HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE

BEREKUM

A PATIENT/FAMILY CARE STUDY ON BRONCHOPNEUMONIA

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

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PREFACE

Nursing now as 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. Before the foundation of modern nursing, nuns and the army were often those who provided nursing like services.

Over the centuries, nursing has move from this phase of religious leaders’ responsibility to a more scientific and patient center approach where patient now have a full knowledge of the care render to him or her and how the care is rendered. The Crimean war was a significant development in the nursing history where an English nurse, Florence Nightingale laid the foundation of professional nursing. In the post Crimean war period, nursing education had undergone a process of diversification towards advanced and specialization credentials, and many traditional regulations and provider’s roles are changing.

Today nurses develop a planned care, working collaboratively with physicians, therapists, the patient, the patient’s family and other health team members that focus on treating illness to improve quality of life. Nursing process is the comprehensive systematic approach use in identifying patient’s problem and making clinical judgments about such problem and how to implement available care to the patient. 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, objective/outcome criteria, planning, implementation, and evaluation.

The overall goal for the Quality and Safety Education for Nurses (QSEN) project is to meet the challenge of preparing future nurses who will have the Knowledge, Skills and Attitudes (KSAs) necessary to continuously improve the quality and safety of the healthcare systems within which they work. It comprises of six areas of competencies, including Patient Centered Care, Teamwork and Collaboration, Evidence-Based Practice, Quality Improvement, Safety and Informatics.

The patient care study is a report of the nursing care rendered to a patient and his or her family. It involves the interaction between the patient (including his or her family and community) and the health team. The patient/family care study forms part of the assessment of every final year student. It is a requirement for every candidate in order to partially fulfill the awardment of a license to practice as Registered General Nurse by the Nursing and Midwifery Council of Ghana. 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. Initials of patient and his parents were used instead of patient and family's real names throughout the study to maintain anonymity and confidentiality of their vital and legal information. 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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I thank the almighty God, who gave me the strength and knowledge to undertake this project successfully. I also wish to express my sincere gratitude to my college's Principal; Madam Monica Nkrumah for giving me the needed skills and information to make this study a success.

Also my special regards go to Mr. K. A. and his wife Madam T. E. and family for given me the chance to use him for my study. My gratitude goes to my supervisors Mr. Ayamba Dramani and Mr. Ibrahim Alhassan for his care, supervision, patience and guidance for me to complete this work and to all the tutorial staffs at Holy Family Nursing and Midwifery Training College, Berekum for their guidance, suggestion and contribution in this study.

To Mr. Effah Benjamin; males ward in charge and all the staffs of the males' ward at Holy Family Hospital-Berekum, I say thank you for their support and encouragement.

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INTRODUCTION

This care study highlighted the holistic care rendered to MR. K. A, a seventy-year-old man. The nursing process was used as a guide to carry out this work. My interaction with MR. K.A. and his family started on the day of admission (29th Nov, 2022). It was patient-healthcare relationship and it lasted till the time I terminated my care (4th Dec, 2022). MR. K.A. was seriously ill and was admitted with the following clinical pictures; coughing, chest pains, vomiting, fever and rapid breathing and was diagnosed of bronchopneumonia by the medical officer on duty. MR. K.A. was admitted to the Males ward through the Emergency Unit of Holy Family Hospital, Berekum and he recovered successfully on the day of discharge.

During his period of hospitalization, he was put on the following medication;

1. IV Cefuroxime 750mg TID for 24hours.
2. IV Metronidazole in 500mg TID for 24hours.
3. Syrup Carbocisteine 15ml TID for 7 days.
4. Nystatin oral suspension 6ml TID for 7 days.
5. Capsule Fluconazole 150mg OD for 10 weeks.
6. Oral paracetamol 1g TID for 5 days.
7. DNS 1000ml at 65ml/hour for 24 hours.

Nursing interventions which were carried out to improve his state of health included; elevation of the head, bed rest and administration of analgesics to relief pain (headache), serving of

nutritious diet, assisting patient in performing mouth wash to maintain adequate nutritional status and encouraging patient to perform personal hygiene.

Three follow-ups and home visits were made to assess the health of the patient and family. Termination of care took place on fifth day after review on 4th December, 2022.

The script is made up of six chapters with the first five chapters consisting of assessment, analysis, planning, implementation and evaluation. The sixth chapter entails the summary and conclusion of care rendered.

This patient was selected in order to gain more knowledge on pneumonia and to render a comprehensive nursing care to the patient, his relatives and the community.

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CHAPTER ONE

ASSESSMENT OF PATIENT / FAMILY

1.0 Introduction

An assessment is a critical analysis and evaluation or judgment of the status or quality of a particular condition, situation or other subject of appraisal (Weller, 2014). Assessment is the first phase of the nursing process. It involves systematic gathering of relevant information about the patient himself, the patient's relatives, friends, community members, literature and members of the health team. It also includes patient's particulars including demographic data, family's medical and socio-economic history, patient's lifestyle and hobbies, past and present medical history, admission of patient, patient's concept of illness, literature review in relation to patient's medical condition and validation of data. In this study data was gathered through patient folder, interview, literatures, physical assessment and interactions with patient, wife and other relatives.

1.1 Patient's Particulars

According to Lewis, Collier, and Heitkemper (2022), particulars refer to a fact or detail especially one that is officially written down, usually of an individual's personal details such as name, address, etc. MR. K.A. is a 70 years old man born on the 1st of May 1952 at Wamfie in the Bono region to Mrs A.F. and Mr K.P. He is dark in complexion and weighs 56kg on admission and 1.8m in height. He is a Ghanaian by nationality and a native of Wamfie-Kookosum (Dormaa) in the Bono region. He lives with his family members with house number ***WF/192,*** Wamfie. He speaks Bono. MR K.A. is the first born of the five children thus three girls and two boys of his parents. He is a Christian and worships at the Continuation Church, Wamfie with his wife who is in the community but not in the same house.

His next of kin is MRS. E.T. who is his wife. Patient does not have any physical or congenital anomalies as well as tribal marks.

1.2 Patient/Family's Medical/ Surgical History

Currently, the wife and children of MR. K.A. are in good health and are not hospitalized. According to MR K.A. There are no known chronic and hereditary diseases like diabetes and mental illness in his family. There are no known allergies to food or drug in the family.

However, headache and abdominal pains are the common disorders that are seen and they usually take over-the-counter-drugs like paracetamol and trisilicate to mitigate pain and sometimes they go to the hospital when the treatment fails. Their preferred mode of treatment is the use of orthodox medicine and claims none of her family members have undergone surgery before.

1.3 Patients/Family's Socio-Economic History

MR K.A. and family are having a good family cohesion and lives harmoniously with neighbours. They all depend on the National Health Insurance Scheme to seek medical care. They are also highly religious and take part in all religious activities. MR K.A. also classified their family as a middle class and can afford a three square meal every day. According to him there are no known taboos in the family but they cherish good moral values and also practice customary marriage in their family. MR K.A. receives external support from their extended family when they are in need or need help critically.

He is a farmer and the wife is a trader. Annually they are able to contribute a substantial amount that is used for the family's welfare.

1.4 Patients' Developmental History

Growth refers to the progressive increase of living things, especially the process by which the body reaches its point of complete physical development (Weller, 2014).

Development refers to the biological, psychological and emotional changes that occur in human beings between birth and the end of adolescent as the individual progresses from dependency to increasing autonomy (Walter, 2020). Maturation refers to the change in the function of an organism, starting from the molecular level and involves various organs both metabolically and physically (Weller, 2014).

According to MR K.A., he was delivered at the Wamfie Methodist Hospital, Wamfie through spontaneous vaginal delivery on the 1st May, 1952 without any complications. He went through normal developmental milestone. Sat at the fifth month without support, teeth erupted at the sixth month, crawled at eighth month, and was able to walk in the twelve month. He was breastfed exclusively for some months he can't recall and was given complementary feeds after months. Erik Erikson's theory of psychosocial development (1959) describes the human life cycle as a series of eight ego developmental stages from birth to death.

