PREFACE

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

Patient/Family care study is carried out by student nurses to enable them put into practice the knowledge and skills which they have acquired from the three-year training period in school.

This is to ascertain how best the theoretical knowledge could be used practically to help patient get the effective nursing care.

It helps the student nurse to encounter the patient closely, understand his/her condition and identify problems of the patient. It is satisfactory to both the nurse and patient, that is, the patient becomes satisfied with the care rendered to him or her. The student nurse also feels happy upon being able to achieve his or her goal.

The study serves as a requirement for the award of a professional license to practice by the Nurses and Midwives council of Ghana.

Patient/Family initial have been used instead of their full names to ensure privacy and confidentiality as part of the ethics of the Nurses and Midwives Council.

ACKNOWLEDGEMENTS

My first and foremost thanks go to the Almighty God for his direction, strength and protection.

I express my gratitude to Mr. A.J and his family for not hesitating in allowing their son to be used for the study and also for providing the necessary information throughout the study.

I also express my gratitude to all the tutors of the Holy Family Nursing and Midwifery Training College, Berekum and especially to my supervisor Madam Antoinette Effum who supervised my script.

I also appreciate the entire nursing staff at the males' ward, Asutifi North District Hospital, Kenyasi number 2 especially the ward in-charge Mrs. Theodora Akosa for helping me to get the necessary information to complete this study.

My appreciation also goes to my mother Madam Beatrice Akwaa Nyamekye, my grandfather Mr. J.E Nyamekye and my brother Osam - Pinanko Thomas Snr for helping me financially to be able to complete the study. I also express my sincere gratitude to all friends most especially Adu Djan Vincent who was always there for me during the difficult times. I also thank Boateng Belinda for the support and encouragement.

Finally, I wish to extend my gratitude to the authors and publishers of the books I used as reference in writing this study..

INTRODUCTION

Patient/family care study is a written report of the care rendered to the patient/family which is required by The Nursing and Midwifery Council of Ghana in partial fulfillment for the award of License to practice as a Professional Registered General Nurse. This is an approach in nursing where a comprehensive and holistic nursing care is given to the patient/family from the time of admission to discharge, and ensuring continuity of care through follow-ups or home visits before the care is terminated.

This patient/family care study was carried out on a thirty-five years old man who for the purpose of confidentiality, will be referred to as Mr. A.J in this study. Mr. A. J was admitted to the Males Ward of the Asutifi North District Hospital, Kenyasi No.2 on the 8th November, 2021 and was discharged on the 12th November, 2021. Mr. A. J spent four days in the hospital. I introduced myself to him and his family as a final year student who would like to use him as a client for my Patient and Family Care Study which they agreed .to gain more knowledge about the condition Gastroenteritis.

Data was collected from the patient/family through observations, interviews and other diagnostic procedures. Health problems such as high body temperature (38.0^{o}C), altered nutritional pattern, fluid and electrolyte imbalance, sleeping pattern disturbances and abdominal pain were identified and interventions made with patient and family's co-operation to achieve set goals. Due to effective medical and nursing care rendered to him, he was discharged without any complications.

Home visits were also made during admission and after discharge to identify predisposing factors of client's condition, to educate client's family on the condition and to ensure continuity of care.

A.J and his family appreciated the care given to them by the health team.

This script comprises six chapters which include;

1. Assessment of patient/family

2. Analysis of data collected

3. Planning for patient/family care

4. Implementation of patient/family care plans

5. Evaluation of care rendered to patient/family

6. Summary and conclusion.

Chapter one dealt with assessment of client and family comprising client particulars, family medical history, socio-economic history, lifestyle and hobbies, past and present medical history, admission of client, her concept of illness, literature review and validation of data.

Chapter two dealt with analysis of data involving comparison of data gathered with standard for literature, client and family strength, health problems and nursing diagnosis.

Chapter three dealt with planning of care for the patient/family, setting of objectives and the nursing care plans for objectives set.

In chapter four, nursing interventions of the nursing care plans were implemented thus; giving a summary of the actual nursing care plan, preparation of client and family towards discharge and rehabilitation and also follow-up home visit and continuity of care.

Chapter five dealt with evaluation of care consisting of statement of evaluation, amendment of nursing care for partially met or unmet outcome criteria, termination of care,

The last chapter which is chapter six dealt with summary and conclusion followed by bibliography and appendix

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CHAPTER ONE

ASSESSMENT OF PATIENT AND FAMILY

1.0 Introduction

Assessment involves the gathering of information about the health status of the patient/client, analysis and synthesis of the data and the making of clinical nursing judgment (Weller, 2014). Assessment is the first phase and an essential tool in the nursing process. It deals with gathering of data from the patient/family through observation, direct interviews of the patient, family and health workers who rendered care to the patient, from medical records, laboratory investigations, physical examinations and review of literature. The assessment covers the patient's particulars, family medical/surgical history, family socio-economic history, patient's developmental history, patient's lifestyle and hobbies, patient's past medical/surgical history, the present medical/surgical history of the patient, admission process of the patient and family, patient/family's concept of his/her illness, literature review on the condition and validation of data. This information gathered from patient will help identify patient/family's problems and the appropriate and recommended nursing interventions rendered to patient.

1.1 Patient's Particulars

Particulars is defined as details or information about a person, especially when officially recorded (McIntosh, 2013). Mr. A.J is a 46years old man, born on 22nd July, 1975 to Mr. A.W and Mrs. N.A, both deceased. He hails from Akotsi in the Volta Region and currently resides at Kenyasi No.2. He is the first born of ten children. He is married to Mrs. J.A with three children; two (2) females and a male. His next of kin is Mrs. J.A, who is the wife of Mr. A.J. Mr. A.J is a member of the Assembly of God Church Ministries, Kenyasi - Assembly. According to patient, he has never been to school

before. He speaks both Ewe, English and Twi. He is dark in complexion, weighs 75kg. He is 1.4m tall. He has no physical impairments or disabilities. He is a galamsay operator.

1.2. Family Medical History

Health history is a series of questions used to provide an overview of the patient's current health status, is focused on the impact of psychosocial, ethnic, and cultural background on a person's health. Information is obtained on both paternal and maternal sides of family (Hinkle & Cheever, 2014). According to Mr. A.J, both his parents and grandparents are deceased. His parents were involved in a car accident some years back. Upon further interaction with patient, it was revealed that his uncle was a known asthmatic. He was managed with asthmatic drugs. Apart from asthma, there is no identified hereditary disorders like diabetes mellitus, hypertension, sickle cell, epilepsy nor any mental disorders in the family. However, the relatives present during patient history taking said that, periodically, they do suffer some ailments like malaria, headache, fever and abdominal pains which are treated by self-medication (using both over-the-counter drugs and traditional medicines) but if symptoms persist, they report to the hospital. Based on this information, I educated patient and family about the effects of the use of over the counter drugs and urged them to seek medical care from any health center when they are suffering from any condition. This is the second time he has being admitted at the hospital. The first instance was as a result of malaria which was managed with antimalarial medications.

The sources of medical treatment for Patient's family are both orthodox and herbal medicine. He said that out of the whole family only his uncle had undergone surgery before, which involved his eye.

1.3 Family Socio – Economic History

This is an economic and sociologically combined total measure of a person's work experience and of an individual's family's economic and social position in relation to others based on income, education and occupation (Bickey & Szilagyi, 2015). Patient indicated that, he is married. He works as a small-scale miner. Currently, he is still in the small-scale mining as his occupation but cannot work as effective as he used to due to old age. According to patient, he does not have a fixed income as compared to government workers but the income he gains mostly depends on how the outcome of his mining activity. Patient also suggested that there is a great sense of harmony among members of the family and they all relate very well with the community members. Socially the family is not noted for smoking or drinking alcohol. He further revealed that family members are not into public service thus depends solely on their income earned from trading and farming. Family members are always willing to support each other in times of financial hardship. His family members are well known for their enormous participation in religious activities, their kindness and generosity. Patient said they have no taboos in their family, rather they conform to the rules and believes of the Christian religion. He also indicated that the National Health Insurance Scheme cover most of his bills whenever he seeks for treatment at the hospital. Although patint, does not hold any position in his church but do fully partake in all church activities. In analyzing the family socioeconomic status, he falls under the lower socioeconomic status.

1.4 Patient's Developmental history

Development refers to the process of growth and differentiation which involves cognitive, psychosexual and psychosocial processes (Weller, 2014). Maturation is the process of becoming completely developed mentally or emotionally (Walter, 2014). Growth is the progressive development of a living thing, especially the process by which the body reaches its complete physical

development. The developmental history was given by patient himself. Patient indicated that, his mother went through normal pregnancy of nine months' gestation without any pregnancy associated disorders. She had spontaneous vaginal delivery with the assistance of traditional birth attendants at Akotsi in the Volta Region, at home. He was born without any congenital abnormality. Patient was breastfed but was introduced to complementary foods like light porridge. Patient did not receive any immunization evidence by absence of Bacillus Calmette- Guerin scar at his right shoulder. He went through a normal developmental milestone. This includes sitting at the 7th month, crawling at the 10th month, walking at 16th month, talking at 12th month and running at 19th month. Patient at age thirteen (13), begun to experience secondary sexual characteristics such as, broadening of chest, growth of hair at public parts and development of deep voice. He got married at age twenty- three (23). He has given birth to five children.

Erikson's theory of psychosocial development in 1954 describes the human life cycle as a series of eight egos developmental stage from birth to death. The theory focuses on psychological task that are accomplished throughout the life cycle. Patient is a 46year old and thus fall under when there is a conflict between generativity versus stagnation which is the seventh stage of Erikson psychosocial development theory. According to Erikson theory of psychosocial development (1995), there are eight distinct stages with each possible results, these could be success or failure personality.

These stages are;

1. Trust versus Mistrust (birth to 1 year)
2. Autonomy versus Shame and Doubt (2 to 3 years)
3. Initiative versus Guilt (3 to 5 years)

4. Industry versus Inferiority (6 to 11 years)

5. Identity versus Role confusion (12 to 18 years)

6. Intimacy versus Isolation (19 to 40 years)

7. Generativity versus Stagnation (40 to 65 years)

8. Integrity versus Despair (65 to death)

Generativity versus Stagnation (40 to 65); the middle adult is concerned with guiding the next generation. When a person makes a contribution during this period, perhaps by raising a family or working toward the betterment of society, sense of generativity; a sense of productivity and accomplishment results. In contrast, a person who is self-centered and unable or unwilling to help society move forward develops a feeling of stagnation.

Upon interaction with the patient, I realized that the patient has attained generativity because he has been able to contribute to the society by raising his children by guiding them to become useful members in the community.

1.5 Patient's Lifestyle/Hobbies

Lifestyle is the pattern of daily living that an individual develops (Weller, 2009). Hobbies are activities one does for pleasure when he/she is not working (Oxford Advanced Learner's Dictionary, 2006). Patient usually goes to bed around 10:00pm and wakes around 5:30am. He prays and reads his Bible before he comes out to perform his personal hygiene. He empties his bowels regularly. He maintains his oral hygiene with toothbrush and toothpaste twice a day. He takes his bath twice daily with warm water. Patient mostly takes Milo beverages and sometimes porridge with bread. Patient is allergic to strong perfume, dust and pollen. Patients favorite food is 'Tuo zaafi' (T.Z). He takes

three square meals in a day. However, he does not usually take fruits. He does not smoke nor drink alcohol. He does attend church meetings on Wednesday and Fridays at 7:00pm to 9:00pm. He usually attends social activities like weddings and funerals on Saturdays. He often sits by the television to listen to the news. On Sundays, he attends church service with the family at the Assemblies of God Church. My personal impression about him is that, he is very benevolent and generous. He also seems to be very concerned about his children's education and their success in life.

