21	Blood	**FULL BLOOD COUNT**				
		Haemoglobin	13.6g/Dl	**Males:** 12g/dL - 18g/dL **Females:** 11g/dL - 16g/dL	Haemoglobin level was normal	Patient was encouraged to eat nutritious meals
		Red Blood Cell	$5.7x10^{12}/L$	**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	$8.99x10^{9}/L$	$4.5\ x10^{9}/L$ - $8.5\ x10^{9}/L$	WBC count was slightly high	Amoxicillin was prescribed
11/12/21	Blood film	Blood film for malaria parasite	Plasmodium falciparum absent (negative)	Negative	Normal: No parasites detected	No treatment given

Table 2: Results of Diagnostic investigations carried Out on Patient Cont'd…

11/12/21	Stool	Stool for routine examination (R/E)	Macroscopic: Formed specimen Microscopic: Intestinal spiral flagellates seen	There should not be any spiral intestinal flagellates in stool	The gastritis is helicobacter pylori-related	Capsule Amoxicillin 500mg three times daily x 14 and Tablet Metronidazole 400mg three times daily x 4
11/12/21	Upper GI	Gastroscopy	Patient had ulcerations in the stomach	There should not be ulcerations in the stomach	Patient had Gastritis	Intravenous Omeprazole 400milligram stat, Capsule Omeprazole 200milligram twice daily x 5days and Capsule Amoxicillin 500mg three times daily x 14 days were prescribed

B. Causes of Patient's Condition

Madam V. Y. condition was caused by infestation with *Helicobacter pylori* as revealed by diagnostic investigation (stool R/E). Also, according to Madam V.Y. she uses a contraceptive called secure and also uses over the counter drugs like EFPAC as first line of treatment for pains and other minor ailments. Contraceptives contain corticosteroids and EFPAC is an NSAID, both of which predisposes to gastritis.

C. Clinical Features/ Signs and Symptoms

Comparison of clinical features exhibited by patient with those listed in the literature review

Table 3: Clinical Manifestations Exhibited by Patient as compared with Literature Review

Clinical Manifestation in the Literature Review	Clinical Features Exhibited by Patient
Epigastric discomfort	Patient complained of epigastric discomfort
Headache	Patient complained of headache
Nausea	Patient complained of feeling nauseated
Anorexia	Patient complained of anorexia
Vomiting	Patient vomited (3x in the morning on admission day)
Hiccupping	Patient did not experience hiccups
Pyrosis (heartburn) mostly after meals	Patient complained of heartburn after meals
Belching or bloating	Patient did not experience belching or bloating
A sour taste in the mouth	Patient did not experience sour taste in the mouth
Report intolerance to spicy or fatty foods or slight pain that is relieved by eating.	Patient did not report intolerance to spicy or fatty foods or slight pain that is relieved by eating
Epigastric heaviness after eating.	Patient did not experience epigastric heaviness
Anemia.	Patient was not anaemic (Hb-13.6g/dL)

From the above comparison, Madam V.Y. exhibited most of the signs and symptoms as stated in the literature review such as vomiting, epigastric discomfort, headache, nausea and anorexia. Patient did not experience hiccupping, anaemia, sour taste in the mouth and intolerance to spicy or fatty foods or slight pain that is relieved by eating.

D. Medical Treatment of Patient

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

The drugs below were prescribed for Madam V.Y. to treat her condition:

1. Intravenous Omeprazole 400milligram stat
2. Capsule Omeprazole 200milligram twice daily x5days
3. Suspension Nugel (Magnesium trisilicate + Aluminum hydroxide) 15millitres three times daily x5days
4. Capsule Amoxicillin 500mg three times daily x 14 days
5. Tablet Metronidazole 400mg three times daily x 4 days
6. Injection Tramadol 100mg stat
7. Tablet Paracetamol 1gram three times daily x3days

Table 4 below shows comparison of treatment outlined in the literature review with those given to Madam V.Y.

Table 4: Comparison of treatment outlined in the literature review with those given to Madam V.Y.

Treatment according to literature review	Patient's drug administered
1. Antibiotics a. Amoxicillin + Clavulanic acid b. Metronidazole c. Ciprofloxacin	**1. Antibiotics** a. Amoxicillin was administered b. Metronidazole was administered c. Ciprofloxacin was not administered
2. Antacids a. Nugel O b. Magnesium hydroxide	**2. Antacids** a. Nugel O was administered b. Magnesium hydroxide
3. Histamine 2 blockers a. Cimetidine b. Ranitidine	**3. Histamine 2 blockers** a. Cimetidine was not administered b. Ranitidine was not administered
4. Proton pump inhibitor a. Esomeprazole b. Lansoprazole c. Omeprazole	**4. Proton pump inhibitor** a. Esomeprazole was not administered b. Lansoprazole was not administered c. Omeprazole was administered
5. Prostaglandin E1 Analogue a. Sulcrafate b. Misoprostol	**5. Prostaglandin E1 Analogue** a. Sulcrafate was not administered b. Misoprostol was not administered
6. Intravenous fluids a. Dextrose Normal Saline	**6. Intravenous fluids** a. Dextrose Normal Saline was not administered
7. Anti- emetics	**7. Anti- emetics**

a. Phenergan	a. Phenergan was not administered
8. Analgesics (Narcotic) a. Tramadol	**8. Analgesics (Narcotic)** a. Tramadol was administered
9. Antipyretics (Analgesic) a. Paracetamol	**9. Antipyretics (Analgesic)** a. Paracetamol was administered
10. Surgery a. Billroth II b. Vagotomy	**10. Surgery** a. Billroth II was not performed b. Vagotomy was not performed

According to the literature review, fluid and electrolyte infusion such as normal saline was stated but Madam V.Y. was not given because she was well hydrated. Paracetamol which is an analgesic and antipyretic was prescribed and served religiously instead of diclofenac or aspirin because they are both NSAIDs which precipitate the incidence of gastritis. No anti-emetic was served because the vomiting had subsided. Capsule Amoxicillin and tablet Metronidazole which both have antibiotic effects were prescribed and served religiously to eradicate the organism *Helicobacter pylori*. Also, intravenous Omeprazole, capsule Omeprazole (both proton-pump inhibitors), and suspension Nugel (Magnesium trisilicate + Aluminum hydroxide) an antacid was prescribed for Madam V.Y. and served religiously. From the prescribed drugs, the eradication therapy was used in eradicating the bacteria leading to subsequent subsiding of signs and symptoms following admission.

None of the surgical procedures stated in the literature review was carried out on Madam V.Y. because the gastritis was acute and remission was attained upon treatment.

With reference to the literature review, it can be concluded that Madam V. Y. treatment met the approved treatment modality which helped her to recover early and fully.

Table 5: Pharmacology of Drugs Administered

Date	Drug	Dosage/ Route of Administration (Literature)	Dosage/ Route of Administration Given to Patient	Classification	Desired Effect	Actual Action Observed	Side Effect/Remedies
11/12/21	Omeprazole	**Dosage** **Adult** IV: 40mg every 12 hours Oral: 20mg twice daily **Child** IV: 2 mg/kg once daily Oral: 1–2 mg/kg once daily **Route** IV, Oral	**Dosage** IV: 40mg stat Oral: 20mg bd x 5 **Route** Intravenously, Oral	Proton pump inhibitor	Gastric acid-pump inhibitor: Suppresses gastric acid secretion by specific inhibition of the hydrogen-potassium ATPase enzyme system at the secretory surface of the gastric parietal cells; blocks the final step of acid production.	Anti-secretory effects of drug were achieved as patient verbalized of relieved abdominal discomfort after about 20 minutes of drug administration	Headache, dizziness, vertigo, insomnia, Rash, inflammation, urticaria, pruritus, alopecia. Patient experienced no side effects.
11/12/21	Paracetamol	**Dosage** Adult: 0.5–1 g every 4–6 hours Child: 250–500 mg every 4–6 hours **Route** Oral, rectal and IV.	**Dosage** 1g tds x 3 days **Route** Orally	Anti-pyretic/ Analgesic	To relieve pain by blocking generation of pain impulses and also to relieve fever by acting on the hypothalamus heat regulating centre.	Patient was relieved of pains and also did not develop fever	Dark urine, skin reactions, liver damage following overdose. Patient experienced no side effects.

