HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE

BEREKUM

A PATIENT/FAMILY CENTERED NURSING CARE STUDY ON GASTROENTERITIS

ADU PATRICK JOSEPH

4120210011

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

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PREFACE

Nursing 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.

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My first and foremost thanks go to the Almighty God for His direction, strength and protection throughout my study.

I express my gratitude to Madam R.O and her 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, especially to my supervisor Mr. Joseph Appiah who supervised my script.

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My appreciation also goes to my mother, Madam Mary Addae, my uncle Mr. Addo Richard and his wife Madam Elizabeth Asibi and my brother Jonathan Appiah for helping me financially and spiritually to be able to complete the study.

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Finally, I will also like to send my sincere gratitude to the numerous authors and publishers of the various books, articles and webpages I used in making this care study the masterpiece it is.

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 seven years old boy who for the purpose of confidentiality, will be referred to as B.A.E.K. in this study. B.A.E.K was admitted to the Paediatrics Ward at the S.D.A Hospital, Sunyani on the 29th November, 2022 and was discharged on the 2nd December, 2022. B.A.E.K. spent four days in the hospital. I introduced myself to his mother as a final year student at Holy Family Nursing and Midwifery Training college, Berekum, 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 fluid and electrolyte imbalance, altered nutritional pattern, activity intolerance, diarrhea, anxiety and knowledge deficit 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.

B.A.E.K 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, 2009). 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)**.** B.A.E.K is the patient for my care study; he was born on 26th March, 2015 at Fiapre, Sunyani in the Brong region. My patient is 7 years old. He was born to Madam R.O and Mr. S.K. He is the third child among the three children born to his parents. He comes from Fiapre and stays at Fiapre in house number S-56 in Sunyani in Brong Region. He is fair in complexion. He is a Christian and attends Pentecostal Church at Fiapre (Berlin top). Madam

R.K. who is B.A.E.K elder sister, is his next of kin. He speaks his mother tongue (Twi). B.A.E.K is a class one pupil of Wesley Preparatory School at Fiapre (Berlin top). His folder number is 13541/22.

1.2 Family's Medical/Surgical History

My conversation with Madam R.O. (mother of B.A.E.K), revealed that, there is a familial disease such as hypertension and diabetes in their family. Currently B.A.E.K sibling is not sick or injured, they are all in good health except His father, Mr. S.K. who is suffering from kidney failure. None of the family members has undergone surgery before. The source of medical treatment for B.A.E.K family is orthodox medication, that is over the counter drugs especially,Paracetamol to treat sickness like headache. They sometimes use herbs to treat some skin disorders. B.A.E.K family has allergies such as dust and perfume. According to Madam R.O., his uncle is a decease, he was diagnosed of hypertension and died 6months time after he was diagnosed. His grandparents are alive and has been hospitalized before with the diagnosis of hypertension and diabetes. Madam R.O. told me that, there is no communicable diseases and mental disorders in the family.

1.3 Family's 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) As a child of 7 years old, the parents provide him with all that he needs such as food, cloth and shelter. His father is a pastor at Greater Grace Temple at Tanoso in Sunyani and according to the mother she works at Sunyani Municipal Assembly. Upon discussion with his mother, average monthly income is around seven hundred Ghana cedis (GHC700.00), averaging eighty-four thousand Ghana cedi's (GHC84,000.00)

annually. A very cordial relationship exists in their family as they give one another emotional support and other necessary things needed. According to the mother, all members of the family are Pentecostal members except the father who attends greater grace temple at Tanoso in Sunyani and are much concerned with their religious responsibilities. The family has registered with the National Health Insurance Scheme (NHIS), this enables them to get free medical treatment when they fall sick.

1.4 Patient's Developmental History

Growth, Maturation and Development are often thought to mean the same thing but in truth they are quite different concept. Growth is a change in body size, body composition or dimensions of a specific region of the body (Joyce and Lewindon,2014). Maturation is the progression of the human body towards adulthood (Lloyd and Oliver, 2014). Development refers to how individuals motor skills develops and movement patterns as the child grows up (Joyce and Lewindon, 2014).B.A.E.K was born at SDA Hospital, Sunyani, on the 26th of March , 2015.He was born at term through Cesarean Section (CS) . His mother was about 37 years when she gave birth to him. Madam R.O said her son started sitting and crawling when He was Eight (8) months old and started developing his milk teeth in the same month. B.A.E.K was immunized against vaccine preventable diseases and there was an evidence of BCG scar on his right arm indicating immunization. He was exclusively breastfed. He started his basic education in the year 2018. He is at the fourth stage of development among the eight stages according to Erik Erikson's psychoanalytical theory of development. He is at the stage of Industry versus Inferiority which centers on how children will be learning to write and read and to do things on their own. Through my observation, I saw that B.A.E.K. is at the industry stage, because he can perform daily activities on his own without assistance or depending on his parent. At this stage the child peer group will gain greater

significance and will become a major source of the child's esteem. In my conversation with madam R.O., B.A.E.K is able to do things on his own and at times fetches water for his parents .He is an industrious and interesting child.

1.5 Patient's Lifestyle/Hobbies

A lifestyle is someone's way of living which typically reflects an individual's attitudes and values (Merriam-Webster, 2013). Hobbies are activities that we do for pleasure in our free times. B.A.E.K. has a normal sleeping pattern in the absence of any disease or infirmity. According to his mother, he normally sleeps as late as 10:00 pm and mostly does not wake up until about 6:00 am. He started showing interest in playing football at the age of 4 years. B.A.E.K. does not often cry and can be described as friendly. According to his mother, B.A.E.K brushes his teeth and takes his bath with cold or warm water depending on the weather condition. His mother said he likes porridge made of millet in the morning. His favorite meal is Banku and Okro stew. B.A.E.K is allergic to dust and perfume, He is an extrovert child because he used to mingle with the children at the Pediatric ward after he recovered from his sickness and on my third home visit, I met him playing football with the children at his area. According to the mother he normally passes out stool twice in a day and also urinates more than twice in a day depending on the fluid intake.

1.6 Patient's Past Medical/Surgical History

Past medical history is the total sum of a patient's health status prior to the presenting problem. It covers patient last date of hospitalization, past illness, any known allergies, significant injuries, surgeries etc. B.A.E.K has been hospitalized before this current admission due to skin infections.

Madam R.O said her son has been having malaria, and fever and are mostly treated with over-thecounter drugs. He has no known allergies to drugs, animals or any food but rather perfume and dust. His last date of admission was on 22nd of October, 2022 due to some skin infections.

B.A.E.K had no childhood illness, like measles, whooping cough and other diseases as he grew from childhood. He has no known allergies to drugs, animals, insects or any food. He has never had any accident or injuries before. He has been hospitalized before.

1.7 Patient's Present Medical/Surgical History

Patient was brought to the hospital on 29th November, 2022 with complains of vomiting, coughing, running of watery stool and could not eat well which started the previous day According to client mother, he was well until the 29th day of November, 2022 in the afternoon when he started experiencing severe vomiting, three times a day with a measurement of 200mls of each vomit when compared.

