HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE,BEREKUM

A PATIENT AND FAMILY CENTERED CARE STUDY ON CELLULITIS

BY

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

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PREFACE

Nursing now a profession has evolved through time to be the nursing known today. In the prehistoric era, nursing was "untaught" and instinctive which was performed out of compassion and desire to help others. It was based on experience and observation and was a woman's function to naturally nurture the child, the sick and aged. Later it evolved and care was given by crusaders, prisoners and religious orders of the Christian Church while receiving on the job training from more experienced nurses. But nonetheless it made no much improvement in health as angry Protestants confiscated properties of hospitals connected with Roman Catholicism. Many nurses therefore fled for their lives. During the 19th and 20th centuries however, nursing developed as there were many wars, arousal of social consciousness and increased educational opportunities offered to women and the enormous role played by Florence Nightingale that cannot be over emphasized. The training of nurses in diploma program, licensing of nurses, specialization of hospitals and diagnosis, development of baccalaureate and advance degree programs and scientific and technological development as well as social changes mark this period. More than ever, today's nurses need to think critically, creatively, and compassionately to reach out to all.

The nursing process is a deliberate problem-solving approach for meeting a person's health care and nursing needs. It consists of a sequence of steps in the following order: assessment, diagnosis, outcome identification (objective/outcome criteria), planning, implementation, and evaluation. Assessment is the systematic collection of data to determine the patient's health status and identify any actual or potential health problems. Diagnosis is identification of actual, potential and collaborative patient problems whereas planning is the development of goals and outcomes, as well as a plan of care designed to assist the patient in resolving the diagnosed problems and achieving the identified goals and desired outcomes. Implementation is the actualization of the

plan of care through nursing interventions and evaluation is determination of the patient's responses to the nursing interventions and the extent to which the outcomes have been achieved.

The patient/family care study forms part of the assessment of every final year student. It is a prerequisite for every candidate in order to partially fulfill the award of diploma certificate in Registered General Nursing by the Nursing and Midwifery Council of Ghana. It affords the student the opportunity to develop his/her skills for future use. The patient/family care study is a comprehensive account of the comprehensive nursing care rendered to the patient and family from the day of admission through the day of discharge, review and follow up visits.

The confidentiality of the patient and family were ensured by the use of patient/family initials instead of their full names.

The comprehensive care rendered was made possible by the employment of skills and knowledge in such disciplines as psychology, public health nursing, medical nursing, surgical nursing, pharmacology and nutrition and dietetics to meet the patient/family's needs and the community at large.

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The greatest thanks giving goes to the Almighty God for given me the strength and wisdom to pursue this three-year course and also writing this care study.

I will also like to show my appreciation to my patient N.A.E. and his family for their understanding and consent in the process of executing my nursing care and procedures.

A big thank you to the Principal of Holy Family Nursing and Midwifery Training College, Berekum, Madam Monica Nkrumah.

My sincere thanks also goes to my supervisor (Mr. Amos Owusu) and the whole staff of Holy Family Nursing and Midwifery Training College, Berekum, I take this opportunity to express my thanks to the paediatric ward in-charge, Mr. Augustus Amankwaa Boadi , the nurse administrator, Doctors and other workers of Holy Family Hospital for their maximum support. not forgetting the staff of Holy Family Hospital, Berekum, especially those of Paediatric ward.

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INTRODUCTION

This Patient/Family care study contains detailed care that was carried out on Master N.A.E. a 4 year old boy who was admitted into the paediatric ward of Holy Family Hospital Berekum, on the 10 /11/2022 at 1:30pm with the diagnosis of Cellulitis after presenting with pain at the right leg. He was attended to by Doctor M.G. Prescribed drugs included; IV Clindamycin 150mg qid × 48 hours, Suspension Flucloxacillin 5ml qid x 5days, Suppository Paracetamol 250mg tid x 1 day, Cap Clindamycin 75mg qid x 5 days, Syrup Ibuprofen 100mg tds x 5 days . Laboratory investigations carried out on patient were; Blood for Full blood count (FBC) and Test for malaria parasites.

All laboratory investigations were reviewed and appropriate interventions were carried out.

During his period of hospitalization, the five health problems that were identified includes: pain at the right leg, high body temperature, Difficulty in sleep, loss of appetite, Patient's mother has little knowledge on disease condition. Nursing care plan for the identified problems were drawn and implemented. Some of the interventions given include; Patient's mother was reassured of speedy recovery since he is in the hands of competent nurses and medical team, the level of pain was assessed, Patient was put in a comfortable position, patient's mother was educated on disease condition. Prescribed analgesics were served. This led to the speedy recovery and discharging of patient on 14/11/22.

About three home visits were made to the patient's home during the period of care.

The first one was during his hospitalization to confirm information provided by the patient, assess patient's home environment and to create a conducive home environment for receiving him after discharge. The second was after discharge to remind patient of review date and to assess patient's compliance with treatment and education was given and the last visit was to hand patient over to

a community nurse to ensure continuity of patient’s care. During the home visits, education on patient’s condition and its management, personal and environmental hygiene, good nutrition and the adverse effects of continuous use of over the counter drugs were given and reinforced.

The care was terminated on 25/11/2022 during the third home visit.

This script is organized, written and compiled into six chapters for easy reading and understanding based on the nursing process.

1. Chapter one (1) consists of assessment of the patient and family
2. Chapter two (2) consists of analysis of data collected
3. Chapter three (3) deals with the planning of patient and family care
4. Chapter four (4) consists of the implementation of the planned patient and family care
5. Chapter five (5) deals with evaluation of care rendered to patient and family
6. Chapter six (6) also deals with summary and conclusion of the care study.

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CHAPTER ONE

ASSESSMENT OF PATIENT / FAMILY

1.0 Introduction

Assessment is the first phase of the nursing process. It identifies the information about the patient, patient's family and community characteristics. It includes gathering information to diagnose the specific problems that requires the appropriate nursing intervention.

Assessment starts from the day the nurse comes into contact with the patient, up to the day of discharge and also follow- up. (Brabin, 2017)

1.1 Patient's Particular

Master N.A.E., the subject of my study is 4 years old boy and was born on the 17th of March, 2019 to Madam Y.B and Mr. E.D. He is the second born of his parents and has two siblings. He comes from Berekum but currently lives at Ahenbronoso in the Bono Region. He is a Christian and worships with his parents in the Church of Christ at Berekum every Sunday. He is dark in complexion and weighs 12.4 kilograms and height of 90cm. Master N.A.E. lives with his mother and father at Ahenbronoso. He is in Nursery at Stop Over International School and has no physical impairment. His next of kin is Madam Y.B (Mother). My patient speaks Twi.

1.2 The Patient's Family Medical

A patient and a family medical history is a record of health information about a person and his or her relative. A complete record includes information from three generation of relatives, including children, brothers and sisters, parents, nephews and nieces, etc. Together with these factors can give clues to medical conditions that may run in a family (Weller, 2016)

According to the patient's mother, this is the 4th time of hospitalization. There is no history of surgery and hereditary conditions like essential hypertension, diabetes Mellitus, Asthma and mental illness and sickle cell disease in the family. She said some of the family members take alcohol, some also smoke and some abuses drugs.

However, the family sometimes suffered from minor ailments such as headache, abdominal upset, diarrhea for which they sought treatment from Aponsakrom Health Centre or pharmacy. He also said there is no history of communicable diseases like tuberculosis, leprosy and others and also there is no food allergy and drug allergy present in the family.

1.3 The Patient/Family's Socio Economic History

It is the social science that studies how economic activities are affected and shaped by social processes. In general, it analyses how families progress, stagnate, or regress because of their local economy. Family socio-economic history deals with the social background and economic status of the patient and the family. Social-economic history gives more information about the patient's environment, housing types, parent's occupation and marital status, number of individuals living in the house and sleeping arrangement, religious affiliations and others (Hornby, 2017).

According to Madam Y.B, the relationships between their family members are cordial and friendly. They attend Church on Sundays. The mother said N.A.E. is having health insurance and if it had not been the National Health Insurance Scheme (NHIS), they (father and mother) would not have been able to pay for the hospital bills.

