HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

A CLIENT/FAMILY CENTERED CARE STUDY ON GASTROENTERITIS

ASANTE JENNIS OSEI

4120210044

A CLIENT/FAMILY CARE STUDY SUBMITTED TO THE NURSING AND MIDWIFERY COUNCIL OF GHANA IN PARTIAL FULFILLMENT FOR THE LICENCE TO PRACTICE AS A PROFESSIONAL REGISTERED NURSE

AUGUST, 2023

PREFACE

Nursing as a profession has improved throughout history evidenced by transformation in the practice, the type of care givers, the roles and the changing of policies. Nursing has become a profession of caring and provision of services for those in need, health promotion of individuals, their family and the entire community as a whole. The patient/family care study gives a detailed account of the nursing care rendered to the patient and family to improve their health. This study is designed to provide complete nursing care to both the patient and family from the day of admission to the time of discharge and after that follow ups and home visits are done for continuity of care. Patient care study involves a recording data, documenting and analyzing information and reporting results of nursing care. Patient/family care study is based on holistic care, considering all the factors that impact the health of the patient.

The patient/family care study forms an integral part of the nursing curriculum for educating students and is necessary for completing the nursing course and also a partial fulfillment of the requirement for the award of professional license by the Nursing and Midwifery Council of Ghana to students pursuing diploma in nursing in the country.

Using the nursing process in caring for a patient, emphasis is based on health promotion, maintenance, and the restoration of health or caring for the patient until a peaceful death depending on the patient's condition. The nursing process is a series of organized steps designed for nurses to provide excellent care. This involves five phases, including assessing patient/family, making a diagnosis for patient/family, planning, implementing and evaluating nursing care. This study also gives students the opportunity to practice acquired knowledge to provide effective nursing care to the patient based on the condition.

ACKNOWLEDGEMENT

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

My heartfelt gratitude goes to patient's mother and his family for being approachable, cooperative and for spending their time in answering all the questions asked, which meant so much for the completion of this study.

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

I deem it an expedient to express my profound thanks to the Principal and the entire staff of Holy Family Nursing and Midwifery Training College, Berekum, for being my source of guidance and motivation during this study.

I am also grateful to the medical doctors and Physician Assistants, nurses and the entire staff of the paediatric ward of Holy Family Hospital, Techiman for their support and guidance.

Furthermore, I would like to extend my appreciation to my wonderful family, Mrs. Alberta Ocran for their unending emotional, moral, spiritual, and financial support throughout the period of the study. Not forgetting my very best, Master Godfred Biney, Master Simon Osei and Madam Sabina Osei whose words of encouragement made this study a possibility.

I would like to extend a hand of appreciation to all Diploma 22s and 23s Lastly, I am very grateful to all the publishers and authors whose books I used during the course of my Study.

May God Richly bless you all

INTRODUCTION

The main motive behind this care study is to help the client to regain his health and/to assist the patient to a peaceful death and giving of report of the assistance that was given to the patient and identifying the patient's problem and finding the solutions that were provided from the nursing process. This care study shows a report of nursing care provided for baby I.M, an eleven months baby boy with the diagnoses of gastroenteritis. He was admitted to paediatric ward for four days at Holy Family Hospital, Techiman.

According to Dorothy Johnson, (1980), Nursing refers to "an external regulatory force which acts to preserve the organization and integration of the client's behaviors at an optimum level under those conditions in which the behaviors constitutes a threat to the physical or social health or in which illness is found".

A holistic approach was used in providing care for the client from the day of admission on 29th November, 2022 till discharged on the 3rd December, 2022. This method took into consideration the client's physical, psychological, emotional and spiritual needs.

Good interpersonal relationship and good communication was established with the patient's parents, especially the mother, and it was made known to the parent's that everything that is communicated will be kept confidential.

In order to offer effective nursing care, the health problems identified were prioritized and care plan drawn and implemented from the day of admission till discharge.

Before discharge, the client's family was educated on the disease condition, the mode of transmission and the ways of preventing the disease. After discharge, home visits were undertaken to ensure the continuity of care. And also follow up care was rendered and the terms for completing medication was explained to promote the wellbeing of the baby

The study has been organized and written into six chapters based on the steps of the nursing process.

Chapter one deals with assessment of client and family. This includes the client's particulars, family history and developmental history, admission of client, client concept of illness, literature review on the condition and validation of data.

Chapter Two contains the analysis of data, covering comparison between the collected data from client and family to that of standards.

This chapter also deals with client and family strengths, client health problems and nursing diagnoses.

Chapter Three contains the planning of care for client and family.

Chapter Four deals with implementation of nursing care plan, preparation towards discharge, follow-up visits.

Chapter Five has to do with the evaluation of care rendered to the client and family study.

Chapter six entails the summary and conclusion that ends this care study report by reviewing thematic issues that arose in the care study from admission to last home visit after discharge as well as the recommendations. Include the signs and symptoms presented by the patient, treatment given and investigations carried out

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIFURES

CHAPTER ONE

ASSESSMENT OF PATIENT AND FAMILY

1.0 Introduction

The first stage of the nursing process is the assessment. Assessment is a systematic collection of data to determine the patient's health status and any actual or potential health problems (Smeltzer, Bare, Hinkle, & Cheever, 2014).

In the nursing process, assessment involves the gathering of information about the health status of the patient, analysis and synthesis of the data, and making of clinical nursing judgment (Weller B., 2018). Through observation, questioning, investigations such as laboratory results, x-ray reports and physical examination, data about the patient and family is gathered and analyzed.

Assessment involves the collection of information of patient, his or her family and environment to identify his or her background problems and strength to enable the nurse to render an effective nursing care. Assessment also helps to gather crucial information. Assessment and monitoring of the patient is very important, which makes the nurse alert of making changes in the needs of the patient which also ensures the effectiveness of nursing. Assessment of the patient starts with the nursing process which deals with assessing the health status of the patient. This chapter talks about the relevant data that is obtained from interacting with the patient's family which is gathered and studied during the assessment phase of the nursing process. It involves patient's particulars, family medical history and socioeconomic history. Again, it focuses on patient's developmental history, patient's demographic history, hobbies, lifestyle, past and present medical history. This assessment is done to assist in diagnosis of patient. It also includes the admission of the patient; patient's

concept of illness, literature review as well as validation of the data obtained is discussed. This information gives the health team the idea about patient/ family problems and will serve as foundation upon which appropriate nursing intervention will be established and implemented for the speedy recovery of the patient/ family. Most of this information was obtained from the patient's mother because the patient is eleven months old.

1.1 Patient's Particulars

Patient is a person who is ill or is undergoing treatment for a health care problem and registered with a general practitioner (Weller B., 2018). According to Collins English dictionary (2003) particulars refers to facts or details about which are written down and kept as a record. Patient's full name will be denoted by his initials as far as nursing ethics is concerned to ensure patient's confidentiality. Patient's name is baby I. M. an eleven month old male born on the 31st December, 2021 in new Onyinase at Techiman in the Bono East Region, to Mr. I. I. (father) and Mrs. B. S. (mother). He is "Busanga" by tribe. He has not started speaking but makes attempt to speak, according to the mother. He is a Muslim by religion. Patient is currently, not in school and the place of abode is at new Onyinase located at Techiman in the Bono East Region with a house number DT/0007. He is dark in complexion and his next of kin is his mother. He weighs 10.5 kilograms and height is 0.85 metres. Patient is the second born among two siblings. Patient has no physical impairment. His folder number is AAA5651 and is registered with national health insurance scheme.

1.2 Family's Medical History

Health history is a holistic assessment of all factors affecting a patient's health status, including evaluate teaching needs, and to serve as the basis of an individualized plan for addressing wellness (Taylor, 2016). There is no known chronic or acute family disease such as hypertension, diabetes, mental illness or any hereditary disease. According to the mother,

patient's sibling has repeated episodes of difficulty in breathing which is not confirmed by physicians as asthma. All the other siblings and parents as well as most of their relatives are registered with National Health Insurance Scheme (NHIS). She disclosed that, none of her siblings has been visiting the hospital frequently. Mother explained that, family members suffer from headache from which they visit the hospital without taking over the counter drugs. According to mother, patient does not have any allergies to food or drugs.

1.3 Family's Socio-Economic History

Family socio-economic history deals with the social background and economic status of the patient and the family (Hornby, 2015). According to the patient's mother, her husband sells cattle. She is a hairdresser. Since patient is a child, he depends on parents for financial support. Patient's family has no specific annual earns but annual estimated income of 2000 Ghana cedis. The family is able to meet their daily expenses, even though, the amount both parents earned was not told. Patient and family are from middle socio-economic class depending on their source of income, hence the patient is being is catered for by the parents without external help from other relatives. Patient's mother also explained that they depend on the National Health Insurance Scheme (NHIS) which plays a vital role in medical cost.

1.4 Patient's Developmental History

Development is a process that creates growth, progress, positive change or the addition of physical, economic, environmental, social and demographic component (Sid, 2018). Maturation is the process of becoming completely developed mentally or emotionally (Walter, 2013). Growth is the progressive development of a living thing, especially the process by which the body reaches its complete physical development. (Weller B., 2018). According to mother, throughout pregnancy, labour, and delivery she did not experience any complications. Patient was delivered through spontaneous vaginal delivery (SVD) at term

without any difficulty. Mother stated that patient does not have any congenital disease such hydrocephalus, congenital heart disease when patient was born. Patient has been immunized against all vaccine preventable disease for his age as evidenced by the mark of the BCG present at the right upper arm. Patient was breastfed exclusively for six months and continued with complimentary feeds like cereal and porridge such as maize and millet. Apparently, mother said that, patient does not take a lot of interest in the breast milk but likes to eat any food that she eats. According to the mother, the patient could sit by the fourth month, crawled by the seventh month. Mother stated that, patient has not started walking since patient is eleven months old. He can stand when he holds onto items like chairs or when someone is closer to him.

According to the Erik H. Erikson's theory of psychosocial development, it describes the human life cycle as a series of eight ego development from birth to death. He also stated that, each of these stages has crisis, therefore these crisis should be dissolved before an individual can be able to move to the next stage. These psychosocial development includes trust and mistrust (0-18months), autonomy versus shame and doubt (18months-3years), initiative and guilt (3-6years), industry versus inferiority (6-12years), identity versus role confusion (12-20years), intimacy and isolation (20-35years), generativity versus stagnation (35-65years) and then integrity and despair (65 to death).

Patient falls under "**trust and mistrust**" (0-18 months), which states that the infant does not have any idea of how the world is and so they look towards their primary care giver for stability and consistent care. When a baby cries or fusses and their needs are met by holding, feeding and caring for them, trust is built. Over time, babies learn they can trust caregivers too. If the care given to the patient is consistent, predictable, and reliable, they will develop a sense of trust which they will carry to other relationships and they will be able to feel secured even when they are threatened. If these needs are not met consistently, mistrust, suspicion

and anxiety may set in and also they feel a sense of hopelessness when they are faced with crises.

1.5 Patient's Lifestyle/Hobbies

Lifestyle is the pattern of daily living that an individual develops (Weller F. B., 2014). Hobbies are activities one does for pleasure when he/she is not working (Hornby, 2015)

According to mother, patient does not wake up to urinate as the patient is still on diapers. Because the patient is fed adequately and is always satisfied, patient does not wake up at midnight to cry, unless diapers are wet. According to mother, patient wakes up when she wakes up from bed as early as 5:30am, to do her chores and also prepare breakfast for the family. After she is done with her chores, she takes care of the patient's personal hygiene like changing diapers, bathing and cleaning of the mouth as well as changing clothes for the patient. After that mother breastfeeds him, and since patient is not a fan of breast milk, he takes small until he eats breakfast at 7:00am. After eating breakfast, the patient sleeps for at least two hours and then wake up and sucks breast milk. Patient eats lunch at 12pm and crawls around and plays with sibling for a while. Patient put up a moody facial expression whenever he is displeased with something and cries. Patient has no known allergies for food or drugs as declared by the mother. Generally, he is an active and interesting child. According to mother, the food that patient enjoys eating a lot is tuo-zaafi and green leaf soup. Mother also explained that patient eats supper at 4pm in the evening and plays with his father until he tired and then mother baths him and put him to bed.

1.6 Patient's Past Medical History

Patient past medical history provide information on patient state of health and illness before the present complaints (Weller B., 2018).

According to mother, patient has been immunized against the six killer diseases such measles, diphtheria, hepatitis B, polio, yellow fever and others. Mother of patient said that, the patient did not have any reaction or any complication after the vaccines were given. Patient's mother further explained that he did not experience any childhood diseases or congenital diseases. Again, mother said that, patient does not have any allergies to food, drugs, insects, etc.