On the 29th day of November in the evening around 5:00 pm, the situation got worse as he continues vomiting accompanied by coughing. He was then brought to the Outpatient Department (OPD) on the 29th of November, 2022 around 6:00pm at Seven Day Adventist (S.D.A) Hospital, Sunyani. On the 29th of November, 2022 in the evening, patient was admitted to the Paediatrics Ward with diagnosis of Gastroenteritis by Dr. K.K., An account was obtained during the interview with the patient mother on the onset, duration, and character of the present illness, as well as any acts or factors that aggravate or ameliorate the symptoms (Mosby's Medical Dictionary, 2009).

1.8 Admission of the Patient

As specified by Esena (2011), admission is the initiation of care, usually referring to inpatient care. On 29th November, 2022, at 7:02pm, B.A.E.K with his mother accompanied by a nurse walked into the Paediatric Ward for admission. He was admitted by Dr.KK with the diagnosis of Gastroenteritis. They were warmly welcome and seat was offered to them. I introduced myself, and the other staffs on duty to his mothers. The nurse handed over his folder to me, I confirmed the particulars in the folder with those the mother told me. It was a planned admission. The patient's identity was verified by mentioning his name for response. He was then welcomed again and immediately admitted and made comfortable on an admission bed. I assisted the mother in arranging his personal items. I orientated his mother to the ward and its annexes and I introduced the other patients in the same room to the mother. Madam R.O(his mother) complained that B.A.E.K has been vomiting, cannot eat well, inability to sleep, running nose, coughing and having diarrhea. He looked weak and moderately dehydrated.

Vital signs checked on admission was recorded as:

Temperature-36.3'C,

Pulse- 88bpm

Respiration - 25cpm,

Other body measurement was checked and recorded as, RBS-5.3mmol.

Weight – 25kg

I then entered the information into the admission and discharge book and the daily ward state.

His medications were collected and administered as prescribed by the Doctor. His medications on admission include;

1. Oral Rehydration Salt 3 sachets

2. Metronidazole 125miligrams 8 hourly in 48hours.

3. Ringers lactate solution,500ml, daily*1.

4. Syrup Zincovit 5mililitres daily x 30days

5. Dextrose 5% in sodium chloride 0.9%(500ml) daily*1 Laboratory investigations ordered by the doctor included:

1. Full blood count (Hemoglobin, white blood cell count).
2. Blood for malaria parasites.
3. Routine urine examination.
4. Stool for culture and sensitivity.

The urine and the stool for the investigation was collected on the next day of the admission. I wake B.A.E.K and his mother up around 5:40am in the morning, I asked the mother to give me the urine bottle and the stool bottle which was requested from laboratory by Dr. K.K. I accompanied B.A.E.K. at the washroom and collected the stool and the urine for the laboratory investigation.

B.A.E.K had allergies of perfume and dust. An intravenous cannula was set for patient and blood sample taken to laboratory for laboratory investigations. His due medications were administered

accordingly. Patient was made comfortable in bed and Madam R.O was reassured that she was in good hands and both doctors and nurses will do their best to the recovery of B.A.E.K.

I introduced myself as a final year student of the Holy Family Nursing and Midwifery Training College, Berekum. I made them aware of my desire to take B.A.E.K and his family as the patient/family for a care study to enable me render to his individualized comprehensive nursing care until he is discharged home and even follow him after discharge for some time until he has fully recovered.

I made it known to them that it was a requirement by the Nursing and Midwifery Council in partial fulfillment towards the award of license to practice as a Registered General Nurse in Ghana and they agreed to my request and promised to cooperate in the care of B.A.E.K. I explained to madam R.O. and her 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. Madam R.O. and her 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 morning nurse for continuity of care.

A care plan was quickly drawn to care for patient and family. A nursing care plan was drawn based on patients' problems in order to help give individualized care to them. The actual care rendered is discussed in chapter four.

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's mother did not know and understand the specific causes of her son's illnesses. She was however quick to recognize the signs and symptoms of ill health such as fever, vomiting and diarrhoea. She was looking forward to seeing her son recover speedily. She believed that her son's illness could be treated by modern medicines and was much specific about the need for orthodox medicine.

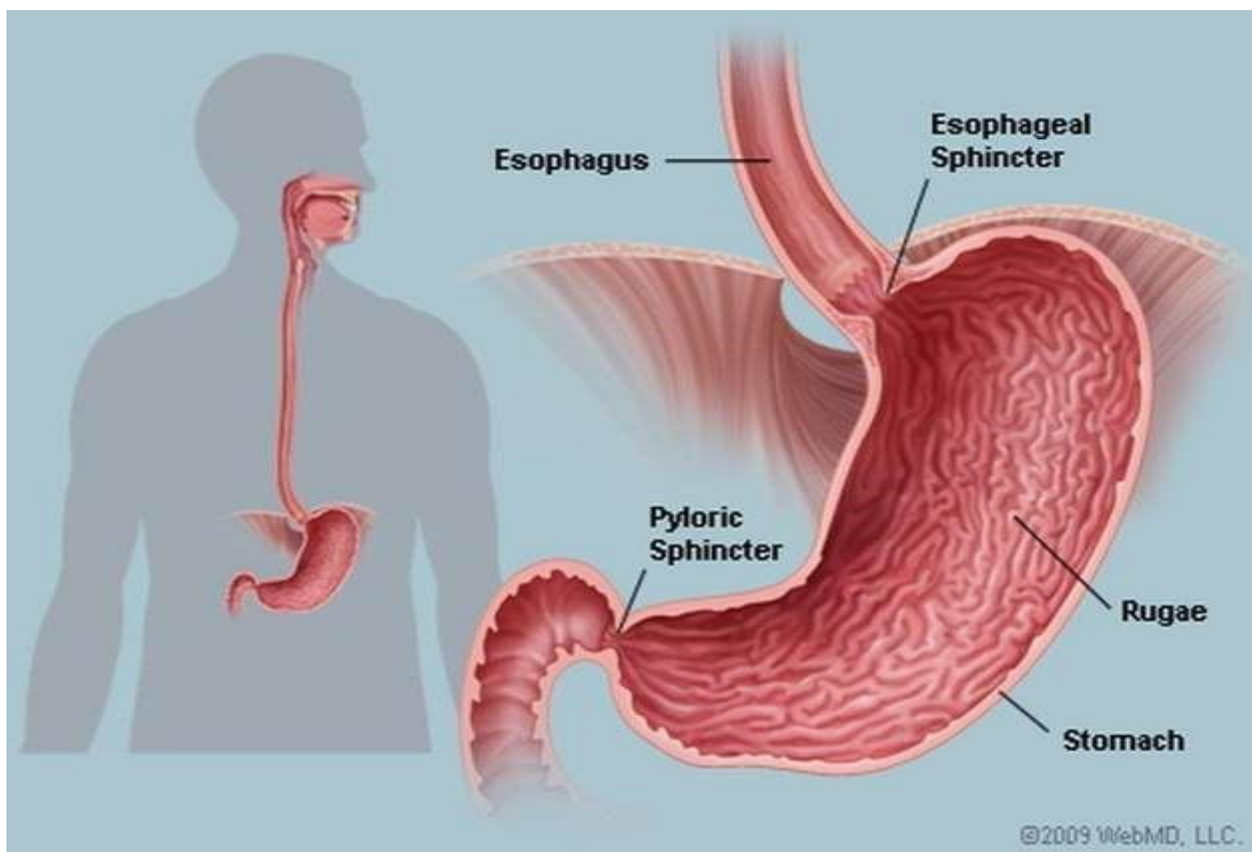
1.10 Literature Review on Gastroenteritis

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.