According to Madam Y.B. (mother) she and her husband are farmers. They cultivate crops such as cassava, maize, plantain and yam. They also cultivate vegetables like garden eggs, pepper, okro, tomatoes and rear domestic animals like poultry. Madam Y.B. also said, they sometimes sell some of the crops for the up keep of the family. Aside farming, she also said she sells koko. The mother

said, the family depends on the income generated from the sale of the farm produce. Though the income earned is not sufficient for the family, there is no financial support from other family members. The income earn is used to support the family. They are exposed to so many dangers in relation to their work such as cuts from cutlasses been used, bite from snakes, sting from scorpions and so many others. According to Madam Y.B., she believes there are family values, taboos and cultural practices but they are not known to her.

1.4 Patient's Developmental History

Development is defined as the process of growth and differentiation. Growth, as well, is the progressive development of a living thing, especially the process by which the body reaches its point of complete physical development. (Weller, 2016).

Master N.A.E. was born on 17th March, 2019 at Holy Family Hospital, Berekum in Bono Region. According to N.A.E.'s mother, she delivered spontaneously per vagina at the ninth month of pregnancy. She practiced exclusive breast feeding for six months, before supplementary foods were introduced. N.A.E. was breastfed for a period of 2 years. He was immunized against all the six communicable diseases. He passed through the normal developmental milestone. He was able to sit without support at her fourth (4th) month of life, able to crawl at his sixth (6th) month and started walking on the eleventh (11th) month of life. According to the mother, N.A.E. never had any serious sickness during his infancy that could have impeded his growth. N.A.E. began having abnormal swollen of the feet and palm at the age of six months.

1.5 Patient's Lifestyle and Hobbies

Lifestyle is the pattern of daily living that an individual develops (Weller, 2016). Hobbies are activities one does for pleasure when he/she is not working. (Hornby, 2017)

N.A.E. is the calm type of person and socializes with people he knows or has ever come into contact with.

Patient gets out of bed around 6:00am; he brushes his teeth with tooth brush and toothpaste (pepsodent). He is assisted by the mother to take his bath with warm water twice every day, in the morning and evening before going to bed. He uses sponge and towel. He is able to free his bowel two to three times each day. He does this early in the morning before taking his bath, sometimes during the afternoon and in the evening before taking his bath.

He takes his breakfast around 7:00am. He likes porridge (koko) with beans cake (koose), and then he goes out to play. He normally plays games on his mother's phone and sometimes plays with toys. He usually takes his snack around 10:00am and 3:00pm. He takes lunch between 12:00 pm and 1:00pm. He either takes rice with palava sauce, banku with okro soup and fish or yam and garden eggs stew with egg.

He usually takes his supper at 6:00pm which may either be fufu with light soup and redfish or rice and tomato stew with egg or banku with palm nut soup. He sometimes takes some deserts like orange, pawpaw and banana but he prefers orange to the others.

The food he likes best is fufu and light soup with chicken. He drinks about 1500miles of water throughout the day. After sup per he takes his evening bath, brushes her teeth, play with toys and goes to sleep at 8:00pm.

1.6 The Patient's Past Medical History

Past medical history is the total sum of a patient's health status prior to a presenting illness. It is also a narrative or record of past events and circumstances that are or may be relevant to a patient's current state of health informally, an account of past disease, injuries, treatment, and other strictly

medical fact (Medilexican, 2018). According to Madam Y.B, N.A.E. never fell seriously sick during the first five months of life.

1.7 The Patient's Present Medical History

Present medical history is the details about the chief complaint. It is also the exact condition that brought the patient to the health facility. (Med-ed. virginia.education, 2016)

N.A.E. was well until 9th November, 2022, when he started complaining of body pains, and loss of appetite and swollen of the wrist and ankle was visible, fever and yellow coloration of the eyes and he was voiding out concentrated urine.

According to madam Y.B, she managed the loss of appetite by giving her Zincovit orally and folic acid orally, ibuprofen was also administered orally to reduce pain and she also said she gave him dewormer because she was suspecting that, N.A.E. is being infected by a wo rm that was why he was losing appetite. She waited for N.A.E to respond to treatment but to no avail, and so she rushed him to the hospital on the 10th November, 2022 and was referred to Paediatric ward (children's ward) where N.A.E. was transfused with one pint of blood group O^+.

1.8 Admission of Patient

Admission of a patient is when an illness or injury requires an immediate health care (Hornby, 2017). Admission can de scheduled (planned) or unscheduled (emergency).

On 10th November, 2022 around 3:00pm, patient was admitted to the paediatric ward through the Out-Patient Department. He was accompanied by a nurse and his mother. He was in a wheel chair. They were welcomed at the nurses' station and a comfortable seat given to the mother. The admission papers were taken from the accompanying nurse and patient's particulars confirmed

with the mother. Madam Y.B. was reassured and other nurses on duty introduced themselves to her to promote co-operation.

Patient was immediately put in a well-prepared admission bed and his vital signs checked and recorded as follows;

Temperature	:	38.4°C
Pulse	:	108bpm
Respiration	:	28cpm
Weight	:	12.4kg

Patient's particulars such as name, age, sex, address, hometown, next of kin and religion were all entered in the Admission and Discharge book as well as the daily ward state. Patient's mother was then oriented in and around the ward. The nurse introduced herself as well as other colleagues at the nurses' station and assured her of their competency in helping her son get well.

She was then oriented to the ward's place of convenient and the wash rooms as well as the patient and relative next to her. She was also informed of the hospital's policies. That is the cash and carry system and the National Health Insurance Scheme.

Patient's mother was made aware of the hospital's routines such as time of visiting, feeding, type of cloth his son is supposed to wear. The daily routine nursing care and ward rounds. She was also told to provide items which will be needed for patient's hospitalization such as sponge, soap, towel, pomade and powder to help maintain patient's hygiene.

Patient's mother was also advised to keep valuable items such as mobile phone and money safety. This helps to gain her cooperation and relieved her of anxiety. The following medications were prescribed by the doctor were collected and administered as ordered:

1. IV Clindamycin 150mg qid × 48 hours

2. Suspension Flucloxacillin 5ml qid x 5days
3. Suppository Paracetamol 250mg tid x 1 day
4. Cap Clindamycin 75mg qid x 5 days
5. Syrup Ibuprofen 100mg tds x 5 days

All these medications were correctly administered as ordered.

He ordered the following investigations and tests;

a. Full blood count
b. Test for malaria parasites

1.9 Patient's Concept of His Illness

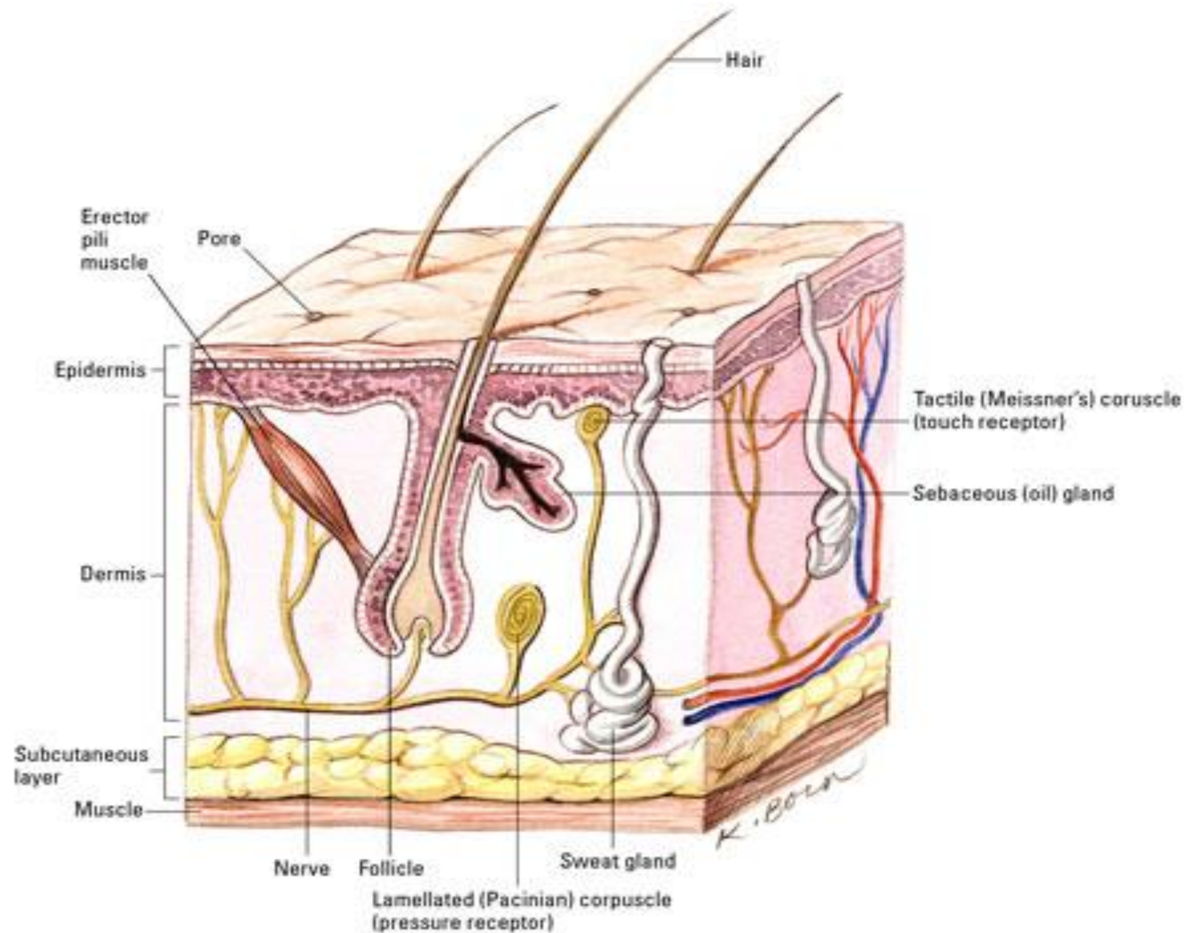
Patient's knowledge of the condition was that he has generalized body pains and fever which has led to his admission but his mother has some amount of knowledge con cerning her child's condition. Patient's mother believed that the clinical manifestations such as pain, fever and loss of appetite would be relieved once treatment has started.