From mother of the patient, patient was admitted on the 11th November, 2022, because of an ear infection. She did not buy any over the counter drugs for the patient but sent him straight to the hospital and was given treatment, thus, Holy family hospital, Techiman. According to mother, patient developed minor ailment such as headache and rhinorrhea but she does not buy over the counter drugs for the patient but sends him to the hospital for treatment. Patient does not have any physical disabilities and has not under gone any surgery.

1.7 Patient's Present Medical History

According to Cheeve and Hinkle (2014), the history of the present health concern or illness is the second most important factor in helping the health care team arrive at a diagnosis or determine the patient's health needs.

A careful history assists in correct selection of appropriate diagnostic tests. Also, according to Bickley and Szilagyi, (2014), history of present illness is a complete, clear, and chronologic account of the problems prompting the patient to seek care. According to patient's mother, patient started vomiting on the 27th November 2022 but was not given any drug. Patient's mother thought that the patient was feeling cold and she tepid sponged him with warm water and breast fed him but patient was not sucking the breast milk nor did he eat anything. After she tepid sponged him, within a few minutes the vomiting progressed and the patient was not able to eat anything. On 28th November 2022 patient was feeling a little better in the morning

but in evening 8:00pm, the intensity of the vomiting increased and then she decided to take the patient to the hospital the next day. At around 3:25am, mother complained that the patient was still vomiting which made her scared and send the patient to the hospital, thus, 29th November, 2022. He was reviewed and admitted to the paediatric ward. It was discovered that the patient had gastroenteritis with a haemoglobin level of 7.8g/dl upon conduction of laboratory investigations. And Intravenous normal saline 500millilitres and intravenous ringers lactate 500 milliliters were administered. A diagnostic investigation was conducted to check if malaria parasites were present but it was negative. On examination, patient did not look lethargic, dehydrated, febrile with sunken eyes and conscious and so patient was admitted to the paediatric ward. Mother further explained that, it was after they came to the hospital that she saw that the patient was passing watery stool.

1.8 Admission of Patient

Admission of a patient into the hospital ward is a change of environment with its attendant problems (Gyan & Darko, 2010).

At exactly 4:00am on the 29th November, 2022, patient was brought to the paediatric ward of Holy Family Hospital, Techiman, per mother's back for admission with the diagnosis of gastroenteritis. On examination patient looked ill, febrile with sunken eyes which showed that patient was a little dehydrated. Vital signs were checked and recorded as follows:

Temperature	39.3^0C
Pulse	142bpm
Oxygen saturation	98%
Respiration	32cpm

Weight 10.5kg

An intravenous cannula was secured for patient for blood samples to be taken for investigations and intravenous ringers lactate infusion was administered as well as oral rehydrated salt, immediately to restore the fluid and electrolyte that has been lost through vomiting. Patient was also tepid sponged and nearby windows were opened. Patient was made to wear light clothes and mother was asked to give patient cold drinks to help reduce body temperature. The following laboratory investigations conducted include: blood for malaria parasites, full blood count and urinalysis.

Mother of the patient was reassured of the competency of the health providers that are on duty. Mother was oriented at the ward and its annexes as well as bathrooms, toilets, hospital policy regarding the payment of bills, and visiting hours which was 5:30am to 6:30am in the morning and 5:30pm to 6:30pm in the evening. Mother was introduced to the staffs on duty and was asked to report any complications or any abnormality. A simple bed was prepared for patient and his mother so that infusions could be administered to restore fluid. The mother was informed that, the child will be discharged home once he is well to continue the care in the house. The mother agreed and said they were ready at any time to cooperate with the care of her child. He was managed on the following medications:

1. Oral rehydration salt powder 100mls
2. Intravenous Ringers Lactate 1 liter daily
3. Intravenous dextrose normal saline 1 liter
4. Tab folic acid 5mg daily x 30 days
5. Zinc tablet 20mg daily× 7days
6. Intravenous ciprofloxacin 100mg bd x 48 hours
7. Syrup zincovit 5mls daily x 30 days

8. Intravenous paracetamol 150mls tid x 48 hours

Detailed information about patient which includes his age, address, hometown, parents' occupation, religion and next of kin were taken from his mother and recorded into the admissions and discharges book, daily ward state and nurses note. Father was informed to bring necessary items on his next visit such as plates, spoons, sponge, and towel among others to the patient to make his stay on the ward comfortable. Patient was registered under the national health insurance scheme, so parents did not have to make any deposit before treatment.

The preparation of patient and family for discharge and rehabilitation started on this day. It was explained to the patient and his family that, hospitalization is temporal and he will be discharged home when his condition becomes stable. I informed patient and his relatives that I was a student at the Holy Family Nursing and Midwifery training college, Berekum and that I would be using patient for care study in order to gain more knowledge on his condition and condition. Patient and family were educated on the causes, signs and symptoms, treatment and prevention of patient's condition (Gastroenteritis) which they willingly accepted. I made mother aware that, it was a requirement of the Nursing and Midwifery Council in partial fulfillment towards the award of license to practice as a Registered General Nurse in Ghana. I assured her of anonymity and confidentiality and informed her that she could decline and / or withdraw at any time of her choice without compromising the care they shall receive. She consented and promised to co-operate in the care of child. I purposely chose this condition to learn more about how to care for a child with the condition.

1.9 Patient's Concept of Illness

Patient's concept of illness refers to an image or thought held in mind (Weller, 2018).

Even though patient's mother cannot identify the cause of the child's condition but believed that the child was feeling cold and cannot testify that she saw the child putting something in the mouth because the place that child plays has been cemented and child does not play in the soil. Mother therefore attributed the disease condition to physical causes and not spiritual causes and she believed that the knowledge given to the health professionals by Allah will help to cure the patient of his condition.

1.10 Literature Review

This section deals with the information about the condition patient was diagnosed with, which is gastroenteritis.

Definition

According to WHO, Gastroenteritis is the inflammation of the stomach and intestines that may result in a wide range of symptoms from asymptomatic infections through mild complaints to life-threatening conditions that lead to death.

Gastroenteritis is the inflammation of the stomach, small intestine or large intestine, leading to a combination of abdominal pain, cramping, nausea, vomiting and diarrhea (Biotechnology, 2013).

Texas Department of Health stated that it is an inflammation of the stomach and small intestine which results when bacteria or viral infection of the gastrointestinal tract produces inflammation and tissue damage. (Health, 1985).

(Nicki R, 2010) Gastroenteritis is a general form for a group of conditions that are usually caused by infection and produce symptoms such as loss of appetite, nausea and vomiting, mild to severe diarrhoea, cramps and discomfort in the abdomen.

Gastroenteritis is the inflammation of the mucosal lining of the stomach and the small intestine. It is characterized by nausea, vomiting, fever, abdominal pain, anorexia and diarrhea. It is also known as intestinal flu, viral enteritis or food poisoning. (Ethelwynn L, 2007)

Gastroenteritis affects people at all ages but particularly in young children. In most cases, gastroenteritis in children is caused by a virus called rotavirus and it is caused in adults by notavirus or food poisoning.

INCIDENCE

Gastroenteritis is a major cause of pediatric morbidity and mortality around the world. It remains a frequent reason for infection-related admissions to emergency units among all age groups. Persons who are immune-suppressed such as HIV/AIDS patient are at a higher risk of contracting the disease (Salami, 2019)

(Council, 2001) states that gastroenteritis prevalent rate is high during summer, especially those related to food poisoning, due to the greater chance of consuming spoiled food as it becomes easier for some microorganisms to multiply and common in people living in temperate climates especially often affecting all ages but infants and toddlers are the most.

PREDISPOSING FACTORS

(Hofmann, 2018) stated that factors that predispose one to gastroenteritis includes;

1. poor nutrition

2. immunodeficiency
3. prematurity in infants
4. poor hygiene
5. Living in crowded areas

Types Of Gastroenteritis

1. Viral Gastroenteritis: is an inflammation, swelling, and irritation of the inside lining of the gastrointestinal tract
2. Bacterial gastroenteritis: is a diarrheal disease characterized by an increase in bowel movement frequency with or without fever, vomiting and abdominal pain.
3. Amebic dysentery: this is cause by a parasite called Entamoeba histolytica, which spread through human stools.
4. Bacillary dysentery: this is intestinal infection caused by a group of shigella bacteria which can be found in human gut.

Causes Of Gastroenteritis

Gastroenteritis is an infection of the stomach and intestines (bowel). The infection interferes with one of the main functions of the intestines, which is the absorption of water from the contents of your intestine and into the body. This is the reason why the most common symptoms of gastroenteritis is watery diarrhea, and why dehydration is such a common complications.

1. Bacterial cause include: Escherichia coli, Staphylococcus aureus, Salmonella Typhi, Shigella Clostridium.
2. Viral cause includes: rotavirus, enteric Virus, Adenovirus.
3. Parasitic cause include: Entamoeba, Histological and Ascaris Enzyme Deficiency and consumption of unwashed food and fruits can cause the disease. Fungal like Candida albicans can also cause the disease.

Other causes include:

a. Diet: Ingestion of highly natural toxins in plant and animals such as mushroom and shell fish. Harmful chemical agents such as insecticide and heavy metals e.g. Food borne illness resulting from eating food contaminated by disease causing bacteria, virus or parasites example (Escherichia Coli, Rotavirus and protozoa)
b. Parenteral cause: It may be due to infections outside the gastrointestinal tract, example, upper respiratory tract infection (URTI), urinary tract infection (UTI) whooping cough (Pertussis), measles and otitis media
c. Food allergies: The immune system is made up of special cells that circulate throughout the body to defend the body against foreign substance such as viruses and bacteria. This body cell does not come into contact with or are sensitive to certain substance known as allergic substance. When these substances come into contact with cells, they irritate the cells. The cells try to fight their irritating action by releasing histamine to fight their reaction. The reaction of histamine against the action of the allergic substance in the stomach and the intestine can cause irritation and inflammation of gastrointestinal tract. Treatment is by withdrawal of allergic substances from the individual diet.

d. Gastroenteritis can also be spread through contact with someone who has the virus, contaminated food and water, unwashed hand after visiting the washroom or changing the diapers. There are also unusual ways one can get gastroenteritis which include drinking contaminated water which contains heavy metals such as arsenic, cadmium, lead, or mercury. Also eating a lot of acidic foods, like citrus fruit and tomatoes. Toxins that might be present in certain sea foods and certain medications such as antibiotics, antacids, laxatives and chemotherapy.