1.11 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 B.A.E.K. This chapter also captures the patient/family strengths, the health problems identified and nursing diagnoses formulated for given care to B.A.E.K.

2.1 Comparison of Data with Standards

A. Diagnostic Investigations/Tests

Investigation is the act or process of doing a careful search or examination in order to discover facts.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 culture and sensitivity.

4. Routine Urine Examination

Table 1: Diagnostic investigation conducted for B.A.E.K. as compared with the 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 Investigations/Tests Compared With Standards

Date	Specimen	Investigation	Result	Normal Value	Interpretation	Remarks
29/11/22	Blood	Haemoglobin(HB) level	12.5g/dl.	11.0-18.0 (male) 12.0-15.0 (female)	Normal value	No treatment given
29/11/22	Blood	Blood film for malaria parasites (MP's)	No malaria parasites seen.	No malaria parasites should be seen	Malaria parasite absent	No treatment was given
29/11/22	Blood sample	White blood cell count.	5.99×10^3 /μL	$4.0\text{-}10.0 \times 10^9$/liter	Normal value Absence of infection in the blood.	No treatment was given
29/11/22	Stool	Culture and sensitivity	Positive campylobacter species isolated	Negative	Diarrhea accompany by vomiting was caused by bacterial.	Intravenous Metronidazole 125mg were given and Rangers lactate administered.
29/11/22	Blood Sample	Platelet count (PLT)	317	150-450	Normal value	No treatment was given

Table two (2) shows the details of the investigations/tests carried out on B.A.E.K during his admission. It is made up of date of requisition, type of specimen requested, diagnostic investigations/tests carried and results, corresponding normal values, interpretations and remark.

B. The cause of patient's illness

With reference to the causes of gastroenteritis stated in the literature review, the cause of my client's illness was due to contamination of campylobacter species isolated in the culture and sensitivity results of his stool test.

Specific Medical Treatments Given to Patient

The following treatments were given to Patient;

1. Oral Rehydration Salt 3 sachets
2. Metronidazole 125miligrams 8 hourly in 48hours.
3. Ringers lactate solution,500ml, daily*1.
4. Syrup Zincovit 5mililitres daily x 30day
5. Dextrose 5% in sodium chloride 0.9%(500ml) daily*1

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.
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 Metronidazole) were prescribed for the patient.
Rehydration agents (Oral rehydration solution)	Rehydration agent (oral rehydration solution) was prescribed for the patient.

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.

2.2. Clinical Manifestation

Table two below shows the Clinical Manifestation of Patient as Compared to Literature Review.

Table 4: **Comparison of Clinical Manifestation with Literature Review**.

Clinical Features in Literature Review	**Clinical Features Exhibited By Patient**
Nausea and vomiting	Patient experienced nausea and vomiting.
Diarrhoea	Patient experienced diarrhea
Loss of appetite	Patient experienced loss of appetite
Fever	Patient did not experience fever
Headaches	Patient did not experience headaches
Abdominal flatulence	Patient did not experience abdominal flatulence
Abdominal pain	Patient experienced abdominal pain
Abdominal cramps	Patient did not experienced abdominal cramps
Bloody stools	Patient did not experienced bloody stools
Fatigue	Patient experienced fatigue
Heartburn	Patient did not experienced heartburn
Lethargy/irritability	Patient experienced lethargy/irritability
Lack of sleep	Patient did not had insomnia

Reduced skin turgor	Patient had reduced skin turgor
Weight loss	Patient experienced weight loss.
Oedema	Patient did not experienced oedema.
Abdominal distension	Patient did not experience abdominal distension
Hepatomegaly	Patient did not experience hepatomegaly

From the table, it is evident that my patient had gastroenteritis because he exhibited most of the clinical features as: nausea and vomiting, diarrhea, loss of appetite, fatigue, lethargy, abdominal pain, weight loss and reduced skin turgor.

Table Four (4): Pharmacology of Drugs Given To B.A.EK

Date	Drug	Dosage/Route of Administration to B.A.E.K	Classification	Desired Effect	Actual Action Observed	Side Effects/Remarks
29/11/2022	Rangers lactate	1liter over 24 hours; 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
29/11/2022	Oral Rehydration Salt	3 sachets Orally	Fluid and electrolyte balance.	To restore fluids and electrolytes balance	Patient was well hydrated and her skin turgor improved	Nausea and vomiting, stomach upset No side effect observed

Table Four (4) Shows Pharmacology of Drugs Given to B.A.E.K cont'd

Date	Drug	Dosage/Route of Administration to B.A.E.K	Classification	Desired Effect	Actual Action Observed	Side Effect/Remarks
29/11/2022	Metronidazole	125mg 8 hourly x 48 hours Intravenously	Antibacterial, antiprotozoal	Disrupts DNA, inhibiting nucleic acid synthesis.	Patient did not show any sign of infection.	Anorexia, dry mouth, diarrhoea, constipation, dizziness. None of the above effect was observed.
29/11/2022	Dextrose 5% sodium chloride solution.	Intravenous(500ml)*1	Hypoglycemia antidote.	To restore blood sugar level.	Patient blood sugar restored	Swelling, hyperglycemia. No side effect was observed on patient.
29/11/2022	Syrup Zincovit	5mls daily x 30days orally (Suspension)	Haematinic	To correct anaemia by helping in the formation of red blood cells and boosting up immunity	Patient'sanaemia was corrected	Nausea, vomiting, constipation, anorexia, diarrhoea. None was observed.

Complications

With regards to the complications outlined under the literature review, B.A.E.K 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.

2.2 Patient/Family's Strengths

These involve the activities that contribute to the well-being of patient and his family as well as his speedy recovery. Through interaction and observation of B.A.E.K and his mother, it was revealed that, they had several strengths, which in diverse ways contributed to the patient's quick recovery. These strengths include;

1. Patient was able to clean his mouth with water after vomiting.
2. Patient was able to communicate with the nurse about his favourite diet.
3. Patient could tolerate activities of daily living if assisted example bathing, walking etc..
4. Patient was able to tolerate oral fluids.
5. Patient and family were cooperative despite deficient knowledge about condition.
6. Patient was able to ask the nurse about his disease condition.

2.3 Patient /Family Health Problems

Health problem is a state in which people are unable to function normally and without pain Health is also a state of complete physical, mental and social wellbeing and not merely the absence of diseases or infirmity, according to W.H.O, (1948).

Through assessment, observation as well as the complaints made by patient and his mother, the following health problems were identified;

1. Patient complains of nausea and vomiting (29/11/22)
2. Patient mother complains of loss of appetite (29/11/22)
3. Patient had general body weakness (29/11/22)
4. Patient had diarrhoea and looked dehydrated (29/11/22).
5. Patient mother was anxious (29/11/22).
6. Patient mother does not know anything about the disease condition (29/11/22).