1.10. Literature Review on Cellulitis

Anatomy and Physiology of The Integumentary System (skin)

According to (Waugh, 2012) the integumentary System (skin) consist of the skin, hair, oil and sweat glands, nails and sensory receptors which play a role in the maintenance of homeostasis. It is the largest organ in the body which acts as the primary barrier in disease prevention. It consist of two layers`,

Figure 1: layers of the skin



1. The stratified squamous epithelium called the epidermis
2. A deeper connective tissue layer called the dermis

Below the skin is another connective tissue layer called the hypodermis. The epidermis consist of dead cells within which the specialized cells below are found`,

a. Keratenocytes which produce keratin to form the honey layer of the skin.
b. Melanocytes which produce a pigment melanin that gives skin colour.
c. Tactile cells for sensory response.
d. Non pigmented granular dendrocytes (dendritic cells, or Langerhans) for immunity.

The dermis is the deeper and thicker than the epidermis .It consist of elastic and collagenous fibres which support the epidermis of the skin. This layer consists of cells of connective tissues which

can be inflamed when exposed to bacterial infections which refer through as cellulitis. Kenneth and Saladin (2008).

Definition

Cellulitis is an acute spreading bacterial infection of the skin and the tissue immediately beneath the skin. From the viewpoint of Clark (2017), Cellulitis is an infection of the deep dermis of the skin by beta-hemolytic streptococci.

Causes

According to Kuma and Clark (2007), Cellulitis is caused by;

1. Bacteria

    a. Streptococci: streptococci spread rapidly in the skin because they produce enzyme that hinder the ability of the tissue to confine infection.

    b. Staphylococci bacteria can also cause cellulitis, especially after bites by human beings, animals or after injuries in contaminated water or dirty environment. Bacteria usually enter through small breaks in the epidermis that result from scrapes, punctures, burns and skin disorders such as dermatitis.

Risk Factors

1. People with cracks or peeling between the toes

2. History of peripheral vascular disease
3. Injury or trauma with a break in skin
4. Insect bites and stings, animal and human bites
5. Blockage in blood supply to a site (ischemia)
6. Use of corticosteroids or drugs that suppress the immune system.
7. Wound from recent surgery
8. People with immunosuppression
9. Malnutrition
10. Cutaneous inflammation (tineapedis, eczema, burns)
11. Ulcers from diabetes

2. Diabetics are more susceptible to cellulitis than the general population because of impairment of immune system. They are especially prone to cellulitis in the feet because the disease causes impairment of blood circulation in the legs leading to diabetic foot/ foot ulcer. Poor control of blood glucose level allows bacteria to grow more rapidly in the affected tissue (Bare, 2018)

Pathophysiology

When streptococcus enters the body through an opening, they attack the hair follicles. They then accumulate and multiply causing the local infection which results in swelling, redness, pain and warmth.

The organisms then produce an enzyme called hyaluronidase which causes the spread of the infection by breaking down the fibrin network and other barriers that help in keeping inflammation localized.

The spread of the inflammation may eventually become systemic if not treated. Cellulitis often occurs on the legs. Symptoms often include swelling, redness, fever and pain that spread over a large area. If untreated, cellulitis can spread to the lymph nodes and blood that lead to serious life – threatening complications such as bacteraemia (Bare and Smeltzer, 2015)

Clinical Manifestations

According to Joyce M. Black e'tal (2006).

1. Fever and Chills
2. Redness and tenderness of affected part
3. Headache
4. Hot or warm feeling of the affected part
5. Swelling of the site
6. Warmth over the site
7. Sore skin or rashes
8. Tight, glossy and stretched appearance of skin
9. Itching
10. Malaise
11. Blisters(occasionally)
12. Lymphadenopathy may be present
13. There may be delirium
14. It may be nodular on rare occasions
15. Hair loss over the site
16. Nausea and vomiting
17. Pain

Diagnosis/Diagnostic Investigations

The following are some of the ways in which someone with cellulites may be diagnosed.

1. Physical examination reveals warmth, redness and swelling
2. Culture and sensitivity test to detect the present of organism and the antibiotic they are most sensitive to (in case of wound)
3. Full blood count
4. Liver function test to rule out any involvement of the liver.

   Since the disease look similar to Deep Vein thrombosis, differential diagnosis is done to rule out the condition. When the knee is flexed, patient may complain of pain in the calf muscle on dorsiflexion (Pratt sign) which show deep vein thrombosis (Smelter & Bare, 2010).

Laboratory investigations include;

1. Random Blood Sugar (RBS);
2. Fasting Blood Sugar (FBS); and
3. Haemoglobin level Estimation (Hb).

Medical Treatment

1. Administer systemic antibiotics such as penicillin, metronidazole, clindamycin, etc.
2. Give analgesics such as diclofenac or ibuprofen for pain.
3. Administer antipyretics to combat pyrexia.
4. Immunosuppressed people may be given immune boosters.
5. Patients with cutaneous inflammation may be given topical antibiotics or antifungals such as miconazole cream.
6. The affected site is dressed with normal saline.

Surgical Treatment

According to .Suzanne C.S (2000), cellulites may be treated through the following surgical means;

If the edema is severe and uncontrolled by medical therapy, surgery is done. If mobility is severely compromised or if infection persists, one surgical approach involves excision of the affected subcutaneous tissue and fascia with skin grafting to cover the defect.

Another procedure involves the surgical relocating of superficial lymphatic vessels into deep lymphatic system by means of a buried dermal flap to provide a conduit for lymphatic drainage. Debridement may also be done to remove dead tissues.

Nursing Management

According to (Bare B. a., 2012) the following are nursing care given to client with cellulitis

Psychological Care

Reassure patient and family that the client is in the hands of competent staff and that proper medical care is available for complete recovery. Allow client as well as his family members to voice out their worries and ask questions, their worries should be addressed and questions answered as honestly as possible.

Engage patient in friendly interactions to aid comfort and relaxation at the hospital this also promotes cooperation and rapport establishment.

Engage the patient in diversional therapy such as watching of television and explain any procedure before carrying it out. This helps reduce anxiety and pain.

Drug Administration

All prescribed drugs should be administered ensuring that it is the right drug, given through the right route, to the right person at the right time. Observe for any side effects of the drug and ask patient to voice out any abnormality noticed after taking the drug. All administered medications with any side effect (if present) should be documented and reported. The following classes of drugs are given (Agbeko 2014);

1. Analgesics; eg diclofenac, ibuprofen, paracetamol, tramadol etc.
2. Antibiotics; clindamycin, ciprofluoxacilin, etc.
3. Antiprotozoal; e.g. metronidazole
4. Anti-fungal; e.g. muconazol
5. Anti-inflammatory; ibuprofen, diclofenac, hydrocotisol
6. Intravenous Fluid; e.g. normal saline, ringers lactate, dextrose in normal saline, etc.