1.6 Patient's Past Medical/Surgical History

Patient past medical history provide information on client state of health and illness before the present complaints (Bailliere's Nurses Dictionary, 2019). According to patient, he never experienced any childhood illness like whooping cough, poliomyelitis, measles, tetanus, tuberculosis, and diphtheria. He is allergic to dust, strong perfumes and pollen. He revealed that he usually suffers from minor ailments such as diarrhea, constipation, headaches and common cold which he usually treats with traditional medicines and sometimes with over-the-counter medications. When symptoms persist or becomes worse, he visits a nearby hospital or clinic. Patient said he had never been involved in an accident. He has no physical disability. His first hospitalization occurred in April 2018 on the account of malaria which was managed with antimalaria medications. Patient also indicated that he never goes for health reviews unless his ailment becomes difficult to treat with traditional medicine and over the counter medications. Based on this information I educated patient's family about the effects of the use of over the counter drugs and urged them to seek medical care from any health center when they are suffering from any disease condition.

1.7 Patient's Present Medical/Surgical History

The history of the present health concern or illness is the single most important factor in helping the health care team arrive at a diagnosis or determine the patient's needs. The physical examination is helpful but often only validates the information obtained from the history. A careful history assists in correct selection of appropriate diagnostic tests (Hinkle & Cheever, 2014). He complained of vomiting, passage of bloody mucus stool and could not eat well. He was sent to Asutifi North District Hospital in Kenyasi No.2 on the 30th October, 2021 and was treated as an outpatient. On 8th November, 2020, his symptoms got worse and was therefore sent to the emergency unit of Kenyasi Health Clinic by his son. He reported with history of vomiting, inability to eat, inability to sleep and passing of watery bloody mucous stool. Patient was detained at the emergency unit and later admitted to the Males Ward with diagnosis of Gastroenteritis.

1.8 Admission of Patient

As specified by Esena (2011), admission is the initiation of care, usually referring to inpatient care. Patient arrived at the Males Ward on 8th November, 2021 at 11:45am. He was accompanied by his son and a staff nurse in a conscious and ambulatory state with the diagnosis of gastroenteritis through Emergency unit. It was a planned admission. The patient's identity was verified by mentioning his name for response. He was then welcomed and immediately admitted and made comfortable in an admission bed. He was introduced to the staffs present and was assured of the competency of the healthcare team. His particulars such as name, sex, age, and residential address were recorded in the admission and discharge book and the daily ward state. Vital signs were checked and recorded accurately as follows:

Temperature 38.0 ^{O}C

Respiration 20 cycles per minute

Pulse 91 beats per minute

Blood Pressure 110/85millimeters of mercury (mm/Hg)

Patient was given Tab. Paracetamol 1g. He was made comfortable in bed. Hospital policies regarding visiting periods, payment of bills and the time vital signs will be checked were explained. Temperature was rechecked after 2 hours and recorded as 37.1 ^{O}C.

He is to be managed on the following treatment.

1. Intravenous Ringers Lactate (1) liter over 24 hours.
2. IV Metronidazole 500miligrams 8 hourly in 48hours.
3. Intravenous Ciprofloxacin 400miligrams 12hourly in 48hours.
4. Tablet Paracetamol 1gram 8 hourly x 5 days.
5. Intravenous buscopan 40mg stat.
6. Dextrose in normal saline 1litre over 8 hours.

Laboratory investigations ordered by the doctor included;

1. Full Blood Count (Haemoglobin, White blood cell count)
2. Stool for routine examination
3. Blood test for malaria parasites.

Physical examination on the patient was performed from head to toe and assessment revealed that

patient was warm to touch (38.0 ^{O}C), looked dehydrated and was experiencing abdominal cramps and pain which was relieved when he assumed a knee chest position. Patient was oriented to time, place and person. He was also orientated to the ward annexes. Patient and family were informed of the ward protocols the rules and regulations including visiting hours and meal time. He was asked to get his personal items that will be needed during the time of admission. Patient was then introduced to the other clients who were on the ward.

I reintroduced myself to patient as a final year student nurse of the Nursing and Midwifery Training College, Berekum, who would like to take him for my care study. Patient and his son were informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment towards the award of license to practice as a Registered General Nurse. I explained to the patient and his son the concept of the patient/family care study and assured them of privacy and confidentiality.

It was added that a report will be written after the entire study. Patient and his son agreed to my request and promised to offer me the necessary information and assistance. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus, they will continue the care at home once he is well. I decided to choose this patient for the study because I wanted to know more about gastroenteritis as the incidence of this condition is more prevalent in this locality and identify diverse ways of preventing it. Clinically, patient was ill as he was handed over to the afternoon nurses for continuity of care.

1.9 Patient's Concept of Illness

Patient's Family concept of illness is the understanding retained in the mind, from experience, reasoning or imagination about patient illness (Park, 2013). Patient did not attribute his illness to any spiritual cause. He was of the view that some conditions like epilepsy and other mental

disorders can have spiritual implications. He did not know the exact cause of his condition however, he was quick to recognize the signs and symptoms of ill health such as fever, vomiting and diarrhea. He was looking forward to recover speedily. He believed that his illness could be treated by modern medicines. He was much specific about the need for orthodox medicine.

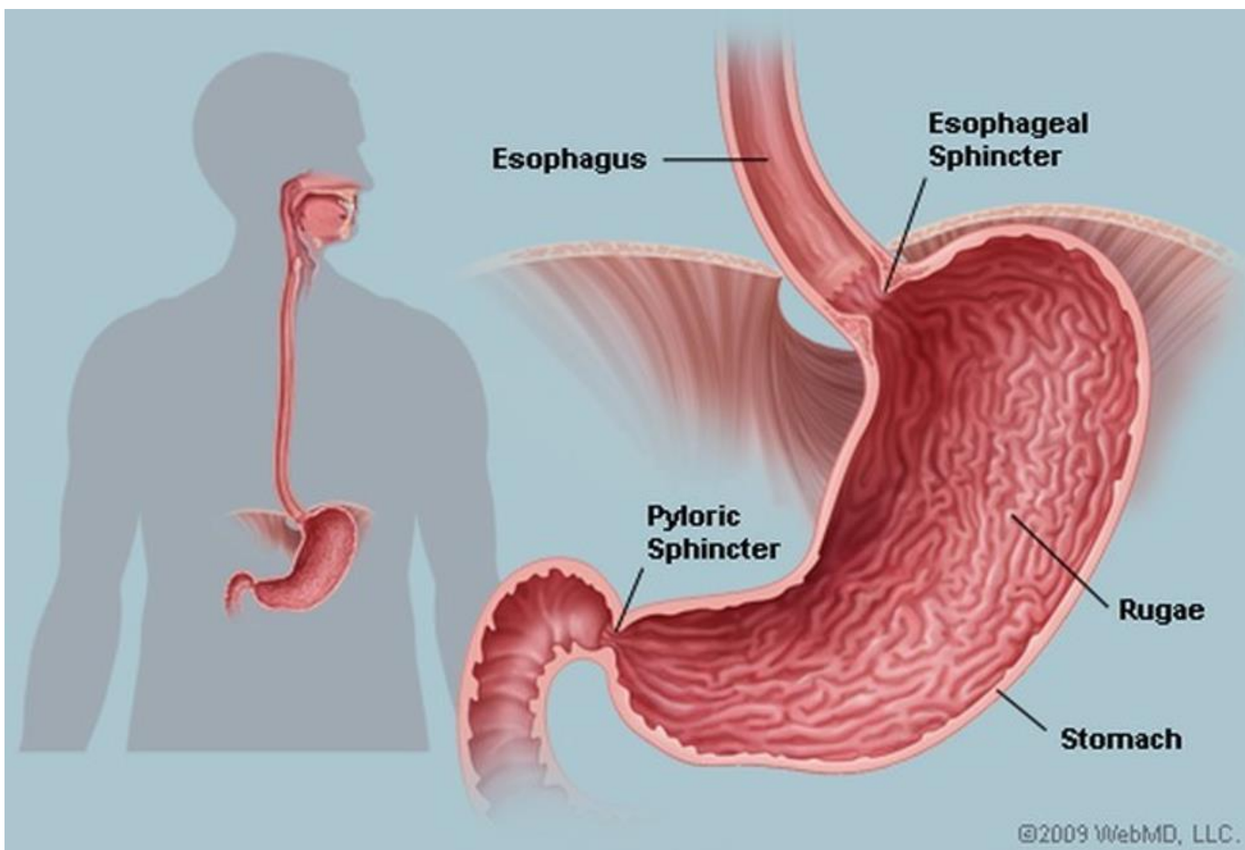
1.10 Literature Review on Gastroenteritis

Basic Anatomy of the Stomach and the Intestines

The stomach is situated in the left upper portion of the abdomen under the left lobe of the liver and the diaphragm, overlaying most of the pancreas. A hollow muscular organ with a capacity of approximately 1500 mL, the stomach stores food during eating, secretes digestive fluids, and propels the partially digested food, or chyme, into the small intestine. The gastroesophageal junction is the inlet to the stomach. The stomach has four anatomic regions: the cardia (entrance), fundus, body, and pylorus (outlet). Circular smooth muscle in the wall of the pylorus forms the pyloric sphincter and controls the opening between the stomach and the small intestine. The stomach is lined with columnar epithelial tissues. The **small intestine** is the longest segment of the GI tract, accounting for about two thirds of the total length. It folds back and forth on itself, providing approximately 7000 cm (70 m) of surface area for secretion and **absorption,** the process by which nutrients enter the bloodstream through the intestinal walls. It has three sections: The most proximal section is the duodenum, the middle section is the jejunum, and the distal section is the ileum. The ileum terminates at the ileocecal valve. This valve, or sphincter, controls the flow of digested material from the ileum into the cecal portion of the large intestine and prevents reflux of bacteria into the small intestine. Attached to the cecum is the vermiform appendix, an appendage that has little or no physiologic function. Emptying into the duodenum at the ampulla of Vater is the common bile duct, which allows for the passage of both bile and pancreatic secretions. The **large intestine** consists of an ascending segment on the right

side of the abdomen, a transverse segment that extends from right to left in the upper abdomen, and a descending segment on the left side of the abdomen. The sigmoid colon, the rectum, and the anus complete the terminal portion of the large intestine. A network of striated muscle that forms both the internal and the external anal sphincters regulates the anal outlet (Hinkle & Cheever, 2014).

The Diagram Below Shows the Anatomy of the Stomach



Definition of Gastroenteritis

Gastroenteritis is a medical condition from inflammation ("-itis") of the gastrointestinal tract that involves both the stomach ("gastro" -) and the small intestine ("entero" -). Gastroenteritis is inflammation of the mucosal lining of the stomach and intestines characterized by abdominal cramping, vomiting, nausea and diarrhea (Hinkle & Cheever, 2014).

Incidence/Epidemiology

Gastroenteritis occurs in persons of all ages and is a major cause of morbidity and mortality in most developing countries. It ranks second to common cold as a cause of loss of work time and fifth as the cause of death among children. It can be life threatening in the elderly. The very young, old and immune suppressed patients can become quite ill with this self-limiting condition (Hinkle & Cheever, 2014).