2.4 Nursing Diagnosis

According to Bailliere's Nursing Dictionary (2009), 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 on my patient.

1. Fluid volume deficit related to vomiting(29/11/22)
2. Alteration in nutrition (less than body requirement) related to loss of appetite.(29/11/22)
3. Activity intolerance related to general body weakness.(29/11/22)
4. Diarrhea related to bacterial infections. (29/11/22).
5. Anxiety (patient's mother) related to unknown outcome of condition and hospitalization (29/11/22)
6. Knowledge deficit (patient's mother) related to inadequate information about the cause, management and prevention of the condition (29/11/22)

CHAPTER THREE

PLANNING FOR PATIENT/FAMILY CARE

3.0 Introduction

Planning is the process of thinking about and organizing the activities required to achieve a desire goal (Anderson, 2009). This is the third component of the nursing process which involves setting objectives/outcome criteria that will help to solve the problems identified. It involves the use of the nursing care plan to set objectives for patient and family. The nursing care plan enables care to be continued and also interventions to be carried out to help the patient to relieved of his problems. It is based on the potential and actual problems identified.

3.1 Objectives and outcome criteria for Patient/Family Care

According to Bailliere's Nursing Dictionary (2009), 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. (29/11/22)Patient's fluid and electrolyte volume will be restored within 48 hours as evidence by:

   a. Nurse recording a balanced intake and output.

   b. The nurse observing patient to have signs of good hydration such as moist mucosa of the lips and the mouth and normal skin turgor.

2.(29/11/22), Patient's nutritional status will be restored and maintained within 72 hours as evidenced by;

a). Nurse observing patient consumes, at least, more than half of the rice and stew in a 500mg bowl.

b). Patient's mother verbalizing that patient's normal eating pattern has been restored.

3. (29/11/22), Patient will tolerate and be able to perform activities of daily living 48 hours as evidenced by:

a). Patient's mother verbalizing that the patient can stand on his own without assistance

b). Nurse observing that patient is able to perform some activities of daily living.

4.(29/11/22), Patient will relieve from diarrhea within 24 hours as evidenced by:

a). Patient's mother verbalizing that the diarrhea has subsided

b). Nurse observing patient has a normal skin turgor and a normal weight for his age.

5. (29/11/22), Patient's mother / family will be relieved of anxiety within 24 hours as evidenced by:

a). Patient's mother /family members verbalizing that they are no more anxious.

b). Nurse observing that patient/family members' show relaxed facial expressions.

6. (29/11/22),Patient's and mother would have adequate information about the causes, management and prevention of the condition within 48hours as evidenced by:

a). Patient's mother verbalizing a basic understanding of the causes, management and prevention of the condition (gastroenteritis)

b). Nurse getting a positive feedback on the information given to patient's family

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 Five (5): Nursing Care Plan for B.A.E.K and Family

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
29/11/22 8:30pm	Fluid volume deficit related to vomiting.	Patient will maintain a normal fluid volume within 48 hours as evidenced by, a. Nurse recording a balanced intake and output. b. Nurse observing patient to have a sign of good hydration such as normal skin turgor.	1.Reassure patient and the mother. 2.Remove all nauseating objects away from patient's sight. 3. Give oral care each time patient vomits. 4. Encourage intake of oral fluids. 5. Monitor intake and output chart. 6. Monitor signs of dehydration such as sunken eyes and poor skin turgor.	1. Patient and mother was reassured. 2. All unclean pans and urinals were removed from patient's bed side. 3. Patient was assisted to clean his mouth with water each time he vomited. 4. Oral fluids intake 2-3 litres a day was encouraged. 5. Intake and output chart was monitored and recorded. 6. Signs of dehydration such as sunken eyes and poor skin turgor were monitored.	01/12/22 8:30pm	Goal fully met as 1.Patient had Good skin turgor and Normal urine output. 3. Patient mother verbalizing that the vomiting has subsided	A.P.J

Table Five (5): Nursing Care Plan for B.A.EK. and Family Continued.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
29/11/22 9:10pm	Altered nutritional pattern (less than body requirement) related to loss of appetite.	Patient will regain his normal nutritional pattern within 48hours as evidenced by: a) Nurse observing patient consumes, at least, more than half of the rice and stew served in the 500ml bowl. b) Patient's mother verbalizing that patient's normal eating pattern has been restored.	1.Reassure patient and the mother. 2. Serve patient meal at regular intervals(3-4 times). 3. Perform oral hygiene twice daily. 4. Serve patient's favourite meals to stimulate his appetite and encourage feeding. 5. Reward patient to stimulate his appetite and to encourage him to eat well. 6. Involve patient in planning his diet.	1.Patient and mother was reassured. 2.Patient meal was served at regular intervals (3-4 times) 3. Patient's teeth was brush twice daily and his mouth was rinsed before and after each meal. 4. Patient's favourite meals (banku and okro stew) was prepared and served. 5. Patient was rewarded with biscuits and toffees to encourage him to eat well. 6. Patient was involved in planning his diet.	01/12/2 2 9:10pm	Goal fully met as; Patient's mother verbalized that He was able to eat all the food served to him.	A.P.J.

Table Five (5): Nursing Care Plan for B.A.E.K. and Family Continued.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
29/11/22 9:40pm	Activity intolerance (actual) related to general body weakness.	Patient will be able to perform activities of daily living within 24hours as evidenced by: a)the nurse observing that patient is able to perform some activities of daily living when assisted. b) mother verbalizing that the patient can stand on his own without assistance.	1. Reassure patient's mother that patient will be able to stand on his own. 2. Assess patient's level of activity tolerance. 3. Plan activity and rest periods with the mother. 4. Assist patient to move out of bed. 5. Encourage patient to exercise by walking around the ward. 6. Serve prescribed antibiotics drugs.	1. Patient's mother was reassured that he will be able to tolerate activities of daily living so far as treatment is continued 2. Patient's level of activity tolerance was assessed 3. Activity and rest periods of patient were planned with the mother. 4. Patient was assisted to move out of bed. 5. Patient was encouraged to walk around the ward with assistance 6. IV Metronidazole 125mg was served as prescribed.	30/11/22 9:40pm	Goal fully met as client was able to perform some activities of daily living and his mother also stated that he could now stand on his own without assistance.	A.P.J.

Table Five (5): Nursing Care Plan for B.A.E.K. and Family Continued.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
29/11/22 10:00pm	Diarrhea related to bacterial infection.	Patient will relieve from diarrhea within 12 hours as evidenced by; 1. Patient verbalizing the frequency of stools(more than 3 x a day)has stop.	1. Reassure patient and mother. 2. Evaluate patient pattern of defecation. 3.Assess for abdominal pain, cramping, hyperactive bowel sounds, frequency, urgency and loose stools of the patient. 4.Submit client stool for culture. 5.Educate the patient about the importance of hand washing after each bowel	1.Patient and mother was reassured for competent care. 2.Patient pattern of defecation was evaluated. 3.Patient abdominal pain, cramping, hyperactive, bowel sounds, frequency, urgency and loose stools was assessed. 4.Patient stool was submitted for culture. 5.Patient was educated about the importance of hand washing after each bowel movement.	30/11/22 10:00am	Goal fully met as patient mother verbalizing that, 1.The rate at which B.A.E.K passes loose stools has subsided. 2.Her son passes formed stool not more than 3 x a day.	A.P.J.

			movement and before preparing food for others. 6.Administer antidiarrheal medications as prescribe.	6.Oral Rehydration Salt and Bismuth salt was administered.			