Position, Rest and Sleep

Ensure bed rest in a peaceful environment. Patient should be made comfortable always to reduce the impact of pain. Client is best nursed in a supine position with the affected limb slightly elevated with a pillow to help reduce oedema. Measures should also be taken to ensure that client sleeps well. All nursing interventions should be carried out in well ventilated and noise free environment.

Personal Hygiene

Ensure proper hygiene methods such as bathing at least twice daily and brushing of the teeth or cleaning the mouth daily. Dirty clothing and linen should be changed .The hands and feet should be well cared for by ensuring that nails are clean and tidy, by washing and combing. Care should be taken when bathing or cleaning the affected area to avoid inflicting pain. All used items during all nursing cares taken must be discarded or decontaminated appropriately.

Nutrition

A well balanced meal should be provided containing carbohydrates, protein, vitamins, fats and oil, roughages and minerals.

Food should be extra rich in vitamins especially vitamin C and protein to help boost the immune system and facilitate healing.

Roughages as well as proper intake of fluids should be ensured to help prevent constipation due to limitation in activities and movement of client.

Ensure adequate intake of diets which are easily digestible and absorbable e.g., fruit juice to prevent constipation or GI abnormalities.

Observation

Patients vital signs should be checked and recorded accurately (temperature, pulse, respiration, blood pressure).this aids to assess the progress of the client. Patient's level of pain is also assessed so that measures may be taken to reduce it. Physical examination should be done daily to assess signs and symptoms at the site.

The client's level of activity is also assessed so that the necessary help may be rendered. Therapeutic and other effects of drugs are also assessed for response to treatment.

Weight of client must be assessed and compared to the normal weight of the client to detect deviation from normal. Circumference and length of the affected limb should be measured on daily bases and compared to the unaffected one to detect the degree of abnormality.

Elimination

Due to reduced activity and bed rest, patient may experience constipation thus intake of roughages, fruits and fluids should be encouraged to aid free bowel movement.

In case of vomiting, a vomits bowl should be made available to the patient. Vomitus should be observed for its characteristics and abnormalities and recorded.

Bed pan must be served when necessary.

Patient and Family Education

Advice patient and family to ensure personal and environmental hygiene (bathing and brushing the teeth daily, keeping the surroundings clean, wearing of clean clothing and proper well-fitting shoes.

Educate on protective measures for the skin such as application of lotions and skin cream to prevent cracking of the skin, wearing of comfortable shoes to prevent athletes' foot, wearing appropriate protective equipment during work and sports. In case of a break in skin, it should be cleaned carefully and covered with a clean material. It should be reported to the hospital if it bleeds severely or does not heal. They should also be educated to take good care of bites from insects and avoid scratching them as it may result in a wound.

Dog bites and bites from other animals should be reported to the hospital for the necessary treatment. Meals should also be well balanced with a lot of vitamins to boost immunity and facilitate healing. Educate patient on the need for proper intake of drugs and the importance of review.

Prevention

This entails what measures to embark on to avoid the occurrence of the disease. Making the

causes of the disease condition well recognized clarify the exact measures which when put into practice will not pave way for the disease to occur. Some of the preventive measures which were embarked on under this disease condition are as follows;

1. The wound was cleaned and covered to prevent the entry of micro-organisms.
2. Education on good personal hygiene was given to prevent the recurrent episode of the disease.
3. Medications were administered as prescribed and follow up adhered to.

Complications

According to medical and surgical nursing by Linda Felver;

1. Bone infection

Is a long term complication if untreated, the microbes destroys the skin tissues and extend to affect the bone causing osteomyelitis.

2. Inflammation of the lymph vessels (lymphagitis)

The bacterial infection in which the microbes enter lymph draining from infected tissues and spread along the walls of lymph vessels this will cause inflammations of lymph vessels and then spread through lymph draining network to systemic circulation.

3. Meningitis (if its peri-orbital)

When the infection spread through lymph draining network to systemic circulation the bacteria enter the bloodstream and are carried to the brain meninges and surrounding tissues causing inflammation of the meninges.

4. Sepsis

Sepsis is as result of bacterial spread in the bloodstream and become systemic causing infection of the blood.

5. Tissue death (gangrene)

Infection at the affect tissues, with long-time deprivation of blood (oxygen) result in tissue death.

1.11 Validation of Data

To render quality nursing care to a patient, valid assessment of data is needed to prevent errors in care plan and to aid speedy recovery. Owing to that, patient's relatives confirmed the information collected. The signs and symptoms my patient exhibited and the diagnostic investigation carried out matched with the literature review and that also confirmed the diagnosis.

All these comparisons were made to confirm the accuracy of the data collected on the patient. Data collected were free from errors and all particulars were valid.

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

Analysis is the arrangement and grouping of identical material meaningfully for the purpose of identification and comparison. Analysis in the nursing process deals with comparing data gathered on the patient with the standard to help determine any deviation from normal functions of the body and this enables the nurse formulate appropriate nursing interventions. This chapter compares data

gathered with standards. It basically compares causes, treatment, diagnosis, investigations, clinical features and complications with references from the literature review and text books. It also looks at the patient/family strength, health problems and nursing diagnosis formulated and complications presented by the patient. (Tripathy, 2018)

2.1 Comparison of Data with Standard

Diagnostic Investigation

The following laboratory investigations were carried out on Master N.A.E. during his hospitalization

1. Full blood count
2. Blood for malaria parasite.
3. Blood for differential red blood cell count.

Table 1: Comparison of data collected with standard values

The following tables illustrate the comparison of data collected with standard values.

Date	Specimen	Investigation	Results	Normal value	Interpretation	Remarks
10/11/22	Blood.	Malaria parasite.	Malaria parasite was absent.	Negative	Patient has no malaria	Patient was encouraged to sleep under insecticide mosquito net.
11/11/22	Blood.	White blood cell count	17.39 x 10^9/L	6.2-17 x 10^9/L	Slightly above normal indicating infestation	No treatment was given
11/11/22	Blood.	Red blood cell count.	2.22 x 10^{12}/L	3.5-5.2 x 10^{12}/L	Below normal indicating slight anaemia	Folic acid 5mg x 30 was given to stimulate normal erythropoiesis.
11/11/22	Blood.	Platelet count	170 x -10^9/L	150-400 x -10^9/L	Within normal range	No treatment was given.
11/11/22	Blood.	Mean Corpuscular Haemoglobin (MCH)	23.0pg	23-31pg	Result is normal	Treatment was not given.
11/11/22	Blood.	Mean Corpuscular volume (MCH)	77mm^3	70-86mm^3	No abnormality was seen	No medication was given.

Causes

With reference to the literature review, patient's condition was caused by intravascular haemolysis.

Table 2: Diagnostic test carried on N.A.E. Compared with Literature Review

LITERATURE REVIEW	TEST CARRIED ON N.A.E.
Physical examination revealing warmth redness and swelling.	Physical examination was conducted on patient.
Full blood count	Full blood count was done for patient.

Malaria parasite test was ordered by the doctor but was not in the literatures review. It was done as a differential diagnosis to rule out malaria

The table below shows the diagnostic investigations/tests carried on N.A.E.

Table 3: Investigations/Tests Carried On N.A.E.

Date	Specimen	Investigations	Results	Normal Range	Interpretation	Remarks
10/11/22	Blood	White Blood Cell (WBC) count	13.57 [10^x3/ul]	2.80-8.0 [10^x3/ul]	Increased WBC indicates there was an infection.	Antibiotics were administered.
10/11/22	Blood	Haemoglobin	16.4 g/dl	Males; 13.00 – 18.00 g/dl	Normal Haemoglobin level, indicating patient is not anaemic.	No treatment given, since Hb level is within normal range
10/11/22	Blood	Neutrophil	7.2/µL	1.50-7.00 µL	High Neutrophil count, patient has bacterial infection	Antibiotics were administered.
10/11/22	Blood	Malaria Parasites	Negative	There should be no malaria parasites in blood	Negative results indicate that my patient was not having malaria	No treatment was given

B. The cause of patient's illness

With reference to the various diagnostic investigations, there was an increase in white blood cells indicating the presence of an infective process.