Causes/Aetiology

As specified by Walker and Whittlesea (2012), Gastroenteritis has many causes which include the following;

1. Bacteria such as; *Escherichia coli*, staphylococcus aureus, salmonella, shigella, and clostridium perfringes.
2. Parasites such as; Ascaris, enterobius and trichivellaspiralis
3. Viruses such as; Echo viruses, adenoviruses, norovirus, and rotavirus.
4. Amoeba like Entamoebahistolytica.
5. Reaction to some drugs like antibiotics.

6. Enzymes deficiencies.

7. Food allergies.

The major risk factor for gastroenteritis that is caused by food poisoning is improper handling and storage of food. Bacterial or viral food poisoning usually occurs within 16 hours after eating contaminated food. The incubation period for gastroenteritis is between twelve hours to ten days (Lewis, 2012).

Types of Gastroenteritis

Gastroenteritis can basically be classified into:

1. Bacterial Gastroenteritis
2. Viral Gastroenteritis
3. Eosinophilic Gastroenteritis

Bacterial Gastroenteritis

Bacterial gastroenteritis is a very common disorder with many causes, ranges from mild to severe, and usually manifest with symptoms of vomiting, diarrhea, and abdominal discomfort.

Bacterial gastroenteritis is usually self-limited, but improper management of an acute infection can lead to a protracted course. By far, the most complication is dehydration.

Shigella, Salmonella and Campylobacter are the top three leading cause of bacterial gastroenteritis followed by **Aeromonas** Species. (Lewis, 2012).

Viral Gastroenteritis

Viral gastroenteritis is a common cause of morbidity and mortality worldwide.

Viral gastroenteritis ranges from a self-limited watery diarrheal illness (usually less than 1 week) associated with symptoms of nausea, vomiting, anorexia, malaise, or fever to severe dehydration resulting in hospitalization or even death. **Rotaviruses, caliciviruses, astrovirus and norovirus** are thought to be the cause of viral gastroenteritis. **Rotavirus** attach and enter mature enterocytes at the tips of small intestinal villi thereby causing structural changes to the small bowel including villus shortening and mononuclear inflammatory infiltration in the lamina propria (weller,2014).

Eosinophilic Gastroenteritis

Eosinophilic gastroenteritis is an uncommon inflammatory gastrointestinal disease affecting the both adults and children.

It is characterized by eosinophilic infiltration in one or more areas of the gastrointestinal tract, mainly the stomach and duodenum.

The presence of abnormal gastrointestinal symptoms, most often abdominal pain, nausea, vomiting, diarrhea and weight loss. Atopy or food allergies is often present (Lewis, 2012).

Mode of Transmission

Fecal-oral is the main mode of transmission. The human hand is the main medium for transmission aided by flies where these are prevalent or rampant. Infective materials spread to the hands and then to the mouth (Hinkle & Cheever, 2014).

Pathophysiology

Gastroenteritis is caused by different organism and non-infectious agents. The gastrointestinal tract reacts to any of these varied causes in a related fashion (Lewis, 2012).

According to Silverman and Roy (2013), bacteria in the gastrointestinal tract use the following mechanism to bring about the disease condition.

A. Enterotoxin production; the organism gain entry into the GIT, multiply and release toxins that bind to the mucosa and cause a profuse secretion of water and electrolytes. Example; shigella and **Vibrio cholerae.**

B. Invasion of epithelial cells: The bacteria invade and destroy the cells of the intestinal epithelium. This therefore, leads to bloody mucoid stools. Example E- coli.

C. Penetration and systemic invasion: There are local inflammation in which the organisms try to penetrate the mucosa and gain access to the systemic circulation.

This inflammatory process goes a long way to bring about stimulation and secretion of intestinal fluids.Because the mucosa lining of the GIT is inflamed, food cannot be retained and there is no alternative than to be vomited or passed out as watery stool. As a result of the excessive loss of water through vomiting and stool, dehydration becomes the order for the day and also the individual becomes very weak due to the inability to retain food. There is also scanty and concentrated urine because most of the fluid is passed out as stools and vomitus, (Weller, 2014).Also, inflammation reaction and the presence of toxin also stimulate a sympathetic nerve which stimulates salivation, nausea and vomiting. It further increases intestinal activities leading to diarrhea and abdominal pain, (Weller, 2014).

Persistent diarrhea and vomiting subsequently lead to depletion of body fluid and electrolyte especially bicarbonate reserves. It predisposes to acidosis, fluid volume deficit and circulatory collapse. This further leads to fluid shift from intracellular compartment to extracellular compartment

resulting in to systemic disturbances in cellular functions and changes in their shape which manifest as sunken eyes and dry mucous membrane.

Also, fluid volume deficit and subsequent electrolyte imbalance result in hypocalcemia which triggers the sympathetic nerve to stimulate the heart to increase pulse rate,

Clinical Features

The clinical features vary depending on the type of organism and level of gastrointestinal tract involved.

However, gastroenteritis in adults is usually a self-limiting, non-fatal disease.

General signs and Symptoms include ;(Lewis, 2012)

1. Frequent diarrhea stools which may be bloody or mucous.
2. Nausea and Vomiting.
3. Abdominal pains and cramp.
4. Anorexia or Loss of appetite.
5. Headache with chills.
6. Fever may be present.
7. General malaise.
8. Dizziness.
9. The abdomen is often distended.

10. Borborygmi (hyperactive bowel sounds) may be present.

11. Pulse is rapid.

12. Dehydration leading to; sunken eyes, weak pulse, low urine output, dry mucous membrane and low blood pressure

Signs and symptoms usually begin 12–72 hours after contracting the infectious agent, (Herdman & Kamitsuru, 2018) some bacterial infections may be associated with severe abdominal pain and may persist for several weeks.

Children infected with rotavirus usually make a full recovery within three to eight days.

However, in poor countries treatment for severe infections is often out of reach and persistent diarrhea is common (Lewis, 2012).

Diagnostic Measures

According to (Sawyer, 2011); the following diagnostic investigations can be carried out to diagnose an individual of gastroenteritis

1) By the signs and symptoms.

2) Blood culture identifies causative bacteria or parasites.

3) Serum electrolytes estimation. Example potassium and sodium calcium.

4) Full blood count for White blood cell and Neutrophil count.

5) Stool for routine examination to identify the presence of blood of leukocytes in stool.

6) Gastric analysis to evaluate gastric acid output.

7) Abdominal computed tomography scans helpful in diagnosing diseases that can present with diarrhea.

8) Erythrocyte sedimentation rate: Helpful in determining the existence of the low-grade inflammation in irritable bowel syndrome patients.

Medical Management

According to (Hinkle & Cheever, 2014); Gastroenteritis when acute must be treated as a medical emergency for the following reasons,

1. To avoid the spread of disease to other people.
2. To avoid the complications of the disease.
3. Severe diarrhea is treated with oral rehydration salt (ORS) therapy in which physiological salt solutions are given orally to correct dehydration and electrolyte imbalance.
4. Hospitalization may be needed as the patient requires as support treatment consisting of bed rest, nutritional support and increase fluid which needs monitoring.
5. Histamine-receptor **antagonist** such as cimetidine may be prescribed as they block gastric secretion.
6. Antacids such as Aluminum Hydroxide may be used as buffers which can be administered hourly.
7. Analgesics such as Budesonide and Ibuprofen (NSAID) can also be given for abdominal pains.
8. Anti-emetics, for example Phenergan is given to reduce vomiting.

9. Intravenous fluids and electrolytes replacement can be given. The intravenous fluids which are normally given are normal saline, dextrose saline and **ringers** lactate.

10. Bismuth containing compounds such as prochlorperazine, or thiobenzamide can be given,

11. Antimicrobial agents are not usually used for gastroenteritis, although they are sometimes recommended if symptoms are particularly severe or if a susceptible bacterial cause is isolated or suspected. If antibiotics are to be employed, a macrolide (such as azithromycin) is preferred. Other antibiotics prescribed may include metronidazole, cefuroxime and ciprofloxacin.

12. Antispasmodics example Buscopan.

Nursing Management

The nursing managements are put under the following headings, (Lewis, 2012).

A. Comfort and Rest

1. In order to promote rest and comfort for client there is the need to perform the following activities for the patient.

2. Promote period of rest during symptomatic stages according to the level of fatigue. Maintain a well straighten bed, free of creases and crumbs to promote comfort.

3. Emotional support and divisional activities are necessary especially when recovery and convalescents are prolonged.

4. Encourage gradual resumption of activities and mild exercise during convalescence period. They should however be planned not to interfere with rest period.

B. Maintain Adequate Nutrition

1. It is always difficult for the patient to take in sufficient food and fluids due to the nausea and vomiting.

2. If patient cannot tolerate fluids orally, then intravenous fluids should be instituted.

3. Hot or spicy food should be avoided when planning a diet for patients. The appropriate soft diet may include rice water, porridge, and light soups.

4. There is a need to varied patient food to make it enjoyable.

5. Restore normal body weight by maintaining a well balance diet rich in calories, protein, and vitamins.

C. Prevention of Infection

1. The nurse should always wash hands thoroughly before and after carrying out any procedure on the patient to prevent the spread of infection.

2. The nurse should always teach patient on ways to maintain personal hygiene.

3. Advice client to eat food cooked from home rather than buying from outside to minimize infections.

4. Patient should be instructed to wash hands immediately after visiting toilet and before and after handling food.

5. Patient should always avoid the use of contaminated water, food and also avoid eating raw fruits and vegetable without washing them.

6. Linens soiled with stool should be disinfected to prevent the spread of the disease.

7. Isolation of patients should be done to prevent the spread of the disease.

8. Barrier nursing should be ensured to prevent cross infection.

9. Proper disposal of stools should be ensured and good hand washing practice should also be encouraged.

D. Monitoring and Observation of Patient to Prevent Complication

1. Vital signs, (temperature, pulse, respiration and blood pressure) should be monitored thoroughly to know whether the condition is improving or deteriorating.

2. The nurse should observe for the amount of urine passed and its degree of concentration by monitoring the output.

3. Nurse should also observe for the presence of blood or mucus in the stool.

4. Client should be weighed weekly to check if there is any weight loss.

5. Patient should also be monitored for the desired and side effects of the drugs.

6. When patient is on intravenous infusion, it should be monitored. There should be frequent assessment of the intravenous site for infiltration.

E. Elimination

1. Bowel elimination should be encouraged by serving bed pan on request.

2.Client should be encouraged to have regular bladder elimination

3. Urinals should be served when necessary.

4.Observe vomitus for color, consistency and content of the vomitus and feaces. If vomiting is persistent prevent dehydration by encouraging client to take more fluids to replace the loss ones.

5.Aseptic techniques should be done to prevent infections.

F. Prevention

According to (Smeltzer and Bare, 2012) the preventive measures for gastroenteritis includes the following;

1.The patient is isolated from others to prevent cross infection.

2.Patient's vomitus and stools should be well disposed of after being disinfected.

3.Proper barrier nursing should be practiced.

4.Hand washing must be performed regularly.

5.Personal hygiene should be practiced by cutting finger nails short, shaving of hair when applicable.

6.All cooking utensils should be washed and cleaned before usage.

7.Ensure and encourage clean environment for cooking and storage of food.

8.Proper cleanliness in the ward must be done to prevent complications.