Table Five (5): Nursing Care Plan for B.A.E.K. and Family Continued.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
29/11/22 11:00pm	Anxiety (patient's mother and family) related to unknown outcome of condition and hospitalization	Patient's mother/family will be relieved from anxiety within 24 hours as evidenced by (a) Patient's mother verbalizing that she is no more anxious. (b) Nurse observing that patient's mother/family member's show relaxed facial expressions.	(1) Reassure patient mother and family. (2) Educate patient mother and family members on the disease condition (3) Allow them to ask question on whatever bothers their mind and provide tactful answers. (4) Introduce them to patients with similar conditions who are doing well. (5) Engage patient in diversional activities. 6.Assess patient and mother physical reactions to anxiety.	(1) Patient and family were reassured of being in the hands of competent health team. (2) Patient and family were educated on the disease condition and the treatment regimen. (3) Patient's mother was allowed to ask questions. (4) Patient and mother were introduced to patients with similar conditions who were doing well. (5) Patient and mother were engaged in diversional activities. 6.Patient and mother physical reaction was assessed.	30/11/22 11:00pm	Goal was fully met as patient's mother verbalized that she was no more anxious.	A.P.J .

Table Five (5): Nursing Care Plan for B.A.E.K. and Family Continued.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Sign
29/11/22 11:30pm	Knowledge deficit related to inadequate information about the causes, management and prevention of the condition	Patient mother will have adequate information about the causes, management and prevention of the condition within 48hours as evidenced by: a). patient's mother verbalizing that she has a basic understanding about the causes, management and prevention of the condition b). nurse getting a positive feedback	1.Reassure patient and family and establish rapport with them 2.Assess their knowledge on her condition 3.Inform patient and family about ways of preventing the symptoms and some management for the disease 4.Allow patient and family to ask questions for clarification. 5.Answer questions in simple understandable language without using professional jargons	1.Patient and family were reassured and rapport established with them 2.Their knowledge on her condition was assessed 3.Patient and family were informed about ways of preventing the symptoms and some management for the disease. 4.Patient and family were allowed to ask questions about the disease condition.	01/12/22 11:30pm	Goal fully met as patient's mother verbalized a basic understanding of the causes, management and prevention of the condition	A.P.J.

		after giving enough information on the causes, management about the condition.	6.Ask patient and family to summarize what they heard.	5.All questions were answered in simple, plain and clear language without the use of professional jargons. 6.Patient and family were asked to give a feedback on what they heard.			

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

Care of patient began on the day of admission on the 29th November 2022 and continued until discharge on the 2nd December,2022. During his period of admission, daily routine nursing care such as bathing, mouth care and serving of prescribed medication were carried out. Also specific care was rendered according to patient's needs.

4.1.1 Day of Admission, 29th November,2022.

On 29th November,2022 at about 7:02pm, B.A.E.K with his mother accompanied by a nurse walked into the Paediatric Ward for admission. He was admitted by Dr. K.K. with the diagnosis of Gastroenteritis. I introduced myself, and the other staffs on duty to his mother. The nurse handed over his folder to me, I confirmed the particulars in the folder with those his relatives told me. He was placed in a well prepared admission bed. I assisted his mother in arranging his personal items. I orientated his mother to the ward and its annexes and I introduced the other patients in the same cubicle to his mother. Madam R.O. complained that B.A.E.K. has been vomiting, passing loose

stools (watery stools- 4 times), cannot eat well and general body weakness. He looked weak, moderately dehydrated and very sick.

Vital signs checked on admission were;

Temperature-36.3’C,

Pulse- 88bpm

Respiration - 25cpm, Other

body measurement include; RBS-

5.3mmol.

Weight 25kg

I then entered the information into the admission and discharge book and the daily ward state

The following treatment plans were written in his folder;

1. Oral Rehydration Salt 3 sachets

2. Metronidazole 125miligrams 8 hourly in 48hours.

3. Ringers lactate solution,500ml, daily*1.

4. Syrup Zincovit 5mililitres daily x 30day

5. Dextrose 5% in sodium chloride 0.9%(500ml) daily*1

Laboratory investigations ordered by the doctor included,

1. Full blood count (Hemoglobin, white blood cell count).
2. Blood for malaria parasites.
3. Routine urine examination.
4. Stool for culture and sensitivity.

Patient's information was recorded appropriately into the admission and discharge book and on the daily ward state.

B.A.E.K. had an allergy of dust and perfume. An intravenous cannula was set for patient and blood sample taken to lab for investigations. His due medications were administered accordingly. Patient was made comfortable in bed and Madam R.O. was reassured that she was in good hands and both doctors and nurses will do their best to the recovery of B.A.E.K. I introduced myself as a final year student of the Holy Family Nursing and Midwifery Training College, Berekum. I made them aware of my desire to take B.A.E.K and his family as the patient/family for a care study to enable me render to him individualized comprehensive nursing care until he is discharged home and even follow him after discharge for sometimes until he has fully recovered. I made it known to them that it was a requirement by the Nursing and Midwifery Council in partial fulfillment towards the award of Diploma in Registered General Nursing in Ghana and they agreed to my request and promised to co-operate in the care of B.A.E.K. A care plan was quickly drawn to care for patient and family.

At 8:30pm, patient complains of nausea and vomiting and was dehydrated so the nursing diagnosis of actual fluid volume deficit (dehydration) related to vomiting was made and a goal was set to regain his normal fluid volume within 48hours of hospitalization. The following nursing interventions were carried out; patient's skin turgor and mucous membrane was assessed, patient/family was reassured that the nausea and vomiting will subside with time, mother was advised and encouraged to serve food at right time. Patient's daily weight, vital signs and intake and output were checked and recorded in the appendix, intravenous fluids and Oral rehydrated salt (3 sachets) were administered as ordered.

At 9:10pm, patient's complains of loss of appetite, so the nursing diagnosis altered nutritional pattern (less than body requirement) related to loss of appetite was made and a goal was set to help him regain his normal nutritional pattern within 48 hours of hospitalization. The nursing interventions that were to be carried out were; patient's teeth were to be brushed twice daily and rinsed before and after each meal, patient's favorite meals were to be prepared and served, food was served at right interval (34 times daily), and patient was rewarded to eat well.

At 9:40pm, patient was weak so the nursing diagnose activity intolerance (actual) related to weakness and inability to stand on his own was made and a goal was made to help patient perform activities of daily living within 24 hours The following nursing interventions were carried out; Patient was reassured he will be able to tolerate daily activities as so far as treatment is continued, patient level of activity tolerance was assessed, activity and rest periods were planned with his mother, patient was encouraged to move out of bed with assistance, patient was assisted to walk around the ward and prescribed antibiotics such IV Metronidazole 125mg was administered .