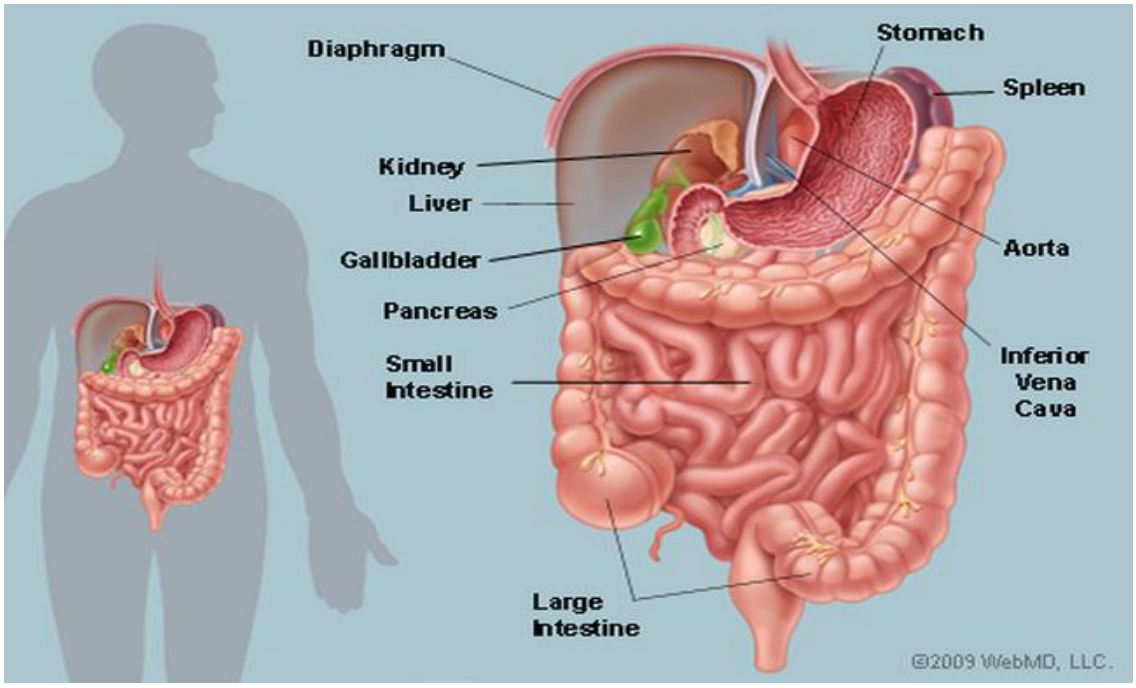

Figure 1: Normal Physiology Of The Stomach And The Intestines

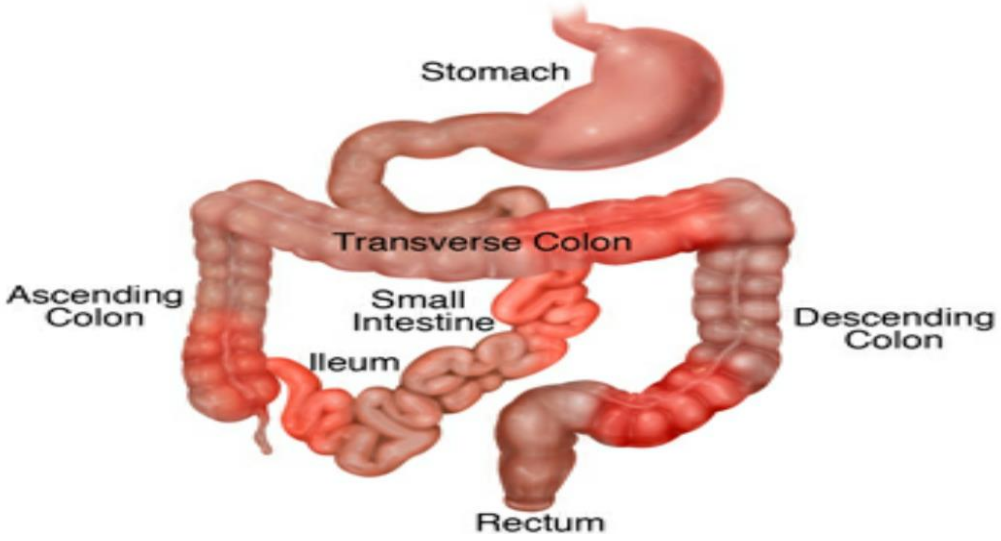

Figure 2: Inflammation Of The Stomach And Intestines

PATHOPHYSIOLOGY

Invasive pathogens such as Shigella sp, Escherichia coli and Camphylobacter sp penetrate into the intestinal mucosa. Initial entry into the mucosal cells is facilitated by the production of ‘invasins’, which disrupt the host cell cytoskeleton. Subsequent destruction of the epithelial cells allows further entry, which also causes the typical symptoms of dysentery, low-volume bloody diarrhea and abdominal pain.

According to (Chan SS, 2003) Enterotoxins produced by the bacteria adhere to the intestinal epithelium and inflame gastrointestinal mucosa, inducing excessive fluids and electrolytes secretion into the bowel lumen.

Direct invasion and ulceration of bowel mucosa by the organisms causes bleeding, fluid exudate formation and water and electrolyte secretion. This result in distension of the upper gastrointestinal tract by unabsorbed chime and excess water can lead to nausea and vomiting, inflammation and fermentation of undigested food cause abdominal pain and cramping; and excess fluid and electrolyte secretion into the bowel result in diarrhea with possible secondary fluid and electrolyte imbalance, and acid-base disruption.

CLINICAL MANISFESTATION

Clinical manifestation refers to the external symptoms of a disease that are important for diagnosis, treatment and evaluation of the disease (sons, 2020). The type and severity of the symptoms depend on the type and quantity of the microorganisms or toxins ingested. Symptoms also vary according to person’s resistance to disease. Symptoms often begin suddenly, but sometimes dramatically with;

1. Abdominal cramps (mild or severe)
2. Abdominal pain
3. Nausea and Vomiting
4. Fever
5. Abnormal flatulence
6. Anorexia
7. Fainting and weakness
8. Diarrhea with or without visible blood and mucus may occur.
9. Insomnia
10. Dehydration (dry skin, sunken eyes and scanty urine)
11. Chills
12. Audible rumbling of intestines

DIAGNOSTIC INVESTIGATIONS

1. Clinical manifestation presented by the patient
2. History taking (recent travel, known GI irritant)
3. Serum electrolytes
4. Blood urea Nitrogen (BUN)
5. Creatinine should be obtained to evaluate hydration and acid-base status
6. Stool examination to reveal the organism.
7. Barium studies of upper gastrointestinal tract show inflammation and ulcer.
8. Complete blood count for hemoglobin level, white blood cell count and red blood cell count for estimation of red blood cell destruction by the invading organism.
9. Urinalysis to exclude the organism such as(Shigella organism or often shed in urine)
10. Sigmoidoscopy may be done to differentiate inflammatory bowel disease from infectious enteritis

Management

Medical Management

1. Intravenous therapy is necessary when fluid is not tolerated by mouth example, dextrose saline, normal saline, ringers lactate
2. Oral Rehydration Salt (ORS), fruits juice should be encouraged if patient can tolerate them.
3. Analgesics for the relief of pain and fever.
4. Antibiotics are administered to treat infections.
5. Hematinic are also given to maintain the hemoglobin level.
6. Multivitamin are also given to replace the vitamins that have been lost through diarrhea and vomiting.

Nursing Management

Psychological Care

1. Reassure the patient and the mother that the condition is like any other medical condition and will respond to treatment based on his co-operation with the health care given.
2. Every procedure to be performed on him must be explained to him so as to elicit his co-operation.
3. Patient with the same condition who are responding to treatment should be introduce to the patient and the mother in order to allay his anxiety.

Rest and Sleep

1. Explain to patient and mother that rest and sleep are very essential in his recovery.
2. His bed should be clean, dry and free from crease and cramps to promote sleep.

3. Visitors should be restricted and the environment should be well ventilated and noise should be minimized as far as possible.

Nutrition

1. Diet therapy and diet modification in disease management is very essential. In gastroenteritis, there is fluid and electrolyte losses hence, administer intravenous fluid such as ringers lactate to correct fluid and electrolyte imbalance.
2. Oral rehydration salt should be given to patient to treat dehydration and correct the fluid and electrolyte imbalance.
3. Diet should be planned with patient and mother, taking into consideration the likes and dislikes, including his ethnicity, culture and religious background.
4. Food should be served at patient normal meal time of eating and should be served in bit, attractive and hygienic.

Personal Hygiene

1. Explain to the patient and the mother that maintaining good personal hygiene will boost the morale apart from keeping him neat and refreshed.
2. Mother should be encouraged to wash her hands thoroughly after visiting the toilet, before and after feeding patient with soap and water.
3. Mother should be encouraged bath patient twice a day and clean his mouth at least daily and rinse the mouth whenever he vomits.

Observation

1. Observe vital signs such as temperature, pulse, respiration and blood pressure which serve as base line data for treatment.

2. Observe patient urine and feaces for colour, odour, amount and consistency or any abnormality if any and report promptly to the appropriate medical personnel.
3. Also observe for signs of dehydration such as poor skin turgor, pallor and sunken eyes. Monitor intravenous infusion if any to know the rate of flow, whether there is blockage to its flow and patients compliance.
4. Monitor input and output correctly to know whether there is a balance between the amount of fluid taken and the amount of fluid excreted.
5. Therapeutic effects of drugs should also be observed to know the improvement in the patient condition.

Medication

1. Precautions should be taken before giving the drugs prescribed such as start doses to ensure that the right drug has been given, to the right patient, at the right dose through the right route and at the right time.
2. Educate patient on side effects of drugs.
3. Explain the rationale for each prescribed drug in order to elicit compliance.
4. Watch for therapeutic effect of the drug as well as the adverse effect.

Patient's Education

Education is done to give patient and family an insight into the disease

1. Educate patient and family on the disease, causes sign and symptoms, complication and prevention.
2. Educate patient and family on the importance of complying and completing the treatment regimen.

3. Educate patient and family on the importance of avoiding some foods and drinks that are irritating to the stomach and intestinal lining such as caffeinated drinks and spicy food such as coffee, alcohol, onions, garlic among others
4. Educate patient and family on the need to increase fluid intake.
5. Educate patient and family on the effect of self-medication.
6. Teach patient and relatives to wash their hands with soap and water before and after handling any food.
7. Teach patient and family to wash hands with soap and water after visiting the toilet.
8. Teach patient and family on the importance of personal and environmental hygiene.
9. Educate patient and family on the importance of boiling and filtering water, keeping water in clean, tight fitting cover containers before drinking.
10. Educate patient and family on the importance of heating food before eating.
11. Educate patient and family to only buy food from food vendors who surroundings are clean and free from flies.

Complication

Complication refers to a condition or an event that is in a complex form. (collins, 2009).

In most patients the disease resolves with no complication when well managed and treated, however persisted and untreated gastroenteritis can lead to;

1. Dehydration
2. Hypovolemic shock
3. Malnutrition
4. Anemia
5. Convulsion
6. Kidney failure

7. Hypotension
8. Bacteremia
9. Vascular collapse
10. Enteric fever

Prevention

1. Practice proper food hygiene. Make sure to refrigerate food properly. Food should be properly and thoroughly cooked and also avoid eating foods that have expired.
2. Do not share towels, flannels, cutlery or utensils when you or child is having gastroenteritis.
3. Make sure to wash hands frequently and thoroughly with soap and water, particularly after visiting the toilet and before touching food. Do not rely on alcohol hand gels
4. Disinfect any surface or objects that could be contaminated.
5. Avoid visiting places like work place, school or nursery until symptoms subside for at least 48 hours.

1.11 Validation of Data

Information collected from child's mother was cross-checked with the literature review which was found to be true and confirmed. Comparing the clinical feature review, exhibited the child general observations with that of literature review, it was confirmed that child was suffering from gastroenteritis as diagnosed by the doctor. All date collected were therefore rendered free from errors biases.

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

Analysis of data is the process of systematically applying statistical or logical techniques to describe and illustrate, condense, recap, and evaluate data (Weller B., 2018). It is the second phase of the nursing process. This chapter deals principally with analysis of data collected in chapter one. In data analysis, critical and logical study with arrangement is done about an object under study. Analysis of data helps the health care worker to compare the data extracted from patient to that of the standard. Areas to be analyzed under this chapter consist of;

Diagnostic investigations

1. Causes.
2. Clinical features.
3. Treatment.
4. Complications

2.1 Comparison of the Data with Standards

Comparison of data with standard is made between the diagnostic investigations, cause, treatment, clinical features and complications related to the information gathered from the literature review. The following were compared with standards as in the literature review;

1. Diagnostic investigations
2. Causes
3. Clinical manifestation
4. Pharmacology of drugs

5. Treatment
6. Complications

2.1.1 Diagnostic Investigation

According to Weller B., (2018), diagnosis is the determination of the nature of a disease and Test is defined as an examination or trial.

Investigations refer to an examination or analysis of the composition of a substance by the use of chemical reagents, and/or to determine the presence or absence of a substance (Weller B., 2018). With reference to all test books consulted for the literature review, the diagnostic investigations of gastroenteritis are through history of exposure to practices that pre-dispose one to gastroenteritis (for example poor personal, environmental and food hygiene).

Also, literature review points out that history and signs and symptoms, blood film for malaria, full blood count, and white blood cell count.

Table 1: Diagnostic Investigation/Test

Diagnostic measures in literature review	Diagnostic measures conducted on patient.
1. History and clinical signs and symptoms	1. History was taken and signs and symptoms were monitored.
2. Serum electrolytes	2. Serum electrolytes was not done for the patient
3. Full blood count	3. Full blood count was done for patient.
4. Stool examination	4. Stool examination was not done for the patient.
5. Urinalysis	5. Urinalysis was done for the patient.
6. Blood urea nitrogen	6. Blood urea nitrogen was not done for the patient
7. White blood cell count	7. White blood cell count was done for the

	patient.
8. Barium studies	8. Barium studies were not conducted for patient.
9. Sigmoidoscopy	9. Sigmoidoscopy was not done for patient.

With reference to the table, barium studies, sigmoidoscopy, blood urea nitrogen, stool examination, serum electrolyte, and urinalysis were not done because other laboratory investigation such as blood film for malaria parasites and history and clinical manifestation confirmed the diagnosis of gastroenteritis.

Table 2: Diagnostic Investigation/Tests Carried Out on Patient Compared with Standards

Date	Specimen	Investigation	Results	Normal Values	Interpretation	Remarks
29/11/22	Blood	Random blood sugar	3.1mmol/L	**Children(**5.6mmol/L-8.3mmol/L) **Adult(**4.0mmol/L-6.0mmo/L)	Patient does not have diabetes	Intravenous ringers lactate was given since RBS was below the normal range.
		Malaria	negative	Negative	Patient does not have malaria	No treatment was given to patient
		White blood cell	9.6*10^3/ul	3-15 thousand microllitre	White blood cell is within normal range.	No treatment was given to patient.
		Red blood cell	4.7*10^6/ul	4.1-5.53*10^6/ul	Red blood cell is within normal range	No treatment was given
		Haemoglobin level estimation	7.8g/dL	Children (12.0g/dL - 15.0g/dl)	The Haemoglobin is within normal range.	Tablet folic acid and haemoblobin was given since haemoglobin level was below the normal range.