Patient/Family Teaching and Education

According to Smeltzer and Bare (2012),

1. Educate the patient about the early signs of diarrhea and dehydration.
2. Let the patient know the need for personal and environmental hygiene.
3. Advise patient to always wash the hand before eating and after visiting the toilet.
4. Food must be well heated before eating and fruits also washed properly.
5. Advice patient not to expose foods to flies.
6. Educate patient and family on the need to avoid defecation in the bush.

Complications

If early treatment is not sought for, the following complications may develop.

1.Acute renal failure is due to frequent vomiting and diarrhea may lead to dehydration, which in turn may decrease blood volume and hence reduced circulatory volume. This therefore decreases renal perfusion and may lead to renal failure.

2.Fluid and electrolytes Imbalance as a result of diarrhea and vomiting may lead to loss of hydrogen ions from the stomach. Bicarbonate ions may also be lost through diarrhea which may cause imbalance in these electrolytes in the blood and may lead to acidosis or alkalosis.

3.Convulsions (in case of a child) due to inadequate blood supply to the brain and fever and also infections travelling to the brain causes problem to the brain which may lead to convulsion.

4.Malnutrition this occurs when the body doesn't get enough nutrients e.g., poor diet and digestive conditions.

5.Dehydration may occur as a result of diarrhea. In diarrhea, there is loss of bicarbonate ions from the intravascular component. The loss of these electrolytes goes along with plasma (water), causing the increase in osmotic/oncotic pressure. This causes fluid to shift from the extracellular and intracellular spaces, causing the cells to shrink causing dehydration.

6.Cardiac failure occurs as a result of decreased cardiac output. The heart is the first organ to receive oxygenated blood. In diarrhea, the patient losses fluid and subsequently lead to hypovolemia. This leads to decreased blood volume and hence decreased cardiac perfusion. This then leads to ischemia and may lead to cardiac failure.

7.Hypovolemic Shock occurs as a result of fluid lost along with electrolytes. As the fluids are lost from the intravascular spaces, the volume of the blood reduces, causing reduction in cardiac output, and hence, decreased perfusion to the vital organs, leading to shock.

1.12 Validation of Data

Validation is defined according to (Weller, 2014), as the extent to which a data measure, indicator or method of data collection possesses the quality of being sound or true, as far as can be judged. In other words, validation refers to the process by which data retrieved is being confirmed.

Data collected from patient were the same to that of what the relatives said, also during the home visit most of the information given to me by patient and his family at the hospital were confirmed by other relatives in the house. Data presented by patient and his diagnostic investigations carried out were similar to those in the literature review.

When the patient's condition became stable and all the relatives had calm down, I again asked them the same questions which were asked previously and the same response was given. Upon this I therefore believe the information gathered was authentic and valid for study

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

Analysis of data is a systematic examination and evaluation of data or information, by breaking it into its component parts to uncover their interrelationship, thus providing basis for problem solving and decision making (Weller, 2014). This chapter forms the second phase of the patient/family care study. It entails comparing the results of the investigation carried out with standards in the literature review. It also involves comparing the causes, clinical manifestations, treatments and complications of the patient's condition (gastroenteritis) with those stated in textbooks. It gives the pharmacology of drugs prescribed by the medical officer for patient. This chapter also captures the patient/family strengths, the health problems identified and nursing diagnoses formulated for given care to patient.

2.1 Comparison of Data with Standards

1. Diagnostic investigation/ Tests.
2. Causes/ Risk factors.
3. Clinical features/ Sign and Symptom.
4. Medical/ Surgical treatment.

1. Diagnostic Investigations/Tests

The Literature points out; serum electrolyte estimation, blood culture, full blood count, stool for routine examination, gastric analysis, erythrocyte sedimentation rate and abdominal computed tomography scan as the diagnostic measures for confirming gastroenteritis. The following investigations were carried out on patient to aid in the diagnosis and treatment;

1. Blood film for malaria parasite.
2. Full Blood Count.
3. Stool for routine examination.

Table 1: Diagnostic Investigation Conducted for Mr. A.J as Compared with Literature Review

Diagnostic Investigation in Literature Review	Diagnostic Investigation Conducted for Patient
Serum Electrolyte Estimation	Serum Electrolyte Estimation was not done for patient
Blood Culture	Blood Culture was done for patient to identify causative bacteria or parasite.
Full Blood Count	Full Blood Count was done for patient to check for infection.
Stool for Routine Examination	Stool for Routine Examination was done for patient to identify the presence of blood of leukocytes in stool.
Gastric Analysis	Gastric Analysis was not done for patient
Erythrocyte Sedimentation Rate	Erythrocyte Sedimentation Rate was not done for patient

Abdominal Computed Tomography scan	Abdominal Computed Tomography Scan was not done for patient

With reference to table 1.0, Serum electrolyte estimation, Gastric analysis, Erythrocyte sedimentation rate and Abdominal Computed Tomography Scan were not carried out because the diagnosis was arrived at those diagnostic investigations that were ordered for him which were Stool routine examination, Blood culture and Full Blood Count. Blood film for malaria parasite was ordered to rule out malaria which shares some similar symptoms to gastroenteritis.

Table 2: Diagnostic Investigation/ Test Carried On Patient Compared with Standard

Date	Specimen	Investigations	Results	Normal Value	Interpretations	Remarks
08/11/21	Blood sample	Blood film for malaria parasites (MP's)	No malaria parasites seen.	No malaria parasites should be seen	Malaria parasite absent	No treatment was given to patient.
		FULL BLOOD COUNT				
08/11/2021	Blood	White blood cell count.	6.3×10^{9} /litre	**Males** (4.0-11.0×10 ^{9}/liter) **Female** (4.0-11.0×10^{9}/liter) **Child** (3.1-21.6×10^{9}/L0	Normal value indicating absence of infection in the blood.	No treatment was given to patient.

		Neutrophil count	79.00%	**Males** (2.0-7.5%) **Females** (2.0-7.5%) **Child** (15-78%)	High Neutrophil count indicates infection.	Antibiotics such as Intravenous ciprofloxacillin 400mg, Intravenous Metronidazole 500mg were given.
		Hemoglobin (HB) level	13.1g/dl.	**Male** (13-18 g/dl) **Female** (12-15 g/dl) **Child** (11-17.3g/dL)	Patient was not anemic.	No treatment was given to patient.
08/11/2021	Stools	Stool for routine examination to determine the specific a type of bacteria or parasite affecting the intestines.	No pathogen was present	No pathogen should be present	Diseases causing organism was absent.	No treatment was given to patient.

2.2 The cause of patient's illness

From the history taking from my patient, physical examinations performed on my patient and the laboratory investigation carried out, Mr. A.J condition can be confirmed to be caused by infections as indicated in the elevation of neutrophil count.

2.3 Specific Medical Treatments Given to Patient

The following treatments were given to Patient;

1. Intravenous Dextrose in Normal saline one (1) liter over 8 hours.

2. Intravenous Metronidazole 500miligrams 8 hourly in 48hours.

3. Intravenous Ringers lactate one (1) liter over 24 hours.

4. Intravenous Ciprofloxacin 400miligrams 12hourly in 48hours.

4. Tablet Paracetamol 1 gram 8 hourly for 5 days.

5. Intravenous buscopan 40mg stat.

6. Intravenous Ringers Lactate one (1) liter over 24 hours.

Table 3: A Comparison of Specific Medical Treatment Prescribed to Patient Compared with Literature Review

Medical Treatments in The Literature Review	Medical Treatments Prescribed for Patient
Histamine – Receptor Antagonist (Cimetidine)	Histamine- Receptor Antagonist was not given to patient.

Antacids (Magnesium Oxide)	Antacids were not given to patient.
Analgesics Budesonide and Ibuprofen	Analgesics (Tab Paracetamol) were given to patient to relief pain.
Anti – emetics (Phenegan)	Anti –emetics were not given to patient.
Intravenous fluids and electrolyte replacement (IV Normal Saline, Dextrose Normal Saline and Ringers Lactate)	Intravenous fluids and electrolyte replacement (IV Dextrose Normal saline solution and ringers' lactate) were prescribed for patient
Bismuth containing compounds (Thiobenzamide)	Bismuth containing compounds were not prescribed for patient.
Antimicrobial agents (Ciprofloxacin, Metronidazole and Cefuroxine)	Antimicrobial agents (IV Ciprofloxacin and Metronidazole) were prescribed for the patient.
Rehydration agents (Oral rehydration solution)	Rehydration agent (oral rehydration solution) was not prescribed for the patient.
Antispasmodics (Buscopan)	Antispasmodics (Buscopan) was given to patient, to suppress spasms and contractions thereby blocking the action of acetycholine on the receptors found within the smooth muscle walls of the gastro and urinary tract.

The medications ordered for the patient was in line with literature which aided in effective management of patient condition and aided his speedy recovery without complications.

2.5 Clinical Manifestations Exhibited by Patient

The comparison of the clinical manifestation in the literature review with those manifested by patient is shown in table for below.

Table 5: Comparison of patient's Clinical Manifestation with Literature.

Clinical Manifestation in Literature	**Clinical Manifestation Exhibited by Mr. A.J**
1. Frequent diarrhea stools	Patient experienced diarrheal stool (4 times in a day)
2. Nausea and vomiting	Patient experienced nausea and vomiting
3. Abdominal pain and cramping	Patient experienced Abdominal pain and cramping
4. Fatigue	Patient did not experience fatigue.
5. Headache with chills	Patient did not experience Headache with chills
6. Fever	Patient did experience Fever
7. General malaise	Patient experienced General malaise
8. Dizziness	Patient did not experienced dizziness
9. Distended abdomen	Patient did not experience distended abdomen
10. Borborygmi	Patient did not experience borborygmi

11. Rapid pulse	Patient did not experience rapid pulse
12. Dehydration	Patient had a risk of developing dehydration
13. Anorexia	Patient experienced anorexia

The patient on admission exhibited most cardinal signs and symptoms of acute gastroenteritis outlined in the literature review. These signs and symptoms provided the clue and aided in his early diagnosis and treatment.

2.4 Pharmacology of Drugs

The medical treatment that was given to Mr. A.J is outlined in the Table below. It consists of date of the order, the drug name, the dosage and route of administration for the patient, classification, desired effect, actual effect observed and remarks.

Table 4: Shows Pharmacology of Drugs Given To Patient

Date	Drug	Dosage/Route Of Administration in literature review	Dosage/Route of Administration to Patient.	Classification	Desired Effect	Actual Action Observed	Side Effects/Remarks
08/11/21	Dextrose in Normal saline	Dosage: Depends on the patient's fluid and electrolyte imbalance levels. Route: **Intravenously**	**Dosage:** 1liter over 8 hours; **Route:** Intravenously	Electrolytic and fluid balance	To restore fluids and electrolytes balance and expand plasma volume	Patient was well hydrated. The patient skin turgor improved	Fluid overload, example pulmonary edema. No side effect was observed
08/11/21	Metronidazole	**Dosage;** 400- 800mg three times daily. **Route;** Intravenously, oral.	**Dosage**: 500mg every 8 hours x 48 **Route**: Intravenously	Antibacterial, antiprotozoal	Disrupts DNA, inhibiting nucleic acid synthesis.	Patient did not show any sign of infection.	Anorexia, dry mouth, diarrhea, constipation, dizziness. None of the aboveffect was observed.