At 10:00pm, patient's passes loose or unformed stool(4times), so the nursing diagnosis diarrhea related to bacterial infection was made and a goal was set to help prevent the passage of loose stool within 12hours. The nursing interventions that were to be carried out were; patient stool was submitted for culture, oral rehydration salt and bismuth salt was administered to correct dehydration, patient was educated about the important of hand washing after each bowel movement, mother and patient was reassured for competent care. Patient vital signs was checked and recorded in the appendix.

At 11:00pm, patient's mother was anxious about his child's diagnoses, so an objective was then set to relieve mother from anxiety within 24hours and the nursing intervention included, asking mother to express her anxiety, mother was reassured of the available treatment and the availability of competent nurses, the cause of the diseases were explained to her and was encourage to ask questions that bothered her mind and to which tactful answers were provided. B.A.E.K. and the mother were made to understand that the hospital is a temporal home for them and will be discharged home when the condition permits for continuing treatment at home. I assured them of confidentiality of information. I also explained to the mother that, I will visit their home and the need to do so. After the explanation she agreed that her son should be taken for the study and promised to cooperate. Patient was then made comfortable in bed.

At 11:30pm, during my interaction with my patient, I got to know that B.A.E.K and his mother had no idea about his condition therefore a nursing diagnosis of, Knowledge deficit related to inadequate information about the causes, management and prevention of the condition was made and an objective was set to help them gain enough information about the condition within 48 hours. The following interventions were carried out to achieve our objectives; 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, all questions were answered in simple, plain and clear language without the use of professional jargons and also patient and mother were asked to give a feedback on what they heard. He was bathed by his mother and he was served with kalyppo and biscuit , all his due medications were administered and vital signs also checked and recorded as in appendix.

4.1.2 Second Day of Admission, 30th November, 2022.

On the second day of admission, patient woke up at 6:00am, I assisted the mother to perform his bathing and also maintain his oral hygiene. His vital signs checked and recorded as in the appendix. His due medication was administered at 6:30am and recorded.

The goal set on the 29th November,2022 to enable patient and family relieved of anxiety within 24hours was fully met on the 30th November, 2022 as evidenced by, Patient and mother in good mood, with a relaxed facial expression and they verbalized that, they were no more anxious. I assisted in his bathing.

4.1.3 Third Day of Admission, 1st December,2022

Patient woke up around 5:00am, I assisted his mother with his bathing, and his oral hygiene. His vital signs were checked and recorded as in the appendix.

During morning rounds with Doctor, patient's stool culture and sensitivity laboratory result was in and campylobacter species were isolated and the. doctor ordered to continue his medications.

Also, at 11:30pm, I evaluated the objective set on the 29th November,2022 for the nursing diagnosis of knowledge deficit related to inadequate information about the causes, management

and prevention of the condition within 48hours. Goal was fully met as patient's mother had a basic understanding about the causes, management and prevention of the condition (gastroenteritis).

4.1.4 Fourth Day of Admission, 2nd December, 2022.

Patient woke up around 5:40am, I assisted his mother to bath him and his oral hygiene was done. He was served with rice water porridge and bread as his breakfast, patient was encouraged to take in oral fluids 2-3 litres a day. The goal set on fluid volume deficit was fully met as client gained his normal weight.

His due medications were served and documented, vital signs were also checked and documented as in appendix.

On review by Doctor K.K at 9:25am, B.A.E.K mother gave no complaints on her son's condition. B.A.E.K. was discharged on this day. The date of discharge and remarks were entered into the admission and discharge book. Questions were asked on the health educations given to them and emphasis were made on their personal hygiene, food hygiene and environmental sanitation. He was to continue his drugs at home which were; Syrup Zincovit 5mililitres. I educated Patient's mother on correct dosage of drugs and its side effects. Patient and family were praised for their cooperation and support during the care delivery process. They were congratulated for registering for the national health insurance scheme and were encouraged to renew it when the time is due. I also informed them of the date of review; which was 6th December, 2022. I helped the mother to pack their belongings and saw them off at the gate of the ward. I then removed the bed linens and the bed and lockers were carbonized and well laid for new admissions.

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

Preparation of patient and family for discharge was initiated from the day of admission, where I told my patient and his family that the hospital was not going to be his permanent living environment but he will be discharged home soon by the competent care that will be rendered to him.

The mother was educated on the causes, signs and symptoms, complications and prevention of Gastroenteritis. This was to equip her 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.

I also educated patient's mother to prepare food under hygienic environment, keep good personal hygiene, wash their hands with soap and water before and after eating. She 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.

I also advised her to keep the windows in the house open to allow free movement of fresh air so that their room will be well ventilated. They were told 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's mother. I also educated her to report any change in her child's condition before the review date is due. She was educated on the need to keep drugs out of reach of children.

His name was entered into the admission and discharge book and also the ward census chart. All his bills were covered by health insurance because he was using private insurance.

I helped them to pack the rest of his things into his luggage. 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 1:50pm on the day of discharge.

4.2 Follow Up/Home Visit/Continuity of Care

Home visit is the component of continuum of a comprehensive health care in which health services are provided to individual's, and families in their place of residence for the purpose of promoting, maintaining or restoring health.

Follow-up visit is made to the patients at their homes to see to it that, the patient medication is properly taken as prescribed, progress of health and to discuss health matters related to the family members. This is also made to ensure that the patient really adhered to the planned care seriously, it was also aimed at assessing the patient's resources available to facilitate his recovery.

4.2.1 First Home Visit: 30th November, 2022.

My first home visit was made on Wednesday,30th November, 2022 to my patient's house whiles he was still on admission at 9:00am and I was even surprised for knowing that, my patient and I stay at the same area. The aim for my first home visit 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 patient's condition and then to help remedy the situation through health education and also identify health resources in the community.

My patient's family lives closer to the big chapel at the Berlin Top called Grace Chapel. My patient's grandmother and grandfather and most of the relatives 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 told 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 B.A.E.K. together with his two sisters and his mother occupies one room. The bath house was inside the house with a pipe line that drain into the main gutter. They share a common kitchen. They use cylinder I mean gas for cooking. I took the opportunity to educate them to be careful about the gas when cooking. 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 and to boil rain water before drinking it.

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 as well as the disease condition Gastroenteritis : its causes, mode of transmission, signs and symptoms and prevention, the need to ensure adequate ventilation, visiting the hospital during pregnancy and established the link between them to aid their understanding. I told them of my next visit. I bade them goodbye and left the house around 11:45am because I went for night shift that day.

4.2.2 Second Home Visit: 4th December,2022.

The second home visit was made on, 4th December,2022 in the morning at 5:30pm., I visited them on the third day after he was discharged. He was very well and his condition had improved. The

purpose of the visit was to assess the health of B.A.E.K and to see whether the education given to his relatives during my first home visit were being followed. There was a warm reception on arrival and they were very happy to see me again after they were discharged. A seat and a glass of water was offered. I asked about how he felt and B.A.E.K. mother said his condition was better and he was playing with his cousins behind the house. B.A.E.K. was told I was in and he run to hug me. I was very excited to see him doing very well.