C. Clinical Manifestation

The table three (3) below indicates the signs and symptoms exhibited by patient with the literature review.

Table 4: Comparison of Clinical Features of Patient to that in the Literature Review

According To Literature	As Exhibited By Client
1. Swelling at the site	Clients right leg was swollen
2. Tenderness	Client complained of tenderness
3. Warmth over the site	Client's right leg was warm to touch
4. Fever	Client experience fever
5. Headache	Client mother complained of headache
6. Blisters	Client developed blisters
7. Redness	Client's right leg appeared reddened
8. Delirium	Client did not experience Delirium
9. Joint stiffness	Client did not complain of joint stiffness
10. Lymphadenopathy	Client did not experience lymphadenopathy
11. Hair loss over the site	Client did not experience hair loss
12. Nausea and vomiting	Client did not experienced nausea

With reference to the literature review and the clinical manifestations exhibited by my patient, it can be confirmed that he had cellulitis.

D. Treatment given to patient

Treatment is the mode of dealing with a patient or a disease (Gaunieus, 2021)

With particular reference to the literature review, the following specific drugs were prescribed for my patient;

1. Suppository Paracetamol 250mg tid × 24hours was prescribed to relieve pain.
2. Intravenous Clindamycin 150mg qid × 48 hours was prescribed due to the presence of infection.
3. Cap Clindamycin 75mg qid × 5 days was prescribed due to the presence of infection.
4. Syrup Ibuprofen 5ml tds x 5 days was prescribed to relieve pain.
5. Suspension Flucloxacillin 5ml qid x5days was prescribed to reduce swelling.

The table below compares the treatment given to my patient with those stated in the literature review.

Table 5: Treatment Given to Client as Compared with the Literature Review.

Treatment Outlined In Literature Review	**Treatment Given To My Client**
1.Antibiotics such as penicillin and metronidazole	IV Clindamycin 150mg qid × 48 hours, Susp. Flucloxacillin 5ml qid x5 days and Cap Clindamycin 75mg qid × 5 days was given.
2.Analgesic such as diclofenac and acetaminophen.	Supp. Paracetamol 250mg tid × 1 day and Syrup Ibuprofen 5ml tds x 5 days were given to my client.
4. Antifungal such as Miconazole cream.	Antifungal was not ordered for my client.
5. Immune boosters.	Immune boosters were not ordered for my client
6. Immobilized and elevated affected part.	Patient's right leg was elevated.
7.Wound dressing	Patient did not have wound.

Table 6: Pharmacology of Drugs Prescribed to N.A.E.

Date	Name of drug	Classification of drug	Standard Dosage and Route of Administration	Dosage and route of administration for the patient	Desired effect	Actual effect of the drug observed	Side effect(s)/ Remarks
10/11/22	Clindamycin	Antibiotic(Lincosamides)	Route: intravenously Orally Dosage: Adult; 150-300mg in every 6hrs up to 450mg in every 6hrs in severe infections. Children: 3.6mg/kg/6hrs	Dosage: 150mg qid x 48hrs Route: Intravenously	It inhibit protein synthesis of pyrogenic gram negative and gram positive anaerobic organisms.	Client's condition improved as nature of wound showed sign of healing.	Diarrhoea, abdominal discomfort, jaundice, esophagitis, nausea and vomiting. None of these were evident in the client.

Table 6: Pharmacology of Drugs Prescribed to my Client cont.

Date	Name of drug	Classification of drug	Standard Dosage and Route of Administration	Dosage and route of administration for the patient	Desired effect	Actual effect of the drug observed	Side effect(s)/ Remarks
10/11/22	Clindamycin	Antibiotic (Lincosamides)	Route: intravenously Orally Dosage: Adult;150-300mg in every 6hrs up to 450mg in every 6hrs in severe infections. Childr0en: 3.6mg\kg/ 6hrs	Dosage:75 mg qid x 5 days	It inhibit protein synthesis of pyrogenic gram negative and gram positive anaerobic organisms.	Client's condition improved as nature of wound showed sign of healing.	Diarrhoea, abdominal discomfort, jaundice, esophagitis, nausea and vomiting. None of these were evident in the client.

Table 6: Pharmacology of Drugs Prescribed to my Client cont.

Date	Name of drug	Classification of drug	Standard Dosage and Route of Administration	Dosage and route of administration for the patient	Desired effect	Actual effect of the drug observed	Side effect(s)/ Remarks
10/11/22	Paracetamol	Non-opiod analgesic (antipyretic)	Route: Rectal Dosage: Adult- 500-1000mg every 6-8hrs. Children: 2 years-3 years 250mg to be taken 3-4 times daily	Dosage: 250mg tds x5 24hours Route: rectal	It has analgesic and antipyretic properties with no useful anti-inflammatory action	Client's pain was relieved and also patient's fever was subsided.	Nausea, stomach pain, darker urine, jaundice, liver damage. None of these were evident in the client.
10/11/22	Ibuprofen	Nsaid analgesics	Oral: 100mg 8 hourly	Dose : 100mg tds x 5 days Route: Oral	To relieve pain from various conditions and to reduce fever.	Client was relieved from pain.	Dizziness, nausea. None of these were evident in my client
14/11/22	Flucloxacillin	Isoxazoly penicillin of the ß-lactam group	Oral: 12.5-25mg 6 hourly	Dose:5ml qid x5 days route: Oral	To reduce swelling	Client swelling was reduced	Diarrhoea, Nausea, Vomitinng and bloating

Complications

With reference to the complication indicated in the literature review, patient did not develop any complication due to effective medical and nursing care given during his admission.

2.2 Patient and Family Strength

Patients' mother had knowledge on personal hygiene and was able to direct patient to maintain some aspect of his personal hygiene such as oral care.

Patient's mother was able to express herself fluently in Twi which made communication between her and the health team very effective.

Patient and mother was co-operative and understanding during hospitalization and this made his care easier.

Patient and family took the education and advice given to them seriously and into practice. The family, friends, and neighbours of N.A.E. visited and prayed for him.

Patient was supported financially by his family therefore the purchase of drugs and payment of his bills was not a problem and was also a NHIS holder. His immediate needs were promptly provided with no difficulty.

2.3 Patient's/Family Health Problems

From interview and data collected from patient, it was identified that he had the following problems;

1. Patient experienced pain at the right leg.
2. Patient had a high temperature (pyrexia)
3. Patient was unable to sleep (insomnia)

4. Patient had loss of appetite (Anorexia)
5. Patient mother has little knowledge on disease condition.

2.4 Nursing Diagnosis

1. Pain related to inflammatory process of the right leg.
2. Altered body temperature (38.9^{o}C) related to disease condition.
3. Sleeping pattern disturbance (insomnia) related to change of environment.
4. Alteration in nutrition (less than body requirement) related to loss of appetite (anorexia)
5. Knowledge deficit related to the management of Cellulitis.

CHAPTER THREE

PLANNING FOR PATIENT AND FAMILY CARE

3.0 Introduction

The nursing care plan is a systematic approach used in carrying out nursing activities with and for patient. It brings about the method of primary nursing care. It also enables the health team to determine the patient's health status and to identify his health problems. After these problems have been identified, the nurse will formulate diagnosis and plan a care that is adequate enough for the patient and implement (Guigernsh, 2017).

3.1 Objective/Outcome Criteria

1. Patient will be relieved of pain within 30munites as evidenced by patient verbalizing the absence of pain.
2. Patient will be able to maintain a normal body temperature within 24 hours as evidenced by patient's temperature reducing to normal.
3. Patient will have a sound sleep for at least 30 minutes during the day and four (4 hours) at night as evidenced by patient demonstrating ability to fall asleep within few minutes of lying-in bed.
4. Patient will regain his appetite within 2 days as evidenced by;
   a. Patient consuming at least half bowl of meal served.
   b. Nurse observing the patient tolerating almost all the food served.
5. Patient and mother will have adequate knowledge on the management of Cellulitis within 3 hours as evidenced by;

   a. Patient and mother verbalising measure of managing the disease.

   b. Patient and mother answering questions put to them correctly.