Diagnostic Investigation/Tests Carried Out on Patient Compared with Standards Cont'd

Date	Specimen	Investigation	Results	Normal values	Interpretation	Remarks
29/11/22	Urine	Appearance	Clear	Clear	Urine appears clear	No treatment was given was patient.
		Colour	Amber	Amber	Urine was amber in colour	No treatment was given patient.
		Leucocyte	Negative	Negative	No leucocyte present	No treatment was given was patient.
		Urobilinogen	0.9mg/dl	0.1-1.8mg/dl	Urobilinogen was within normal range	No treatment was given was patient.
		Nitrate	Negative	Negative	No nitrate present	No treatment was given to patient.
		Protein	Negative	Negative	Protein was absent	No treatment was given to patient.

		pH level	7.0	4.5-8.0	PH was within normal range	No treatment was given to patient.
		Blood	Negative	Negative	Blood was absent	No treatment given
		Bilirubin	Negative	Negative	Bilirubin was absent	No treatment given
		Specific gravity	1.005	1.005-1.030	Was within normal range	No treatment given to patient
		Ketones	Negative	Negative	Ketones was absent	No treatment given to patient.

2.2 Causes of patient's condition

According to Merriam Webster's dictionary (2019)., causes of a patient's condition refers to something that brings about a disease.

From the literature review, information was gathered from client relatives, results of diagnostic investigation and medical records which revealed that patient disease condition is as a result of an infectious organism.. There are some other factors that predispose an individual to develop gastroenteritis.

With reference to the causes in literature review, there was a very clear indication that the patient did not inherit condition from parents.

Table 3: Clinical Manifestation exhibited by Patient Compared To Standards

Clinical features outlined in literature review	**Clinical features exhibited by patient**
1. Diarrhoea	1. Patient had diarrhoea
2. Insomnia	2. Patient had no insomnia
3. Audible rambling of intestines	3. Patient had no rumbling of the intestines
4. Chills	4. Patient had no chills
5. Dehydration	5. Patient was dehydrated evidenced by the looking fatigued, sunken eyes.
6. Fainting	6. Patient did not faint
7. Weakness	7. Patient had body weakness
8. Anorexia	8. Patient had anorexia
9. Vomiting	9. Patent's mother complained of

	vomiting
10. Fever	10. Patient had fever
11. Abdominal cramps	11. Patient had no abdominal cramps
12. Abnormal flatulence	12. Patient had no abnormal flatulence

With reference to the table above presented most of the clinical manifestations as stated in literature review such as diarrhoea, weakness, vomiting, dehydration and fever showed that the patient had gastroenteritis.

2.3 Treatments given to patient

According to Weller B.,(2018). , Treatment refers to the mode of dealing with patient or disease. This disease is mostly treated medically with medications. Based on the clinical manifestations that the patient came with, he was managed on the following medication:

1. Oral rehydration salt powder 100mls
2. Intravenous Ringers Lactate 1 liter daily
3. Intravenous dextrose normal saline 1 liter
4. Zinc tablet 20mg daily× 7days
5. Intravenous ciprofloxacin 100mg bd x 24 hours
6. Syrup zincovit 5mls daily x 30 days
7. Intravenous paracetamol 150mls tid x 1 day
8. Tab folic acid 5mg daily x 30 days

The table below shows drug treatment given to patient

Table 4: Treatment given to patient compared to literature review

Treatments outlined in literature review	**Treatments give to patient.**
1. Antibiotics (ciprofloxacin)	1. Antibiotics were prescribed for the patient to destroy the bacteria causing the infection.
2. Intravenous therapy	2. Intravenous therapy was prescribed for the patient to keep patient hydrated and replace lost electrolyte.
3. Analgesics	3. Analgesics was prescribed for the patient to relieve patient's pain
4. Haematinics	4. Haematinics was prescribed for the patient to increase the haemoglobin level
5. Oral rehydrated salt	5. Was prescribed for the patent to treat dehydration and diarrhoea.
6. Multivitamins	6. Multivitamin was prescribed for the patient to prevent vitamin deficiency.

Table 5: Pharmacology of drugs administered to patient.

Date	Name of drugs	Dosage/route of administration	Dosage and route of administration for patient.	Classification	Desired effect	Actual effect of the drug observed	Side effect Remarks
29/11/22	Oral rehydration salt	Dosage 50-100mls daily Route- orally	Dosage-100mls daily for 24 hours Route- orally	Oral rehydration therapy	1.Used treat moderate dehydration 2. Optimize the absorption of fluid in the intestines, which helps to replenish fluid. 3. it is used to treat dehydration due to diarrhea and vomiting	Patient was given the oral rehydration salt to correct the dehydration due to vomiting.	**Side effects**: possible side effects include nausea, vomiting, weakness, loss of appetite, confusion, severe thirst, kidney damage. **Remarks**: no side effect was encountered.

Date	Name of drug	Dosage/ route of administration	Dosage and route of administration for patient	Classification	Desired effect	Actual effect of the drug observed	Side effects Remarks
29/11/22	Intravenous therapy (dextrose normal saline and ringers lactate).	Dosage- 1-2 litres for 24 hours Route – intravenously	Dosage - 1 litre daily at a rate of 41mls/hr Route - intravenously	Intravenous fluids	1. To treat severe dehydration. 2. Improve ability to carry oxygen.	Patient was relieved from severe dehydration.	**Side effects**: oedema, cardiac overload **Remarks** : no side effect was encountered

Date	**Name of drug**	**Dosage/ route of administration**	**Dosage and route of administration for patient.**	**Classification**	**Desired effect**	**Actual effect of the drug observed**	**Side effects** **Remarks**
29/11/22	1ntravenous paracetamol	Children - 325mg to a maximum dose of 400mg daily that is QID when the need emerges. Adult- 1g when needed Route – intravenously	Dosage – 150mg tid at 41mls/hr for 24hours Route - intravenously	Analgesic/ Antipyretic effect	To relieve pain by blocking generation of pain impulses, probably by inhibiting prostaglandin synthesis in the central nervous system.	Patient's fever was relieved.	**Side Effect:** Renal failure, constipation Skin rashes, dizziness, urticarial, hypotension **Remarks :** None of the above effects was experienced.

Date	**Name of drug**	**Dosage/ route of administration**	**Dosage and route of administration for patient.**	**Classification**	**Desired effect**	**Actual effect of the drug observed**	**Side effects** **Remarks**
29/11/22	Intravenous ciprofloxacin	**Children** – 200mg usually given QID by 12 hours **Adult** – 500mg given 12 hours for 14 days. Route– intravenously	Dosage -100mg bd x 7 days. Route- intravenously	Antibiotics (quinolones)	1.It is used to treat variety of bacterial infections 2. It is used to treat infections of the skin, bladder, abdomen.	Patient was relieved of the bacterial infection.	Bleeding, blistering, nausea, stomach pain, heartburn, vaginal itching **Remarks** None of the above effects was experienced.

Date	**Name of drug**	**Dosage/ route of administration**	**Dosage and route of administration for patient.**	**Classification**	**Desired effect**	**Actual effect of the drug observed**	**Side effects** **Remarks**
29/11/22	Tablet folic acid	Children -5mg taken daily for 1-7 days Route – orally	Dosage -5mg daily for 30 days Route - orally	Multivitamins	1.It helps the body to make new healthy new red blood cells 2.It is used to treat and prevent folic acid deficiency	Patient was given folic acid to relieve him from anaemia.	**Side effects**: nausea, loss of appetite, irritability, confusion, stomach upset. **Remarks:** None of the above effects was experienced.

Date	**Name of drug**	**Dosage/ route of administration**	**Dosage and route of administration for patient.**	**Classification**	**Desired effect**	**Actual effect of the drug observed**	**Side effects /Remark**
29/11/22	Zinc tablet	Dosage – 20 mg daily for 30 days. Route –orally	Dosage -20mg daily x 9 days. Route -orally	Multivitamins and mineral supplement	1. For treatment of vitamin deficiency and helps to improve and boost immunity	Patient was relieved of diarrhea and stool consistency was improved	Side effects: nausea, vomiting, stomach and kidney damage. **Remarks** None of the above effects was experienced.

2.4 Complications

Complication is an extra medical problem that makes it more difficult to treat an existing illness (Walter, 2013). With reference to the complication indicated in the literature review, patient did not experience any complication during his admission due to adherence to treatment and effective nursing care.

2.5 Patient/Family Strength

Strength refers to the ability to do things that need lot of physical or mental effort (Walter, 2013). The following strengths were observed in patient and family during their period of hospitalization. This involves the activities that contribute to the wellbeing of the patient and his family as well as speedy recovery (Weller B., 2018). Below are the strengths that were observed on the patient and family:

1. Patient had good coping mechanism.

2. Mother was able to report vomiting.

3. Patient could suck breast milk.

4. Mother participates in child care.

5. Patient could move in bed.

6. Patient was able to tolerate cold water

2.6 Patient Health Problems

Patient/family problems are the health issues of patients and family that is difficult for them to solve or understand (Hornby, 2015). A health problem is any stress; be it mental, social or physical in a patient that prevents her from meeting a certain health standard.

Hence the patient may need some professional service.

Health problems identified on patient were as follows;

1. Mother complained of loss of appetite.

2. Patient looked pale and fatigued.

3. Mother complained of vomiting

4. Mother was anxious due to the changes in the child's condition

5. Mother had insufficient knowledge about the child's condition on gastroenteritis.

6. Mother complained of diarrhea.

2.6 Nursing Diagnosis

Diagnosis is a judgment about what a particular illness or problem is, made after examining it (Walter, 2013).

1. Hyperthermia (39.3) related to dehydration as evidenced by fatigue, increased heart rate.

2. Imbalanced nutrition less than body requirement related to insufficient dietary intake as evidenced by reduced interest in food.

3. Anxiety (mother) related to change in child's health as evidenced by poor eye contact.

4. Risk for fluid volume deficit as evidenced frequent vomiting.

5. Activity intolerance related to decreased haemoglobin concentration as evidenced by pallor and fatigue.

6. Deficient knowledge (mother) related to insufficient information as evidenced by insufficient knowledge on gastroenteritis, cause, treatment and prevention"

CHAPTER THREE

PLANNING FOR PATIENT/ FAMILY CARE

3.0 Introduction

Planning is the process in which the nurse and patient together consider the goals to achieve in meeting the patient's identified or potential problems in daily life and produce an individual care plan (Weller B., 2018). Planning is the third phase in the nursing process which involves a deliberative and a systematic process which involves decision making and solving patient's health problem. Planning serves as a tool for the nurse to keep records for the patient's health needs and provide the basis for the continuity of care for the patient and family at home and at the hospital.

3.1 Objectives for patient/ family care plan

1. Patient's body temperature will be maintained within the normal range as evidenced by;

   a. Nurse recording the temperature (36.2^0C) has returned to normal.

   b. Mother verbalizing the child no longer warm to touch.

2. Patient will regain normal nutritional pattern within 48 hours as evidenced by:

   a. Nurse observing patient eating half of meal served.
   b. Mother verbalizing that patient has gained appetite.

3. Mother will be relieved of anxiety throughout the period of hospitalization as evidenced by;

   a. Mother verbalizing she is no longer anxious about child's condition.

   b. Nurse observing that mother is participating in treatment of child.

4. Patient will maintain normal fluid volume throughout the period of hospitalization as evidenced by;

a. Mother verbalizing vomiting has stopped.

b. Nurse observing patient has good skin turgor and normal urine output

5. Child's tolerance for activity will be restored within 72 hours as evidenced by;

a. Mother verbalizing of increased in activity level.

b. Nurse observing resolution of pallor and fatigue

6. Mother will have enough knowledge on gastroenteritis, causes, treatment and prevention as evidenced by;

a. Nurse observing mother ask questions and seeking clarification on child's care.

b. Mother demonstrating measures for prevention of gastroenteritis.

Table 6: nursing care plan for patient

Date and Time	Nursing Diagnosis	Objective and Outcome Criteria	Nursing Orders	Nursing Interventions	Date and Time	Evaluation	Sign
29/11/22	Hyperthermia related to dehydration secondary to gastroenteritis as evidenced by fatigue, increased heart rate.	Patient's body temperature will be maintained within the normal range as evidenced by; 1. Nurse recording the temperature (36.20C) has returned to normal. 2. Mother verbalizing the child no longer warm to touch.	1. Teach mother how to tepid sponge patient 2. Encourage mother to give copious fluid to the patient. 3. Provide adequate ventilation by opening windows. 4. Monitor patient's temperature every 15 minutes for 1 hour and record. 5.Administer prescribed antipyretic (intravenous paracetamol).	1. Mother was taught how to tepid sponge patient to reduce temperature. 2. Mother was encouraged to give more fluid to patient to improve hydration. 3. Louvers were opened to improve ventilation to help reduce temperature. 4. Patient's vital sign were checked and recorded after 36 hours as Temp-37.2^{0}C, pulse-122bpm, Resp.- 32cpm and Spo2- 99%. 5. Prescribed antipyretic was administered	30/11/22	Goal fully met as evidenced by the mother verbalizing that fatigue has subsided and the nurse observing that patient looks hydrated.	J.O.A

Table 6: nursing care plan for patient.