Table 5: Pharmacology of Drugs Administered. 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
11/12/21	Metronidazole (Flagyl)	**Dosage** Adult: 400 mg every 8 hours usually treated for 7 days Child: 30 mg/kg **Route** Oral and IV	**Dosage** 400mg three times daily x 4 days **Route** Oral	Nitroimidazole (Antiprotozoal)	It inhibits nucleic acid synthesis by forming nitroso radicals, which disrupt the DNA of microbial cells.	Patients condition improved.	Ataxia, Erythema multiforme. None of these side effects were observed.
11/12/21	Amoxicillin	**Dosage:** Adult: 500 mg 3 times a day Child: 250 mg 3 times a day **Route:** Oral and IV	**Dosage** 500mg three times daily x 14 days **Route** Orally	Penicillin's-Broad-spectrum	A bactericidal antibiotic that assists with eradicating *H. pylori* bacteria. To prevent or control infection by inhibiting bacteria growth	Patient's condition improved	Black hairy tongue, dizziness, hyperkinesia. None of these side effects were observed.

Table 5: Pharmacology of Drugs Administered 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
11/12/21	Suspension Nugel O	**Dosage** Adult: 15mls two times daily Child: 5-7.5ml two times daily **Route** Oral	Suspension Nugel O 15mls tds × 5 days **Route** Orally	Antacid suspension.	Antacids either directly neutralize acidity, increasing the pH, or reversibly reduce or block the secretion of acid by gastric cells to reduce acidity in the stomach.	Patient was relieved from abdominal pains	Chalky taste, constipation, diarrhea. Patient experienced no side effects.
11/12/21	Tramadol	**Dosage:** Adult: 100-200mg every 4–6 hours Child: 50-100mg **Route:** IV, Oral, IM	**Dosage:** 200mg in 500mls of normal saline within 4 hours **Route:** Intravenously	Narcotic/ Opioid Analgesic	It binds to the opioid receptors and blocks the pathway of nor epinephrine and serotonin which reduce pain.	Pain was relived	delirium, dyspnea, muscle weakness, nightmares, wheezing. None of these side effects were observed.

E. Complications

According to Marriam-Webster (2020), complication is defined as an unfavorable result of a disease, health condition or treatment.

Table 6: Comparison of complications outlined in the literature review with those patient exhibited

Complications outline in literature review	Complications exhibited by patient
Stomach Ulcer	Patient did not experience stomach ulcer
Anemia	Patient did not experience anemia
Pyloric stenosis	Patient did not experience pyloric stenosis
Malignant changes of gastric mucosa	Patient did not experience malignant changes
Hemorrhage or bleeding	Patient did not experience hemorrhage or bleeding
Gastric Outlet Obstruction	Patient did not experience gastric outlet obstruction
Dehydration from vomiting	Patient did not experience dehydration from vomiting

From the literature review, possible complications that could arise from gastritis includes: stomach ulcer, anemia (Vitamin B12 deficiency anemia), perforation, pyloric stenosis among others, Madam V.Y. did not experience any due to good medical and nursing care provided which resulted in her early recovery.

2.2 Patient/Family Strengths

Strength as defined by Weller (2016), is the ability of a muscle or a person to produce or resist a physical or psychological force. This is explained as the ability of the client and his family to help or participate in the care for the achievement of set goals. The following strengths were observed on Madam V.Y. and her family;

1. Patient was able to describe the intensity of epigastric pain on a numeric rating scale and also point to the site of pain.

2. Patient could verbalize the frequency and nature of his vomitus.
3. Patient could verbalize that he was feeling hot to touch
4. Patient and family were able to verbalize their fears
5. Patient could eat 40mls of porridge served.
6. She could sleep for about three (3) hours at night.
7. Patient and family were ready and willing to learn about the disease condition

2.3 Patient/Family's Health Problems

Weller (2019) defines problems as, any health care condition that requires diagnostic, therapeutic, or educational action. It also refers, in nursing, to any unmet or partially met basic human need. The patient/family's problem means, the difficulties they faced because of the disease condition. The following were health problems identified with the client during the period of hospitalization. They include;

1. Patient complained of epigastric pain (11/12/2021)
2. Patient was vomiting (11/12/2021)
3. Patient had fever (38.5^0c) (11/12/2021)
4. Patient and family were anxious (11/12/2021)
5. Patient could not eat well (11/12/2021)
6. Patient could not sleep well at night (11/12/2021)
7. Patient and family had inadequate knowledge about the disease condition (12/12/2021)

2.4 Nursing Diagnoses

A nursing diagnosis according to NANDA International (2020) is a clinical judgment concerning a human response to health conditions/ life processes, or vulnerability for that response, by an individual, family, group or community. It is a clear and definite statement of the patient's health status that can be influence by nursing interventions. It is derived from a

validated, critically analyzed and interpreted dated collected during assessment. Conclusions are drawn regarding the patient's needs, problems, concerns or human responses. The nursing diagnosis, once identified, provides a central focus for reminder of the stages that is based on the nursing process. The plan of care is designed, implemented and evaluated, hence making it possible to give comprehensive health care to the problems.

Nursing diagnosis for Madam V.Y. was as follows;

1. Abdominal pain related to inflammation of the gastric mucosa (11/12/2021)
2. Risk for fluid and electrolyte imbalance related to vomiting (11/12/2021)
3. Pyrexia (38.5ºC) related to infectious process (11/12/2021)
4. Anxiety (patient and family) related to unknown outcome of condition (11/12/2021)
5. Risk for imbalance nutrition (less than body requirement) related to loss of appetite (anorexia. (11/12/2021)
6. Insomnia related to ambient noise and nursing procedures (12/12/2021)
7. Knowledge deficit related to inadequate information about condition, its causes and treatment modalities (12/12/2021)

CHAPTER THREE

PLANNING OF PATIENT/FAMILY CARE

3.0 Introduction

According to Dorland (2016), planning refers to consciously setting forth a scheme to achieve a desired end or goal.

Planning deals with setting of goals and objectives to help eliminate or reduce client's health problem and coming up with the appropriate nursing interventions to meet set goals. Madam V.Y. and her family were actively involved in planning of nursing care.

The nursing care plan comprises of the following nursing diagnosis, objective/ outcome, nursing orders, nursing interventions and evaluation were used to carry out the nursing care of patient.

3.1 Objectives/Outcome Criteria

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

1. Patient epigastric pain will resolve within 24 hours as evidenced by:
    a. Patient verbalizing relieve of pain.
    b. Nurse observing patient exhibiting comfort and relieve of pain.
2. Patient will maintain her normal fluid volume throughout the period of hospitalization as evidence by:
    a. Patient verbalizing that there has not being episode of vomiting.
    b. Nurse observing the absence of signs of fluid volume deficit in patient and patient recording a weight that relate to her age.
3. Patient pyrexia will reduce to normal (36.2-37.2^{0}C) within 24 hours as evidenced by:

a. Patient verbalizing that she no longer feels warm.

b. Nurses checking and recording normal body temperature (36.2-37.2^{0}C).

4. Patient and immediate family anxiety will subside within 24 hours as evidenced by:

   a. Patient and immediate family verbalizing relieve of anxiety.

   b. Nurses observing that patient and immediate family have relaxed facial expression.

5. Patient will regain her normal eating pattern within 24 hours as evidenced by:

   a. Patient verbalizing regain of appetite for food.

   b. Nurses observing patient eat more than half of her usual meals served.