After assessing the surrounding, I congratulated them for keeping the surrounding clean as I told them in the health education on my first home visit. 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. I encouraged them to do more. I also asked them if they have any concern to express in the care they are given to B.A.E.K. at the house. I reminded them of the review date which was on the 6th December, 2022 and its importance. I then asked permission and left there around 6:00pm to my house and I was escorted by B.A.E.K mother and she was much excited.

4.2.2 Review (6th December, 2022)

Madam R.O. and her son B.A.E.K. came to the Seventh Day Adventist (S.D.A) Hospital for review on 6th November,2022. A day before the review date in the evening, I called his mother to remind her about the review date and she told me that she is aware of the date. Early in the morning, on the 6th December,2022, I called the mother and she said, B.A.E.K will be going to write his terminal exams so when he come home in the afternoon, they will come. I went for morning shift on that day so I was waiting for them before I close. On their arrival, I went with patient and his

mother to activate his folder number from the records. Upon my interaction with patient, I observed that his condition had really been improved.

Patient and his mother were escorted to consulting room at the out-patient department and upon assessment by the doctor K.K, he confirmed that, B.A.E.K condition had improved. His vital signs were checked and were within normal range, thus, Temperature: 36. 5°C, Respiration: 22cpm. No medication was given to them, and the mother was much appreciated for the time I spent for them. They thanked me, I bade them goodbye and they took a taxi home.

4.2.3 Third Home Visit: 7th December, 2022

On the said date, I went for my third home visit. The aim of the visit was basically to terminate care with my patient and family and also to handover to a public health nurse for the continuity of care. I set off from house around 11:00am, and I arrived at 11:15am. I walk short distance to my patient house. Before the day for the third home visit, I informed nurse Dorothy who was a public health nurse at the Cross Care Clinic about the termination of the patient's care. When I got to the house, I was welcome by my patient's mother. I was offered a seat. My mission of the visit was asked and I told them that, I came to terminate the care I had with them and also to handover to a public health nurse. Upon my assessment, I realized that B.A.E.K. was doing very well and they were also following the treatment regimen and the health education given them. To enhance the continuity of care, I handed them over to a Public Health at Cross Care Clinic at Fiapre(Berlin Top) for continuity of care. The staff nurse told me that, she knows them since they have been accessing care from them. After explaining to them the need to follow up, I was assured by the public health care providers that, they would pay regular visits to my patient and the family after I had handed them over to the clinic. I also told patient's mother not to hesitate to call me anytime they needed my help. I used this opportunity to thank them for giving me the chance to use them

for the patient and family care study. I told them that, I may not be able to visit them frequently but I will pay them friendly visit. They congratulated me for everything I did for the family and they escorted me to my house gate where I used to stay during my clinicals but I told them that, the place is not my permanent home but because of the clinicals that is why I came there. I bade them goodbye and I entered into my house.

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 Paediatrics' 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 fluid and electrolyte imbalance was restored within 48hours of hospitalization.

On 29th November,2022 at 8:30pm the nursing diagnosis of risk for fluid and electrolytes imbalance related vomiting. An objective was set to maintained patient fluid and electrolytes within 48hours. The following nursing implementation was carried out, patient was reassured, patient intake and output was monitored and maintained in a chart, intake of adequate liberal fluid such as water and soft drinks was ensured and prescribed medication was served.

On 1st December, 2022 at 8:30pm, the goal set to restore patient fluid and electrolytes balance was fully met as evidenced by Patient verbalizing that, nausea and vomiting has ceased.

2. Patient nutritional status will be improved within 48 hours

It was found on day of admission at 9:10pm that patient could not eat well, an objective was set to enable patient maintain his nutritional status within 48hours. The nursing interventions that were to be carried out were; patient's teeth were to be brushed twice daily and rinsed before and after each meal, patient's favorite meals were to be prepared and served, food was served at right interval (3-4 times daily), food was served with drinks such as Kalyppo, and patient was rewarded to eat well.

On the 1st December,2022 at 9:10pm, goal was fully met as Nurse observed patient consumed more than half of his food served (rice and stew) in a 500ml bowl.

3. Patient performed activities of daily living with assistance

On 29th November at 9:40pm the nursing diagnosis of activity intolerance related to general body weakness. An objectives was set to relieve patient from activity intolerance within 24hours.The following nursing interventions were carried out; Patient was reassured he will be able to tolerate activities as so far treatment is continued, patient level of activity tolerance was assessed, activity and rest periods were planned with mother, patient was encouraged to move out of bed with assistance, patient was encouraged to walk around the ward with assistance, prescribed antibiotics were administered as ordered.

On the 1st December,2022, at 9:40pm, this goal was fully met as evidenced by patient bathing, eating and brushing his teeth without assistance.

4. Patient diarrhea was subsided within 12hours.

On 29th December at 10:00pm, the nursing diagnosis of diarrhea related to bacterial infection was made. An objective was set to help patient diarrhea to stop within 12 hours. The following

interventions were done: Patient was reassured that measures will be taken to stop running of loose stools, Patient pattern of defecation was evaluated, Patient abdominal pain, cramping, hyperactive, bowel sounds, frequency, urgency and loose stools was assessed, Patient stool was submitted for culture. Patient was educated about the importance of hand washing after each bowel movement, Oral Rehydration Salt and Bismuth salt was administered,

On 30th November,2022, at 10:00am, Goal fully met as patient mother verbalizing that, the rate at which B.A.E.K passes loose stools has subsided and passes formed stool twice daily.

5. Patient and mother were no more anxious

It was found on 29th November,2022 at 11:00pm that patient/ relatives were anxious about the unknown outcome of the condition and hospitalization, an objective was set to relieve them from anxiety within 24hours. The nursing interventions included, asking mother to express her anxiety, mother was reassured of the available treatment and the availability of competent nurses, the cause of the diseases were explained to her and was encourage to ask questions that bothered her mind and to which tactful answers were provided. B.A.E.K. and the mother were made to understand that the hospital is a temporal home for him and will be discharged home when the condition permits for continuing treatment at home. I assured them of confidentiality of information. I also explained to the mother I will visit their home and the need to do so. Goal was fully met as Patient's mother verbalized that they were no more anxious on 30th November, 2022 at 11:00pm.

6. Patient and mother gained adequate information about the condition gastroenteritis within 48hours

Madam R. O had deficient knowledge about the causes, management and prevention of the condition. Therefore, on the 29th November,2022 at 11:30pm a nursing diagnosis of deficient knowledge related to inadequate information about the causes, management and prevention of the

condition was made. A goal was set to help patient's mother gain adequate information about the causes, management and prevention of the condition within 48hours. Patient's mother was reassured and rapport established with her, patient/family were asked about some of the causes of the condition, patient and family were informed that hand washing and observing good personal hygiene can help prevent the spread of the infection, patient's mother asked about some of the risk factors for the condition and she was answered correctly, all questions were answered in simple understandable language without using professional jargons, mother was asked to summarize what she heard during the information delivery.

On 1st December,2022 at 11:30pm, goal was fully met as mother gained a basic in-depth knowledge about the causes, management and prevention of the condition.