My patient is in the eight developmental stage. That is integrity verses despair; this stage begins at approximately age 65 and ends at death. It is during this stage that we contemplate our accomplishments and can develop integrity if we see ourselves as leading a successful life. Individuals who reflect on their life and regret not achieving their goals will experience feelings of bitterness and despair. As we grow older (65+ years) and become senior citizens, we tend to slow down our productivity and explore life as a retired person. Erik Erikson believed if we see our lives as unproductive, feel guilty about our past, or feel that we did not accomplish our life goals, we become dissatisfied with life and develop despair, often leading to depression and

hopelessness. Success in this stage will lead to the virtue of wisdom. Wisdom enables person to look back on their life with a sense of closure and completeness, and also accept death without fear. Wise people are not characterised by a continuous state of ego integrity, but they experience both ego integrity and despair. Thus, late life is characterised by both integrity and despair as alternating states that need to be balanced.

Based on my interaction with MR K.A. and MRS T.E. it can be concluded that he is in a state of industry because he performs most of his personal hygiene like bathing, and brushing of his teeth and grooming without or sometimes with minimal assistance. And he works hard at being responsible, being good and doing right.

1.5 Patient Lifestyle and Hobbies

MR K.A. is a farmer and so prepares to go to farm from Monday to Saturday. He brushes his teeth once and bathes twice daily. He empties his bowel once or twice daily. According to MR K.A. he wakes up at 5:30 am and gets prepared for farm. He takes breakfast every morning to his farm every morning. He returns from farm around 6:00 pm and takes supper after he takes his bath. He usually goes to bed around 9:00 pm. On weekends he goes to farm late in the morning and return early in the afternoon to rest. MR K.A. prefers eating food from home to what is prepared outside and the food he likes best for lunch and supper is fufu with light-soup. He mostly spends his leisure time with friends. On Sundays he attends church with his wife. Patient is not allergic to any food. He eats three times daily. His favourite breakfast is Hausa koko with bread. He is a very quiet person. He is approachable and mingle with other children when he is out from home. His hobby is listening to old time music. He plays the role of a father in the family.

1.6 Patient's Past Medical History

According to MR K.A. has not been hospitalized before and has never been transfused with blood. He also said, he has not undergone any surgery before. He then said getting access to healthcare is not difficult since their house is not too far from the hospital. They depend on over-the-counter drugs such as paracetamol and trisilicate when disease condition starts with mild signs and symptoms and do not usually go for medical check-ups.

However, their preferred mode of treatment is the use of orthodox medicine. Patient has no chronic conditions, no physical deformities or congenital abnormality.

1.7 Patient's Present Medical History

Patient wife complained that two days prior to his admission, MR K.A. had hiccups, frequent vomiting, pain in the chest, weak and could not eat well. According to patient's wife, he was brought to the accident and emergency unit at Holy Family Hospital in Berekum on the 28th November, 2022 in a conscious state. On his arrival to the hospital, a medical assistant attended to him.

Per his assessments and investigations of the medical assistant, he diagnosed him of Bronchopneumonia where he detained him at the emergency unit until he was a bit stable before he was sent to the males ward to continue the treatment.

1.8 Admission of Patient

On the 29th November, 2022, at 10:15am, MR K.A. was brought to the males' ward in a conscious state, in a wheel chair from the Accident and Emergency Unit of Holy Family Hospital Berekum accompanied by staff nurses and patient wife. They were warmly welcomed and he was given a bed to make them feel comfortable for assessment to commence. Patient was observed to have had a high body temperature. General condition was assessed to be poor after

physical examination was conducted and found patient had periorbital swollen due to severe cough. Patient complained of severe chest pain and cough and wife added vomiting, fever and rapid breathing which were recorded under the nurses' continuation notes. I introduced myself as a second year student of the Holy Family Nursing and Midwifery Training College, Berekum. All vital information was gathered and I glanced through MR K.A.'s e-folder in order to verify the basic information given if he is the right patient. He had the diagnosis of Bronchopneumonia, looked very weak on arrival. A comfortable semi-fowler's bed was made for the patient and his vital signs were checked and recorded as follows;

Temperature - 38.7^{o}C

Pulse -75bpm

Respiration -28cpm

BP -109/86mmHg

SPO2 -98%

His weight was 56kg. Patient high body temperature was intervened by administering oral Paracetamol and was tepid sponged until his temperature was found to be within the normal range. Patient was also served with cold water and nearby windows and doors were also opened to enhance proper ventilation. Patient was introduced to other patients on the ward as well as orientation to the ward and it annexes was done. MR K.A. and wife was reassured of the competency of the health team to help solve the problem and all information taken is confidential.

I introduced myself as a second year student of the Holy Family Nursing and Midwifery Training College, Berekum who wants to take him as my patient, nurse him, study his condition and write a Patient/Family Care study on his condition as a requirement by the Nursing and

Midwifery Council (NMC) in partial fulfilment towar0ds the award of license in Registered General Nursing in Ghana. He and his wife agreed to be used for the study and promised to cooperate and gave the necessary information I needed. Patient and family were reassured that, patient was in the hands of competent staff and that everything possible would be done to ensure his speedy recovery and his discharge. This was done to make patient's wife understand that the admission was temporal and that a time will come for the patient will be discharged home and to provide continuity of care after discharge. Again it was to make the patient fit back into the society. The routine activities of the ward and the hospital was explained to patient's wife such as ward rounds, visiting hours, time for checking vital signs and time for serving medication. The wife was then asked to bring patient's personal hygiene needs which included toothpaste and toothbrush, towel and sponge and some clothes.

The following laboratory investigations had been ordered and carried out while patient was at the emergency room;

1. Full blood count (FBC)
2. Lipid profile

MR K.A. was placed on the following drugs:

1. IV Cefuroxime 750mg TID for 24hours.
2. IV Metronidazole in 500mg TID for 24hours.
3. Syrup Carbocisteine 15ml TID for 7 days.
4. Nystatin oral suspension 6ml TID for 7 days.
5. Capsule Fluconazole 150mg OD for 10 weeks.
6. Oral paracetamol 1g TID for 5 days.
7. DNS 1000ml at 65ml/hour for 24 hours.

After the admission process, objectives and nursing care were planned with the patient in order to achieve a speedy recovery and patient was assured to be discharged if set objectives are met. Patient due medication was served. Patient was responding to treatment and was handed over to the afternoon nurses.

Patient and wife was told, follow ups will be done and home visits will take place before and after he's been discharged and education was planned on his medication and diets. Patient was educated on his daily routine and his workload once discharged.

1.9 Patient/Family Concept of the Illness

MR K.A.'s wife attributed the illness to how frequent her husband stays outside with his friends frequently might have exposed him to cold and poor ventilation in their room. She also believed that with the treatment at the hospital and the assurance given to them her husband's condition will be better.

1.10 Literature Review on Bronchopneumonia

Anatomy and Physiology of the Lungs

There are two lungs, one lying on each side of the midline of the thoracic cavity. They are cone-shaped and are described as having an apex, a base, a costal surface and medial surface. The apex is rounded and rises into the root of the neck. The base is concave and semilunar in shape and is closely associated with the thoracic surface of the diaphragm. The costal surface is convex and is closely associated with the costal cartilages, the ribs and intercostal muscles. The medial surface is concave and has roughly triangular-shaped area called the hilum**,** at the level of the 5^{th}, 6^{th} and 7^{th} thoracic vertebrae. Structures which form the root of the lung enter and leave at the hilum.

The right lung is divided into three distinct lobes: superior, middle and inferior. The left lung is smaller as the heart is situated left of the midline. It is divided into only two lobes: superior and inferior. The lungs function by introducing oxygen by a process called diffusion into blood and also excreting the waste product of metabolism (carbon dioxide) (Smeltzer, Hinkle, Bare, & Cheever, 2018).