6. Patient will regain her normal sleeping pattern (6-8 hours in the night and 2hours in a day) within 24 hours as evidenced by:

   a. Patient verbalizing having an undisturbed sleep for about 8 hours at night.

   b. Nurses observing that patient sleep undisturbed for 8hours during the night and 2hours during the day.

7. Patient and family will gain adequate knowledge on the causes, signs and symptoms and prevention of gastritis throughout the period of hospitalization as evidenced by:

   a. Patient and family being able to answer questions posed on the condition correctly.

   b. Nurse observing patient and family answer questions posed on the condition correctly.

Table 6 below shows the nursing care plan for Madam V. Y.

Table 7: Nursing care plan for Madam. V.Y.

Date/ Time	Nursing diagnosis	Objectives and outcome criteria	Nursing orders	Nursing interventions	Date/ time	Evaluation	Sign
11/12/21 12:30pm	Abdominal pain related to inflammation of the gastric mucosa.	Patient abdominal pain will resolve within 24 hours as evidenced by: a. Patient verbalizing relieve of pain. b. Nurses observing patient exhibiting comfort and relieve of pain.	1. Reassure patient and family of effectiveness of medications to relieve pain. 2. Assess patient's pain on a scale of 0-10 3. Identify precipitating factors of pain like anxiety. 4. Encourage intake of bland diet and explain why it is necessary 5. Monitor vital signs every four hours 6. Serve prescribed medication and observes for therapeutic and adverse effects 7. Provide diversional activities like watching television set when necessary	1. Patient and family were reassured about effectiveness of medications for relieve of pain to calm them down. 2. Pain was assessed on a scale of 0-10 and rated as moderate (5). 3. Anxiety was noticed as precipitating factor of pain and so patient was continuously reassured. 4. Patient was supervised to take in bland diet such as rice and tomato stew free of spice to prevent gastric irritation. 5. Vital signs were monitored for every four hours to know deviation from normal. 6. Prescribed medication such as IV tramadol 100mg was served and therapeutic effects observed. 7. Television set was turned on for patient on request to watch her favorite television show to divert patient attention from pain.	12/12/21 12:30pm	Goal fully met as Patient verbalized relieve of pain and nurse observed patient exhibiting comfort and relieve of pain.	

Table 7: Nursing Care Plan for Madam V.Y. Continued

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
11/12/21 12:45pm	Risk for fluid and electrolyte imbalance related to vomiting	Patient will maintain her normal fluid volume throughout her period of hospitalization as evidenced by; 1. Patient verbalizing that there has not being episode of vomiting. 2. Nurse observing the absence of signs of fluid volume deficit in patient and patient recording a weight that relate to her age.	1. Reassure patient that vomiting will subside with treatment. 2. Monitor strict intake and output of oral fluids. 3. Ensuring adequate intake of liberal fluids such as water and soft drinks 4. Identify nauseating factors and eliminate them when need be 5. Monitor for signs of dehydration like assessing skin turgor 6. Weigh patient daily once signs of fluid deficit are observed	1. Patient was reassured that vomiting will subside with treatment when medications are served. 2. Intake and output of oral and IV fluids were strictly monitored to know the amount of fluid loss. 3. Intake of adequate liberal fluids such as water and soft drinks were ensured to prevent dehydration. 4. All nauseating substances were cleared from the patient's surroundings to prevent vomiting. 5. Patient's skin turgor was elastic and eyes were normal when assessed daily to ascertain. 6. Patient was weighed on admission and during discharge to know whether she had loss or gained weight.	15/12/21 12:45pm	Goal fully met as patient verbalized relieve of vomiting and no sign of fluid volume deficit was noticed and so patient was discharged home with a body weight of 65 kilograms	

Table 7: Nursing Care Plan for Madam V.Y. Continued

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
11/12/21 1:00pm	Pyrexia (38.5ºC) related to infectious process	Patient pyrexia will reduce to normal (36.2-37.2^{0}C) within 24 hours as evidenced by; 1. Patient verbalizing that she no more has fever. 2.Nurses checking and recording normal body temperature (36.2ºC-37.2ºC)	1. Reassure patient that fever will subside with treatments given. 2. Encourage patient to take a cold shower when required. 3. Ensure adequate ventilation. 4. Encourage intake of cold fluids frequently. 5. Remove tight and heavy clothing on patient. 6. Serve prescribed antipyretics and observe for therapeutic and side effects	1. Patient was reassured that fever will subside with treatment. 2. Patient was encouraged to shower with cold water to reduced high body temperature. 3. Adequate ventilation was ensured by opening nearby windows to aid in reduction of high body temperature. 4. Patient was encouraged to take cold fluids frequently to reduced high body temperature. 5. Tight and heavy clothing were removed to help reduce the high body temperature 6. Tablet Paracetamol 1gram was administered.	12/12/21 1:00pm	Goal fully met as Patient verbalized relieve of fever and a normal body temperature of 36.8ºc was checked and recorded.	

Table 7: Nursing Care Plan for Madam V.Y. Continued

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
11/12/21 1:15pm	Anxiety (patient and family) related to unknown outcome of condition	Patient and immediate family anxiety will subside within 24 hours as evidenced by; 1. Patient and immediate family verbalizing relieve of anxiety. 2. Nurses observing that patient and immediate family has a relaxed facial expression.	1. Reassure patient and immediate family of remission with available treatment. 2. Educate patient and immediate family on the condition 3. Encourage patient and immediate family to ask questions. 4. Answer all questions tactfully and honestly 5. Explain all procedures carried out on patient 6. Introduce other patients who have recovered from same condition to patient and allow him to interact with them.	1. Patient and immediate family were reassured that the condition will resolve with the available treatment. 2. Patient and immediate family were educated on condition to know what is happening to the patient. 3. Patient and relatives were encouraged to ask questions to make them understand the condition. 4. All questions were answered tactfully and honestly. 5. All procedures carried out on patient were explained to help the patient know what is going on. 6. Patient was allowed to interact with other patients with the same condition to share their experience so as to allay all her anxiety.	12/12/21 1:15pm	Goal was fully met as patient and immediate family verbalized relieve of anxiety and they wore a relaxed facial expression	

Table 7: Nursing Care Plan for Madam V.Y. Continued

Date/ Time	Nursing Diagnosis	Objective	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
11/12/21 1:30pm	Risk for imbalance nutrition; less than body requirement related to loss of appetite (anorexia)	Patient will regain her normal eating pattern within 24 hours as evidenced by; 1. Patient verbalizing regain of appetite for food. 2. Nurses observing patient eat more than half of her usual food served.	1. Plan diet with patient, taking into consideration patient's diet preferences. 2. Serve food in bit and attractive to stimulate appetite. 3. Ensure adequate mouth care 4. Remove all nauseating materials like commodes 5. Educate patient/family on diet and the need for balanced diet and other vitamin supplements 6. Document procedures performed into the nurse's notes.	1. Diet was planned with patient taking into consideration patient's choices of food. 2. Food was served in bit and attractive to stimulate appetite which made patient to eat the required amount of food. 3. Patient was encouraged to carry out mouth care which prevented her from nauseating. 4. All nauseating materials like commodes were removed from site of patient during meals to prevent patient from vomiting. 5. Patient and family were educated on diet and encouraged to take fruits to restore lost electrolyte. 6. Procedures were documented as performed into the nurses' notes to ensure continuity of patients care.	12/12/21 1:30pm	Goal was fully met as patient verbalized regaining of appetite for food while being observed taken more than half of her usual food served.	