Date and Time	Nursing Diagnosis	Objective and Outcome Criteria	Nursing Orders	Nursing Interventions	Date and Time	Evaluation	Sign
29/11/22 7:00am	Imbalanced nutrition less than body requirement related to insufficient dietary intake as evidenced by reduced interest in food.	Patient will regain normal nutritional pattern within 24 hours as evidenced by: 1. Nurse observing patient eating half of meal served. 2. Mother verbalizing that patient has gained appetite	1. Reassure mother of maintenance of weight of child. 2.Provide frequent nutritious food for the patient but should be in small amount. 3. Document actual weight the patient 4. Plan patient's diet with mother 5. Record amount of food intake.	1. Mother was reassured of the maintenance of the weight of the child. 2. Patient was provided with nutritious food in small amount frequently to provide energy. 3. Patient's actual weight and height was assessed and it was realized that the patient was well nourished with an increase in weight of 2kg. 4. A proper balanced nutritional menu was planned for the patient 5. Patient was able to ingest 60mls of porridge served.	02/12/22	Goal fully met as evidenced by; 1. Nurse observing patient eating half of meal served. 2. Mother verbalizing that the child has regained appetite.	J. O.A

Table 6: nursing care plan for patient.

Date and Time	Nursing Diagnosis	Objective and Outcome Criteria	Nursing Orders	Nursing Interventions	Date and Time	Evaluation	Sign
29/11/22	Anxiety (mother) related to change in child's health as evidenced by poor eye contact.	Mother will be relieved of anxiety throughout the period of hospitalization as evidenced by; 1. Mother verbalizing she is no longer anxious about child's condition. 2. Nurse observing that mother is participating in treatment of child.	1. Reassure mother of the competency of the nursing care team to reduce anxiety. 2. Give mother a clear explanation of the procedure. 3. Orientate to the new environment and the treatment to be given to the patient. 4. Acknowledge the anxiety level of the mother as well as the child.	Mother was reassured of the competency level of the nursing team and also to rely on them for child care. 2. Mother was educated on the benefits of procedures such as tepid sponging and administration of multivitamin syrups. 3. Mother was orientated to the ward and its annexes to promote comfort and also decrease anxiety level. 4. Mother's anxiety level was acknowledged by the nurse spending an hour with her to offer understanding, trust and empathy.	01/12/22	Goal fully met as evidenced by; 1. Mother verbalizing she is no longer anxious about child's condition. 2. Nurse observing that mother is participating in treatment of child.	J.O.A

Table 6: nursing care plan for patient.

Date and Time	Nursing Diagnosis	Objective and Outcome Criteria	Nursing Orders	Nursing Interventions	Date and Time	Evaluation	Sign
29/11/22 9:00am	Risk for fluid volume deficit as evidenced by insufficient knowledge about fluid needs and frequent vomiting.	Patient will maintain normal fluid volume throughout the period of hospitalization as evidenced by; 1. Mother verbalizing vomiting has stopped. 2. Nurse observing patient has good skin turgor and normal urine output	1. Assess the patient for signs and symptoms of dehydration 2. Monitor the pulse rate of the patient 3. Encourage mother to give copious fluid to the patient. 4. Assess the characteristics of patient's vomitus. 5.Administer intravenous isotonic solution to restore lost	1. There was no symptoms of dehydration present, good skin turgor, moist skin were present. 2. Patient's pulse rate was 110bpm 3. Patient took in 100mls of kalyppo and 200mls of water. 4. Patient's vomitus was clear, non-bilious and was not also offensive and vomitus subsided 5. Ringers lactate was administered	30/11/22	Goal fully met as patient's vomitus had subsided and nurse observing patient has good skin turgor.	J.O.A

Table 6: nursing care plan for patient

Date and Time	Nursing Diagnosis	Objective and Outcome Criteria	Nursing Orders	Nursing Interventions	Date and Time	Evaluation	Sign
29/11/22	Activity intolerance related to decreased haemoglobin concentration as evidenced by pallor and fatigue.	Child's tolerance for activity will be restored within 72 hours as evidenced by; 1 Mother verbalizing of increased in activity level. 2. Nurse observing resolution of pallor and fatigue	1. Reassure mother that the activities of the patient will be improved. 2. Assist patient to perform activities at every 2-4 hours to improve the strength of muscle and tone by doing some exercise. 3. Provide a comfortable bed for patient to enhance rest. 4. Administer prescribed haematinics to help increase haemoglobin level. 5. Monitor for adverse effect, therapeutic and side of the drug administered.	1. Mother was reassured of improvement of the patient's activities. 2. Patient was engaged in a passive and a gradual passive exercise which helped to muscle tone and strength. 3. A comfortable bed was provided for the patient to ensure adequate rest to conserve energy. 4. Syrup zincovit was prescribed and administered to the patient. 5. Mother reported that patient could move on the bed without any form of weakness.	02/12/22	Goal fully met as evidenced by mother reporting that the activity level of the patient has increased and fatigue has decreased.	J.O.A

Table 6: nursing care plan for patient.

Date and Time	Nursing Diagnosis	Objective and Outcome Criteria	Nursing Orders	Nursing Interventions	Date and Time	Evaluation	Sign
29/11/22 10:00am	Deficient knowledge (mother) related to insufficient information as evidenced by insufficient knowledge on gastroenteritis, cause, treatment and prevention	. Mother will have enough knowledge on gastroenteritis, causes, treatment and prevention as evidenced by; 1. Nurse observing mother ask questions and seeking clarification on child's care. 2.Mother demonstrating measures for prevention of gastroenteritis.	1. Reassure mother about the ways of acquiring knowledge about gastroenteritis, causes, treatment and prevention. 2. Assess mother of what she has learnt and the ability to perform the health related care that is required of her. 3. Keep the patient from a noisy environment and any destruction. 4. Use repetition and positive feedback and include mother in the learning process.	1. Mother was reassured on gaining adequate knowledge on gastroenteritis, causes, treatment and prevention. 2. Mother was able to administer syrup zincovit and also provide the patient with copious fluids to improve hydration. 3. Patient was provided with a noise free environment and was also kept from any destruction. 4. Mother was repeatedly thought to she was involved in the learning process and mother was able to verbalize what was thought.	02/12/22	Goal was fully met as mother was able to verbalize what was thought and was able to ask questions and demonstrate and the prevention of gastroenteritis.	J.O.A

CHAPTER FOUR

IMPLEMENTATION OF PATIENT AND FAMILY CARE PLAN

4.0 Introduction

Implementation refers to the act of putting a plan into action (Walter, 2013). The nurse assumes responsibility for the implementation and coordinates the activities of all those involved in implementation, including the patient and family, other members of the nursing team, and other members of the health care team, so that the schedule of activities facilitates the patient's recovery (Smeltzer, Bare, Hinkle, & Cheever, 2014). This chapter gives a vivid account of the nursing care that was rendered to the patient and relative from the day of admission until discharge based on the health problems identified. It also deals with follow up visits/home visits to ensure continuity of care.

4.1 Summary of Actual Nursing Care

The nursing care rendered to patient from the day of admission which was 29th November, 2022 and continued till the day he was discharged on 3rd December, 2022. The nursing care provided to the patient was to provide comfort and promote his recovery without complications. The management of the patient and family was to meet the physiological, emotional, spiritual and physical needs. While on admission, routine nursing actions, for example medications such as intravenous ciprofloxacin as well as necessary documentations were done for the patient. Nursing care given to the patient is summarized as follows:

Day of admission on 29th November, 2022

On 29th November, 2022, at exactly 4:00am patient was brought into the paediatric ward of the Holy Family Hospital, Techiman per mother's back for admission. Mother complained

that patient had been vomiting continuously and also patient feels warm to touch. Patient was conscious. Patient and mother were welcomed and reassured of the competency of the nursing team. An examination was done to confirm whether patient was admitted in the ward with the said diagnosis. Patient's name was mentioned to confirm that the right patient was admitted to the paediatric ward. A simple bed was prepared for patient so that intravenous infusions could be administered to restore fluid. On examination patient looked ill, lethargic, and febrile with sunken eyes which showed that patient was dehydrated. Patient's vital signs was checked and recorded as:

Temperature – 39.3 Degree Celsius

Pulse - 142 beats per minutes (bpm)

Respiration – 32 cycles per minutes (cpm)

Oxygen Saturation - 98% (SPO2)

Weight -10.5kg

The nursing procedure to be done on the child was explained to the mother. A nursing diagnosis of "Hyperthermia (39.3°C) related to dehydration as evidenced by fatigue, increased heart rate." was formulated. An objective was set to aid patient regain his normal body temperature within 36.2°C to 37.2°C within 36 hours. Nursing activities that were carried out were; patient was tepid sponged to help decrease body temperature, after that, intravenous paracetamol 150mg stat was administered. Louvers were kept open to ensure adequate ventilation to help maintain a normal temperature. Vital signs were reassessed after 10minutes and read;

Temperature 38.3°C, pulse 105bpm, respiration 30cpm, Spo2 99%.

Vital signs were checked after 30 minutes and recorded as follows;

Temperature- 37.2°C

Pulse- 121bpm

Respiration- 28cpm

Spo2- 95%

Measures were put in place to decrease in body temperature as cold sprite was served to patient to drink to stabilize the body temperature.

Patient bed sheet was changed into new one after tepid sponging, to make him comfortable in bed. Patient was to be managed on the following drugs:

1. Oral rehydration salt powder 100mls
2. Intravenous Ringers Lactate 1 liter daily
3. Intravenous dextrose normal saline 1 liter
4. Tab folic acid 5mg daily x 30 days
5. Zinc tablet 20mg daily× 7days
6. Intravenous ciprofloxacin 100mg bd x 24 hours
7. Syrup zincovit 5mls daily x 30 days
8. Intravenous paracetamol 150mls tid x 48 hours.

All these drugs were given to the patient to reduce vomiting and hyperthermia and to prevent complications. Patient is a registered member of the National Health Insurance scheme (NHIS) which helped to reduce the hospital expenses.

Blood specimen had already being collected and sent to the laboratory for the various investigations as requested by the Ward Physician and results confirmed the diagnosis. Results showed that, malaria parasite were absent, white blood cells were within the normal range was recorded, full blood count (Haemoglobin level estimation) was 7.8g/dl which was low compared to the range of 12.0-15.0g/dl in children. Patient's vital signs and particulars were entered into the admission and discharges book, daily ward states and nurse's note. The care plan drawn was discussed with the mother who accepted the plan of care. The mother was made aware that the child's health will progress with the help of competent staff

providing nursing care for the child (tepid sponging the child, checking and monitoring his vital signs, administering prescribed medication) and many other nursing interventions that was given.

At 5:30am, patient's mother was educated on food groups that will help to maintain normal weight of the patient as it was identified that child was unable to feed well and a nursing diagnosis of "Imbalanced nutrition less than body requirement related to insufficient dietary intake as evidenced by loss of interest in food" was formulated with the corresponding nursing activities carried out as; Mother was reassured of measures and food groups that will help to maintain weight of child. Assessment on patient nutritional history was done and recorded as he had normal weight for age as 13kg indicating that patient had being eating well. Patient was provided with small but frequent and nutritious feedings (tuo-zaafi and green leaf soup). Enough rest was ensured for patient to improve his ability and desire to ingest food. Patient was able to ingest tuo-zaafi and green leaf soup served as the mother was educated on the essential nutrients needed for the best development of her child.

Mother was reassured of competent nursing care to alleviate the anxiety as she had a poor eye contact and confirmed that she was anxious because of the patient's high body temperature. Mother was educated on the cause of fever and its management and the needs to report any increase in fever. A nursing diagnosis of "Anxiety (mother) related to change in child's health as evidenced by poor eye contact" was formulated. Nursing objectives were set to relieve the mother of the anxiety within 24 hours. The interventions include; Mother was reassured that she can trust the nurses and rely on them for the care of her child. Mother was educated on the benefits of procedures such as tepid sponging and the administration of intravenous fluid to restore fluid and electrolyte loss. Medical jargons were avoided to provide clear understanding on the condition of the patient. Mother was oriented to the ward

and its annexes to promote comfort and decrease anxiety. She listened attentively and was told to ask questions about some

Patient's folder and drugs were handed over to the ward in-charge and the necessary confirmations were made while the patient was still under close monitoring. Child's mother was assisted to pack their belongings into the bedside locker and secured. Relevant data was collected from mother and was documented. Patient was under the National Health Insurance Scheme so no deposit was made. From the diagnosis of the Ward Physician, the patient was diagnosed of gastroenteritis. Mother was reassured to relax. Also, mother was oriented at the ward and its annexes as well as bathrooms, toilets, hospital policy regarding the payment of bills, and visiting hours was made known to them and was also introduced to other patients on the ward. Mother was introduced to the staffs on duty and was to report any complications or any abnormality in patient's condition. Mother was informed that co-operation with the health team was greatly needed for full and early recovery of the patient.