Definition of Pneumonia

Pneumonia is an inflammation of the lung parenchyma caused by various microorganisms, including bacteria, mycobacteria, fungi and viruses (Smeltzer et al., 2018). As a result of the infection, the alveolus becomes filled with serous fluid and inflammation of the cells occurs, the area of the lung involved is said to have undergone consolidation.

Incidence of Pneumonia

Pneumonia is present among immune compromised persons such us those with acquired immune deficiency syndrome (AIDS). It is common among alcoholics and malnourished children. It is also common in people living in an overcrowded area. It occurs in all sexes, males and females (Smeltzer et al., 2018).

Classification of Pneumonia

According to Smeltzer et al., (2018) pneumonia can be classified according to

a. **Location.**

1. Bronchopneumonia

Infections spreads from the bronchi to the bronchioles and alveoli. As these become inflamed, fibrous exudate accumulates and there is an influx of leukocytes. Small foci of consolidation (fluid-filled alveoli) develop. There is frequently incomplete resolution with fibrosis. It occurs most commonly in infancy and old age, and death is fairly common especially when the

condition complicates debilitating diseases. It is mostly caused by staphylococci, pneumococci and haemophylus influenza.

2. Lobar pneumonia.

This is infection of one or more lobes, usually by Streptococcus pneumonia, leading to production of watery inflammatory exudate in the alveoli. This accumulates and fills the lobule which then overflows into and infects adjacent lobules. It is of sudden onset and pleuritic pain accompanies inflammation of the visceral pleura. This form of pneumonia is most common in

previously healthy young adults.

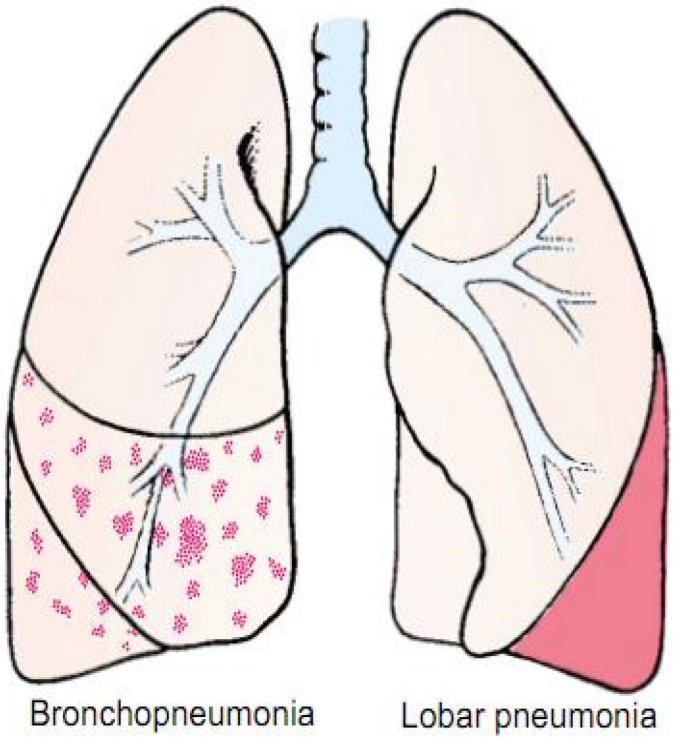

Figure 1.1: A Diagram Showing the Types of Pneumonia

- **Community-Acquired Pneumonia (CAP)**

It is defined as a lower respiratory tract infection of the lung parenchyma with onset in the community or during the first 2 days (48 hours) of hospitalization. The organisms that are commonly implicated in CAP include *S. pneumoniae, H. influenza,* and atypical organisms such as *Legionella, mycoplasma, chlamydia,* viruses.

- **Hospital-Acquired Pneumonia (HAP)**

HAP is pneumonia occurring 48 hours or longer after hospital admission and not incubating at the time of hospitalization. It is the second most common nosocomial infection, second only to urinary tract infection. The microorganisms responsible for HAP are usually bacterial and rarely viral or fungal (Lewis et al., 2022)

Based on microbial etiology

It can be due to

1. fungal
2. viral
3. bacterial
4. protozoa

Causes of Pneumonia

The causes of pneumonia are

1. viral
2. bacterial

a. **Viral causes**

Examples of viruses; influenza, adenovirus and the virus which causes whooping cough, measles virus, chicken pox virus and herpes simplex virus.

b. **Bacterial causes**

Example of bacteria which causes pneumonia is streptococci, staphylococci, pneumococci and mycobacterium tuberculosis (Smeltzer et al., 2018)

Predisposing Factors

According Winchester Hospital (2019). The predisposing factors are as follows

1. Overcrowding or congestion in a room
2. Exposure to cold
3. Smoking
4. Air pollution
5. Alcoholism
6. Poor ventilation

Pathophysiology

According Jain, V., Vashisht, R Yilmaz, G., et al. (2020). The development of pneumonia has four distinguished phases

a. **Congestive phase**

In this phase the causative organism gains entrance into the alveoli of the lungs and start inflammatory reactions producing serous fluid together with the cellular elements of the blood

(red blood cells and white blood cells) which fills up the alveoli resulting in congestion of the lung. It last for 1 – 3 days.

b. **Red hepatization phase**

There are a lot of red blood cells in the lung tissue and it appears reddish. The patient produces rusty sputum containing a lot of red blood cells. The phase last for 2 – 4 days.

c. **Grey hepatization phase**

White blood cells are reabsorbed. This stage last for 4 – 8 days. The lungs appear grey and solid. The patient produces yellowish and purulent sputum.

d. **Resolution phase**

White blood cells are decomposed and microphages carryout the exudates and the lungs become soft and the elastic lung tissue does not restore which impairs alveoli ventilation leading to problem of pneumonia.

Clinical Manifestations

Smeltzer et al., (2018) cited the following as clinical manifestations of pneumonia;

1. A sudden onset of chills.
2. Rapid rising fever 38.0 ºC to 40.5 ºC accompanied by chills.
3. Pleuritic chest pain that is aggravated by deep breathing and coughing.
4. Shortness of breath.
5. Anorexia.
6. Rapid and bounding pulse.
7. Sore throat.
8. Headache
9. Cough

10. General malaise
11. Easily fatigability

Diagnosis of Pneumonia

According to pneumonia is made based on the following test results (Hinkle & Cheever, 2018).

1. Sputum culture and sensitivity is done to isolate the disease causing organism and drug of choice to be given for treatment.
2. Arterial blood gas analysis reveals low oxygen and increased carbon dioxide in the blood.
3. White blood cell count shows leukocyte elevation.
4. Red blood cell count is done to estimate hemoglobin level
5. Chest x- ray is done to provide information about the location and extent of pneumonia, important evidence of related disease for instance bronchial carcinoma, pulmonary tuberculosis and heart disease (Smeltzer et al., 2018).

Medical Management

According to (Hinkle & Cheever,2018), the medical management for Pneumonia are;

1. Administration of humidified oxygen to relieve patient of dyspnea and cyanosis.
2. Antibiotics example IV Amoxiclav adult dose 1.2mg 8 hourly x 3 days. Child dose 25mg/5mg per kg every 12 hours, to help eradicate infections.
3. Analgesics and antipyretics to relieve pleuritic chest pain and pyrexia, example aspirin and paracetamol (acetaminophen)
4. Intravenous fluids and electrolyte replacement maybe given to rehydrate patient if dehydrated.

5. Expectorants and mucolytic such as Carbocisteine may be prescribed to increase expectoration of sputum and relieve cough.
6. Antifungal example fluconazole Adult dose 200mg on the first day, followed by 100mg once a day for at least 10 -12 weeks. Child dose 12mg/kg of body weight on first day, followed mg/kg of body weight once a day, for at least 10-12 weeks.

Surgical Treatment

- ✓ Thoracentesis (chest aspiration) is done if there is dyspnea resulting from fluid accumulation in the pleural cavity.
- ✓ Lobectomy is usually done in cases of tumor. (Smeltzer et al., 2018)

Nursing Management

With reference to Smeltzer et al., (2018), the nursing management of pneumonia can be carried out under the following headings.