08/11/2021	Ringers Lactate	**Dosage:** Depends on patient's fluid and electrolyte imbalance levels. **Route:** intravenously	**Dosage:** 1liter over 8hours; **Route:** Intravenously	Electrolytic and fluid balance	To restore fluids and electrolytes balance and expand plasma volume	Patient was well hydrated. The patient skin turgor improved	Fluid overload, example pulmonary edema. No side effect was observed
08/11/2021	Ciprofloxacin	**Dosage;** 400- 750 mg every 12 hours for 7- 14 days **Route:** Intravenously, oral	**Dosage:** 400mg every 12houly in 48 hours **Route:** **Intravenously**	Antibiotic (Fluoroquinolone)	It inhibits relaxation of DNA; Inhibits DNA gyrase in susceptible organisms; promotes breakage of double stranded DNA.	Patient's infection resolved.	Nauseas and vomiting, constipation, rash, flatulence. Headache, abdominal pain. No side effect was observed on patient.

08/11/21	Buscopan (Hyoscine butylbromide)	**Dosage;** **By mouth:** smooth muscle spasm, 20mg 4 times daily. But depends on how individual will present **Route:** Intravenously, oral	**Dosage**: 40mg stat **Route:** Intravenously	Antispasmodics Anticholinergic	It suppresses spasms and contractions thereby blocking the action of acetylcholine on the receptors found within the smooth muscle walls of gastro and urinary tract	Patient was relieved of abdominal pains.	Nausea and vomiting, constipation, dry mouth, dizziness and reduced ability to sweat. No such side effects were observed on patient.

08/11/21	Tablet Paracetamol	**Dosage;** 0.5- 1g every 4 – 6 hours; maximum daily dose is 4g. **Route;** oral, rectal, IV.	**Dosage**: 1gram 8hourly for 5days. **Route:**Orally.	Antipyretics/ Analgesics	To relieve pain by blocking generation of pain impulses, probably by inhibiting prostaglandin synthesis in the central nervous system.	Patient was relieved of fever.	Dizziness, urticarial, liver damage and disorientation. Patient exhibited none of these side effects.

2.6 Complications Developed by Patient.

With regards to the complications outlined under the literature review Mr. A.J did not develop any of the complications. This can be attributed to the fact that; he was brought early to the hospital and hence early treatment was initiated and led to his early recovery.

2.7 Patient/Family's Strengths

Patient and family strengths refers to the resources that can enable them to cope with stressful conditions leading to patient's recovery. These involve the activities that contribute to the well-being of patient and his family as well as his speedy recovery.

1. Patient temperature subsides after taking cold drink.
2. Patient could verbalize the frequency of loose stool passed.
3. Patient was relieved of abdominal pain when he assumes supine position on bed.
4. Patient could walk to bathroom with assistance.
5. Patient could sleep for four (4) hours at night.
6. Patient and family could answer questions on some of the risk factors of gastroenteritis.

2.8 Patient /Family Health Problems

Problem is defined as a situation, person that needs attention and needs to be deal with or solved from (Weller, 2014) data collected during assessment, the following health problems were noticed on patient:

1. (08/11/21), Patient had high body temperature (Pyrexia, 38.0 ^{O}C).
2. (08/11/21), Patient experienced diarrhea and vomiting.

3. (08/11/21), Patient complained of abdominal pain.
4. (08/11/21), Patient looked very weak.
5. (09/11/21), Patient complained that he did not have a restful sleep.
6. (10/11/21), Patient and relative had little knowledge about the disease condition.

2.9 Nursing Diagnosis

According to Weller (2014), nursing diagnosis is defined as a clear and a definite statement of a health problem or of a potential health problem in the patient's health status that a nurse is professionally competent to treatment. These nursing diagnoses were formulated based on the health problems that were identified.

1. Pyrexia ($38.0^{O}C$) related to inflammation of the stomach and intestinal mucosa.

2. Risk for fluid and electrolyte volume deficit as evidenced by passage of loose unformed stools (four times). (08/11/21).

3. Acute abdominal pain related to inflammatory process in the stomach and intestine (08/11/21).

4. Activity intolerance related to weakness evidence by inability to perform activities of daily living (grooming himself, bathing) (08/11/21).

5. Insomnia related to environmental barriers such as noise as evidenced by patient having less sleep. (09/11/21).

6. Knowledge deficit related to inadequate information about the condition as evidenced by patient's less knowledge on the causes, sign, symptoms, management and prevention of the condition (11/11/21).

CHAPTER THREE

PLANNING FOR PATIENT/FAMILY CARE

3.0 Introduction

Planning is the process in which the nurse and patient together consider the goals to achieve in meeting the patient's identified or potential problems in daily life and produce an individual care plan (Weller, 2014). This is the third phase in the nursing process which deals with setting of goals and objective/outcome criteria to meet the health needs of the patient. These objectives/outcome criteria are set in order of priority which can be long or short term. This is made possible based on the actual and potential problems identified.

3.1 Objectives and Outcome Criteria for Patient/Family Care

According to Weller (2014), objective is defined as a specific result that a person aims to achieve within a time frame and with available resources. In general, objectives are more specific and easier to measure than goals.

As a result of the patient/family health problems identified, the following objectives were set for the patient/family.

1. Patient's body temperature would be reduced to normal (36.2^0C – 37.2^0C) within 24hours as evidenced by:

   a. Nurse recording patient's temperature within the normal range (36.2^0C to 37.2^0C).

   b. Patient verbalizing that he is not feverish.

2. Patient would maintain normal fluid and electrolyte volume throughout the period of hospitalization as evidenced by,

a. The nurse observing patient has a normal skin turgor and normotensive blood pressure.

b. Patient verbalizing that vomiting and diarrhea have subsided.

3. Patient would be relieved of abdominal pains within 48 hours of hospitalization as evidenced by,

a. The nurse observing patient been calm in bed with a relaxed facial expression.

b. Patient rating pain as 0 on the 0-10 numeric rating scale.

4. Patient would regain his strength for daily activities within 48 hours as evidenced by;

a. Patient verbalizing that he no longer has any feeling of bodily weakness.

b. Nurse observing that patient can bath, groom and walk unassisted.

5. Patient normal sleeping pattern would be restored within 24 hours as evidenced by;

a. Patient verbalizing that he had uninterrupted sleep.

b. Nurse observing that patient had uninterrupted sleep for 6-8 hours at night.

6. Patient and family would gain adequate knowledge on gastroenteritis within the period of hospitalization as evidenced by;

a. Patient and family being able to provide correct answers to questions posed to them with on the causes, management and prevention of gastroenteritis.

b. Nurse observing that patient and relatives practice knowledge gained on gastroenteritis.

3.2 Nursing Care Plan

This is the last step in the series of approaches used for presenting the patient's plan of nursing care. It enables the staff nurse to meet the needs of the patient and his family at a given time. The nursing care plan consists of date and time, nursing diagnosis, objectives/outcome criteria, nursing orders/interventions and evaluation

Table 6: Nursing Care Plan for Mr. A.J

Date and Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date and Time	Evaluation	Sign
08/11/21 11:45am	Pyrexia(38.0^{O}C) related to inflammation of the stomach intestinal mucosa as evidenced by rise in body temperature and patient feeling warm to touch.	Patient's temperature would fall within the normal range (36.2^{0}C to 37.2^{0}C) within 24hours as evidenced by; (a) Nurse recording	1) Monitor patient vital signs especially temperature 2) Reassure patient and relatives. 3). Change heavy and tight clothing into light ones. 4) Ensure enough ventilation by opening	1) Patient vital signs were monitored. 2) Patient and relatives were reassured of competent nursing care within the facility. 3) Patient heavy clothing was changed to light ones.	09/12/20 11:45am	Goal was fully met as nurse recorded a temperature of 37.1 ^{O}C and patient verbalized he is no more warm to touch.	T.O

		patient's temperature within the normal range (36.2^{o}C to 37.2^{o}C). (b) Patient verbalizing that he is not feverish.	windows and switching on fans 5) Serve cold drinks and liberal fluid. 6. Serve prescribed antipyretic agents such as paracetamol and prescribed antibiotics	4) Windows were opened and the fans were switched on. 5) Cold drinks and liberal fluids were served 6) Antipyretics and antibiotics such as Tab. Paracetamol 1g and Ciprofloxacin 400mg was served.			

Table 6: Nursing Care Plan for Mr. A.J Cont'd

Date and Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date and Time	Evaluation	Sign
08/11/21 12:30pm	Risk for fluid and electrolyte volume deficit as evidenced by passage of loose unformed stools 4 times a day	Patient will maintain normal fluid and electrolyte volume throughout the period of hospitalization as evidenced by,	1. Assess for signs and symptoms of dehydration. 2. Strictly monitor intake and output. 3. Assess blood pressure and pulse regularly.	1. Patient was assessed for signs and symptoms of dehydration. 2. Intake and output were strictly monitored. 3. Patient blood pressure and pulse were regularly assessed.	12/11/21 10:00am	Goal fully met as the nurse observed a normal skin turgor and patient verbalized that he no more pass diarrhea stools.	T. O

		a). The nurse observing patient has a normal skin turgor. b). Patient verbalizing vomiting and diarrhea have subsided.	4. Assess characteristics of diarrheal stools. 5. Administer isotonic intravenous fluids. 6. Administer prescribed antimotility drugs and antibiotics.	4. Patient diarrheal stools were assessed. 5. Prescribed intravenous isotonic fluids were administered. 6.prescribed antimotility drugs and antibiotics were administered Ciprofloxacin 400mg was served.			

Table 6: Nursing Care Plan for Mr. A.J. Cont'd

Date and Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date and Time	Evaluation	Sign
08/11/21 01:00pm	Acute abdominal pain related to inflammatory process in the stomach and intestine as evidenced by patient complains of pains in the abdomen for the four days.	Patient will be relieved of abdominal pains within 48 hours of hospitalization as evidenced by, a). The nurse observing patient been calm in bed with a relaxed facial expression. b). Patient rating pain as 0 on the 0-	1. Reassure patient that the pain would subside 2. Assess the level of pain on a pain rating scale. 3. Respond immediately to patient complains of pain. 4. Provide patient with warm comfortable bed.	. Patient was reassured that the pain will subside in the course of treatment. 2. The level of pain was assessed on a pain scale of 0 - 10. Patient rated on 6 on numeric rating scale. 3. Patient complains of pains were immediately attended to.	11/11/21 01:00pm	Goal fully met as nurse observed patient exhibit relaxed facial expression in bed and patient rated pain as 0 on the 0-10 numeric rating scale	T. O

		10 numeric rating scale	5. Monitor therapeutic effect of treatment given. 6.Serve prescribed pain medications.	4. Patient was provided with warm comfortable bed. 5. The therapeutic effect of the drug was monitored 6.Prescribed pain medications Tab. Paracetamol 1g was served.			

Table 6: Nursing Care Plan for Mr. A.J. Cont'd

Date and Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date and Time	Evaluation	Sign
08/11/21 **01:30pm**	Activity intolerance related to weakness as evidenced by inability to perform activities of daily living such grooming self	Patient will regain his strength for daily activities within 48 hours as evidenced by; b). Patient verbalizing that he no longer has any feeling of bodily weakness. a). Nurse observing that patient bathing, grooming and	1. Assess patient hydration and nutritional status. 2. Reassure patient and family. 3. Assist patient with the performance of certain activities like brushing the teeth and bathing. 4. Encourage patient to carry out	1. Patient hydration and nutritional status were assessed as patient was given enough fluids and balanced diet. 2. Patient was reassured that he will regain strength for his daily activities with available measures such as assisting patient to perform daily activities. 3. Patient was always assisted in performance of activities like bathing and brushing of his teeth. 4. Patient was encouraged to carry out activities he could tolerate such as walking around	10/12/21 01:30pm	Goal was fully met as nurse observed patient participating willingly in necessary and desired activities and patient also verbalized that he does not feel weak anymore	T. O

		getting dressed unassisted	activities he can tolerate with rest periods when tired. 5. Place items of daily use close to patient. 6. Engage patient in passive range of excise	bed with rest periods when tired. 5. Items of daily use such as comb, mirror were kept close to patient. 6) patient was engaged in passive range of activity like walking from bed to nurses' station, flexion and extension of hands etc.			