3.3 Nursing Care Plan

Table 7: Nursing care plan

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
10/11/22 At 3:30pm	Pain related to inflammatory process of the right leg.	Patient will be relieved of pain within 30 minutes as evidenced by patient verbalising the absence of pain.	1. Reassure patient's mother of competent nursing care. 2. Monitor and record patient vital signs 4 hourly. 3. Elevate the affected limb. 4. Employ diversional therapy. 5. Administer prescribed analgesics.	1. Patient's mother was reassured of competent nursing care. 2. Patient vital signs was monitored and recorded 4 hourly. 3. The affected limb was elevated. 4. Diversional therapy was employed. 5. Prescribed analgesic was administered.	11/11/22 At 3:30pm	Goal fully met as patient verbalised the absence of pain.	A.R.

Table 7: Nursing care plan cont.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
10/11/22 At 6:05am	Alteration in body tempera-ture (38.9ºC) related to infection.	Patient will be able to maintain a normal body temperature within 24 hours as evidenced by; patient's temperature reducing to normal (36.2ºC-37.2ºC)	1. Reassure patient. 2. Tepid sponge patient 3. Serve patient with cold drinks to help reduce the temperature. 4. Open nearby windows to improve ventilation. 5. Monitor temperature at least 1 hour for 4 hours and 4hourly throughout the day. 6. Administer prescribed antipyretics.	1. Patient was reassured that the high temperature was due to disease condition and that measures would be taken to bring it down to normal. This was done to relieve patient and mother from anxiety. 2. Patient was tepid sponged with tepid water and towel leaving drops of water on the skin to be dried by evaporation and as result reduce the temperature. 3. Patient was served with cold drinks (fruit juice) to help reduce temperature. 4. Nearby windows were opened to improve ventilation. 5. Patient's temperature was monitored every 1 hour for 4 hours and 4 hourly throughout the day and recorded. 6. Prescribed antipyretic (Paracetamol) was administered to reduce patient's high body temperature.	11/11/22 At 6:05am	Goal fully met as patient's tempera-ture reduced to 36.8 which fall within the normal range.	A.R.

Table 7: Nursing care plan cont.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
11/11/22 At 8:25pm	Sleep pattern disturbance (insomnia) related to change of environment	Patient will have a sound sleep for at least 30 minutes during the day and four (4 hours) at night within 48 hours as evidenced by; 1. Nurse observing patient sleeping for 6-8 hours at night. 2. Mother reporting child slept very well.	1. Reassure patient. 2. Provide comfortable bed. 3. Position patient in a way that favours him in relaxation. 4. Provide enough warmth. 5. Suggest the use of soporifics such as milk. 6. Protect patient from bright light and noise. 7. Instruct patient to avoid drinks containing caffeine and nicotine. 8. Organize nursing care.	1. Patient was reassured that all measures are being put in place to help him have a sound sleep. This was to relieve his anxiety. 2. Comfortable bed was prepared for the patient using clean bed linen free from creases and cramps. 3. Patient was put in a position that he found more relaxing and comfortable 4. Nearby windows were closed and fans reduce to the lowest in order to avoid chills. Warm bath was given in the evening. 5. Patient was served with milk-shake which facilitates sleep. 6. All bright light were put off leaving one at the nurses' station and all noise were reduced to barely minimum as possible to facilitate sleeping. 7. Patient was advised to avoid drinks that contain caffeine and nicotine because their stimulation can disturb sleep. 8. All nursing care were done at a whole, this promoted minimal interruption in sleep.	13/11/22 At 5:00am	Goal fully met as patient had a sound sleep throughout the night.	A.R.

Table 7: Nursing care plan cont.

Date/ Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
11/11/22 At 8:40pm	Alteration in nutritional pattern (less than body requirement) related to anorexia**.**	Patient will be able to regain his appetite within 2 days as evidenced by; a. Patient consuming at least half of meal served. b. The nurse observing the patient tolerating almost all the food served.	1. Reassure patient 2. Plan diet with patient 3. Remove unsightly things from patient vicinity. 4. Ensure that patient is free from pain before serving meals. 5. Maintain adequate oral hygiene to stimulate his appetite. 6. Serve diet rich in iron supplement.	1. Patient was reassured that he will be able to eat within 2 days. 2. Diet was planned with patient to help met his likes and dislikes. 3. Unsightly things such as bedpan, dust bins were removed from patient's vicinity to help improve his appetite. 4. Warm compresses were applied to painful areas of patient's body to relieve pain before meals were served. 5. Patient was assisted to clean his mouth with tooth brush and toothpaste early in the morning and in the evening after supper. The mouth was rinsed thoroughly with enough water before meals were served. 6. Patient was served with iron foods such as meat, green vegetables (Tuo zaafi and ayoyo soup) and prescribed iron supplement were given.	13/11/22 At 8:30pm	Goal fully met as patient was able to eat half bowl of meal served and was able to tolerate almost all the food served.	A.R.

Table 7: Nursing care plan cont.

Date/ Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
13/11/22 10:00am.	Knowledge deficit related to the management of Cellulitis	Patient and mother will have adequate knowledge on the management of Cellulitis within 3 hours as evidenced by; a. Patient and mother verbalising that they have adequate knowledge on the management of Cellulitis b. Nurse observing that patient and mother answers questions put to them correctly on the management, cause, signs and symptoms as well as complications of Cellulitis	1. Reassure patient and mother. 2. Create conducive environment of mutual trust and respect to enhance learning. 3. Ask patient and mother what they know about Cellulitis and educate them on the unknown. 4. Educate patient and mother on Cellulitis including causes, signs and symptoms, prevention as well as possible complication	1. Patient and mother were reassured that they will have adequate knowledge on the management of Cellulitis 2. A conducive environment of mutual trust and respect was established to enhance learning and answering of questions. 3. Patient and mother were asked about what they know about Cellulitis and based on that education was given on the management of Cellulitis 4. Patient and mother were educated on the cause of Cellulitis, signs and symptoms as well as possible complications.	13/11/22 At 1:00pm	Goal fully met as patient and mother verbalising that they have adequate knowledge on the management of the Cellulitis and nurse observing patient and mother answering questions put to them correctly.	A.R.

Table 7: Nursing care plan cont.

Date/ Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
			5. Allow patient and mother to ask questions bothering them.	5. Patient and mother were allowed to ask questions bothering them on the signs and symptoms, as well as the possible complications and management of the Cellulitis Answers to patient and mother's questions were given in simple terms to clarify any misconceptions.			
			6. Educate patient and mother on the need for regular medical check-up and drug regimen.	6. Patient and mother were educated on the need to come for medical check-up and importance of drug regimen.			

CHAPTER FOUR

IMPLEMENTING PATIENT/FAMILY CARE PLAN

4.0 Introduction

Implementation is the fourth step of the nursing process which includes putting into action the actual nursing interventions mentioned in the care plan (Hornby, 2017). These are activities on the patient's physiological and spiritual needs. This section of the care study includes;

1. Summary of the actual nursing care rendered
2. Preparation of patient and family for discharge and rehabilitation.
3. Follow-ups, home visits and continuity of care.

4.1 Summary of Actual Nursing Care Rendered to Patient and Family

The nursing management of the patient started on the day of admission to the day of discharge. The management aimed at promoting speedy recovery as well as preventing further complications (Guigernsh, 2017). During the period of admission daily routine care was carried out such as bed making, maintaining the personal hygiene and feeding of patient and serving of prescribed medication to the patient. Patient's temperature, pulse and respiration were checked and recorded. Specific care was carried out according to patients need on particular days and is narrated as follows;

4.2 First Day of Admission: 10th November, 2022.

On the first day of admission, patient presented with pain in the abdomen and swelling of the wrist and ankle. Patient and family were reassured that all measures will be put in place to relieve patient of pain.

Patient's pain was assessed to know the severity, location, type and duration. Foam overlay mattress was used to nurse patient to make him feel comfortable. Patient joints were massaged using warm water. He was also engaged in conversation and watching of television in order to take his mind of the pain. Prescribed analgesic and intravenous fluid were administered to patient to help relieve him of pain.

4.3 Second Day of Admission: 11th November, 2022.

On the second day of admission, I visited patient in the morning, assisted him with his personal hygiene but unfortunately, when the patient's temperature was taken at 6.00am, it was above normal range (36.2 -37.2 c). It was 38.9ºC which indicates that the patient has pyrexia. Patient and mother were reassured that the high temperature was due to the disease condition and that measures would be taken to bring it to normal. This was done to relieve patient and mother from anxiety. Patient was tepid sponged with tepid water and towel leaving drops of water on the skin to be dried by evaporation and as a result reduce the temperature. Patient was served with cold drinks (fruit juice) to help reduce temperature. Nearby windows were opened to improve ventilation. Patient's temperature was monitored every one hour for four hours and four hourly throughout the day and recorded. Patient's temperature reduced to 37.2℃ after tepid Sponging.