1. **Observation.**
    - Vital signs (temperature, pulse, respiration) are checked and recorded.
    - Intake and output of fluid are checked and recorded.
    - Patient respiratory pattern is observed.
    - Observe sputum for any abnormalities such as color and amount and then record and report.
    - Patient is observed for improvement or deterioration of condition.
2. **Position.**
    - Put patient in an upright position and support with pillow. Change position frequently to prevent accumulation of secretions in the lung.

3. Rest and sleep.

- Patient is nursed in a well-ventilated room and quiet environment.
- Patient is provided with clean and unrumpled bed to promote rest and sleep.
- Plan and carry out care in such a way that the patients resting time will not be interrupted.
- Restrict visitors to avoid disturbance in patients sleeping pattern.

4. Diet and nutrition.

- Encourage enough fiber and roughage to avoid constipation.
- Adequate intake of fluid to avoid dehydration (about 3- 4 liters daily should be given).
- A pleasant environment should be provided during meal time.
- More protein, vitamins, mineral salts and carbohydrate meals are served to help in fighting infection and enhancing worn-out tissue repair.

5. Personal hygiene.

- Due to dehydration and fever the lip usually appear dry and cracked. Mouth care is done regularly to combat it. Vaseline is applied on the lips.
- Change dirty and soiled bed linen and clothing regularly to avoid infection.
- Bath the patient twice to ensure proper circulation of hair.
- Trim patients nail and ensure proper care of hair.

6. Medication.

- Serve prescribed drugs at the correct time and ensure patient takes them.

- Observe for signs of adverse reaction of the drug served, record and report immediately.
- Observe for therapeutic effect of the drug.

7. Maintenance of patent airway.

- Change the patient position every two (2) hours to prevent pooling of secretions.
- If possible, encourage patient to do deep breathing exercise.
- If patient is unable to cough sputum, oropharyngeal suction is done to clear airway. This is done with care in order not to introduce foreign substance into the pleural cavity.

8. Psychotherapy.

- Assess patient for verbalization of fear, inability and facial tension. Implement measures to reduce fear.
- Reassure patient that all will be well and will be able to resume normal life.
- Introduce patient to other patients who faced such condition and has successfully recovered.

9. Health Education of Patient.

- Educate the patient and family on the disease condition so that they can prevent any complications.
- Educate on the need for follow-up and treatment regimen of antibiotic.
- Educate patient on the need to avoid sleeping directly under fans but rather should open windows for ventilation.
- Educate patient on the avoidance of alcohol, smoking and fatigue exercise.

- Educate patient to avoid dust and cold environment because this can predispose one of getting pneumonia.

Complications of Pneumonia

According to Smeltzer et al., (2018) there may be complications such as;

1. **Lung abscess**; In early phase of pneumonia there is release of monocytes to fight the infection's, when the condition progresses lymphocytes are release which destroys the infections and the lung cells leading to localized necrotic lesion of the lung parenchyma and containing purulent material.
2. **Respiratory failure**; Failure of the lungs to oxygenate blood that circulates through the body correctly as a result of impaired exchange of gases in the alveoli, accumulation of pus decrease surface area diffusion of blood and less amount of blood is to heart to pump to other cells and tissues.
3. **Empyema** this is usually arises from bacterial spread from a severe pneumonia or after the rupture of lung abscess into the pleural space.
4. **Pleural effusion**; Collection of fluid in the pleural spaces as result of inflammation of which pus and exudates accumulates in the pleura cavity.

Prevention of Pneumonia

According to Smeltzer et al., (2018), pneumonia can be prevented in the following ways;

- ✓ Educate on proper environmental and personal hygiene.
- ✓ Sudden change of body temperature should be reported.
- ✓ Avoid excessive intake of alcohol, dusty or smoky environment.
- ✓ The patient should sleep in a well-ventilated room.

- ✓ Disease of the Upper Respiratory Tract should be treated quickly to avoid organism descending into the Lower Respiratory Tract.

1.11 Validation of Data

Validation of Data is defined as the extent to which a data measure, indicator or method of data collection possesses the quality of being sound or true, as far as can be judged (Weller, 2014). Data collected from patient and clinical manifestation were compared with the literature obtained from text books. I also questioned patient's mother on the validity of the symptoms she earlier provided during assessment. Again, the same information gathered from the doctor's notes, nurse's records, investigations carried out and the results and literature review of the condition strongly confirms the validity of the information gathered. When the data collected were compared with literature review it was clear that patient was suffering from Bronchopneumonia. There were no deviations which included that the data collected is valid and free from errors.

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

Analysis of data is defined as the act of determining the component parts of a substance (Weller, 2014). Analysis of data provides the insights of all the constituents of data collected in the assessment phase of the patient and family care study. Data collected from the patient is compared with the standard to formulate a diagnosis for the patient. It is the second phase of nursing process and it includes;

I. Comparison of data with standards.
II. Patient/family strengths
III. Health problems
IV. Nursing diagnosis

2.1 Comparison of Data with Standard

Comparison of data with standard include the following, laboratory investigations, clinical features, drugs or treatment and complications.

Diagnostic Test

Test is a procedure intended to establish the quality, performance, or reliability of something, especially before it is taken into widespread use.

Below are the various diagnostic investigations ordered by the physicians and carried on MR. K.A.

1. Full blood count (RBC, WBC, Hb)
2. Chest X-Ray
3. BUE/CR
4. Sputum for GeneXpert
5. Lipid profile

The table below shows the comparison of diagnostic tests carried out on patient and those listed in the literature review.

Table 2.1: Diagnostic Tests in Literature Review Compared with those carried out on MR K.A

Diagnostic tests outlined in the Literature review	**Diagnostic tests carried out on my Patient**
1. Sputum culture	Sputum culture was not done
2. Arterial Blood Gas	Arterial blood gas was not done
3. White Blood Cell Count	White Blood Cell Count was done
4. Red Blood Cell Count	Red Blood Cell Count was done
5. Chest X – Ray	Chest x-ray was done

In table one above, most of the diagnostic investigations in the literature review such as Chest X-ray, WBC count, RBC count was done on the patient and other investigations like BUE/CR, Lipid and Sputum for GeneXpert was conducted to rule out other medical condition but was not indicated in the table above.

Table 2.2: Diagnostic Investigations/Test

Date	Specimen	Investigation (FBC)	Results	Normal Value	Interpretation	Remarks
29/11/22	Blood	**FULL BLOOD COUNT** Hemoglobin level estimation	8.6 g/dl	12.3 – 18.0 g/dL (Male: 13.8 – 17.2) (Female:12.1 – 15.1)	Low which means patient is anemic.	No treatment was given but education on good diet was given.
		White blood cell count (WBC)	1.75 IU/L	4.4 – 11.3 x 10^3/Ul	Low which means there is presence of infection.	Antibiotics were given.
		Red Blood Cell Count (RBC)	2.90 IU/L	4 – 5.5 10^6/UL	Low which indicate vitamin deficiency and/or malnutrition.	No treatment was given but nutritional status were improved.

Table 2: Diagnostic Investigation/test continued

Date	Investigation	Specimen	Results	Normal Value	Interpretation	Remarks
03/12/22	Chest X-ray	Presence of the patient.	Distributed patchy consolidation in the lungs.	Lungs should be clear without any patchy consolidation.	Indicating patchy consolidation due to inflammation as a result of infection	Antibiotic, example IV Cefuroxime 750mg /ml qid prescribed and administered

Other investigations like Sputum for GeneXpert, BUE/CR and lipid profile was carried out but the results was not seen.

Causes of patient's condition

With respect to the literature review (predisposing factors) and my visits to the patient's house and environment, MR K. A's condition might have been caused by exposure to extreme cold and poor ventilation of the predisposing factors in the literature review.

Table 2.3: Signs and Symptoms Exhibited by my Patient as compared to Text Book Presentation (Literature Review).