Table 6: Nursing Care Plan for Mr. A.J. Cont'd

Date and Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date and Time	Evaluation	Sign
09/11/21 08:15am	Insomnia related to environmental barriers such as noise as evidenced by patient having less sleep.	Patient normal sleeping pattern will be restored within 24 hours as evidenced by; a). Patient verbalizing that he had uninterrupted sleep b). Nurse observing that patient has uninterrupted sleep	1. Reassure patient that his sleep pattern will be restored. 2. Reduce noise in the ward. 3. Ensure warm bath at night to induce sleep. 4. Ensure comfortable bed	1. Patient was reassured that his sleep pattern will be restored with available measures. 2. Television sets were lowered, staff on the ward were encouraged to reduce noise making. 3 Patient was provided with warm water when bathing to induce sleep. 4. Patient bed was properly made free from creases and	10/11/21 08:15am	Goal fully met as patient verbalized that he sleeps well at night and nurse visualized that the patient slept throughout the night	T. O

		for 6-8 hours at night.	and good ventilation. 5. Plan and carry out nursing activities together. 6. Restrict visitors to prevent distraction of patient sleep	ward windows were opened to ensure ventilation. 5. Nursing procedures were carried out at a go. 6. Visitors were restricted to prevent distraction of patient sleep			

Table 6: Nursing Care Plan for Mr. A.J. Cont'd

Date and Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Intervention	Date and Time	Evaluation	Sign
11/11/2 10:30am	Knowledge deficit related to inadequate information about the condition as evidenced by patient less knowledge on the cause, signs and symptoms and also prevention of the condition.	Patient and family will gain adequate knowledge on gastroenteritis within period of hospitalization as evidenced by; a). Patient and family being able to provide correct answers to questions posed to them with on the	1. Assess their knowledge on his condition. 2. Inform patient and family about ways of preventing the symptoms and some management for the disease. 3. Allow patient and family to ask	1. Their knowledge on his condition was assessed. 2. Patient and family were informed about ways of preventing the symptoms and some management for the disease. 3. Patient and family were allowed to ask questions for clarifications on issues about the disease bothering their minds.	12/11/21 10:30am	Goal fully met as patient and family were able to verbalize the causes, management and prevention of the condition and family co-operated in the management of the patient.	T. O

		causes, management and prevention of gastroenteritis. b). Nurse observing that patient and relatives practice knowledge gained on gastroenteritis	questions for clarification. 4. Answer questions in simple understandable language without using medical jargons. 5. Ask patient and family to summarize what they heard. 6. Assess patient/family motivation and willingness in learning	4. All questions were answered in simple, plain and clear language without the use of medical jargons. 5. Patient and family were asked to give a feedback on what they heard. 6) Patient/family willingness and motivation in learning were assessed.			

CHAPTER FOUR

IMPLEMENTATION OF PATIENT/FAMILY CARE PLAN

4.0 Introduction

This chapter forms the fourth part of the patient/family care study. Implementation is the actualization of the nursing care plan through nursing intervention (Hinkle & Cheever, 2014). It gives the vivid account of the actual nursing care that was rendered to the patient/family from the day of admission until discharge based on the patient's health problems identified. This chapter also includes the preparation of the patient and his family towards discharge, home visit and continuity of care.

4.1 Summary of the Actual Nursing Care

The actual nursing care rendered to patient and his family commenced on the day of admission, 8th November, 2021 to the time care was terminated. The management of patient and his family was planned to meet their physiological, psychological, emotional and spiritual needs

Day of Admission, 8th November, 2021.

Patient arrived at the Males Ward on 8th November, 2021 at 11:45am, accompanied by his son and a staff nurse in a conscious and ambulatory state with the diagnosis of gastroenteritis through Emergency unit. He was fairly ill, weak and looked dehydrated. It was a planned admission. The patient's identity was verified by mentioning his name for response. He was then welcomed and immediately admitted and made comfortable in an admission bed. He was introduced to the staffs present and was assured of the competency of the healthcare team. His particulars such as name, sex, age, and residential address were recorded in the admission and discharge book and the daily ward state. Vital signs were checked and recorded as follows:

Temperature 38.0 ^{O}C

Respiration 20 cycles per minute

Pulse 91 beats per minute

Blood Pressure 110/85millimeters of mercury (mm/Hg)

Hospital policies regarding visiting periods, payment of bills and the time vital signs will be checked were explained.

He is to be managed on the following treatment.

1. Intravenous Ringers Lactate (1) liter over 24 hours.

2. IV Metronidazole 500miligrams 8 hourly in 48hours.

3. Intravenous Ciprofloxacin 400miligrams 12hourly in 48hours.

4. Tablet Paracetamol 1gram 8 hourly x 5 days.

5. Intravenous buscopan 40mg stat.

6. Dextrose in normal saline (1) liter over 8 hours.

Laboratory investigations ordered by the doctor included;

1. Full Blood Count (Haemoglobin, White blood cell count)
2. Stool for routine examination.
3. Blood test for malaria parasites.

Physical examination on the patient was performed from head to toe and assessment revealed that patient was warm to touch (38.0 ^{O}C), looked dehydrated and was experiencing abdominal cramps and pain which was relieved when he assumed a knee chest position. He was also orientated to the ward annexes. Patient and family were informed of the ward protocols the

rules and regulations including visiting hours and meal time. He was asked to get his personal items that will be needed during the period of admission. Patient was then introduced to the other clients who were on the ward.

I reintroduced myself to patient as a final year student nurse of the Nursing and Midwifery Training College, Berekum, who would like to take him and his family for my care study. Patient and his son were informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment towards the award of license to practice as a Registered General Nurse. I explained to the patient and his son the concept of the patient/family care study and assured them of privacy and confidentiality.
It was added that a report will be written after the entire event. Patient and his son agreed to my request and promised to offer me the necessary information and assistance. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus, they will continue the care at home once he is well. I decided to choose this patient for the study because I wanted to know more about gastroenteritis as the incidence of this condition is more prevalent in this locality and identify ways of preventing it.

It was added that a report will be written after the entire event. Patient and his son agreed to my request and promised to offer me the necessary information and assistance. I then expressed my gratitude to them. Discharge planning was initiated with the relatives; thus, they will continue the care at home once he is well. I decided to choose this patient for the study because I wanted to know more about gastroenteritis.

Patient and family were informed the rules and regulations including visiting hours and meal time. He was asked to get his own things that may be needed during admissions. Patient was then introduced to the other clients who were on the ward. Patient was made comfortable in bed and was reassured of competent nursing care within the facility.

A care plan was quickly formulated to care for patient and family.

At 11:45am, patient had high body temperature (fever) (38.0^0c). A nursing diagnoses of Pyrexia (38.0^OC) related to inflammation of the stomach and intestinal mucosa as evidenced by rise in body temperature and patient feeling warm to touch was made and a goal was set to bring patient temperature to normal (36.2^0C- 37.2^0C) within 24 hours. The following nursing interventions were carried out; adequate room ventilation was ensured by opening windows and switching on fans, Tablet Paracetamol 1gram was administered as prescribed and temperature was checked every 30 minutes afterward and recorded 37.0^0C. Interventions to carried out were; cold drinks and liberal fluids, temperature was reduced to normal as recorded and documented as 36.7 ^{O}C.

Assessment on admission at 12:30pm revealed that Patient has diarrhea and vomiting so a nursing diagnosis of Risk for fluid and electrolyte volume deficit related to diarrhea and vomiting as evidenced by passage of loose unformed stools 6 times a day. An objective was set to help maintain normal electrolyte volume throughout the period of hospitalization.

The following nursing interventions were carried out; Patient was assessed for signs and symptoms of dehydration, intake and output were strictly monitored, patients' blood pressure and pulse were regularly assessed, patient diarrheal stools were assessed, prescribed intravenous isotonic fluids were administered, prescribed antimotility drugs and antibiotics were administered.

At 1:00pm, patient gave a verbal complaint of abdominal pain. A nursing diagnosis of acute abdominal pains related to inflammatory process in the stomach and intestine, was made A goal to help relieve patient of abdominal pains within 72hours was set and the following interventions were carried out: patient was reassured that the pain will subside in the course of treatment, the level of pain was assessed on a pain scale of 0 – 10 as 8, patient complains of pains were

immediately attended to, patient was provided with warm comfortable bed, prescribed pain medications were administered.

Upon interacting with patient at 1:30pm, patient complained of body weakness and further observation on patient in relation to how he carried out his activities revealed that patient has general body weakness as he could not fully perform daily activities. A nursing diagnosis of Activity intolerance related to weakness as evidenced by inability to perform activities of daily living such as grooming self was formulated. An objective to help patient regain his strength for daily activities within 48 hours were set as the following interventions were carried out: patient nutritional and hydration status were assessed, patient was reassured that he will regain strength for his daily activities with available measures, patient was always assisted in performance of activities like bathing and brushing of his teeth, patient was encouraged to carry out activities he could tolerate such as walking around bed with rest periods when tired, patient was encouraged how to increase his willingness to gradually increase activity and items of daily use such as comb, mirror, bottled water was kept close to patient.

Patient took his afternoon medication at 2pm and vital signs were checked and recorded as Temperature- 37.8 ^{O}C, pulse-115bpm, Respiration-27cpm and Bp- 90/60mmHg. Patient took rice and tomato stew at 3pm, slept around 4:00pm.

At 4:30pm he had some visitors but since he was resting, they were not allowed to disturb him. He woke up at 5:50pm and took his bath. Vital signs were also checked and recorded as Temperature- 37.6 ^{O}C, Pulse- 82bpm, Respiration- 24cpm and Bp- 110/90mmHg at 6:00pm, drugs were served as prescribed. He then had supper at 6:30pm. He was congratulated after eating. Patient was reassured, he took a Milo drink at 7:30pm. Since he had already taken his bath, he brushed his teeth and a conducive environment created for him to induce sleep, afterwards he went to bed around 9:30pm. At 10pm vital signs were checked and recorded as;

Temperature 37.3^{o}C

Pulse 100 bpm

Respiration 21 cpm

Bp 120/75 mmHg

Second Day of Admission, 9th November, 2021

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

Temperature 36.7 ^{O}C

Pulse 77 bpm

Respiration 18 cpm

Bp 110/80 mmHg

Information from the night nurses during taking over at 08:15am and what patient added up indicated that he was unable to have adequate sleep throughout the night. A nursing diagnosis of disturbed sleeping pattern(insomnia) related to environmental barriers such as noise was made. An objective to help patient restore his normal sleeping pattern within 24 hours was set. The following interventions were carried out to achieve the said objective; patient was reassured that his sleeping pattern will be restored after interventions are carried out, volumes of television sets at the ward were switched off, patient was provided with warm water when bathing in the evening to induce sleep, patient bed was properly made free from creases and ward windows were opened to ensure ventilation. Visitors were restricted to prevent interruption of patient's sleep, nursing procedures were planned and carried out together to prevent disturbance of patient sleep. Patient was reviewed and ordered to continue treatment.