Table 7: Nursing Care Plan for Madam V.Y. Continued

Date/ Time	Nursing Diagnosis	Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
12/12/21 7:40am	Insomnia related to ambient noise and nursing procedures	Patient will regain her normal sleeping pattern (6-8 hours in the night and 2 hours in a day) within 24 hours as evidenced by: 1. Patient verbalizing having an undisturbed sleep for about 8 hours at night. 2. Nurses observing that patient sleep undisturbed for 8hours during the night and 2 hours during the day.	1. Reassure patient that she would be able to sleep without disturbance. 2. Encourage patient to take a warm bath prior to bed time 3. Ensure quiet ward environment by turning off radio and television sets when possible. 4. Make bed free from creases and cramps. 5. Restrict visitors when required 6. Plan time for treatment and assessment with the patient.	1. Patient was reassured of improved ability to sleep as procedures carried on patient was done at appropriate time. 2. Patient was encouraged to take a warm bath prior to bed time to aided her to sleep. 3. A quiet ward environment was ensured by lowering volumes of radio and television sets on the ward which helped the patient to sleep. 4. A comfortable bed was made for patient and she was made comfortable in bed and made patient to sleep well. 5. Relatives were restricted during non-visiting hours which allowed patient to sleep well. 6. Time for assessment and treatment were planned with the patient to ensure it did not interfere with patient's sleep.	13/12/21 7:40am	Goal was fully met as patient verbalized having undisturbed sleep for about 8 hours at night and nurse observed that patient slept undisturbed for 8hours during the night and 2 hours during the day.	

Table 7: Nursing Care Plan for Madam V.Y. Continued

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ time	Evaluation	Sign
12/12/21 9:25am	Knowledge deficit related to inadequate information about condition, its causes and treatment modalities	Patient and family will gain adequate knowledge on the causes, signs and symptoms and prevention of gastritis throughout the period of hospitalization as evidenced by: a. Patient and family being able to answer questions posed on the condition correctly. b. Nurse observing patient and family answer questions posed on the condition correctly.	1. Assess patient and relative level of knowledge about gastritis. 2. Educate patient and relatives in a language that is clearly understood by them. 3. Educate patient and relatives about the condition. 4. Assess patient motivation and willingness to learn. 5.Encourge patient and relative to ask question when understanding is not clear 6.Educate patient and relative on medication and its side effect	1. Patient and relative knowledge about gastritis was assessed by asking questions about the condition. 2. Patient and relatives were educated using the Twi language that is clearly understood by them. 3. Patient and relatives were educated about predisposing factor,causes and management of the condition. 4.Patient motivation and willingness to learn was assessed by asking and observing patient readiness to learn 5. Patient and relatives were encouraged to ask questions when understanding is not clear. 6. Patient and relative were educated on medication and its side effect such as vomiting, nausea, dizziness.	15/12/21 9:25am	Goal was fully met as patient and family were able to answer questions posed on the condition correctly and nurse observed patient and family answer questions posed on the condition correctly.	

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. This chapter forms the fourth part of the patient/family care study. It entails carrying out both medical and surgical interventions. The patient and relatives are encouraged to participate by playing their role in patient's recovery. The nurse should bear in mind the individuality of patient and family.

4.1 Summary of Actual Nursing Care Rendered to Patient

The nursing management of the patient started on the day of admission which was 11th December, 2021 to the day of discharge on 15th December, 2021. The management aimed at alleviating patient's abdominal pain and treating other presenting signs and symptoms of the condition, treating underlying cause and preventing complications. During the period of admission, daily routine care was carried out such as pain management, bed making, maintaining the personal hygiene, serving of prescribed medication to the patient among others.

First Day of Admission (11th December, 2021)

On the 11th day of December 2021, the nurse in charge of the female medical ward of the Holy Family Hospital, Berekum received a call from the emergency unit at 11:45am informing her that, a patient by name Madam V.Y. with a diagnosis of gastritis was coming on an unplanned or emergency admission to the female medical ward with the family and so an admission bed was prepared for her. At exactly 12:10pm, patient was brought to the ward ambulatory and was accompanied by one nurse and a relative, who is a co-tenant, in a conscious state. The nurse

handed over to me. The patient was identified and confirmed by mentioning name and other particulars.

Diagnostic investigations requested for Madam V.Y. included;

1. Full blood count
2. Blood film for malaria parasites
3. Stool for routine examination
4. Gastroscopy

The drugs below were prescribed for Madam V.Y. to treat her condition:

1. Intravenous Omeprazole 400milligram stat
2. Capsule Omeprazole 200milligram twice daily x5days
3. Suspension Nugel (Magnesium trisilicate + Aluminum hydroxide) 15millitres three times daily x5days
4. Capsule Amoxicillin 500mg three times daily x 14 days
5. Tablet Metronidazole 400mg three times daily x 4 days
6. Injection Tramadol 100mg stat
7. Tablet Paracetamol 1gram three times daily x3days

Madam V.Y. and relatives were welcomed to the nurses' station and made comfortable by offering them a seat and introduction of self and other staffs that were on duty was done. All necessary documents, admission notes and other information were collected from the accompanying nurse. According to the accompanying nurse, injection tramadol 100mg stat was already given and so Madam V.Y. was sent to the bed side and introduced to other patients near her. Madam V.Y. was brought to the ward with the complaints of epigastric pains, headache and vomiting. She and her relative were reassured of the readiness of the health team

to do their best to bring about recovery and the effectiveness of prescribed medications to aid in recovery. She had already gone for her drugs and so treatment was started immediately.

Vital signs were checked and recorded as;

1. Blood pressure was 110/70 millimeters of mercury (mmHg)
2. Pulse rate was 67 beat per minutes (bpm)
3. Respiration was 21 cycles per minutes (cpm)
4. Temperature was 38.5 degrees Celsius.

Weight was 64 kilograms

On admission, vital signs checked revealed that patient had fever (38.5^{0C}). At 3:30pm, a nursing objective was set to reduce patient's body temperature to normal ($36.2 – 37.2^{0C}$) within 3hours. Patient/family was once again reassured that the various nursing interventions like tepid sponging will be done to reduce the pyrexia. Other nursing interventions carried out included; opening of nearby windows, loosening of clothing and serving of prescribed medication such as anti-pyretic drugs (1 gram of tablet paracetamol) to abate the fever.

On this same day at 3:30pm, patient complained of abdominal pains. A nursing objective was set to relieve patient of pain within 24 hours. The following nursing interventions were carried out; reassurance of patient about effectiveness of prescribed analgesics to relieve pain, assessment of pain on a numeric scale of 0-10 and its rating as moderate (6), supervision of patient to take in rice and tomato stew and the need for such meal was explained to patient, serving of prescribed medications and observation for its therapeutic and adverse effects.

An intravenous line was secured and Intravenous Omeprazole 400milligram stat was administered as prescribed. She was also assisted to change into night gown. Mrs. V.Y. and relatives were oriented to the ward and it annexes. She was introduced to the patients around

her and she was told to call for help when needed. She was also made aware of the items she would need during admission. She was also taken through the ward routines such as time of serving medications, rounds and visiting hours. The cash and carry system as well as the National Health Insurance Scheme (NHIS) was explained to her. She is a registered member of the National Health Insurance Scheme and it was explained to her that certain drugs and treatment which is not covered by the National Health Insurance Scheme (NHIS) would have to be paid for. When the patient was stable, I went to engage her in a therapeutic conversation where I made my intention known to her that I am a student from Holy Family Nursing and Midwifery Training College, Berekum and I informed them I would like to use her and her family for my care study as a partial fulfillment of the award of license by Nursing and Midwifery Council of Ghana to practice as a professional registered nurse. My reasons for using her was made known to them that I would like to render a comprehensive nursing care until she recovers fully and discharged home because she could get a whole lot of complications of her illness if proper care is not given. I requested them to co-operate with me throughout the care giving. I also informed them that as part of my care, I would visit them at home while she was still on admission and after she has been discharged. Upon series of conversations with them they agreed to my request and further promised me that they would provide me with every bit of information I needed after I explained the level of confidentiality and privacy to them. I expressed my heartfelt gratitude to them. I decided to choose this patient for the care study because I wanted to have adequate knowledge on gastritis and its management. Nutritional assessment carried out on patient revealed patient was having a very good nutritional status prior to her admission since patient showed no signs of malnutrition. The preparation for discharge started from the day of admission and they were also informed that admission to the hospital was temporal and would be discharged home as soon as the condition subsides. Patients name and other particulars were entered into admission and discharge book and onto

ward bed state and care rendered written in the nurse's note.