Text Book Presentation	Patient's Presentation
Sudden onset of chills	Patient had chills on admission
High body temperature 38.0ºC to 40.5 ºC accompanied by chills.	Patient had a temperature of 38.7°C on admission
Pleuritic chest pain that is aggravated by deep breathing and coughing.	Patient was having chest pains
Shortness of breath	Patient exhibited difficulty in breathing.
Anorexia	Patient had anorexia
Rapid bounding pulse	Patient had a rapid pulse
Sore throat.	Patient had sore throat
Headache	Patient had headache
Cough	Patient was coughing
General malaise	Patient had general malaise
Easily fatigability	Patient was not easily fatigue

In table three above, the patient exhibited most of the signs and symptoms in the literature review which actually confirm his condition.

Table 2.4: Comparison of Drugs or Treatment which were administered to my patient with those outlined in the Literature Review

Treatment is something that is done to cure an illness or injury, or to make someone feel or look good. The following drugs were administered to the patient from the day of admission till the day of discharge;

IV Cefuroxime 750mg TID for 24hours.

IV Metronidazole in 500mg TID for 24hours.

Syrup Carbocisteine 15ml TID for 7 days.

Nystatin oral suspension 6ml TID for 7 days.

Capsule Fluconazole 150mg OD for 10 weeks.

Oral Paracetamol 1g for 5 days.

DNS 1000ml at 65ml/hour for 24 hours.

Drugs Outlined In The Literature Review	**Drugs given to my Patient**
1. Administration of humidified oxygen.	1. Humidified oxygen was not given
2. Antibiotics	2. IV cefuroxime and metronidazole was given
3. Antifungal	3. Fluconazole and nystatin was given
4. Analgesics and antipyretics	4. Oral paracetamol was given
5. Intravenous fluids and electrolyte replacement.	5. NS and Dextrose was given
6. Mucolytic and expectorants	6. Carbocisteine was given
7. Surgical treatment. E.g. Lobectomy and Thoracentesis (chest aspiration)	7. Lobectomy and Thoracentesis (chest aspiration) were not performed

In table five above shows the drugs that were used for the patient. Some of the drugs which were present in the literature review such as IV metronidazole, fluconazole, Cefuroxime and oral Paracetamol was given which confirmed that the patient had the right treatment which led to his recovery. Below are the details of the drugs given to patient as presented in Table 5.

Table 5: Pharmacology of Drugs Administered to Mr. K.A.

Date	Drugs	Standard Dose	Dosage/Route Administered To My Patient.	Classification	Desired Effect	Side Effect/Remarks
29/11/22	IV Cefuroxime	**For adult:** 3g every 6-8 hours (max. per dose 750mg). **Route:** IV **For Children:** 12.5mg per kg of body weight every 6-8 hours. **Route**: IV	750mg tid for 24hours Intravenously	Antibiotics (Cephalosporin -2nd generation)	Antibacterial that attach to penicillin binding proteins to interrupt cell wall biosynthesis, leading to bacterial cell lysis and death.	Headache, nausea, vomiting, diarrhea, abdominal discomfort and allergic reaction. None was observed in my patient.
29/11/22	IV Metronidazole	**Adult:** 15 mg/kg IV daily not to exceed 4g/day. **Route:** IV **Children:** 35-	500mg eight hourly for 24 hours. Intravenously	Antibiotics (Aminoglycosides)	A broad spectrum antibiotic which inhibits the growth of both gram positive and	Vestibular and auditory damage, nausea, vomiting, rash and blood disorders.

		50mg/kg orally divided once every 8 hours for 10 days. **Route:** Oral			negative bacteria	None was observed.
29/11/22	Oral Paracetamol	**Adult:** 500mg – 1g every 8 hours as required; max 4g doses per day for 5-11 days. **Route:** Oral **Child:** 180-250mg every 4-6 hours for four doses daily. **Route:** Oral	1g tid for 5 days per oral	Analgesic / Antipyretic	To mitigate pain and high body temperature.	Liver damage, hypotension and renal damage. None was observed.
01/12/22	5% DNS	Depends on client IV fluid requirement.	1000ml for 24hours at 65ml/hour	Caloric agent, plasma volume expander and replacement	To maintain fluid and electrolyte balance.	Confusion, pulmonary embolism, fluid overload, and

				fluid(glucose solution)		osmotic diuresis. None was observed.
29/12/22	Capsule Fluconazole	**Adult**: 200mg on the first day, followed by 100mg once a day for at least 10 - 12 weeks. **Route:** Oral **Child**:12mg/kg of body weight on first day, followed mg/kg of body weight once a day, for at least 10-12 weeks. **Route:** Oral	150mg OD for 10 weeks.	Antifungal	A bacteriostatic and bactericidal agent that suppresses protein synthesis, treats severe infections	Diarrhea, abdominal discomfort, jaundice, esophagitis, nausea and vomiting. None was observed.
30/11/22	Oral Nystatin	**Adult:** 4-6 ml (400,000 – 600, 000 units) four times	4ml qid for 24 hours orally.	Antifungal (Polyene macrolide	Antifungal that act by binding sterols in the	Mouth irritation, diarrhea, nausea, vomiting and

		daily for 7 – 14 days. **Route:** Oral **Children**: 2ml (200,000 units) four times daily for 7 – 14 days. **Route:** Oral		antifungal)	plasma membranes of fungi causing the cells to leak, eventually leading to fungal cell death.	stomach upset. None was observed in my patient.
29/11/22	Syrup Carbocisteine	**Adult:** 5ml- 15 ml every 8 hours for 8-10 days **Route:** Oral **Children**: 2.5 – 5ml (half or one teaspoon) every 8 hours for 8-10 days. **Route:** Oral	15ml tid for 24 hours orally.	Mucolytic	Carbocisteine is a mucolytic agents for adjunctive therapy of respiratory tract disorders characterized by excessive, viscous mucus, including chronic	Nausea, vomiting, diarrhea, gastrointestinal bleeding, gastric discomfort and rash. None was observed in my patient.

					obstructive airway disease.	

Complications

According to the literature review, patients with pneumonia suffer from empyema, respiratory failure, pleural effusion and lung abscess but MR K.A. suffered none of them because he reported early to the hospital and was rightfully diagnosed and treated.

a. Patient Family/ strengths

Strength can be defined as the quality or state of being physically strong.

The following strengths were identified in my patient and his family;

1. Patient breathes normal when he assumes a semi fowler's position.
2. Patient and relatives are relieved when procedure was explained to them.
3. Patient can bring out sputum with cough.
4. Patient can eat 1/3 of porridge severed.
5. Patient can perform self-care activities with assistance.
6. Patient can tolerate fluids

a. Health problems

A health problem is an unmet need of the patient. In other words, anything that interferes with a person's ability to meet his/her need. It is divided into actual problems and potential problems. Actual problems are those present on the patient whilst potential problems are those that are suspected to come.

MR K.A. and his family had the following problem;

1. Patient has difficulty in breathing. (29/11/22)
2. Patient has high body temperature (38.7 degrees Celsius) (29/11/22)
3. Patient and relative were anxious. (29/11/22)
4. Patient coughs persistently (30/11/22)

5. Patient was unable to eat well. (30/11/22)
6. Patient was weak. (30/11/22)

2.4 Nursing Diagnosis

Nursing diagnosis is a statement of a health care problem or the potential for one in the health status of the patient for which the nurse is competent to intervene and treat. (NANDA, 2020) The nursing diagnosis is a clearly patient centred and it is patient's specific statement of actual and potential health problem that can be managed using independent nursing interventions. After accessing MR K.A. and the family, the following nursing diagnoses were formulated;

1. Ineffective airway clearance related to copious tracheobronchial secretions (29/11/2022).
2. Ineffective thermoregulation (hyperthermia - 38.ºC) related to infections in the lungs (29/11/2022).
3. Anxiety related to unknown outcome of disease process and its management (29/11/2022).
4. Altered body comfort (cough) related to secretion and irritations in the airway (29/11/2022).
5. Risk for malnutrition related to loss of appetite (30/11/2022).
6. Activity intolerance related to impaired respiratory function (30/11/2022).