I informed the mother that, I was a second-year student of the Holy Family Nursing and Midwifery training college, Berekum. I made her aware of my desire to offer care and write a report as the patient / family care study which would continue through the stay period on admission, discharge and to home visits and reviews. I explained to her that, it was a requirement of the Nursing and Midwifery Council in partial fulfillment towards the award of license to practice as a Registered General Nurse in Ghana. I assured her of anonymity and confidentiality and she could decline and / or withdraw without compromising the care the patient will receive. She consented and promised to co-operate in the care of child. I purposely chose this condition to learn more about how to care for a patient with the condition looking at what entails in its management.

Mother's motivation for the learning was found after the diagnosis was made about the child concerning the child's health. Teaching was repeated to enhance learning as mother was

involved actively in the learning process. An objective of maintaining a normal fluid volume throughout the period of hospitalization was carried out at 10:05am. A nursing diagnosis of "Risk for deficient fluid volume as evidenced by insufficient knowledge about fluid needs and frequent vomiting" was formulated and an appropriate nursing intervention was carried out as well. This includes; clinical features of dehydration were present, good skin turgor, moist skin and mother report no thirst. Patient's pulse was 125bpm; temperature was also 36.9°C. 500mls of normal saline was administered. Patient took in 200mls of orange juice every day with 500mls of water, thus the mixture of the oral rehydration salt solution. Vomitus was clear and non – offensive. Mother was always updated every day on the health status of the child to the days he was fully recovered before discharge. Emotional support was provided. Mother expressed frustration and helplessness. Assistance was provided to help her make informed decisions. At 2:10pm, the child was fed with protein and carbohydrate food (rice and soup with fish). Patient's vital signs were checked and recorded as; temperature- 36.9^0C, pulse- 120bpm, respiration- 30cpm, Spo2- 96%

Patient and mother were thanked for their cooperation for a successful procedure and made comfortable in bed. Patient was responding to treatment under close monitoring especially his body temperature as he was served cold water to drink and louvers were kept open to ensure adequate ventilation to help body temperature return to normal. Patient bed was straightened up from creases and was made comfortable in bed covered with a light cloth sheet.

At 6:00pm, vital signs were checked and recorded as;

Temperature 36.9°C

Pulse 104bpm

Respiration 30cpm

Spo2 96%

All due medication was administered. Mother was congratulated on her corporation towards the care rendered to the patient throughout the day.

Second Day of Admission 30th November, 2022.

Patient woke up at 6:10am; his was bathed by his mother and his mouth wascleaned. Patient's bed was straightened from cramps and was made comfortable in bed covered with light clothes. Patient was fed with "Hausa kooko" with milk, he was able to eat. His due medications were served and vital signs were checked and recorded at 6:00am as

Temperature 36.5°C

Pulse 111bpm

Respiration 31cpm

Spo2 98%

On observation, patient was very weak and looked pale. A nursing diagnosis of "Activity intolerance related to decreased haemoglobin concentration as evidenced by pallor and fatigue" was made with respective nursing activities carried out. Mother was reassured that there will be improvement in child's health. Patient had passive and gradually active exercise which fostered his muscle strength and tone. Vital signs were assessed after the exercise and read; Temp – 36.8°C, pulse- 122bpm, Respiration- 31cpm and SpO2- 99%.

At 11:35am, mother was assessed on the knowledge on gastroenteritis and it was observed that she had no knowledge on the condition of her child. A nursing diagnosis was formulated as "Deficient knowledge (mother) related to insufficient information as evidenced by insufficient knowledge on gastroenteritis, cause, treatment and prevention". Appropriate nursing intervention was carried out to help the mother gain adequate knowledge on gastroenteritis, its treatment and prevention throughout the period of hospitalization. This includes; Mother was educated on gastroenteritis, causes, its management and prevention. Mother was able tepid sponge child to help reduce body temperature.

Mother was educated on the need to give more fluids to child to improve hydration and ensure that patient is fed properly with foods that contain iron. At 10:00am, patient vital signs were assessed and recorded as;

Temperature 36.3°C

Pulse 110bpm

Respiration 29cpm

Spo2 98%

All due medications were administered. During interaction with the mother, she said that she was not feeling anxious because she has seen the improvement in child's health.

At 10:30am, patient was reviewed by Ward Physician and the treatment plan was made for the patient to continue the drugs that were given the previous day he was admitted to the ward. The drugs are as follows;

1. Oral rehydration salt powder 100mls
2. Intravenous Ringers Lactate 1 liter daily
3. Intravenous dextrose normal saline 1 liter
4. Tab folic acid 5mg daily x 30 days
5. Zinc tablet 20mg daily× 7days
6. Intravenous ciprofloxacin 100mg bd x 48 hours
7. Syrup zincovit 5mls daily x 30 days
8. Intravenous paracetamol 150mls tid x 48 hours.

Mother was reassured that the child's health will improve. She reported that the vomiting has subsided but the patient is still having diarrhea. Patient was engaged in passive exercise she held patient's hand for him to take some few steps away from the bed which will help to increase muscle strength. Mother was asked to bring the patient back to bed for him to rest which will help to conserve energy and help alleviate fatigue and weakness. Patient had a nap

and woke up around 12:20pm, and was fed with rice and light soup as he was able to eat the food served. Mother reported that child's eating pattern is improving. Mother was educated on the needs to serve the child food with essential nutrients such as tomatoes, beans, orange, fish and egg and "kontomire" which will increase iron absorption for the production of more red blood cells within the child's body.

At 5:53pm an evaluation of the objective set on 29th November, 2020 to relieved patient from hyperthermia within 36 hours was done and goal fully met as patient's mother verbalized he has been relieved of hyperthermia. Nurse recorded patient's body temperature and touched patient's skin to confirm that the patient was feeling warm. At 6:10pm, mother bathed the patient and changed his clothes to prevent the patient from getting cold.

At 6:32pm, an evaluation of the objective set on 29th November, 2020 to relieve patient vomiting and diarrhoea from within 24 hours was done and goal fully partially as patient's mother verbalized that the vomiting has stopped but the rate at which he was passing the stool has reduced, nurse observed number of times patient vomited has reduced.

At 8pm, an evaluation of the objective set on 29th November, 2020 to maintain a normal fluid volume within 24hours was done and goal fully met as patient; had good skin turgor, moist skin and mucus membrane, normal urine output, normal body temperature, mother reported no thirst and vomiting resolved. Patient slept around 8:30pm. At 10:00pm, patient's vital signs were checked and recorded and due medications were served.

Third day of admission: 1st December, 2022

The patient woke up at 7:10am in a stable and alert condition. Mother ensured patient's personal hygiene and was made comfortable in bed afterwards. At 6:00am routine vital signs were checked and recorded as; Temperature 36.0°C, Pulse 108bpm, Respiration 29cpm, Spo2 98%.

Patient took milo with milk and bread as his breakfast at 7:40am. At 9:05am, ward round done by Ward Physician and no treatments were added to the patient's medication. Patient's medication include:

1. Oral rehydration salt powder 100mls
2. Intravenous Ringers Lactate 1 liter daily
3. Intravenous dextrose normal saline 1 liter
4. Tab folic acid 5mg daily x 30 days
5. Zinc tablet 20mg daily x 7days
6. Intravenous ciprofloxacin 100mg bd x 48 hours
7. Syrup zincovit 5mls daily x 30 days
8. Intravenous paracetamol 150mls tid x 48 hours

Mother told ward physician during rounds that patient didn't vomit throughout the night. At 10:00am, vital signs were checked and recorded as;

Temperature 36.2°C

Pulse 102bpm

Respiration 28cpm

Spo2 99%

Due medication served and patient was made comfortable. Upon interactions with patient's mother, I informed her about my visit to their home and explained the purpose of the visit. Patient's mother gave me a contact and said it is for her husband's younger brother so I should call him to guide me to their house. She told me that he'll be visiting the hospital later to bring her some clothes and food so I have to go with him when he comes. An evaluation was made towards the set objective as goal was fully met as nurse recorded an axillary temperature of 36.2°C and mother reported that child's fever had subsided and the diarrhoea and the vomiting had stopped because patient didn't vomit throughout the whole night

Mother was to be educated on the nutrition based on diet that will aid in the reproduction of more Red blood cells. During lunch, child was fed with rice and beans stew which he was able to eat very well. Mother served him with one slice of water melon as requested by the physician. As an objective set on admission was achieved and evaluated as goal fully met as patient's mother reported child has regained appetite. Education on gastroenteritis continued as teaching was based on the preventive measures. Mother was able to answer questions and made a contribution to the lesson. An emphasis was made on the need to provide nutritious diet to the child, which will aid in iron absorption to help in the increase in hemoglobin level. During supper, mother fed the patient with Fufu and light soup with salmon as patient was able to eat, patient was fed with banana. Patient personal hygiene was ensured. Mother reported child's activity level has improved. Patient bed was straightened up from creases and crump to promote comfortability. Patient slept around 8:30pm.

Fourth day of admission 2nd December, 2022

Patient woke up 7:10am, mother bathed patient and cleaned his mouth. Patient was made comfortable in bed and mother reported that patient had a peaceful sleep.

At 6:00am, his due medications were all served. Vital signs were checked and recorded as; Temperature- 36.8°C, Pulse-120bpm, Respiration- 30cpm, Spo2- 98%. Patient was breastfed and he was given Hausa kooko with milk and a piece of "koose" at 7:45am. Patient played with mother after breakfast. At 8:19am, routine ward round was conducted by Ward Physician and no treatment was added. Patient's hemoglobin was checked for an increase in the level. Patient had a nap and woke up at 10:30 am and his vital signs were checked and recorded as:

Temperature 36.6°C

Pulse 102bpm

Respiration 30cpm

Spo2 97%

At 11:00am full blood cell count revealed a haemoglobin level of 11.6g/dl. At 11:15am an evaluation of the goal set on admission to increase patient's activity tolerance was evaluated. The goal was fully met as child engaged in playing with mother reported an increase in activity level and absence of general body weakness. At a glance through the care plan, it was identified that most of the objectives have been achieved. Upon an interview, mother confidentially reported that her child has almost recovered fully and was looking forward to be discharged home. She was commended for her positive thought as it was made known to her that they would be discharged tomorrow if his condition is satisfactory to the Doctor in-charge. Patient's due medication served and vital signs checked and recorded as;

Temperature 36.6°C

Pulse 121bpm

Respiration 30cpm

Spo2 99%

Child was fed with tuo-zaafi and green leaf soup with fish with which patient ate very well. The child was fed with water melon as requested by the physician at 1:33pm. At 2:00pm, due medications were administered and vital signs were assessed and recorded as; Temperature-37.3°C, Pulse-110bpm, Respiration-28cpm, Spo2-96%.

Mother was then assessed on the previous knowledge gained on the signs and symptoms of gastroenteritis, and she answered the questions correctly pertaining to what causes gastroenteritis. Mother was encouraged to ask questions and seek help to their benefit. Mother was emotionally supported to allay anxiety and make them at ease. I informed mother that I'll be going to where they live and assess the environment.

In the evening at 4:30pm, patient was fed with one of his favorite diet rice and beans stew and he was able to ingest almost all the food that was served. Information gathered that day

was entered and documented appropriately to ensure continuity of care. Patient slept at 9:00pm.

Fifth day of admission, 3rd December, 2022

Patient woke up at 6:00am, patient's personal hygiene was ensured. On this day patient's condition had improved tremendously and was very active that morning. Patient's mother looked very cheerful. At 7:00am, patient's due medications were administered and charted accordingly. Routine vital signs were checked and recorded as follows;

Temperature 36.1°C

Pulse 111bpm

Respiration 21cpm

Spo2 98%

Patient was served with 400mls of corn porridge. At 9:20am, ward round was done by Ward Physician and made orders to discharged patient home with oral medication and to be reviewed on Monday, 9th December, 2022. Patient's mother was officially informed about their discharged. Mother wasn't surprised since she has seen the activeness of the child and she was very excited when she heard about their discharge. An evaluation was made for the set objective on anxiety. Goal was fully met as mother corporated in care, asked questions and verbalized measures taken in care of the child. Mother was asked to demonstrate how to administer patient's medications, which she did excellently. A final evaluation was made as a set objective was achieved at 12:30pm, as goal was fully met as fluid and electrolyte balance and body temperature were restored to normal. Mother identified support group, strategies to maintain normal body fluid and she sought financial assistance from the husband.