A nursing diagnosis of abdominal pain related to inflammation of the gastric mucosa was made for patient at 12:30pm to help manage her epigastric pain. An objective was set to help patient to be relieved from pain within 24 hours. The following interventions were carried out: Patient and family were reassured about effectiveness of medications for relieve of pain to calm them down. Pain was assessed on a scale of 0-10 and rated as moderate (5). Anxiety was noticed as precipitating factor of pain and so patient was continuously reassured. Patient was supervised to take in bland diet such as rice and tomato stew free of spice to prevent gastric irritation. Vital signs were monitored for every four hours to know deviation from normal. Prescribed medication such as IV tramadol 100mg was served and therapeutic effects observed. Television set was turned on for patient on request to watch her favorite television show to divert patient attention from pain.

A nursing diagnosis of risk for fluid and electrolyte imbalance related to vomiting was made for patient at 12:45pm. An objective was set to help patient maintain normal fluid volume and electrolyte balance throughout the period of hospitalization. These interventions were carried out: Patient was reassured that vomiting will subside with treatment when medications are served. Intake and output of oral and IV fluids were strictly monitored to know the amount of fluid loss. Intake of adequate liberal fluids such as water and soft drinks were ensured to prevent dehydration. All nauseating substances were cleared from the patient's surroundings to prevent vomiting. Patient's skin turgor was elastic and eyes were normal when assessed daily to ascertain. Patient was weighed on admission and during discharge to know whether she had loss or gained weight.

At 1:00pm, another nursing diagnosis of pyrexia (38.5^{o}C) related to infectious process was formulated. The following interventions were carried out to help restore patient's normal temperature within 24 hours: Patient was reassured that fever will subside with treatment.

Patient was encouraged to shower with cold water to reduced high body temperature. Adequate ventilation was ensured by opening nearby windows to aid in reduction of high body temperature. Patient was encouraged to take cold fluids frequently to reduced high body temperature. Tight and heavy clothing were removed to help reduce the high body temperature. Tablet Paracetamol 1gram was administered.

Again, at 1:15pm, a nursing diagnosis of anxiety related to unknown outcome of condition was formulated. An objective was set to relieve patient and immediate family of anxiety within 24 hours. The following interventions were implemented: Patient and immediate family were reassured that the condition will resolve with the available treatment. Patient and immediate family were educated on condition to know what is happening to the patient. Patient and relatives were encouraged to ask questions to make them understand the condition. All questions were answered tactfully and honestly. All procedures carried out on patient were explained to help the patient know what is going on. Patient was allowed to interact with other patients with the same condition to share their experience so as allay all her anxiety.

At 1:30pm patient revealed to me that she had lost appetite, hence a nursing diagnosis of risk for imbalance nutrition (less than body requirement) related to loss of appetite (anorexia) was made for patient. An objective was set to help patient regain her normal eating pattern within 24 hours. The following interventions were implemented: Diet was planned with patient taking into consideration patient's choices of food. Food was served in bit and attractive to stimulate appetite which made patient to eat the required amount of food. Patient was encouraged to carry out mouth care which prevented her from nauseating. All nauseating materials like commodes were removed from site of patient during meals to prevent patient from vomiting. Patient and family were educated on diet and encouraged to take fruits to restore lost electrolyte. Procedures were documented as performed into the nurses' notes to ensure continuity of patients care.

At 6:00pm, patients' vital signs were checked and recorded as indicated in the appendix. Patient was then left in the hands of the night nurses to continue in the rendering of care to patient.

At 10:00pm, her vital signs were checked and recorded as indicated in the appendix, due medications were served. Patient slept around 10:30pm.

Second Day of Admission (12th December, 2021)

On the second day of admission I went to the ward to continue with my nursing care to patient. At 6:00am, her due medications and her vital signs were administered and checked respectively at 6:36am as indicated in the appendix. Patient maintained her personal hygiene and her bed was properly laid, free from creases and crumps.

A nursing diagnosis of insomnia related to ambient noise and nursing procedures was formulated at 7:40am. An objective was set to help patient regain her normal sleep pattern within 24 hours. The following interventions were carried out: Patient was reassured of improved ability to sleep as procedures carried on patient was done at appropriate time. Patient was encouraged to take a warm bath prior to bed time to aided her to sleep. A quiet ward environment was ensured by lowering volumes of radio and television sets on the ward which helped the patient to sleep. A comfortable bed was made for patient and she was made comfortable in bed and made patient to sleep well. Relatives were restricted during non-visiting hours which allowed patient to sleep well. Time for assessment and treatment were planned with the patient to ensure it did not interfere with patient's sleep.

At 8:00am, patient was served with porridge and bread.

Patient was reviewed at 9:00am and the plan was to continue treatment.

At 9:25am, a nursing diagnosis of knowledge deficit related to inadequate information about condition, its causes and treatment modalities was formulated. An objective was set to enable patient demonstrate understanding of the condition throughout the period of hospitalization. The nursing actions that were executed include the following: Patient and

relative knowledge about gastritis was assessed by asking question about the condition. Educate patient and relatives in a language that is clearly understood by them.Patient and relatives were educated about predisposing factor,causes and management of the condition.Patient motivation and willingness to learn was assessed by asking and observing patient readiness to learn.Patient and relatives were encouraged to ask questions when understanding is not clear.Patient and relative were educated on medication and its side effectVital signs were checked at 10:00am and recorded as indicated in the appendix.

At 12:30pm evaluation of the set objective to help relieve patient from abdominal pain was done and goal was fully met as patient verbalized relieve of pain and nurse observed patient exhibiting comfort and relieve of pain.

Also, at 1:00pm, evaluation of the set objective to help restore patients body temperature was carried out and goal was fully met as patient verbalized relieve of fever and a normal body temperature of 36.8^{o}c was checked and recorded.

More so, at 1:15pm evaluation of the set objective to relieve patient and immediate family of anxiety was carried out and goal was fully met as patient and immediate family verbalized relieve of anxiety and they wore a relaxed facial expression.

Again, at 1:30pm evaluation of the set objective to help patient have adequate nutrition was carried out and goal was fully met as patient verbalized regaining of appetite for food while being observed taken more than half of her usual food served.

At 2:00pm, patients' vital signs were checked and recorded as indicated in the appendix. Due medication of Suspension Nugel 15ml was administered.

Patient took her lunch at 2:15pm which was ampesi and kontomire stew with fish. Patient took a 50 minutes nap after eating.

I gave patient and her relatives a prior notice that I would want to go and see their place of residence and permission was granted after which they gave me the direction to their house.

At 6:00pm, patients' vital signs were checked and recorded as indicated in the appendix. Due medication of Capsule Omeprazole 200mg was administered.

Patient personal hygiene needs were carried out at 6:50pm.

At 7:00pm, assessment of vomiting was carried out and patient verbalized vomiting has subsided hence goal was not fully met and interventions continued.

At 10:00pm, her vital signs were checked and recorded as indicated in the appendix, due medications of Suspension Nugel 15ml was administered. Patient slept around 10:30pm.

Third Day of Admission (13th December, 2021)

Patient woke up at 5:00am, she performed her personal hygiene. Patient was seen at exactly 6:00am in bed listening to news on his phone radio. Her vital signs were checked and recorded as stated in the appendix and all due medications of Suspension Nugel 15ml, Capsule Omeprazole 200mg, Tablet Paracetamol 1gram, Capsule Amoxicillin 500mg and Tablet Metronidazole 400mg were administered.

She had her bath around 7:15am. A comfortable bed was made for patient with clean sheets and pillow case.

At 7:30am, patient was then assisted to take about 400mls of brown porridge.