CHAPTER THREE

PLANNING FOR PATIENT/FAMILY CARE

3.0 Introduction

Planning is the act of formulating a program for a definite course of action. Planning for patient and family care is therefore a program in which the nurse and the patient together consider the goals to achieve in meeting the patient's identified or potential problems in daily life and produce an individual care plans. As patient's treatment progresses the plan of care changes to reflect the most current condition and intervention strategies. It is done in agreement with the patient and the family. The purpose of the planning is to prioritize problems, set goals and to plan on which strategy to use and the care to be given to achieve the set goals.

3.1 Objectives for the Patient/Family Care

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

1. Patient would be relieved of respiratory distress (dyspnea) within 24 hours as evidenced by;

    i. Patient's ABG and respiratory rate within normal range (95% - 100%).

    ii. Patient's wife verbalizing client can breathe well without difficulty.

2. Patient would maintain a normal body temperature within the range (36.2ºC - 37.2ºC) within 24 hours as evidenced by;

    i. Patient relative verbalizing patient's body feels cool to touch.

    ii. Nurse checking and recording a body temperature of within the range (36.2ºC – 37.2ºC).

3. Patient and wife would be relieved of anxiety within 24 hours as evidenced by;

    i. Patient's wife verbalizing appropriate range of feelings about the outcome of

patient’s condition.

ii. Nurses observing Patient’s wife appearing relaxed and reporting anxiety is reduced to a manageable level.

4. Patient would be relieved of cough within 24 hours as evidenced by;

i. Patient verbalizing relief of cough.

ii. Nurse observing patient being comfortable in bed without persistent cough.

5. Patient’s nutritional status would be improved within 48 hours as evidenced by;

i. Patient ingesting orally adequate diet for age.

ii. Nurse assess patient’s nutritional status as well nourished.

6. Patient would be relieved of general weakness within 72hours as evidenced by;

i. Patient wife reporting a measurable increase in activity tolerance.

ii. Patient demonstrating a decrease in physiological signs of intolerance- respiration within normal range (16 - 20cpm).

Table 3.6: Patient/Family Care plan

Date/ Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Signature
29/11/22, 10:30am	Ineffective airway clearance related to copious tracheobronchial secretions	Patient would be relieved of respiratory distress (dyspnea) within 24 hours as evidence by; 1. Patient's ABG and respiratory rate within normal range (95% - 100%) 2. Patient's wife verbalizing patient can breathe normal without difficulty.	1. Reassure patient and relatives that normal breathing pattern will be restored. 2. Nurse patient in a semi-fowler's position. 3. Monitor vital signs especially respiration every 30 minutes and record until it becomes stable and record. 4. Assess patient for chest pain. 5. Teach and encourage deep breathing exercises 2 hourly during the day. 6. Serve prescribed drugs as ordered.	1. Patient and relative were reassured that his breathing pattern will be restored. 2. Patient were nursed in a semi- fowler's position. 3. Vital signs were monitored especially respiration every 30 minutes. 4. Patient were assessed for the site of chest pains. 5. Deep breathing exercises were taught and encouraged every 2 hours. 6. Prescribed drugs were served.	30/11/22, 10:30am.	Goal fully met as 1. Wife observed patient breaths normally. 2. Nurse observed and recorded normal respiratory rate.	**OMA**

Patient/Family care plan

Date/ Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Signature
29/11/22, 10:35am.	Ineffective thermoregulation (hyperthermia 38.7°C) related to infection in the lungs.	Patient would maintain a normal body temperature within the range (36.2ºC - 37.2ºC) within 24 hours as evidenced by; 1. Patient relative verbalizing patient's body feels cool to touch. 2. Nurse checking and recording a body temperature of within the range (36.2ºC – 37.2ºC).	1. Reassure patient and relative 2. Tepid sponge patient for about 15 to 20 minutes. 3. Loosen all tight clothing and ensure light clothes are worn. 4. Check and record vital signs. 5. Serve medication (antipyretics) as order. 6. Give cold drinks.	1. Patient and relative were reassured of reduction of body temperature to normal. 2. Patient were tepid sponged for 15 minutes. 3. Tight clothing were loosened and light ones worn. 4. Vital signs were checked and recorded. 5. Oral Paracetamol 1g were served and recorded. 6. Cold drinks were given.	30/11/22 10:35am.	Goal fully met as 1. Nurse observed that patient's temperature has reduced to normal with the aid of a thermometer. 2. Patient wife verbalizing that husband body temperature has declined.	**OMA**

Patient/Family Care plan

Date/ Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Signature
29/11/22, 10:30am.	Anxiety related to unknown outcome of disease process and it's management.	Patient and family would be relieved of anxiety within 24hours. as evidenced by: 1. Patient's family asking or probing about the state of condition and treatment 2. Nurse reporting patient and relatives have adequate information of the disease condition and satisfied with treatment regimen.	1. Reassure patient and wife 2. Educate patient and relatives on the disease condition and treatment regimen. 3. Allow patient and relatives to express their fears and concerns. 4. Explain every procedure to be done on patient and give the benefits and risks involve if any. 5. Introduce patient and relatives to patients with similar conditions who are responding to treatment. 6. Asses for verbal and	1. Patient and wife were reassured that this was in the hands of competent health team. 2. Patient and relative were educated on disease condition and treatment regimen. 3. Patient and relative were asked to express their feelings and concerns by providing conducive environment. 4. Procedures like vital signs were explain to patient and his wife and they were told about its benefits. 5. Patient and relatives were introduced to patients with similar condition who were responding to treatment. 6. Patient was assessed for	30/11/22, 10:30am.	Goal was fully met as 1. Patient's relatives asking or probing about the state of condition and treatment 2. Nurse observed that patient and relatives have adequate information of the disease condition and satisfied with	**OMA**

			non-verbal cues indicating increase anxiety.	verbal and non-verbal cues indicating increased anxiety.		treatment regimen.	

Patient/Family Care plan

Date/	Nursing	Objective/Outcome	Nursing Orders	Nursing Intervention	Date/	Evaluation	Signature

Time	Diagnosis	Criteria			Time		
30/11/22, 7:30am	Altered body comfort (cough) related to secretion and irritations in the airway.	Patient would be relieved of cough within 24 hours as evidenced by; 1. Patient verbalizing relief of cough. 2. Nurse observing patient being comfortable in bed without persistent cough.	1. Educate patient on good forceful coughing techniques using the abdominal muscles. 2. Encourage the patient to hydrated. 3. Elevate the head of the body by propping up on pillows. 4. Encourage to reposition patient every two hours. 5. Reassure patient and relative. 6. Serve medication (mucolytic) as order.	1. Patient were educated on good forceful coughing techniques using the abdominal muscles. 2. Patient were encouraged to hydrated. 3. Patient were elevated by propping the head of the body on pillows. 4. Patient were repositioned every two hours. 5. Patient and relative were reassured. 6. Syrup Carbocisteine 15ml were served and recorded.	01/12/22, 7:30am	Goal fully met as 1. Patient verbalized absence of cough. 2. Nurse observed patient comfortable in bed without persistent cough.	**OMA**

Patient/Family Care plan

Date/ Time	Nursing Diagnosis	Objective/Outcome Criteria	Nursing Orders	Nursing Intervention	Date/ Time	Evaluation	Signature

30/11/22, 09:00am	Risk for malnutrition related loss of appetite.	Patient's nutritional status would be improved within 48 hours as evidenced by; 1. Nurse assess patient's nutritional status 2. Patient ingesting orally adequate diet for his age.	1. Educate patient's wife on nutrition concerning husband condition. 2. Educate patient's wife on feeding and assist her to feed the husband. 3.Perform oral hygiene. 4. Assess dietary pattern of patient. 5. Involve wife in planning his meal. 6. Administer prescribed drugs.	1. Patient's wife were educated on husband's condition. 2. Patient's wife were educated on how to feed the husband. 3. Oral hygiene were performed. 4. Patient's dietary pattern were assessed. 5. Patient's wife were involved in meal planning. 6. All prescribed drugs were administered and documented.	02/12/22, 09:00am	Goal fully met as 1. Nurse assessed patient's nutritional status to be nourished. 2. Patient ingested adequate diet orally for age.	**OMA**