Patient's particulars were once again recorded in the Admission and Discharge book as well as the daily ward state after the Physician's report. Emphasizes was made on the need to ensure oral hygiene twice daily for family and also education given to the patient's mother

on the need to ensure prevention, because prevention they say, is better than cure. It was explained to her to feed the child on demand to prevent anaemia and to help in child's growth and development. Mother was also educated to seek immediate and proper health care when there is a minor ailment to prevent most complications of any presenting disease and also to avoid over the counter drugs. All her bills were fully settled because she was an insured patient. Before patient and mother set off, mother thanked the nurses and Physician on the ward and bade them goodbye. I promised to visit them at home and I helped them arrange their items and then escorted them to the hospital entrance. They took a tricycle at the entrance and I bade them farewell. After the patient had been discharged home, the bedside locker and the bed were disinfected. All dirty linens were removed. This was done to ensure cleanliness at the ward to prevent cross infections. The interventions undertaken were documented for continuity of care and reference.

4.2 Preparation of Patient/Family for Discharge and Rehabilitation

Preparation of patient/family for discharge started from the day of admission. Patient/family care was continued until the end of hospitalization. Patient's mother was told that the hospital was not going to be their permanent living environment but she would be discharged home as soon as patient's condition had improved based on the competent care that would be rendered to him.

On the 3rd December, 2022, at 9:20am, during the ward round patient was discharged. Patient's mother was very happy when she was officially informed about their discharge home. The need for review was discussed with patient/family to return on the 9th December, 2022. Mother was told to report promptly to the hospital for proper management if any change occurs in patient's condition before the review date is due. Patient's mother was educated on the causes, signs and symptoms, management, prevention and possible complications of patient's disease condition (gastroenteritis) and the need for good personal

hygiene and good nutrition. Mother was also advised to wash hands before feeding the patient. I helped mother to pack their belongings and made sure she gave the medications as prescribed according to the dosage, route and time. She thanked the nurses and Ward Physician and bid them goodbye. I then escorted them to the entrance where they took a tricycle to their house. The interventions undertaken were documented for continuity of care and references.

4.3 Follow Up/Hope Visit/Continuation of Care

According to Prabhakara, Short Textbook of Community Health Nursing (2011), home visit is a family-nurse contact which allows the health worker to assess the home and family situation in order to provide the necessary nursing care and health related services. The purpose of home visit is to find out needs of patient/family and community in relation to health, socio-economic and cultural aspects, to provide teaching regarding the prevention and control of diseases, to assess the living condition of the patient/family, and to establish a close relationship between the nurses and the patient/family.

First home visit, 2nd December, 2022

The first home visit was done to at 2:00pm after my shift at the ward since the patient stays around the area of the hospital. This home visit was made when the patient was still at the hospital. A planned visit was made to the patient's house to assess the surrounding environment and to find out anything that might be the possible cause of the disease, and factors that predisposes an individual to the disease. I informed the patient's mother about my intention to visit her house after my shift, thus, 2:00pm and she gave the contact of her husband's brother. Mother of the patient made call him to tell him about my visit to their place. There was a sign board one with the name of a pub written on it at a junction before you get to the house. From the sign board I walked about 1kilometers and got to the house. On reaching the house with patient's uncle, an inspection was conducted and it was realized

that, the compound was neatly kept. I noticed that the house was built from cement blocks with green paint with corrugated roofing sheets and with electricity, one bathroom with one toilet for all the members in the house and two bedrooms, one for the parents and one for the children. The rooms were well ventilated with four (4) windows to allow for true ventilation. Also had a kitchen made with cement and the floor was cemented with nice wooden door. Pot and container used in storing drinking water was looking clean and covered. A refuse bin situated at an extreme corner of the kitchen was well covered. The environment looked clean but there were dust around which could predispose the child to getting an infectious disease such as gastroenteritis. I advised him to clean the place with soapy water and a rug. He had to continue to change the water frequently to prevent the place from drying up with the dust still drawing at the place. I educated patient's uncle about the need to practice good environmental and personal health sanitation, ensure that their drainage system is and also encouraged him to continue to keep their home and compound clean to prevent the other sibling from falling sick as well. All questions asked by patient's uncle were tactfully answered and was also encouraged to ask question. I took this opportunity to educate him on a current situation in Ghana, covid-19 protocols such as washing of hand frequently with soap under running water for 20seconds, avoid touching of the face and to stop shaking hands and hugging people for now and also how to apply alcohol hand rub. Also, he was educated on not sharing personal items such as phones, handkerchief and combs. Also, he was educated on covering of mouth and nose when coughing and sneezing and to take physical (social) distancing seriously. Avoid eating or drinking in public places and to wear a mask. She was also educated to reports to the nearby health facility when experiencing the following signs and symptoms dry cough, fever and chills, shortness of breath or difficulty breathing, fatigue, muscles or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea and vomiting and diarrhea. I made him demonstrate on how

to wash the hand with soap under runny water and alcohol hand rub. After staying for a while, I thanked patient's uncle for his support and contribution and promised to be back for the second time. I asked permission to leave around 5:20pm. I got into tricycle (motor king) around 5:22pm to go back to my house.

Second Home Visits (7th December, 2020)

The second home visit was made on the 7th December, 2020, four days after the discharge of patient. It was aimed to remind them about the review date and also to find out what they are actually practicing what they were thought. It was also to find out whether they were implementing the education they had received during the admission as well as verifying if she abides by the medical regimen as prescribed.

I arrived at patient's house at 9:55am. Patient and family were very glad to see me. They offered me a seat and warmly welcomed me. I asked about patient's health and mother replied saying, since the day of discharge he has not encountered any health complaints again. I carried along with me the following equipment, and pulse-oximeter and thermometer. Truly, he was clinically stable as an evidenced by his vital signs temperature- 36.2^0 C and pulse- 112beats per minute. I asked to see patient's drug and notice that he was taking as prescribed and some of them have even finished. I congratulated mother for giving all the drugs to the patient as prescribed without defaulting. Patient and family were advised to wash hands frequently before eating, after changing diapers, after visiting the toilet and after eating, avoid intake of fatty foods, cold foods and foods that are extremely hot. Patient was also educated to use soya beans oil and sunflower oil when cooking, minimizing sodium intake, reduction of stress to have adequate rest, involving patient in passive exercises, attending to medical reviews regularly and reporting to the hospital whenever experiencing any symptoms that are unusual. Mother was also educated to sleep under treated insecticide

mosquito net and remove rubbers covered on her windows to promote adequate and good ventilation. I reminded them once again on the date of review with the promise to meet them on that day at the out-patient department. The family expressed their gratitude and accompanied me to the road side to board a tricycle back home.

4.4 Day of Review/ Follow up (9th December, 2020)

Before the day of review, patient's mother was called on phone in the evening and reminded that the scheduled review was on the next day. She was told to come early to make the review smooth and less stressful. Patient and mother were met at the out-patient department (OPD) as planned at 8:13am. Patient's folder was retrieved from the record room and was taken to see a Doctor at the consulting room. The vital signs were checked and recorded as; Temperature - 36.6°C, Pulse -108 bpm, Respiration - 23 cpm. On review patient's mother gave no complaints, child was very active and requested to do a full blood count to know the haemoglobin level of the child and a result of 12.6g/dl was recorded. Mother was congratulated for ensuring compliance to the treatment regimen which had helped improve the health of the patient haemoglobin level. She was commended on giving patient medications as prescribed without defaulting. I encouraged mother to call me or the hospital when she needs clarification about anything or having any doubt. I also informed them about my next visit which was to terminate the care rendered by handling over the care to the family. I accompanied them to the hospital entrance where I bade them farewell.

Third Home Visit/Termination of Care, 13th December, 2021.

I made my third home visit on the 13th December, 2021. The purpose of the visit was to find out how patient was doing and to terminate care. I made my third and last home visit. I reached patient's house at 10:15am. Patient was doing well and relatives were not surprised at seeing me, since they were informed. As I was entering the house an observation was done,

this time round things were in order. Patient and family were congratulated for sticking to medical advice given them and other education they had while on admission. I carried along with me the following vital signs equipment, wristwatch, thermometer, book and pen. I checked his vital signs especially the temperature- 36.1^0C. Also, mother demonstrated enough knowledge and skills in the management of the child and child looked cheerful, active and healthy. I then took the advantage and threw more emphasis on the need to ensure personal hygiene, the importance of good nutrition, the need to eat more fruits and the need to ensure environmental cleanliness. I finally informed mother that my care for patient would end that day and I supposed to hand over care to a community nurse in that community but no one as such was not available, so the mother was educated and encouraged to report early to the hospital or nearby Clinic anytime the need arises. I thanked them for their co-operation which made the study a success. Patient and family were glad for all the assistance and care received. Mother and family expressed their gratitude and their readiness to co-operate. This was done to terminate the care. After interacting with patient and family for a while, I emphasized on the education that had been given to them already. I thanked them for their cooperation which made my study a success. The family was very grateful for the support and care given to them. They promised to adhere to all the medical advice given. I sought permission to leave and bade them the final farewell.

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 (Brenda, Janice, Suzanne, & Kerry, 2014).

Evaluation is the final stage in the nursing process and it is to know whether the goals set were fully met, partially met or unmet at all, and if not, the action to be taken to meet the objectives

5.1 Statement of Evaluation

During the care of patient, objectives were set for problems identified with good nursing management and cooperation from patient and family, all objectives were fully met and patient's health condition improved. Throughout the period of admission, six health problems were recorded and objectives were set to solve them. Below is the summary of the interventions carried out and to what extent the goals were met.

Patient regained his normal body temperature within 48 hours

On 29th November, 2022, at 4:00am, the problem of high body temperature of 39.3°C was identified and a nursing diagnosis of "Hyperthermia related to dehydration as evidenced by fatigue, increased heart rate" was formulated and various nursing interventions were laydown as means of achieving the set objectives. The goal was to help patient regain her normal body temperature within 36 hours. Mother was reassured that child's fever will subside. Vital signs were assessed and read; Temp-39.3^{0}C, Pulse- 142bpm, Resp-32cpm, Spo2-98%. Vital signs on evaluation was recorded as follows; temperature37.2°c, pulse- 121bpm, respiration-

28cpm, spo2- 95%. Intravenous paracetamol 150mg and intravenous normal saline 1litre were administered. Patient was served with cold “sprite” and water as preferred and cold water on demand to reduce temperature.

Mother was educated on the cause of fever and its management and the needs to report any increase in fever. Louvers were kept open to ensure adequate ventilation to help temperature return to normal. The care plan was evaluated on the 30th November, 2022, at 10:0am. The Goal was fully met as nurse recorded an axillary temperature of 36.3^0C and mother reported that child’s fever had subsided.

Child’s activity tolerance restored within 72 hours.

On 29th November, 2020, the problem of activity intolerance was identified and a nursing diagnose of “Activity intolerance related to decreased haemoglobin concentration as evidenced by pallor and fatigue” was formullated. The set goal was to help patient restored his activity level. The appropriate nursing interventions were carried out as ordered; Mother was reassured about improvement in child’s activity. Patient had passive and gradually active exercise which fostered his muscle strength and tone. Vital signs were assessed after the exercise and read; Temperature -37.1°C, pulse- 122bpm, Respiration- 32cpm and SpO2- 99%. Patient’s mother was encouraged to engage child in playing. Mother reported fatigue during the first 24 hours but subside within the next 48 hours. Enough rest was ensured to conserve energy to alleviate fatigue; Syrup zincovit and tablet folic acid 5mg were prescribed and administered to the patient. The objective was evaluated at 12:00pm on 2nd December, 2022 and goal was fully met as child engaged in play with his father, mother verbalized an increase in activity level and reported absence of general weakness haemoglobin level of 11.6g /dL was recorded.

Patient regained normal nutritional pattern within 48 hours.

On 29th November, 2022, day of admission. Patient was unable to feed well and a nursing diagnosis of "Imbalanced nutrition less than body requirement related to insufficient dietary intake as evidenced by insufficient interest in food" was made. An objective to enable patient feed well within 48 hours was set. These interventions were carried out to meet the set objective; Mother was informed on the food nutrients that will help the child to gain weight. Assessment on patient nutritional history was done and recorded as he had normal weight for age being eating well. The actual weight was assessed and patient was well nourished with weight of 13kg. Patient was provided with small but frequent and nutritious feedings (tuo-zaafi and green leaf soup) as tolerated to reduce fatigue. Enough rest was ensured for patient to improve his ability and desire to ingest food. Patient was able to ingest tuo-zaafi and green leaf soup served as the mother was educated on the essential nutrients needed for the best development of her child. An evaluation was made at 12:30pm and goal set was fully met as patient maintained a normal weight of patient maintained weight of 13.2kg and mother reported that child has regained appetite.

Patient maintains normal fluid volume throughout the period of hospitalization.