At 8:00am, Patient had his breakfast which was Hausa porridge with bread as he was able to consume half of the food.

His 10:00am vital signs were checked and recorded as follows;

Temperature 36.9°C

Pulse 95bpm

Respiration 20cpm

Blood Pressure 100/60mmHg

At 11:45am the goal set on the 8th November, 2021 to enable patient maintain his normal body temperature that is (36.2^{0}C to 37.2^{0}C) within 24hours was fully met as evidenced by the nurse recording body temperature within the normal range of (36.2-37.2°C). He was encouraged to have rest and monitoring continued.

His 02:00pm medications of tablet Paracetamol 1-gram, and intravenous Metronidazole 500 milliliters were duly served. Vital signs checked and recorded as;

Temperature 37.1 ^{O}C

Pulse 89 bpm

Respiration 27 cpm

Blood pressure 110/70 mmHg.

I embarked on my first home visit after work with the aid of the direction given me by patient and son. The purpose was to know patient's residence and the environment in which he lives, verify the information given to me as well as to identify the risk factors such as poor sanitation

that can lead to his condition. Patient ate fufu and light soup as supper. Vital signs were checked and recorded as in appendix and all his due medications were served.

Third Day of Admission, 10th November, 2021

According to patient's son, Patient woke up around 5:30am, he was then assisted by his son to brush his teeth, and also take his bath. At 6:00am, routine vital signs were checked accordingly and recorded by the night nurses. The vital signs were recorded as follows:

Temperature –35.8^{0}C

Pulse –76bpm

Respiration – 20cpm

Blood pressure – 110/90 mmHg

During the ward rounds at 7:40am, the medical officer attended to patient and plan was to continue with treatment regimen.

At 08:05am, as part of the nursing actions, patient was encouraged to take in fluids to correct his fluid deficits and also to teach him relaxation techniques such as knee-chest position to help reduce his pain. Patient was encouraged to verbalize his fears with regards to his stay in the ward.

At 08:15am, an evaluation of the objective set on 9th December, 2020 to restore patients sleeping pattern within 24 hours was done and goal was fully met as patient verbalized that he slept well and the night nurse testified that the patient slept throughout the night.

At 1:30pm, the objective set to help patient perform normal activities was evaluated and goal was fully met as nurse observed patient participating willingly in necessary and desired activities and patient also verbalized that he does not feel weak anymore.

Patient was served with fufu with light soup and meat for lunch. He was made comfortable in a well straightened bed after taking his meals. Vital signs were checked and recorded at 2:00pm as; Temperature - 36.3^{o}c, pulse - 82bpm, Respiration - 22cpm Blood pressure- 120/80mmHg. Patient was later handed over to the afternoon nurses for continuity of care.

From the afternoon nurses, Patient was served with tea with fried egg and bread as supper. Patient due 6:00pm medications were administered and vital signs were checked and recorded as Temperature- 37.2^{O}C, Pulse- 70bpm, Respiration- 18cpm and Bp- 110/70mmHg.

Patient was observed to perform his personal hygiene (bath and oral care) and was handed over to the night nurses.

At 10pm, patient's vital signs were checked and recorded as Temperature- 36.5^{O}C, Pulse- 70bpm, Respiration- 22cpm and Bp- 120/80mmHg.

Fourth Day of Admission, 11th November, 2021

Patient slept soundly during the night according to night staff and woke up at 6:00am. His 6:00am vital signs recorded as; Temperature - 36.1^{o}c, pulse - 81bpm, Respiration - 20cpm Blood pressure- 110/70mmHg. Patient was served with porridge with koose for breakfast at 7:30am.

During the ward routine rounds at 08:00am, treatment was to be continued and possible discharge to be considered the following day. Patient and relatives were informed about possible discharge the next day and were educated on the significance of follow up and the need to continue treatment at home.

At 10:00am, vital signs were checked and recorded as Temperature - 36.9^{o}c, pulse - 85bpm, Respiration - 20cpm Blood pressure- 120/80mmHg.

At 10:30am patient and son were engaged in an interaction and it was realized that patient and son did not have adequate knowledge on patient's condition (gastroenteritis). A nursing diagnosis was formulated as; Knowledge deficit related to inadequate information about the cause, management and prevention of the condition (gastroenteritis). Interventions carried out were; patient and family were reassured and rapport established, their knowledge on the condition was assessed. Patient and family were informed about ways of preventing the symptoms and some management for the disease. Patient and family were allowed to ask questions for clarifications on issues about the disease. All questions were answered in simple, plain and clear language without the use of professional jargons. Patient and family were asked to give feedback on what they heard. During procedure, patient and his son were cooperative. They participated by asking a lot of questions and were able to answer questions asked after the education, patient was then made comfortable in bed afterwards.

At 1:00pm, an evaluation of the objective set on 08/11/21 to help relieve patient of abdominal pains within 72 hours of hospitalization was evaluated and goal was fully met as nurse observed patient with a reduce facial expression

His vital signs at 2:00pm were checked and recorded as; Temperature - 36.3^{o}c, pulse - 82bpm, Respiration - 22cpm Blood pressure- 120/80mmHg and due medications were served and the necessary documentations were done. Patient consumed two balls of banku with groundnut soup with chicken for lunch and was later handed over to the afternoon nurses for continuity of care. According to afternoon nurses, in the evening, patient took his supper which was yam and kontomire stew, it was observed that patient was able to eat more than two-third of food served. Patient then had his bath and also maintained his oral hygiene. Vital signs were checked and recorded as Temperature- 37.0 ^{O}C, Pulse- 70bpm, Respiration- 18cpm and Bp- 110/70mmHg. He performed his evening prayers and afterwards he was made comfortable to sleep. He slept around 10:00pm.

Fifth Day of Admission, 12th November, 2021 (Day of Discharge)

According to the night nurse, patient woke up early feeling strong and better. His personal hygiene had already been kept and maintained. His 06:00am vital signs checked and recorded were as follows:

Temperature - 36.2°c,

Pulse - 72bpm,

Respiration - 24cpm

Blood pressure- 100/70mmHg.

At 10:00am, an evaluation of the objective set to help relieve patient of vomiting and diarrhea within the period of hospitalization was evaluated and goal was fully met as the nurse observed a normal skin turgor.

At 10:30am, an evaluation of the objective set on December 18th, 2020 to help patient and family gain adequate knowledge on gastroenteritis within period of hospitalization as evidenced by; patient and family being able to provide correct answers to questions posed to them on the causes, management and prevention of gastroenteritis, nurse observing that patient and relatives practice knowledge gained on gastroenteritis was done and goal was met fully as evidenced by Patient memorizing what he was taught on the condition. During routine ward rounds, patient was discharged since his condition was stable and had no complains. His son was informed and the bills were assessed to be paid. Patient was educated on his drugs as well as maintaining good personal hygiene and the need for follow ups and regular check-ups. No new medications were prescribed. Patient was informed to come for review on the 4th January, 2021. The need to continue with medications and review date were emphasized. They were helped to pack their belongings. Bed linens were sent to the laundry, the mattress and pillow were as well

decontaminated. Patient and the family bade the ward inmates and staff goodbye. I accompanied patient to the hospital taxi rank. The discharge procedure was documented in the admission and discharge book and in the daily ward state as well as in the nurse's notes.

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

Preparation of patient/family for discharge started from the day of admission when patient and family were told that the hospital was not going to be his permanent living environment but he will be discharged home soon. Patient and son were educated on the causes, signs and symptoms, complications and prevention of condition. This was to equip him to seek prompt medical attention whenever any member of the family was affected or advise any community member to report at the hospital when any of them is ill, for early detection and treatment.

Patient's relatives were educated to prepare food under hygienic environment, practice good personal hygiene, and wash their hands with soap and water before and after eating. He was educated to bath twice daily, wash clothes frequently, ensure proper disposal of refuse, and weed around the environment, and should ensure good drainage systems by draining all gutters. Patient was advised to keep the windows in the house open for fresh air so that their room will be well ventilated. They were informed to take the health education given seriously in order to promote and maintain their health even after discharge. The dangers of self-medication were spelt out to patient and son. Also educated him to report any change in his condition before the review date is due.

All patient's particulars were documented. All his bills were covered by health insurance.

I helped them to pack their belongings. I accompanied them to the entrance of the hospital where they boarded a taxi. I bade them good-bye when the car set off. They left the entrance around 12:35pm on the day of discharge.

4.3 Follow Up/Home Visit/Continuity of Care

Home visit is a family – nurse contact which allows the health worker to assess the home and family situation in order to provide the necessary nursing care and health related activities. The purpose of home visit in nursing is to give care to the sick with the view to teach a responsible family member to give the subsequent care, also to assess the living condition of the patient and his family and their health practices in order to provide the appropriate health teaching.

First Home Visit: 9th November, 2021.

Tuesday, 9th November, 2021 was my first home visit to my patient's house whiles he was still on admission at 02:30pm. I got to Kenyasi No.2, New Site around 03:05pm after attending to my patient on the ward. The aim was basically to find out about the environment in which the family live, and also to help identify the possible health problems in the home environment and to establish a link between the problems of my patient's condition and help remedy the situation through health education.

The house is situated few meters from Octagon Hotel of Kenyasi No.2, New Site. My patient's daughter and his two younger siblings were in the house when I got there. They welcomed me and greetings were exchanged, a seat was offered as well as a glass of water. I informed them that I have come to visit them in order to find out any information that can help in the management of my patient.

My assessment of the house revealed that patient occupies one room out of the three-bedroom house. The bath house is a temporal detached building in front of the house with a drain into the main gutter. They don't have a well-built kitchen. The main source of fuel for cooking is firewood and charcoal which produced a lot of smoke into the rooms. And took the opportunity to educate them not to allow too much smoke indoors. The main source of water is a borehole not far from their house and rain water which they stored in barrels without fitting lids. I educated

them on the need to cover the barrel, regular cleaning of the barrel. Their toilet facility was an aqua privy type with one hole and a container for collecting the toilet papers. Though the toilet was clean, however the hole and the container were not covered and flies were hovering around. They also said they normally burn the toilet papers when the container is full. Lastly, some bowls which they ate in the morning were kept unwashed in the compound.

I educated them on the need for personal and environmental hygiene such as washing their hands with soap and water after toilet and before meals, trimming of finger and toe nails, the need to bath at least twice a day, washing cooking utensils after meals and not leaving them overnight till the next morning, the need to protect food adequately from flies and dusts, clearing of bushes around the house and proper disposal of refuse. They were also given education on the disease condition (Gastroenteritis); its causes, mode of transmission, signs and symptoms and prevention. The need to ensure adequate ventilation, visiting the hospital. I told them of my next visit and bade them goodbye and left the house around 04:00pm.

Second Home Visit: 20th November, 2021.

The second home visit was made on, 20th November, 2021 in the morning at 10:35am and was very happy to see patient and the family. He was very well and his condition had improved. The purpose of the visit was to assess the health of patient and to see whether the education given during admission and first home visit were being followed. There was a warm reception on arrival and they were very happy to see me again. A seat and a glass of water was offered. And was very grateful to see him doing very well.

After assessing the surrounding, and congratulated them for keeping to the health education given. The barrel was well cleaned and fittingly covered with a lid. The backyard had also been cleared. The signs and symptoms, causes, prevention and complications of Gastroenteritis could easily be repeated to me by patient’s mother and the relatives. Patient was encouraged to do

more in order to promote his health. And also asked them if they had any concern to express in the care to be given to patient at the house. I reminded them of the review date which was on the 29th December, 2021 and its importance. I then asked permission and left there around 01:03pm for the house and I was escorted by Patient and son.