At 7:40am evaluation of the set objective to help patient regain her normal sleeping pattern (6-8 hours in at night and 2 hours in a day) was done and goal was fully met as patient verbalized having undisturbed sleep for about 8 hours at night and nurse observed that patient slept undisturbed for 8hours during the night and 2 hours during the day.

At 8:00am, assessment of vomiting was done and goal was not met as patient still verbalized, she was having minimal episodes of vomiting hence nursing interventions continued.

At 9:00am, during ward rounds, patient made no new complains and the plan was to continue her treatment.

At 1:00pm, patient had his lunch which was rice and stew.

At 2:00pm, patients' vital signs were checked and recorded as indicated in the appendix. Due medications of Suspension Nugel 15ml, Tablet Paracetamol 1gram, Capsule Amoxicillin 500mg and Tablet Metronidazole 400mg were administered.

She ate fufu and groundnut soup around 5:20pm as her supper. She had her bath after eating.

At 6:00pm, her vital signs were checked and recorded as indicated in the appendix, due medication of Capsule Omeprazole 200mg was administered.

Patient took her supper which was Jollof rice with chicken.

At 10:00pm, patients vital signs were checked and record as indicated in the appendix, due medications of Suspension Nugel 15ml,Tablet Paracetamol 1gram, Capsule Amoxicillin 500mg and Tablet Metronidazole 400mg were administered. Patient slept around 10:20pm.

Fourth Day of Admission (14th December, 2021)

Patient woke up around 5:20am, she performed her personal hygiene. Patient was seen in bed in good health and was responding to treatment given. Patient was sitting in bed with a cheerful facial expression. I greeted patient and asked about her health condition, patient was happy to tell me she was doing well. The usual routine nursing care was provided and documented in the nurses' notes.

At 6:00am, patients vital signs were checked and record as indicated in the appendix, due medications of Suspension Nugel 15ml, Capsule Omeprazole 200mg, Tablet Paracetamol 1gram, Capsule Amoxicillin 500mg and Tablet Metronidazole 400mg were administered.

At 7:30am, patient had milo and bread as her breakfast.

Patient gave no new complains during ward rounds at 8:50am, and it was planned that discharge would be considered the following day.

Patient was informed about his possible discharge the following day; he was very excited to hear the news.

At 10:00am, patients' vital signs were checked and recorded as indicated in the appendix.

At 10:30am, assessment of vomiting was done and goal was partially met as patient still verbalized, she was feeling nauseated hence nursing interventions continued.

At 2:00pm, patients' vital signs were checked and recorded as indicated in the appendix. Due medications of Suspension Nugel 15ml, Tablet Paracetamol 1gram, Capsule Amoxicillin 500mg and Tablet Metronidazole 400mg were administered.

Patient had her supper around 5:00pm. She observed her personal hygiene in the evening. The necessary nursing care continued and patient and relatives also cooperated.

At 6:00pm, patients' vital signs were checked and recorded as indicated in the appendix. Due medication of Capsule Omeprazole 200mg was administered.

At 10:00pm, her due medications were administered as well as checking and recording of her vital signs. Patient slept afterwards.

Fifth Day of Admission/Day of Discharge (15th December, 2021)

Patient was doing very well in health when seen at 7:00am. We exchanged chats, patient and family reported no new complains.

At 6:00am, patient vital signs were checked and record as indicated in the appendix, due medications of Suspension Nugel 15ml, Capsule Omeprazole 200mg, Tablet Paracetamol 1gram, Capsule Amoxicillin 500mg and Tablet Metronidazole 400mg were administered.

At 7:30am, patient had porridge and bread as her breakfast.

At 9:00am, patient was reviewed by the medical team and patient was generally well with no new complaints. Patient as informed that he will be discharged. The treatment plans were as follows; Counselling with the dietician, continue current medications. She was educated on the need to take the rest of her medications and how to take the medications, side effect of the medications and the need to report any illness and abnormalities were made known to her. She was also encouraged to report any unusual feelings that she will experience before the date of review if any. I called the dietician through the ward phone to come and see patient before she leaves for home. I, together with the dietician provided patient and her family with a clear and understandable education specifically creating awareness on her diets. Patient was informed to come for review on the 22nd December, 2021. All her bills which were not covered by NHIA were fully settled. I assisted in packing patient's belongings, performed disinfection of patients bed and locker to enhance infection prevention.

At 9:25am, evaluation of the set objective to help patient and relatives gain adequate knowledge on condition was done and goal was fully met as patient and family were able to answer questions posed on the condition correctly and nurse observed patient and family answer questions posed on the condition correctly.

Also, at 12:45pm, evaluation of the set objective to maintain patient normal fluid and electrolyte balance was done and goal was fully met as patient verbalized relieve of vomiting and no sign of fluid volume deficit was noticed and so patient was discharged home with a body weight of 65 kilograms.

Patient was discharged at exactly 1:00pm, patient and relatives left the ward.

4.2 Preparation of Patient/Family for Discharge and Rehabilitation

Preparation for discharge commenced from the time of admission at the hospital, at 11:45am on 11th December, 2021, till the last day of visit, 27th December, 2021. 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 gastritis were reemphasized. This was aimed at helping the patient and relatives in the provision of adequate care. Prior to patient discharge, health education was given to the patient and relatives 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 educated on the need to maintain personal and environmental hygiene to help improve immunity. Also, I emphasized on the need for patient to avoid irritating or contaminated diets, avoiding smoking, alcoholism, caffeinated beverages as well as foods that contain high amount of acid or alkali. Patient was encouraged to take in food rich in the essential food nutrients and eating well balanced diets. 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 the 22nd December, 2021. Necessary information was recorded into the admission and discharge book as well as the ward state.

4.3 Follow Up/ Home Visits/ Continuity of Care

Home visiting is a long–established method of enabling patients and families cope with changes in their lives. It should be planned carefully especially with the first visit as it can foster cordial relationship, build and assist nurses to demonstrate the contributions they can make in enabling patients relatives to deal with their current health needs. Health educations pertaining to the condition, diet, self–medication, personal and environmental hygiene, the need to go for regular medical check –ups and early reporting to the health facility when any problem is detected, the need to comply with medications, the need to report on the review date ordered and also the significance of sleeping under insecticides treated net were given to patient and family. Home visits were done before and after patient’s discharge.

First Home Visit (12th December, 2021)

First home visit was made on 12th December, 2021 on while patient was still on admission. I gave a prior notice to patient and other family members and they willingly gave me the permission. The purpose of this visit was to know patient's residence and the environment in which she lives, verify the information given to me as well as to identify the risk factors such as familial tendency and stresses that can lead to her condition and also to identify any nearest health facility at the area for possible referral. Patient and relatives were informed about my intention to visit their home whiles she was still on admission. Madam L.T. her daughter (next of kin) and I left the hospital around 2:10pm and alighted at Magazine exactly 2:30pm. The house is a 4-bedroom building. The house is built with blocks, painted pink and is wired correctly with electricity power, had windows but most of them were closed so I educated patient relatives on the need to open the windows to promote proper ventilation. They have a dustbin with a well-fitting lid in which they dump their waste materials and it is emptied every morning into Zoomlion waste-truck. They have a well, which serves as the source of water in the house. They also have a toilet facility. The environment was very tidy. The patient lives in the house with her landlord as well as other tenants. Observations made in patients' room revealed well-furnished wall with television set, sound system, a ceiling fan, bed, couch and a wooden center table, it was very neat and well organized and they were applauded for that. I also entered the toilet and saw that it was in a good state. The place was clean, with the container for toilet papers emptied. Her daughter was educated on the need to practice good environmental and personal health and also encouraged them to continue to keep their home and surroundings clean. I reassured the relatives of competent nursing care and that she will be well very soon. I had an extensive interaction with patient relatives and through that I was able to confirm most of the information I have been given by the patient. I educated the family members on gastritis explaining to them the need to avoid irritating or contaminated diets,

smoking, alcoholism, caffeinated beverages as well as foods that contain high amount of acid or alkali. No identifiable factor to patient's condition was made during the visit. The vulnerable group in the house were children. Members were advised to ensure the use of insecticide treated mosquito nets to protect the children from mosquito bites at night. She thanked me and assured me that she will ensure that all what I said will be done before I come for my next home visit. We left magazine at 3:00pm and got to the hospital at 3:10pm. Comments made on the condition of the house, education and recommendations were repeated to patient and she also promised to do everything in her power to ensure that all the recommendations are done. I identified on the first home visit that patient's house was not close to any health facility, the closest by far was Holy Family Hospital, Berekum so I told one public health nurse about handing over patient to her and she agreed.