Patient/Family Care plan

Date/ Time	**Nursing Diagnosis**	**Objective/Outcome Criteria**	**Nursing Orders**	**Nursing Intervention**	**Date/ Time**	**Evaluation**	**Signature**

30/11/22, 11:00am	Activity intolerance related to impaired respiratory function.	Patient would be relieved of general weakness within 72 hours as evidenced by; 1. Nurse reporting a measurable increase in activity tolerance. 2. Patient being active and participatory.	1. Reassure patient and family. 2. Check and monitor vital signs (respiratory status) 3. Put patient in a comfortable bed. 4. Help patient relative identify contributing factors to client weakness. 5. Engage patient in passive exercises. 6. Serve prescribed drugs.	1. Patient and family were reassured. 2. Vital signs checked and recorded especially respiration. 3. Bed rest was encouraged 4. Contributing factors to patient's condition were identified with relatives. 5. Patient was engaged in passive exercises. 6. Patient's due medication served.	03/12/22, 11:00am	Goal fully met as 1. Nurse reported measurable increase in activity tolerance. 2. Patient exhibiting increase in activity level.	**OMA**

CHAPTER FOUR

IMPLEMENTATION OF PATIENT/FAMILY CARE PLAN

4.0 Introduction

Implementation the third phase of the nursing process signifying the giving of care in relation to defined nursing interventions and goals (Weller, 2014). During implementation nursing care plan is tested for effectiveness and accuracy. This part of nursing process involves the actual tasks and the procedure performed on Mr. K.A. throughout his period of hospitalization and afterwards until the care was terminated. During this phase the nursing care plan was tested for effectiveness and accuracy. Data gathering continues and plans were changed on the bases of new information obtained. The implementation phase concludes with the recording of the activities performed and the response of the patient.

4.1 Summary of Actual Nursing Care Rendered to Mr. K.A.

First day of admission (29th November, 2022)

On the 29th November, 2022, at 10:15am, MR K.A. was brought to the males' ward in a conscious state, in a wheel chair from the Accident and Emergency Unit of Holy Family Hospital Berekum accompanied by staff nurses and patient wife. They were warmly welcomed and he was given a bed to make them feel comfortable for assessment to commence. Patient's was observed to have had a high body temperature. General condition was assessed to be poor after physical examination was conducted and found patient had periorbital swollen due to severe cough. Patient complained of severe chest pain and cough and wife added vomiting, fever and rapid breathing which were recorded under the nurses' continuation notes. I introduced myself as a second year student of the Holy Family Nursing and Midwifery Training College, Berekum. All vital information was gathered and I glanced through MR K.A.'s e-folder in order to verify the basic information given if he is the right

patient. He had the diagnosis of Bronchopneumonia, looked very weak on arrival. A comfortable semi-fowler's bed was made for the patient and his vital signs were checked and recorded as follows;

Temperature - 38.7^{o}C

Pulse -75bpm

Respiration -28cpm

BP -109/86mmHg

SPO2 -98%

His weight was 56kg. Patient high body temperature was intervened by administering oral Paracetamol and was tepid sponged until his temperature was found to be within the normal range. Patient was also served with cold water and nearby windows and doors were also opened to enhance proper ventilation. Patient was introduced to other patients on the ward as well as orientation to the ward and it annexes was done. MR K.A. and wife was reassured of the competency of the health team to help solve the problem and all information taken is confidential.

I introduced myself as a second year student of the Holy Family Nursing and Midwifery Training College, Berekum who wants to take him as my patient, nurse him, study his condition and write a Patient/Family Care study on his condition as a requirement by the Nursing and Midwifery Council (NMC) in partial fulfilment towards the award of license in Registered General Nursing in Ghana. He and his wife agreed to be used for the study and promised to cooperate and gave the necessary information I needed. Patient and family were reassured that, patient was in the hands of competent staff and that everything possible would be done to ensure his speedy recovery and his discharge. This was done to make patient's wife understand that the admission was temporal and that a time will come for the patient will be discharged home and to provide continuity of care after discharge. Again it was to make

the patient fit back into the society. The routine activities of the ward and the hospital was explained to patient's wife such as ward rounds, visiting hours, time for checking vital signs and time for serving medication. The wife was then asked to bring patient's personal hygiene needs which included toothpaste and toothbrush, towel and sponge and some clothes.

The following laboratory investigations had been ordered and carried out while patient was at the emergency room;

1. Full blood count (FBC)
2. Lipid profile

MR K.A. was placed on the following drugs:

1. IV Cefuroxime 750mg TID for 24hours.
2. IV Metronidazole in 500mg TID for 24hours.
3. Syrup Carbocisteine 15ml TID for 7 days.
4. Nystatin oral suspension 6ml TID for 7 days.
5. Capsule Fluconazole 150mg OD for 10 weeks.
6. Oral paracetamol 1g TID for 5 days.
7. DNS 1000ml at 65ml/hour for 24 hours.

After the admission process, objectives and nursing care were planned with the patient in order to achieve a speedy recovery and patient was assured to be discharged if set objectives are met. Patient due medication was served. Patient was responding to treatment and was handed over to the afternoon nurses.

It was observed that patient experienced difficulty in breathing, a nursing diagnosis of ineffective airway clearance related to copious tracheobronchial secretion. An objective was set 10:30am to regain his normal breathing pattern. The following nursing interventions were carried out; patient and relative were reassured that his normal breathing pattern will be restored, patient in a semi-fowler's position, vital signs were monitored especially respiration

every 30 minutes and record until it becomes stable and record, patient was assessed for chest pain, deep breathing exercises was taught and encouraged to be done 2 hourly during the day and document actions performed in the nurses' notes.

At the same time (10:30am) Mr. K.A. and wife were very anxious, a nursing diagnosis of anxiety related to unknown outcome of disease process and its management. A nursing care plan was drawn to manage their anxiety at 10:30am. An objective was set to reduce patient and wife anxiety within 24 hours. Nursing interventions carried out for patient includes; Patient and wife were reassured to allay fear and anxiety, they were allowed to express their feelings and fears, patient was assessed for verbal and non-verbal cues indicating increased anxiety, patient and relative were introduced to other patient with similar condition who were recovering, explain every procedure to patient and document actions in the nurses' notes.

At 10:35am, patient body temperature was high at 38.7^{o}C, a nursing diagnosis of ineffective thermoregulation (hyperthermia 38.7^{o}C) related to infection in the lungs A nursing care plan was drawn to reduce patient body temperature. An objective was set to relieve the patient of high body temperature to normal (36.2-37.2^{o}C) within 24hours. The following interventions were carried out for the patient; patient and relative were reassured of reduction of body temperature to normal, patient was tepid sponged for 15 minutes, tight clothing were loosened and light ones worn, vital signs were checked and cold drinks were given and document all procedures done in the nurses' notes.

After the admission procedure, objectives and nursing care were planned with the patient's wife in order to achieve a speedy recovery. Patient slept around 12:50pm.

Second day of admission (30/11/22)

On the second day of admission, patient woke up at 6:00am and I assisted him to perform his personal hygiene. Medications were served and patient took his breakfast at 6:40am.

At 7:30am patient was seen to be coughing persistently, a nursing diagnosis of altered body comfort (cough) related to secretion and irritations in the airway.

Patient was reassured of competent care and reminded on discharge when the response to treatment is improved and appropriate information on the condition was provided to them respectively. The following orders were given to relieve patient of cough; educate patient on good forceful coughing using abdominal muscle, hydrate patient, elevate patient head by propping up on pillows, repositioned patient every two hours and serve prescribed drugs (mucolytic).