Review (29th November, 2021)

On Monday 29th December, 2021 Patient and son were met at the Out-Patient Department of Asutifi North District Hospital at 9:00am looking cheerful and lovely as noted from their facial expression. I accompanied them to go for patient's folder. The vital signs checked and recorded as follows;

Temperature	36.2ºC
Pulse	70bpm
Respiration	18cpm
Blood pressure	110/70mmHg

At the Out-Patient Department, patient was seen by the medical officer. Upon assessment, patient was healthy. Patient did not have complains. No medication was given to him. He was informed not to hesitate to report to the hospital should he encounter any health problem. He was also encouraged to practice personal and environmental hygiene to protect himself from getting diseases. Patient was assured of a third home visit. I then accompanied them to a lorry station which is about three minutes' walk from the hospital entrance where they took a taxi to their home.

Third Home Visit: 5th January, 2022

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

On the said date, I set off early Monday afternoon around 12:00pm with a taxi. I got to Kenyasi No.2, at around 12:45pm. Patient and family were doing well as they looked cheerful and had no complains. The environment was tidy as there were no rubbish nor stagnant water around. I terminated my care and handed over patient to one Nurse E.A, I thanked them for their cooperation which made my study a success. Patient's son commended me for good work done and accepted to continue the care of patient at home. 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. After interacting with patient and family for a while, I reemphasized on health education 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. Patient and his 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. I took a taxi to Berekum at 2:15pm.

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, 2014). The chapter gives information about the statement of evaluation, amendment of nursing goals and the termination of the care rendered to patient and family.

5.1 Statement of Evaluation

According to Bare (2011), evaluation is defined as the final stage in the learning process and is a measure of the degree to which the patient has mastered the learning objective. Patient was admitted to the Males Ward with the diagnosis of Gastroenteritis. All goals and objectives were fully met. Below is the summary of the interventions carried out and to what extent the goals were met:

1. Patient's body temperature was reduced to normal

On 08/11/20 at 11:45am, that patient had high body temperature (fever), a nursing diagnosis of Pyrexia (38.0^{O}C) related to inflammation of the stomach and intestinal mucosa was made. An objective was set to enable patient restore his normal body temperature that is 36.2^{o}C-37.2^{o}C within 24hours.The following nursing interventions were carried out; adequate room ventilation was ensured by opening windows, tablet Paracetamol 1gram was administered as prescribed and temperature was checked 5 minutes afterwards and read 37.5^{0}C, cold drinks and liberal fluids were to be served, temperature was checked every 4 hours and recorded. Goal was fully met on 9th November, 2020 at 11:45am as evidenced by Nurse recording body temperature of 37.1^{o} C and patient verbalized he is no more feverish.

2. Patient was prevented from fluid and electrolyte deficit.

Assessment on admission at 12:30 pm revealed that patient had diarrhea and vomiting. A nursing diagnosis of Risk for fluid and electrolyte volume deficit related to diarrhea and vomiting as evidenced by passage of loose unformed stools 4 times a day was formulated and a goal to help patient to be relieved of vomiting within period of hospitalization was set. The following nursing interventions were carried out; patient was assessed for signs and symptoms of dehydration; patient was educated on the importance of fluids to the body. Copious intake of fluid was encouraged, patient vomitus was assessed, isotonic intravenous fluids were administered, and prescribed antibiotics were administered

On 12th November, 2020 around 10:00pm, the objective that was set was fully met as Patient maintained normal fluid and electrolyte volume throughout the period of hospitalization as evidenced by, the nurse observed patient with a normal skin turgor and blood pressure.

3. Patient was relieved of abdominal pains.

On 8th November, 2021 around 01:30pm, patient gave a verbal complaint of abdominal pains. A nursing diagnosis of acute abdominal pains related to inflammatory process in the stomach and intestine was formulated. A goal was set to relieve patient of the abdominal pains within 48hours. The following interventions were carried out to meet the objective set; patient was reassured that the pain will subside in the course of treatment, the level of pain was assessed on a pain scale of 0 – 10, patient complains of pains were immediately attended to, patient was provided with warm comfortable bed and prescribed pain medications were served.

On 10th November, 2021 at 01:30pm, the objective that was set was evaluated and goal was fully met as the nurse observed patient been calm in bed with a relaxed facial expression and patient rating pain as 0 on the 0-10 numeric rating scale.

4. Patient regained strength for his daily activities.

On 8th November, 2021 around 01:30pm, patient gave a verbal complaint of generalized body weakness so a nursing diagnosis of Activity intolerance related to weakness as evidenced by inability to perform activities of daily living such grooming self was formulated. A goal was set to help patient regain strength for his daily activities within 48hours. The following interventions were carried out to meet the objective set; patient mobility level was assessed prior to exercise, patient was reassured that he will regain strength for his daily activities with available measures, patient was always assisted in performance of activities like bathing and brushing of his teeth, patient was encouraged to carry out activities he could tolerate such as walking around bed with rest periods when tired, patient was encouraged how to increase his willingness to gradually increase activity.

On 10th November, 2021 at 01:30pm, the objective was evaluated and goal was fully met as patient verbalized that he no longer had any feeling of bodily weakness and nurse observed that patient could bath, groom and get dressed unassisted.

5. Patient sleep pattern was restored.

On 9th November, 2021 At 08:15am indicated that patient did not have a restful sleep. A nursing diagnosis of Insomnia related to environmental barriers such as noise and an objective to help restored patient sleeping pattern to normal within 24 hours was set. Nursing interventions carried out were as follows: patient was reassured that his sleep pattern will be restored with available measures, television sets on the ward were lowered, patient was provided with warm water when bathing to induce sleep, patient bed was properly made free from creases and ward windows were opened to ensure ventilation and nursing procedures were carried out together to prevent disturbance of patient sleep.

On 10th November, 2021 at 8:15am, the objectives were evaluated and goal was fully met as patient verbalized that he had uninterrupted sleep and nurse observed that patient had uninterrupted sleep for 6-8 hours at night.

6. Patient/family gained knowledge on gastroenteritis.

On 11th November, 2021 at 10:30am patient was engaged in an interaction and it was realized that patient and son had less knowledge on gastroenteritis. A nursing diagnosis formulated was as; Knowledge deficit related to inadequate information about the cause, management and prevention of the condition (gastroenteritis). Interventions carried out were; patient and family were reassured and rapport established with them, their knowledge on his condition was assessed, patient and family were informed about ways of preventing the symptoms and some management for the disease, patient and family were allowed to ask questions for clarifications on issues about the disease bothering their minds and lastly, all questions were answered in simple, plain and clear language without the use of medical jargons. Patient and family were asked to give feedback on what they heard and all procedures carried out on patient were document in the nurses' note accordingly.

On 12th November, 2021 at 10:30am the objective set to enable patient gain adequate knowledge on gastroenteritis within the period of hospitalization as evidenced by; patient and family being able to provide correct answers to questions posed to them on the causes, management and prevention of gastroenteritis, nurse observing that patient and relatives practice knowledge gained on gastroenteritis was evaluated and goal was met fully.

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 patient and family, all of the goals set were fully met. The care plan was therefore not amended.

5.3 Termination of Care

Every nurse-patient relationship at the hospital needs to be terminated. However, this is a very difficult step to take after a good rapport has been established. Because of this, the reality of termination of care has to be made known to both patient and family from the day of admission. Care of patient and family ended on the 5th December, 2021 which was my last home visit. This ended the interaction between the health team, patient and his family. The preparation for termination started on day of admission through discharge, review to the third home visit. Patient was clinically ill on admission but became stable before discharge. During these periods, patient sand family were educated on various topics such as; patient and family were encouraged to practice personal and environmental hygiene, always wash their hands with soap under running water after visiting the patient, foods should be heated and covered with well-fitting lids from flies and fruits should be washed before taken. 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 his family for continuity of care. They were informed that now that patient's health had been restored, the care for him has officially ended. 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 difficult bidding them farewell.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Introduction

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

6.1 Summary

On the 08/11/21 at 11:45am, Patient, a 46year old man was admitted to the Males ward at Asutifi North District Hospital, Kenyasi No.2. Patient complained of having high body temperature, excessive vomiting and diarrhea, anorexia, insomnia and abdominal pain. Laboratory investigations such as full blood count, blood film for malaria parasite and stool for routine examination were also conducted to confirm the cause of the condition (gastroenteritis).

During the period of admission, patient was put on both oral and intravenous medications including;

1. Intravenous Ringers Lactate (1) liter over 24 hours.
2. Metronidazole 500miligrams 8 hourly in 48hours.
3. Intravenous Ciprofloxacin 400miligrams 12hourly in 48hours.
4. Tablet Paracetamol 1gram 8 hourly x 5 days.
5. Intravenous buscopan 40mg stat.
6. Dextrose in normal saline (1) liter over 8 hours.

The health problems identified were: high body temperature (Pyrexia, 38.0 ^{O}C), diarrhoea and vomiting, abdominal pain, body weakness, difficulty sleeping and inadequate knowledge about the disease condition.

Some of the nursing interventions carried out were reassurance, adequate ventilation, thorough education on the disease condition and assisting patient in maintaining his personal hygiene. Adequate rest and sleep, nutrition, and exercises were also ensured. Patient and the son were encouraged to continue care at home after discharge.

On the 29th November, 2021 patient reported for review as scheduled and he had greatly improved. Three home visits were embarked on. The first home visit was done while patient was still on admission on 9th November, 2021, second home visit was on the 20th November, 2021 and third home visit was on the 5th December, 2021. The care of patient and his family were terminated on the 5th January, 2022, during the third home visit when patient had fully recovered.

6.2 Conclusion

In conclusion, my choice of nursing patient has greatly increased my knowledge into his condition, gastroenteritis. It has given me in depth knowledge on the causes, signs and symptoms, diagnosis, treatment, complications and possible prevention of the disease condition. This study has also enabled me gain knowledge on how to practically care for a patient with gastroenteritis using the nursing process.

I therefore recommend that every health institution employs the use of the nursing process, so as to enable them provide individualized, holistic and comprehensive nursing care to help decrease re-occurrences of diseases in our hospitals as well as reducing mortality rate.

I also recommend that every nursing student be given the opportunity to embark on the patient/family care study to enable them obtain more insight on the condition under study.

APPENDIX

Date	Time	Temperature (^oC)	Pulse (Bpm)	Respiration (Cpm)	Blood pressure (mmHg)
08/11/21	11:45am	38.0	91	20	110/85
	02:00pm	37.8	115	27	90/60
	06:00pm	37.6	82	24	110/90
	10:00pm	37.3	100	21	120/75
09/11/21	06:00am	36.7	77	18	110/80
	10:00am	36.9	95	20	100/60
	02:00pm	37.1	89	27	110/70
	06:00pm	36.8	92	19	120/80
	10:00pm	36.0	76	21	120/70
10/11/21	06:00am	35.8	76	20	110/90
	10:00am	36.8	74	18	110/70
	02:00pm	36.3	82	22	120/80
	06:00pm	37.2	70	18	110/70

	10:00pm	36.5	70`	22	120/80
11/11/21	06:00am	36.1	81	20	110/70
	10:00am	36.9	85	20	120/80
	02:00pm	36.3	82	22	120/80
	06:00pm	36.7	75	20	110/70
	10:00pm	37.0	70	18	100/60
12/11/21	06:00am	36.2	72	24	110/70

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