Second Home Visit (20th December, 2021)

This visit was made on 20th December 2021. I made this visit to find out how patient was doing and to see if she was following her treatment regimen and also to remind the patient of the review date which was Wednesday 22nd December, 2021. On assessment patient windows were opened as they were educated to do. The environment was neat and they were commended for that. The importance of taking drugs as prescribed was reinforced to patient and family. Education on good nutrition was stressed on to help protect patient and family from any diseases. Patient and family were thanked for their cooperation and permission was sought to leave. I promised them of another visit which will be my last. Patient's daughter escorted me to the road side where I board a tricycle to my house

Review (22nd December, 2021)

On Friday 22nd December, 2021, patient was met at the Out Patient Department of Holy Family Hospital, Berekum at 8:20am looking cheerful and lovely as noted from facial expression. I

accompanied her to go and verify the hospital identification number on her card as done by every patient who visits the hospital. The vital signs were checked and recorded as follows;

Temperature	36.0 degree Celsius
Pulse	80 beats per minute
Respiration	20 cycles per minute
Blood pressure	110/80mmHg

At the Out Patient Department, patient went to consulting room 3. Upon assessment by the doctor, patient was healthy. Patient had no complains and physical examination performed by the medical officer proved that patient was not in any sort of discomfort. I reinforced the education that I had already given to her and her family. Patient thanked me for my care and concern so far. I assured him of a third visit. I escorted them to the hospital entrance.

Third Home Visit (27th December, 2021)

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.

On Monday, 27th December, 2021, I set off early afternoon around 12:00pm with a tricycle. I passed by Holy Family Hospital, Berekum to inform the public health nurse 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 public health nurse to the patient and her relatives. Patient and family were doing well as they looked cheerful and had no complains. After series of conversation, I handed over patient to the husband Mr.MG to continue with care. Her daughter commended me for good work done and accepted to continue the care of her mother at home. The environment was tidy as there was neither rubbish nor stagnant water around. I however stressed on the importance of regular check-ups and to seek

prompt medical attention whenever they fall sick and rather than relying on self-medication. I asked about patient's drugs and it was found that she had been taking her medications and the recommended diet had also been adhered to. After interacting with patient and family for a while, I reemphasized on health educations that had been given to them already. 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 farewell at 2:00pm.

CHAPTER FIVE

EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY

5.0 Introduction

Evaluation in simple terms is the outcome of nursing actions against the anticipated goals and it is the final step in the nursing process (Hinkle & Cheever, 2018). The chapter gives information about the statement of evaluation, amendment of nursing goals and the termination of the care rendered to my patient and family.

5.1 Statement of Evaluation

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

1. Patient was relieved of abdominal pain (12th December, 2021)

A nursing diagnosis of abdominal pain related to inflammation of the gastric mucosa was made for patient at 12:30pm to help manage her abdominal pain. An objective was set to help patient to be relieved from pain within 24 hours. The following interventions were carried out: Patient and family were reassured about effectiveness of medications for relieve of pain to calm them down. Pain was assessed on a scale of 0-10 and rated as moderate (5). Anxiety was noticed as precipitating factor of pain and so patient was continuously reassured. Patient was supervised to take in bland diet such as rice and tomato stew free of spice to prevent gastric irritation. Vital signs were monitored for every four hours to know deviation from normal. Prescribed medication such as IV tramadol 100mg was served and therapeutic effects observed. Television set was turned on for patient on request to watch her favorite television show to divert patient attention from pain.

At 12:30pm, evaluation of the set objective to help relieve patient from abdominal pain was done and goal was fully met as patient verbalized relieve of pain and nurse observed patient exhibiting comfort and relieve of pain.

2. Patient maintained her normal fluid and electrolyte levels (15th December, 2021)

A nursing diagnosis of risk for fluid and electrolyte imbalance related to vomiting was made for patient at 12:45pm. An objective was set to help patient maintain normal fluid volume and electrolyte balance throughout the period of hospitalization. These interventions were carried out: Patient was reassured that vomiting will subside with treatment when medications are served. Intake and output of oral and IV fluids were strictly monitored to know the amount of fluid loss. Intake of adequate liberal fluids such as water and soft drinks were ensured to prevent dehydration. All nauseating substances were cleared from the patient’s surroundings to prevent vomiting. Patient’s skin turgor was elastic and eyes were normal when assessed daily to ascertain. Patient was weighed on admission and during discharge to know whether she had loss or gained weight.

At 12:45pm, evaluation of the set objective to maintain patient normal fluid and electrolyte balance was done and goal was fully met as patient verbalized relieve of vomiting and no sign of fluid volume deficit was noticed and so patient was discharged home with a body weight of 65 kilograms.

3. Patient normal body temperature was restored (12th December, 2021)

At 1:00pm, another nursing diagnosis of pyrexia (38.5ºC) related to infectious process was formulated. The following interventions were carried out to help restore patients normal temperature within 24 hours: Patient was reassured that fever will subside with treatment. Patient was encouraged to shower with cold water to reduced high body temperature. Adequate ventilation was ensured by opening nearby windows to aid in reduction of high body

temperature. Patient was encouraged to take cold fluids frequently to reduced high body temperature. Tight and heavy clothing were removed to help reduce the high body temperature. Tablet Paracetamol 1gram was administered.

At 1:00pm evaluation of the set objective to help restore patients body temperature was carried out and goal was fully met as patient verbalized relieve of fever and a normal body temperature of 36.8^{o}c was checked and recorded.

4. Patient and immediate family were relieved of anxiety (12th December, 2021)

At 1:15pm, a nursing diagnosis of anxiety related to unknown outcome of condition was formulated. An objective was set to relieve patient and immediate family of anxiety within 24 hours. The following interventions were implemented: Patient and immediate family were reassured that the condition will resolve with the available treatment. Patient and immediate family were educated on condition to know what is happening to the patient. Patient and relatives were encouraged to ask questions to make them understand the condition. All questions were answered tactfully and honestly. All procedures carried out on patient were explained to help the patient know what is going on. Patient was allowed to interact with other patients with the same condition to share their experience so as allay all her anxiety.

At 1:15pm, evaluation of the set objective to relieve patient and immediate family of anxiety was carried out and goal was fully met as patient and immediate family verbalized relieve of anxiety and they wore a relaxed facial expression.

5. Patient regained her normal eating pattern (12th December, 2021)

At 1:30pm patient revealed to me that she had lost appetite, hence a nursing diagnosis of risk for imbalance nutrition (less than body requirement)related to loss of appetite (anorexia) was made for patient. An objective was set to help patient regain her normal eating pattern within 24 hours. The following interventions were implemented: Diet was planned with patient taking

into consideration patient's choices of food. Food was served in bit and attractive to stimulate appetite which made patient to eat the required amount of food. Patient was encouraged to carry out mouth care which prevented her from nauseating. All nauseating materials like commodes were removed from site of patient during meals to prevent patient from vomiting. Patient and family were educated on diet and encouraged to take fruits to restore lost electrolyte. Procedures were documented as performed into the nurses' notes to ensure continuity of patients care.

At 1:30pm evaluation of the set objective to help patient have adequate nutrition was carried out and goal was fully met as patient verbalized regaining of appetite for food while being observed taken more than half of her usual food served.