Prescribed drugs were administered including syrup paracetamol 50mg twice daily for 4 days to help bring temperature to normal. Patient was thanked for co-operation and procedure was documented in the nurse's note. Patient's temperature, pulse and respiration taken on this day were within the range of;

Blood Pressure------------------------120/80mmHg

Temperature-----------------------37.2ºC

Pulse-------------------------------------88 bpm

Respiration------------------------------24cpm

4.4 Third day of admission; 12th November, 2022.

On the third day of admission, patient's condition was improved than the previous day. Patient's routine care such as oral hygiene, bathing, hair and grooming were taken care of. His bed linen was changed. Patient's vital signs were checked and all medications served and recorded but patient could not tolerate even half of the food serve. The following nursing interventions were done; patient and mother were reassured that he will be able to eat within some few days. Oral toileting was ensured to boost his appetite for food. Diet was planned with patient to help with his appetite taking into consideration his likes and dislikes.

Warm compresses were applied to painful areas of patient's body to relieve pain before meals were served. Patient was served with iron rich foods such as meat, green vegetables (tuozaafi and ayoyo soup) and prescribed iron supplement that is folic acid 5mg was given.

Food was served in bit but frequently and attractively to help patient tolerate more. Patient mother was encouraged to stay with her child to meal time to stimulate his appetite and also enhance meal enjoyment. Patient's vital signs, temperature, pulse and respiration were checked and recorded were within the ranges of

Blood Pressure------------------------110/70mmHg

Temperature-----------------------37.0ºC

Pulse-------------------------------------80 bpm

Respiration------------------------------21cpm

4.5 Fourth Day of Admission: 13th November, 2022.

On the morning of the fourth day of admission, I visited patient and his personal hygiene was not taken care of. The following nursing interventions were carried out;

Patient was reassured that he will be assisted to maintain adequate personal hygiene throughout his stay on the ward. Patient was assisted to bath twice daily with warm water and soap and sponge. Privacy was provided during bathing and grooming. Patient's fingers and toe nails were trimmed with nail file.

Patient was served with analgesics, syrup paracetamol 5ml three times daily to reduce pain. Patient's temperature, pulse, respiration check on this day fell between the following ranges.

Blood Pressure------------------------120/80mmHg

Temperature-----------------------36.9°C

Pulse-------------------------------------84 bpm

Respiration------------------------------22cpm

4.7 Fifth Day of Admission (Day of discharge): 14th November, 2022

On this day patient looked cheerful and had no complains. Patient personal hygiene was maintained; vital signs were checked and were within normal range, prescribed medications were also administered as ordered. Patient had his breakfast and was able to tolerate it. During ward rounds the Doctor discharged patient to go home. Settlement of hospital bill was not a problem since patient was a National Health Insurance Scheme holder.

Patient folder number was sent for assessment and the non-insured drugs were paid for and a receipt was issued.

Patient and mother‘s knowledge on the disease was assessed and based on that they were educated on the disease condition, signs and symptom ,causes, complication and on the management of the disease .Patient’s mother was also educated on the need to provide her son’s nutritious diet rich in folic acid from leafy vegetables and iron rich foods to prevent anaemia, high calory diet to give patient energy, protein to build and repair worn out tissue and supplement with vitamins to boost patient’s immune system. Again, patient and mother were educated on the need to continue with drugs prescribed for the patient. They were also informed about the date of review which was on the 18th November, 2022 and was to report to consulting room 2 on that day, I informed her of my second home visit and helped her in packing their belongings. Patient was discharge from the admission and discharge book as well as the daily ward state. Patient’s mother expressed her gratitude to the staff and friends on the ward and bid them goodbye. I escorted them to the taxi rank to take a car home at exactly 12:20pm. Patient’s bed linen was removed and mattress disinfected with parazone 1:10 part of water and later cleaned with savlon and dried.

4.8 Preparation of Patient and Family for Discharge and Rehabilitation

The preparation of patient and family for discharge and rehabilitation commenced on the day of admission. It was made earlier to make patient and family understand that hospitalization is temporal and he would be discharge home.

During Admission, patient and mother were reassured of the competency of the staff and that patient will recover soon enough to go home. The causes, signs and symptoms, management and prevention of the crisis were also explained to them. On the day of discharge, emphasis was made on various educations that took place at the time of admission. They were also education the need to maintain good personal hygiene such as bathing twice daily, oral care, hair care, grooming and proper hand washing before and after eating or visiting the toilet.

Again, the need to sweep, weed, scrub, and proper disposal of refuse was encouraged to be practiced in their environment. Then education also included the need for patient to take a well balance diet rich in protein to repair worn out tissues, carbohydrate for energy, vitamins to boost patient's immune system. Patient's mother was also advised to make sure that the patient takes his drugs to ensure continuity of care at home and ensure complete recovery. Patient mother was informed to bring her son for review on the 18th November, 2022 to consulting room 2 at the Out-Patient Department (OPD). Patient's mother was advised to bring patient to hospital for proper management and appropriate treatment should any complication occurs. Finally, patient was discharge on the 14th November, 2022. His bills were assessed for proper documentation and his name, the date and bed number were entered in the admission and discharge book as well as the daily ward state. They were accompanied to taxi rank to take a car home and I informed patient and his mother of my second home visit. After their departure patient's bed linen was discarded and the mattress was disinfected and later cleaned with savlon and dried.

4.9 Follow – up / Home visit / Continuity of Care

Follow – up, home visit and continuity of care plays an important role in the care of the patient and family after discharge. It helps in observing the health and environmental conditions of the patient and family as well as helping to know the predisposing factors and hazards which could be dangerous to the health of the patient and family.

4.10 First Home Visit: 12th November, 2022.

The first home visit was made while the patient was still on admission on the 12th November, 2022.

The visit was to help me know more about the residence of the prevailing environment conditions as well as his natural habitat on which health education would be based. It was not difficult locating patient house since I was accompanied by his father. A thorough and quick observation was made on the environment on entering the house.

The environment was well swept, weeded, proper drainage system and dust bins for disposal of refuse. The home visit to the child's parents' residence was done while he was still at the hospital which was on 12th November, 2022, to know the child's parents living environment.

The aim was to help to know the child's condition and how he will cope after discharge. I was cordially welcomed by the other people in the house and it was seen with cordial approach at the time we arrived around 3:00pm. They lived in a compound house built with and roofed with aluminium sheet. It is said to be their family house. There were seven rooms in the house which is occupied seven small families.

The ground was not cemented. It was also observed that, there were gutters near their house and weed also which could breed mosquitoes. I made it clear to them the significance of clearing the weeds and also making sure the gutters were not choked. I made my intentions known to them that; I will visit them frequently even when the child comes home. The patient's relatives were reassured of the possibility of N.A.E's. discharge within some few days. They expressed their appreciation and with permission from them, I left the house and promised to visit them again when N.A.E. is discharged.

4.11 Second Home Visit: 17th November, 2022.

On the 17th November, 2022, I made my second home visit. Patient was doing well and her relatives were happy to see me. Upon interaction, I got to know that he had been taken his

remaining drugs and was looking healthy. He was congratulated and his relatives were encouraged to adhere to the health education given to them during admission and discharge. They were reminded of the review date which was 18th November, 2022. I then informed them that, on my next visit I will be accompanied by a public health nurse who will continue with the care. N.A.E.'s relatives expressed their gratitude and accompanied me to the lorry station to board a car back to school.

4.12 Review: Friday, 18th November, 2022.

On Friday, 18th November, 2022, patient was brought to the hospital by his mother for review as scheduled. They were assisted to activate his folder number and were accompanied to the consulting room two (2) at the OPD. After thorough examination by the doctor, he was declared fit and once again advised to take in well-balanced diet, continue with treatment and report at the hospital anytime he was sick for prompt treatment. Patient was informed of the next visit and was accompanied to the taxi rank to board a car.