5.3 Amendment of the Nursing Care Plan

During my interactions with B.A.E.K. and his family, within the period of hospitalization six patient's strength and family's health problems were identified. Goals were set to resolve these six health problems. 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.

5.4 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.

The termination of B.A.E.K. and family care started on the first day of interaction with them on the 29th of November, 2022. To avoid separation anxiety, they were told that, our relationship was a therapeutic one and would last for a reasonable period.

They were not surprised when they were finally told about the termination of the care and my relationship with them on the 7th December,2022. On this day, I visited my patient and family at Berlin Top (Fiapre) and then handed them over to a Public Health Nurse at Cross Care Clinic for continuity of care. I reassured B.A.E K. and family of my assistance within my capacity anytime they needed my help. I promised to visit them anytime I had the opportunity. I thanked them sincerely for their co-operation right from the day of admission.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Introduction

Summary is a comprehensive and usually brief abstract, recapitulation, or compendium of previously stated facts or statements. 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 29th November,2022, B.A.E.K., a seven years old boy was admitted to the Paediatric Ward at the S.D.A Hospital, Sunyani. Patient's mother complained of her son having diarrhea, vomiting, cannot eat well, rhinitis and cough. Laboratory investigations such as White blood cell count, Blood film for malaria parasite and stool for culture and sensitivity tests were also conducted to confirm the cause of the condition.

During the period of admission, B.A.E.K. was put on both oral and intravenous medications. The health problems identified were nausea and vomiting, diarrhea leading to fluid and electrolyte imbalance, anxiety of parents due to unknown outcome of disease condition, imbalanced nutrition as a result of loss of appetite and activity intolerance as a result of general body weakness.

Some of nursing interventions carried out were reassurance, adequate ventilation was provided by opening louvers at the ward, thorough education was done on the disease condition and patient

and family were introduced to patients with similar conditions who were doing well. The discharge planning started from the day of admission till the actual day of discharge 02/12/22.

Three home visits were made to the patient and family to know the situation of the home environment and identify any problems which would be harmful to their health. Health education was given on the problems identified in the house to help prevent the contracting of certain preventable diseases. The care of patient's and his family was terminated on the 07/12/22 during the third home visit after review when the child was very well and was subsequently handed over to the Community Health Nurse for continuity of care.

6.2 Conclusion

Conclusion is something that you decide when you have thought about all the information connected with the situation (Weller, 2014).

In conclusion, my choice of nursing B.A.E.K. has strengthened 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 should employ 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 should be given the opportunity to embark on the patient/family care study to enable them obtain more insight on the condition under study.

BIBLIOGRAPHY

Hinkle, J. L., & Cheever, K. H. (2014). *Brunner & Suddarth"s textbook of medical-surgical nursing*. Philadelphia: Wolters Kluwer Health/ Lippincott Williams and Wilkins.

Hinkle, J. L., & Cheever, K. H. (2014). *Brunner & Suddarth's textbook of medical-surgical nursing* (13th ed.). Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Jennifer, L. (2017). *Moving beyound microbiome.* San Antonio: Medline Publication,San Antonio.

Lewis, S. (2012). *Assessment and management of clinical Problems* (9th edition ed.). Australia: John Wiley $ sons Limited.

Lin, B. (2013). *Etiology of viral gastroenteritis.* califonia: Penguin random house.

Mallick, S. (2011). Gastroenteritis. Toronto: Tomeo Publications.

McIntosh, B. C. (2013). *Cambridge advnce learner's dictionary.* Edinburgh: Cambridge University press.

MediLexicon. (2011). *Medial Abbreviation Dictionary: Database of over 200,000 medicals, biotech, pharma and healthcare acronyms abbreviation*.

Nguyen, M. (2016). *Eosinophilic gastroenteritis and colitis.* Texas: Hachette Livre Publications.

Roy, S. (2013). *Pediatric Clinical Gastroenteritis* (9th edtion ed.). London: St.Louis C. V Mosby.

Sawyer, M. (2011). *DISEASES AND DISORDERS, A nursing therapeutics manual* (7th edition ed.). Philadelphia, United States of America: F.A Davis Company.

Walter, S. (2014). *A study on maturity*. Retrieved from www.researchgate.net.

Weller, B. F. (2014). Bailliere"s nurses" dictionary: for nurses and all health workers. London: Elsevier Health Sciences.

(Weller ,2009). (Merriam-Webster, 2013). Bickey, L., & Szilagyi, P. G. (2015). *Bates' guide to physical examination and history taking.*

Philadelphia: Walters Kluver Health/ Lippincort Williams & Wilkins.

Patient Folder number(13541/22)

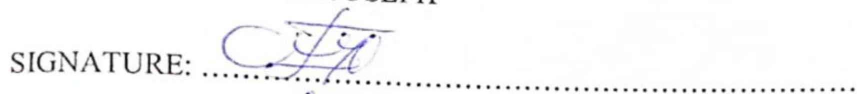
APPENDIX

Date	Time	Temperature (ºC)	Pulse (Bpm)	Respiration (Cpm)
29/11/22	07:05pm	36.3	88	25
	10:00pm	36.0	85	22
30/11/22	06:00am	36.5	77	22
	10:00am	36.9	95	20
	02:00pm	36.1	89	27
	06:00pm	36.0	92	24
	10:00pm	36.0	86	22
01/12/22	06:00am	36.2	80	25
	10:00am	36.0	90	25
	02:00pm	36.3	82	22
	06:00pm	36.2	70	22
	10:00pm	36.0	90	24
02/12/21	06:00am	36.1	81	20
	10:00am	36.0	85	24

SIGNATORIES

THE STUDENT NURSE

NAME: ADU PATRICK JOSEPH



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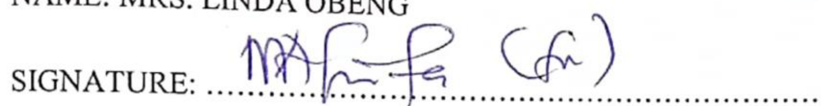
DATE: ....

THE NURSE-IN-CHARGE OF THE PAEDIATRIC WARD (S.D.A HOSPITAL, SUNYANI)

NAME: MRS. LINDA OBENG



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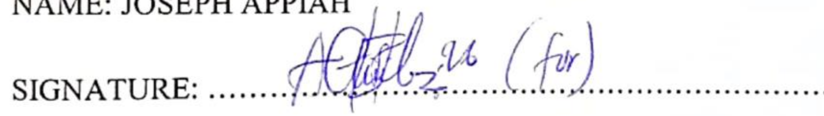
THE SUPERVISOR, HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

NAME: JOSEPH APPIAH



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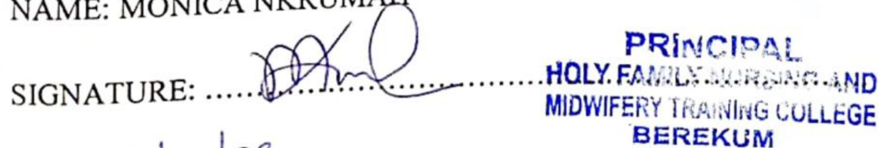
THE PRINCIPAL, HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM.

NAME: MONICA NKRUMAH



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