On the day of admission, an objective of maintaining a normal fluid volume throughout the period of hospitalization was carried out. A nursing diagnosis of "Risk for deficient fluid volume as evidenced by insufficient knowledge about fluid needs and frequent vomiting" was made and an appropriate nursing intervention was carried out as well. This includes; Clinical features of dehydration with sunken eyes good skin turgor, moist skin and mother report no thirst. Patient's pulse was 125bpm; temperature was also 36.9°C. 500mls of normal saline was administered. Patient took in 200mls of orange juice every day with 500mls of water, thus the mixture of the oral rehydration salt solution. Vomitus was clear and non – offensive.

An evaluation was made on 10:15am on 29th November, 2022. The goal fully met, as patient had good skin turgor, moist skin and reported no thirst and vomiting subsided.

Mother was relieved of anxiety throughout the period of hospitalization.

On 29th December, 2020, at 10:45am, mother was anxious and measures were put in place to solve the associated problem based on the nursing diagnosis of "Anxiety (mother) related to change in child's health as evidenced by poor eye contact" was formulated. Nursing objectives were set to relieve the mother of the anxiety within 24 hours. The interventions include; Mother was reassured to feel that she can trust the nurses and rely on them for the care of her child.. Mother was educated on the benefits of procedures such as tepid sponging and the administration of intravenous therapy and the use of medical jargons were avoided to ensure clear understanding. Mother was oriented to the ward and its annexes to promote comfort and decrease anxiety and was attentively listened to as she expressed her feelings verbally. A busy and noisy environment was prevented to reduce the anxiety level of the mother and encouraged to seek assistance to help reduce anxiety. At 10:45am on 1st December, 2022, goal was fully met as mother cooperated with care of child, mother asking questions about care of child and mother participating in treatment of child as mother cooperated and engaged in child's care.

Mother gained adequate knowledge on gastroenteritis, its treatment and prevention throughout the period of hospitalization

Mother gained adequate knowledge on gastroenteritis, its treatment and prevention throughout the period of hospitalization.

On the second day of admission, patient's mother was anxious because she had inadequate knowledge on gastroenteritis with its causes, sign and symptoms, prevention and its

management. Measures were put in place for mother to gain more knowledge on the condition of her child as a nursing diagnosis of “Deficient knowledge (mother) related to insufficient information as evidenced by insufficient knowledge on gastroenteritis, treatment and prevention” was formulated. The nursing interventions include; Mother was reassured of gaining more knowledge on gastroenteritis, its management and prevention. Mother was able to administer zinc tablet to child and provide cold drinks for child to drink when temperature was high. Teaching and learning were enforced when child was resting to obtain maximum concentration from the mother. Teaching was repeated to enhance learning as mother was involved actively in the learning process. The set goal was evaluated on 2nd December, 2022, as mother asked questions, verbalized and demonstrated on the prevention of gastroenteritis and its prevention such as washing hands before feeding, ensuring personal and environmental hygiene.

5.2 Amendment of Nursing Care Plan for Partially Met or Unmet Outcome Criteria

With reference to the care plan drawn and implemented on the patient and family, all set objectives were met as stipulated, with the implementation of the appropriate nursing interventions. There was no amendment of any goal

5.2 Termination of Care

This forms the last aspect of the interaction with patient and his family. This is a period in which a therapeutic interaction comes to an end. The interaction with patient and his family started on the day of admission, 29th of November, 2022, and ended on 13th December, 2022, during the last home visit. This stage was difficult as there had being a good relationship between the patient, mother, some family members but every nurse-patient relationship needs to be terminated.

The preparation for termination of care started on the day of admission through discharge, review to the third home visit. On 13th December, 2022, I visited the patient and his family members at home and finally informed them that, it was going to be the last visit to them. As I was entering the house an observation was done, this time round all things were in order. Though it was hard for them to accept this was the last time of the home visit. They were also happy that patient had recovered. I thanked them for their co-operation and they asked for God's blessings for me and that ended the interaction and termination of care. I thanked them sincerely for their co-operation The family was very grateful for the support and care given to them. They promised to adhere to all the medical advice given. I sought permission to leave and it was granted. I left the house.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Introduction

Summary is a comprehensive and usually brief abstract, recapitulation, or compendium of previously stated facts or statements. Conclusion is something that you decide when you have thought about all the information connected with the situation (Weller, 2014).This is the last chapter for the patient/family care study and it entails the summation and conclusion of all care to patient/family throughout the period of hospitalization.

6.1 Summary

Summary is a brief statement of the main points of something (Chester & Murray, 2010).

Patient is an eleven months old baby admitted on the 29th November, 2022, at 4:00am, at the Paediatrics Ward of Holy Family Hospital, Techiman, from the Out-Patient Department with the diagnosis of gastroenteritis. Patient presented with signs and symptoms such as fever, general body weakness, loss of appetite, anxiety, knowledge deficit and vomiting. The diagnostic investigations carried out on the patient were; Blood for malaria parasite, Blood for hemoglobin level estimation, Blood for white blood cell count. Treatments given to patient during his period of hospitalization included;

1. Oral rehydration salt powder 100mls
2. Intravenous Ringers Lactate 1 liter daily
3. Intravenous dextrose normal saline 1 liter
4. Tab folic acid 5mg daily x 30 days
5. Zinc tablet 20mg daily× 7days
6. Intravenous ciprofloxacin 100mg bd x 24 hours

7. Syrup zincovit 5mls daily x 30 days
8. Intravenous paracetamol 150mg tid x 48 hours

During the period of hospitalization six nursing problems were identified. A nursing care plan was drawn to implement nursing interventions for quality health care to the patient and family as a whole. Vital signs before discharge were checked and recorded as; temperature-36.1°C, pulse-111bpm, respiration-21cpm, spo2-98%. Continuity of care was ensured with three home visits and a follow up/review made in the hospital. Patient was discharged home on the 3rd December, 2022, to continue with treatment when his condition improved. Patient came for review on the 9th December, 2022. Education was given to the mother on the importance of good nutrition, the need for him to eat more fruits and the need to ensure their personal hygiene and their environmental cleanliness. Mother was advised on the importance of reporting to the hospital whenever they are sick. The care rendered to patient ended on 13th December, 2022, which he had recovered fully.

6.2 Conclusion

The study has equipped me with knowledge on how to care for a patient as an individual. Through this study, I have been able to put into practice actual and holistic nursing care as it has been learnt theoretically. The study provided a therapeutic environment for nursing patient as an individual and has promoted a good nurse-patient/family relationship as well as broadened my knowledge on gastroenteritis, its management and prevention.

It is my recommendation that all students are given the opportunity to embark on the patient/family care study to implement the nursing process in order to render

individualized comprehensive care to patients/families. In brief, I wholly enjoyed every part of writing this script despite the challenges encountered.

APPENDIX

Table 7: Patient's vital signs throughout the period of hospitalization

Date	Time	Temperature (^{0}C)	Pulse (Bpm)	Respiration (Cpm)	Spo2 **(%)**	**Weight (kg)**	**Blood Pressure(BP**
Vital signs during tepid sponging							
29/11/2022	4:00am	39.3	142	32	98	13	
	4:10am	38.3	105	30	99		
	4:40am	37.2	121	28	95		
	6:00am	37.1	121	28	96		
	10:00am	36.9	110	30	95		
	2:00pm	37.0	111	30	99		
	6:00pm	37.3	115	29	99		
	10:00pm	37.6	112	29	100		
30/11/2022	6:00am	36.5	111	31	98		
	10:00am	36.8	112	31	99		
	2:00pm	36.3	110	29	98		
	6:00pm	36.3	111	26	98		
1/12/2022	6:00am	36.0	108	29	98		
	10:00am	36.2	103	30	97		
	2:00pm	36.2	105	24	100		
	6:00pm	36.1	100	22	99		

Table continues

2/12/2022	6:00am	36.6	102	21	99		
	10:00am	36.6	100	22	99		
	2:00pm	36.5	101	25	97		
	6:00pm	36.1	100	21	98		
3/12/2022	6:00am	36.7	102	24	99		
	10:00am	36.5	105	25	98		

BIBLIOGRAPHY

Biotechnology, N. C. (2013). *Gastroenteritis review*. U.S national library: NCBI.

Chan SS, N. K. (2003). Acute bacterial gastroenteritis. *a study of adult patients with positive stool cultures in the emergency department*.

collins, W. (2009). *diictionary.com*. Retrieved 2012, from dictionary.com: http//www.dictionary.com

Council, N. R. (2001). Division on earth and life studies, board on atmospheric sciences and climate. 160.

Ethelwynn L, S. J. (2007). *Nursing Practices: Medical-Surgical Nursing for Hospital and Community* (African Edition ed ed.). Glasgow , Glasgow Caledonian University, UK.

Health, T. D. (1985). *Gastroenteritis.* Texas.

Hofmann, K. (2018). Nutrition and Dietetics. *Health 24*.

Nicki R, C. B. (2010). *principles and practice of Medicine* (21st Edition Ed ed.). Edinburgh: Churchhill Livingstone Elsevier.

Salami, A. F. (2019). Prevalence, risk factors and seasonal variations of different Enteropathogens. *acute gastroenteritis*, BMC pediatr 19, 137.

sons, j. w. (2020). *wiley online library*. Retrieved 2023, from onlinelibrary.wiley.com: http//onlinelibrary.wiley.com

Walter, E. (2013). Cambridge Adanced Leaners Dictionary (2nd ed.). Cambridge:

Cambridge University press.

Cheever, K. H., & Hinkle, J. L. (2018). *Brunner & Suddarth's Textbook of Medical-*

Surgical Nursing (14th ed., Vol. 1). Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

John, David T.,William A.& Petri, Jr. (2006). *Markell and Voge's Medical Parasitology. 9th ed.* Saunders Elsevier.

Kaushansky,et al. (2016). *Williams Hematology (9 ed.).* New York: McGraw-Hill Education.

Myers., J. (2016). *Nursing care plans: Nursing diagnosis and intervention (6th ed.).* St. Louis, United States: Elsevie.

Parry et al. (2016). *Principles of Medicine in Africa (3 ed.).. (R. G. Eldryd Parry, Ed.).* Singaporre: Tien Wah Press (Pte) Ltd. Retrieved 9 1, 2018 .

Parry, Godfrey, Mabey, & Gill. (2016). *Principles of Medicine in Africa (3 ed.). (R. G. Eldryd Parry, Ed.).* Singaporre: Tien Wah Press (Pte) Ltd. Retrieved 9 1, 2018.

Pasikhova, Y. (2017). fever in patients with cancer. *Moffitt cancer centre*, 193-197.

Patrick et al. (2016). *Dictionary of Nursing (2nd ed.).* 38 soho square London: A&C Black publishers LTD. Retrieved 9 1, 2018.

Plewes et al. (2018). Pathophysiology, clinical presentation, and treatment of coma and acute kidney injury complicating falciparum malaria. *Current opionin in infectious disease*, 69-7

Smeltzer et al. (2010). *BRUNNER&SUDDARTH Textbook of Medical Surgical- Nursing*

(12th edition). Philadelphia:Lippincott.,William.;Wilkins.

Taylor, J. S. (2016). *health history* . Birmingham.

Taylor, Lillis, & Lynn. (2015). *Fundamentals of nursing (8 ed.).* Lisa McAllister.

Venugopal et al. (2020). *Plasmodium asexual growth and sexual development in the haematopoietic niche of the host.*

Walter, E. (2013). *Cambridge Adanced Leaners Dictionary (2nd ed.).* Cambridge: Cambridge University press.

Warrell DAet al. (2010). *Oxford Text Book of Medicine. Fifth edition.7.8.2 Malaria.* California: New Jersey, New York City.

Weller. (2014). *Bailliere'S Nurses Dictionary (26th edition) for Nurses and Health care workers.* China: Tindall.,Baillierre.

Weller, B. F. (2014). *Bailliere's Nurses' Dictionary (26th edition) for Nurses and Health Care Workers* (26th ed.). China: Tindall., Baillierre.

WHO. (2003). *Infectious Disease, Book 5 : Evolving Infections.*

Patient's Folder Number AAA5651 (Holy Family Hospital,Techiman).

SIGNATORIES

THE STUDENT

NAME: ASANTE JENNIS OSEI

SIGNATURE: .....

DATE: 6th July, 2023.

THE WARD IN-CHARGE OF THE PEADIATRICS' WARD

(HOLY FAMILY HOSPITAL, TECHIMAN)

NAME: MATTHEW AMANKWAA

SIGNATURE: .....

DATE: 11/04/2023

THE SUPERVISOR

NAME: ANTOINETTE EFFUM

SIGNATURE: .....

DATE: 6th July, 2023

PRINCIPAL

HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

NAME: MONICA NKRUMAH

SIGNATURE: 17/07/23

PRINCIPAL
HOLY FAMILY NURSING AND
MIDWIFERY TRAINING COLLEGE
BEREKUM