6. Patient regained her normal sleeping pattern (13th December, 2021)

A nursing diagnosis of insomnia related to ambient noise and nursing procedures was formulated at 7:40am. An objective was set to help patient regain her normal sleep pattern within 24 hours. The following interventions were carried out: Patient was reassured of improved ability to sleep as procedures carried on patient was done at appropriate time. Patient was encouraged to take a warm bath prior to bed time to aided her to sleep. A quiet ward environment was ensured by lowering volumes of radio and television sets on the ward which helped the patient to sleep. A comfortable bed was made for patient and she was made comfortable in bed and made patient to sleep well. Relatives were restricted during non-visiting hours which allowed patient to sleep well. Time for assessment and treatment were planned with the patient to ensure it did not interfere with patient's sleep.

At 7:40am evaluation of the set objective to help patient regain her normal sleeping pattern (6-8 hours in the night and 2 hours in a day) was done and goal was fully met as patient verbalized having undisturbed sleep for about 8 hours at night and nurse observed that patient slept undisturbed for 8hours during the night and 2 hours during the day.

7. Patient and family gained adequate knowledge gastritis (15th December, 2021)

At 9:25am, a nursing diagnosis of knowledge deficit related to inadequate information about condition, its causes and treatment modalities was formulated. An objective was set to enable patient demonstrate understanding of the condition throughout the period of hospitalization. The nursing actions that were executed include the following: Patient and family were reassured that they will have comprehensive information on the condition. Patient and family's knowledge about condition was assessed. Patient and family were educated on the causes and predisposing factors, signs and symptoms and prevention of the condition to enhance their knowledge. Patient and family were encouraged to ask questions for clarifications. Patient and family understanding and knowledge about condition was assessed during termination of care by asking them questions on gastritis. Existing misconceptions regarding gastritis were identified by asking them what they know about gastritis.

At 9:25am, evaluation of the set objective to help patient and relatives gain adequate knowledge on condition was done and goal was fully met as patient and family were able to answer questions posed on the condition correctly and nurse observed patient and family answer questions posed on the condition correctly.

5.2 Amendment of the Nursing Care Plan

Despite the numerous problems identified, with the individualized comprehensive nursing care and support from other members of the health team and co-operation of Mrs. O.C. and family, all of the goals set were fully met. The care plan was therefore not amended.

5.3 Termination of Care

Care of patient and family ended on the 27th November, 2021 which was my last home visit. This ended the interaction between the health team and patient and her family. The preparation for termination started on day of admission through discharge, review to the third home visit.

During these periods, patient and family were educated on various topics. I congratulated the family for the care they had rendered to patient. They were thanked for their co-operation and patient was handed over to a community health nurse. They were told that now that patient's health had been restored, the care for her has officially ended. I handed over patient to the public health nurse to continue with care. I informed them of my desire to visit them unofficially whenever I had the opportunity. They were happy and noted that they would miss my care and would strictly adhere to all instructions given to them. It was a moment to remember when I told them of my intention to leave. There was no separation anxiety as patient and the relatives had enough psychological preparations from the day of admission till discharge but it was still difficulty bidding them farewell.

CHAPTER SIX

SUMMARY OF CARE RENDERED TO PATIENT AND FAMILY

6.0 Introduction

Summary is a brief statement or account of the main points of something. Conclusion is something that you decide when you have thought about all the information connected with the situation. 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

On 11th December, 2021, Madam V.Y. with a diagnosis of gastritis was admitted to the female medical ward with the family. With the use of nursing process, the problems identified were developed into nursing diagnosis with nursing orders which were implemented to help solve these problems and promote recovery.

Using the nursing care plan, effective nursing care was carried out on the patient to ensure full recovery of Madam V.Y. Among the care provided to her were 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.

The following were health problems identified on the client during the period of hospitalization. They include;

1. Patient complained of epigastric pain
2. Patient was vomiting
3. Patient had fever (38.5^{0}c)
4. Patient and family were anxious

5. Patient could not eat well
6. Patient could not sleep well at night
7. Patient and family had inadequate knowledge about the disease condition

Nursing diagnosis for Madam V.Y. are as follows;

1. Abdominal pain related to inflammation of the gastric mucosa
2. Risk for fluid and electrolyte imbalance related to vomiting
3. Pyrexia (38.5^{o}C) related to infectious process
4. Anxiety (patient and family) related to unknown outcome of condition
5. Risk for imbalance nutrition (less than body requirement) related to loss of appetite anorexia.
6. Insomnia related to ambient noise and nursing procedures
7. Knowledge deficit related to inadequate information about condition, its causes and treatment modalities

Diagnostic investigations requested for Madam V.Y. included;

1. Full blood count
2. Blood film for malaria parasites
3. Stool for routine examination
4. Gastroscopy

The drugs below were prescribed for Madam V.Y. to treat her condition:

1. Intravenous Omeprazole 400milligram stat
2. Capsule Omeprazole 200milligram twice daily x5days
3. Suspension Nugel (Magnesium trisilicate + Aluminum hydroxide) 15millitres three times daily x5days
4. Capsule Amoxicillin 500mg three times daily x 14 days
5. Tablet Metronidazole 400mg three times daily x 4 days

6. Injection Tramadol 100mg stat
7. Tablet Paracetamol 1gram three times daily x3days

She was discharged on 15th December, 2021 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 25th December, 2021. Three home visits were embarked on. The first home visit was done while patient was still on admission on 12th December, 2021, second home visit was on 20th December, 2021 and third home visit was on the 27th December, 2021. The care was finally terminated on 27th December, 2021 after handing over her to the public health nurse.

6.2 Conclusion

The patient care study has helped me gain knowledge about nursing care rendered to patients, 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. Recommendations of patient /family, medical team, opinions and appraisal of their co-operation 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 patients effectively in the near future regardless of their condition with the help of nursing process adopted.

The study also provided the platform for the patient/family to receive individualized care. Based on the testimonies given by patient who receive individualized nursing at hospitals, it prompts most of the community members to seek medical help at the various hospitals. This helps to redeem the image of the hospital and the staff nurses as a whole. Also, this

patient/family care study also helps to change the community's wrong perceptions about staff nurses and also improve the people's attendance to the hospital.

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

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APPENDIX

Table 8: Vital Signs of Patient throughout the period of hospitalization

Date	Time	Temperature (ºC)	Pulse (bpm)	Respiration (cpm)	Blood Pressure (mmHg)
11/12/21	11:45am	38.5	67	21	110/70
	2:00pm	38.1	65	18	110/70
	6:00pm	37.7	72	25	100/80
	10:00pm	36.9	70	18	110/70
12/12/21	6:00am	37.1	57	19	110/80
	10:00am	36.3	62	24	120/80
	2:00pm	36.4	65	18	110/70
	6:32pm	36.4	73	18	120/80
	10:38pm	36.0	80	20	120/60
13/12/21	6:00am	35.3	73	18	130/90
	10:00am	36.0	68	20	120/80
	2:00pm	35.9	94	27	120/70
	6:00pm	36.1	78	25	130/80
	9:55pm	36.5	81	20	120/70
14/12/21	6:00am	35.2	73	18	120/80
	10:00am	36.6	82	20	120/80
	2:00pm	36.5	92	22	120/80
	6:00pm	36.6	80	20	120/70
	10:00pm	35.7	84	21	100/60
15/12/21	6:10am	35.3	91	24	120/90
	10:00am	34.7	84	21	100/60

SIGNATORIES

1. NAME OF CANDIDATE: TUAH ESTHER

SIGNATURE...

DATE.....05/10/2022...

2. NAME OF WARD IN-CHARGE: MRS GRACE DEDE

SIGNATURE...

DATE.....05/10/2022...

3. NAME OF SUPERVISOR: EMMANUEL ASI

SIGNATURE...

DATE.....05/10/2022...

4. NAME OF PRINCIPAL:

SIGNATURE...

DATE...06/10/2022...

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