4.13 Third Home Visit: 25th November, 2022.

On the third home visit, I visited my patient with a community health nurse (in accompany), who work at Berekum after arrangements had been made about patients handing over. This was done to terminate the care and to ensure the continuity of care. Patient and family were doing well with no complains. After interacting with patient and family for a while, I emphasized on the education that had been given to them already and introduction the community health nurse, Madam S.A. to them, and handed over patient to her for continuity of care. They were worried but I assured them that he is competent to provide a holistic continuity of care to them. Since it was the last day of my therapeutic relationship, I terminated my care and thanked them for their cooperation which made my study a success.

The family was very grateful for the support and care given to them.

CHAPTER FIVE

EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY

5.0 Introduction

This is measuring the outcome of nursing orders against previously determined goals. The nursing care given to patient was evaluated in order to determine whether the plan indicated previously was successful or not. It is the final phase of the nursing process.

5.1 Statement of Evaluation

During the evaluation of patient, it was observed that goals set for identified health problems were fully met without complication.

1. Master NA.E.'s pain at the right leg subsided.

On the day of admission, 10th November, 2022, patient complaints of pain. After implementing the necessary nursing care, the goal set was fully met as patient verbalized the absence of pain.

2. Patient's normal body temperature was restored within 24 hours.

On the second day of admission, 11th November, 2022 at 6:05am, patient temperature was above normal. Patient and mother were reassured that the high temperature was due to the disease condition and that measures would be taken to bring it to normal. This was done to relieve patient and mother from anxiety. Patient was tepid sponged with tepid water and towel leaving drops of water on the skin to be dried by evaporation and as a result reduce the temperature. Patient was served with cold drinks (fruit juice) to help reduce temperature. Nearby windows were opened to improve ventilation. Patient's temperature was monitored every one hour for four hours and four hourly throughout the day and recorded. Patient's temperature reduced to 37.2°C after tepid

Sponging. Prescribed drugs were administered including syrup paracetamol 50mg twice daily for 4 days to help bring temperature to normal. Patient was thanked for co-operation and procedure was documented in the nurse's note. Goals set were fully met as patient temperature reduced to 37.2^{0}C which falls within the normal range.

3. Patient slept for at least 30 minutes during the day and four (4 hours) at night.

On this same day, another objective set was that patient will have a sound sleep within 30 minutes. Another goal was set and fully met as patient had a sound sleep throughout the night when the necessary nursing measures were implemented.

4. **Patient regained his normal appetite was restored within 2 days.**

On the 12th November, 2022, patient experienced anorexia. Measures such as planning meal with patient and mother, oral hygiene using adequate water, removing nauseated things from his vicinity, serving food rich in iron, protein and vegetables attractively and in bits and at frequent intervals to ensure patient eat well and to boost up his immunity. Goal set was fully met as patient was able to eat almost all the food served at 9:00am on 12/11/2022.

5. Patient and mother gained adequate knowledge on the management of the condition within 3 hours.

On the 5th day of admission, 14th November, 2022, routine nursing care which included maintaining personal hygiene, checking of vital signs and administering of prescribed drugs were carried out. Patient made no complain during ward rounds but patient and mother had little knowledge on the management of Cellulitis Goals were set to educate patient and mother to allay

their fears and to have more knowledge base on the management of the disease. Goal set was fully met as patient and mother answered questions put to them correctly.

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

With the effective medical treatment and good nursing care given to N.A.E, all goals were fully met. The care was very successful as patient fully recovered from the health problems presented and there was no need to amend any part of the care rendered.

5.3 Termination of Care

The termination of care is a completion of care given to the patient and family.

It is always very difficult as both parties exhibit signs of separation anxiety. To prevent this from happening, it was made clear to patient and his family that the care was a therapeutic one which would last for only a short period of time. However, I promised them of any help when the need arises.

After patient's discharge, a series of home visits were made.

During the last home visit to patient's home, a community health nurse was introduced to patient and his family as the one to continue the nursing care. They were reassured that he is competent to provide a holistic continuity of care to them. I encouraged patient to continue with the drugs given and adhere to the medical advice. I thanked them for their co-operation and bid them goodbye.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Introduction

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

6.1 Summary of care rendered.

N.A.E was admitted on 10th November, 2022 into the children's ward through Out Patient Department of Holy Family Hospital. He spent a total of five (5) days at the hospital. During his period of hospitalization four (4) health problems were identified. The problems identified included; patient had pains on the right leg, patient had high body temperature related to Cellulitis, Impaired immobility (physical) related to swelling of the right leg, patient had difficulty in sleeping (insomnia).

Nursing diagnosis was stated for each of the problems and objectives/outcome criteria were set. Nursing interventions such as patient's right leg was elevated, vital signs were checked every 4 hourly, noise free environment was ensured, patient was engaged in diversional therapy to help divert his attention on the pain, warm compress was applied to the affected area. Diagnostic investigation conducted for my patient included

a. Full blood count,
b. Test for malaria parasites

During his period hospitalization, he was served with the following drugs

1. IVF DNS 300ml x24 hours
2. IV Clindamycin 150mg 6 hourly x48 hours
3. Paracetamol suppository 250mg 8hourly x24hours
4. Cap Clindamycin 75mg 6hourly x5days
5. Suspension Flucloxacillin 5ml 6 hourly x5days
6. Syrup Ibuprofen 5ml 8 hourly x5days

Patient was discharged on the 14th November 2022 and was asked to come for review on the 21st November 2022.

Three (3) home visits were made. The first was made on 12th November 2022 to find out the actual and potential problems that could have contributed to the patient's illness. The second was made 15th November 2022 to ascertain whether the education given him and his family during the period of hospitalization and first home visit had been adhered to and also to remind them of the review date. He was finally handed over to the community health nurse in Berekum on 25th November, 2022 during my last home visit.

6.2 Conclusion

In conclusion, my choice of nursing N.A.E. has strengthened my knowledge into his condition, cellulitis. The study has equipped me with knowledge in 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 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 cellulitis.

It is recommended that, the idea and principle behind the adoption of the nursing process which is the core approach to the writing of patient and family care study should be embrace by all nurses to ensure total patient care.

APPENDIX

Table 8: Vital signs for N.A.E

Date	**Time**	**Temperature (^{0}C)**	**Pulse (bpm)**	**Respiration (cpm)**	**Spo2 %**
10/11/22	1:30pm	38.3	116	29	99
	6:00pm	37.1	108	26	99
	10:00pm	37.4	118	22	97
11/11/22	06:00am	38.1	116	26	97
	10:00am	37.1	122	25	98
	02:00pm	36.6	108	22	99
	06:00pm	37.6	132	23	97
	10:00pm	36.8	113	24	98
12/11/22	06:00am	36.4	132	28	97
	10:00am	36.2	130	25	97
	02:00pm	37.0	98	20	98
	06:00pm	36.1	106	26	98
	10:00pm	36.3	122	22	99
13/11/22	06:00am	36.5	105	24	96
	10:00am	36.0	122	21	98
	02:00pm	36.1	105	20	99
	06:00pm	36.3	102	24	97
	10:00pm	36.4	108	21	99
14/11/2022	6::00am	36.5	105	22	97

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Patient Folder (Folder number: AAHO960) – Holy Family Hospital

SIGNATORIES

THE STUDENT NURSE

Name: ROSE ASANTE

Signature…

Date… 11/07/2023

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

Name: AMOS OWUSU

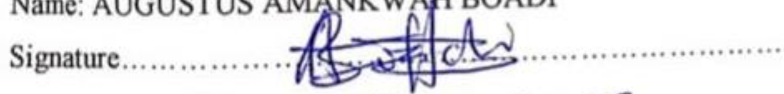
Signature…

Date… 17/07/23

THE NURSE-IN-CHARGE OF THE PEDIATRICS WARD (HOLY FAMILY HOSPITAL – BEREKUM).

Name: AUGUSTUS AMANKWAH BOADI

Signature…

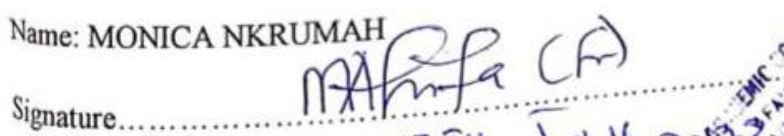


Date… 13 – 07 – 2023

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

Name: MONICA NKRUMAH

Signature…



Date… 17TH JULY, 2023