At 9:00am patient was seen to be not feeding well, a nursing diagnosis of risk for malnutrition related loss of appetite. A nursing objectives were set to improve patient's appetite within 48hours as evidenced by nurse assessing patient nutritional status. The following interventions were carried out for the patient; patient's wife were educated on husband's condition, patient's wife were educated on how to feed the husband, oral hygiene were performed, patient's dietary pattern were assessed, patient's wife was involved in meal planning, and all prescribed drugs were administered and documented

At 10:30am, the nursing intervention to relief respiratory distress (dyspnea) within 24hours were evaluated and goal fully met as evidenced by nurse observed and recorded patient normal respiratory rate.

At the same time at 10:30am, the nursing intervention to allay anxiety within 24hours were evaluated and goal fully met as evidenced by nurse making sure patient and relatives have adequate information and preventive measures of the condition.

At 10:35am, the nursing interventions done to reduce patient's temperature were evaluated and goal was full met as evidenced by nurse observed that patient's temperature has reduced to normal with the aid of a thermometer.

At 11:00am was seen to be weak, a nursing diagnosis of activity intolerance related to impaired respiratory function. A nursing objective were set to relieve patient general body weakness within 72 hours as evidenced by nurse reporting measurable increase in activity tolerance. All other routine cares were done for the patient.

I introduced and handed over to the afternoon nurse when I prepared to leave the ward to continue the care. I informed patient and family that I wanted to visit their home the next day and I asked for directions to the house, they agreed and wife said they will be expecting me. I said good bye to patient and informed him and his wife about my departure.

Third Day of Admission (1/12/22)

On the third day of admission, patient woke up at 5:00am according to the night nurse. He performed his personal hygiene with assistance.

At 7:30am, the nursing interventions done to relieve cough were evaluated and goal fully met as evidenced by nurse observing patient being comfortable in bed without persistent cough.

I met patient and his wife on the ward around 8:00am and they were happy to see me Daily routine care was done for him and was prepared for morning rounds. Orders from morning rounds included; stopping of IV DNS, continuing current medications for another 24 hours, encouraging feeding and ambulation. The orders were carried out as stated by the doctor.

Fourth Day of Admission (02/12/22)

Patient woke up at 5:00am and his vital signs was checked and recorded at 6:00am as:

Temperature	36.8degree Celsius
Pulse	81beat per minutes
Respiration	19 cycle per minutes

At 7:00am there was much improvement in his condition. His wife stated that he emptied his bowel but took his bath and performed oral hygiene with assistance from her and was served with breakfast.

At 9:00am, the nursing interventions done to improve patient nutritional status were evaluated and goal fully met as evidenced by nurse assessing patient nutritional status to be nourished. Lunch and supper were given and patient was able to consume at least half of each meal served which was quite encouraging than before. He was advised to have enough rest and sleep and avoid strenuous exercise. Patient's vital signs was checked and recorded at 6:00 pm as,

BP 110/70mmHg

Temperature 37.0^{o}C,

Respiration 21cpm,

Pulse 94bpm

SPO2 99%.

I handed over to the night nurses to monitor and continue the care. Patient was made comfortable in bed and was told to be visited again the next morning.

Fifth Day of Admission (03/12/22)

According to the night nurse, patient woke up at 6:00am with much improvement in the previous identified problem. Routine self-hygiene such as bathing, brushing of his teeth and grooming were also done and served with porridge and bread. His vital signs were checked and recorded as follows:

BP 90/60mmHg

Temperature 36.8degree Celsius

Pulse 87beat per minutes

Respiration 19cycle per minutes

At 8:00am prescribed drugs were served with no reaction observed. At 10:00am the doctors came round and gave the following orders; start treatment for malaria for 1 day, continue IV antibiotics, and encourage oral hydration. Wife was educated to give meals including high protein like meat, fish and milk.

At 11:00am the nursing intervention to relieve general weakness within 72hours were evaluated and goal fully met as evidenced by nurse reporting a measurable increase in activity tolerance.

The vital signs were checked and recorded as follows at 2:00pm as:

BP 110/70mmHg

Temperature 36.3degree Celsius

Pulse 120beat per minutes

Respiration 35cycle per minutes

Vital signs were taken at 6:00pm and it was within the normal range. He took his bath and went to bed. I handed them over to the night nurse for continuity of care and promised to see them early the following morning.

Sixth day/ Day of Discharge (04/12/22)

According to the night nurse, patient woke up at 5:30am, his condition had improved over time. His personal hygiene was maintained with no assistance and bed clothing was changed. He was then made comfortable in bed. Patient was served his morning medications and his vital signs were checked and recorded at 6:00am as;

Temperature 36.8 degree Celsius

Pulse 98 beats per minute

B/P 110/76mmHg

Respiration	18 cycles per minute
Spo2	98%
Weight	59.6kilograms

Patient was served with porridge and bread with two fingers of banana in the morning. During ward rounds by the medical officer on duty, patient was discharged on syrup Carbocisteine 15ml tid x7. His condition was stable and his acid fast bacilli results was negative. Patient's family were made aware and the necessary preparations for discharge started.

His folder was sent to the Billing Office for assessment and payment of his bills. Patient and his wife were assisted to pack their belongings. Education was given to patient and wife on his diet and the need to complete the medications given to him and also attend the hospital on reviewed day (12th December, 2022).

The need to report any observed sickness anytime was emphasized to prevent future complications. Terminal disinfection of the bed and the linen was done to prevent cross of infection to other patient and the bed was made ready for use by another patient. The date for review was communicated to them. His particulars were entered in the admission and discharge book and daily ward state. Mr. K.A. was ready to go home. At 11:30am, patient and relatives were set to go. They thanked the staff and bid the other patients on the ward farewell. I also bid them goodbye.

4.2 Preparation of patient and family for discharge/Rehabilitation

The preparation of Mr. K.A. towards discharge started on the day of hospitalization. During the admission both wife and patient were reassured that all due care would be rendered to raise patient's health status. They were then educated on the causes, clinical features, management and how to prevent the reoccurrence of the disease condition. The importance of

taking his drugs on time was also explained to him and his mother. Therapeutic and side effects of the drugs were made known to them. The review date, which was 12th December, 2022 was also stressed on. Patient's wife was encouraged to bring him to the hospital if he encounters any complications before the review date for treatment. Assessment and payment of bills were made and documented.

Patient's wife was assisted to pack their belongings. The wife and patient expressed their profound gratitude to the staff for their care and concern. I escorted them and promised them of my second home visit as well as the review date.

4.3 Follow up/home visit/Continuity of care

Home visit is the friendly but, purposeful visit to patient's residence with the aim of assessing the real home situation; identify problems and promoting good health. There are two types of home visit: routine and selective home visits.

Routine home visit is the act of visiting one house after the other in a given area to assess their health condition by members of the health team. Selective home visit is a special visit paid to families and patients for continuity of care and supervision. Home visit build up interpersonal relationship between the patient, his family and the nurse. The selective type of home visit was used in carrying out the study.

First home visit (1st December, 2022)

I alighted at Wamfie hospital junction at 11:00am. The house was almost 600 meters away from the junction with house number ***WF/192***, Wamfie, about 10 to 15minutes walk from the road side. After exchanging greetings with his, children and siblings, my reason for the visit was declared to them. I made them understood that I was there to assess their health condition and the environment in which they lived and make some possible suggestions to prevent some environmental diseases. They happily welcomed me and thanked me for the visit. The

family live in a compound house laid with blocks which was not painted. There was a kitchen, one bath room and they use public toilet which was distance away from their house.

I asked if it would be possible for me to observe the patient's room and I was granted the permission to do so in the company of the patient's sister. Per my observation, I saw that patient's the room had no fan and ventilation was poor since the room had two windows braised with sticks for security reasons. They lived closer to a refuse dump and they dispose their waste there.

I also asked for the location of the patient's friend's house. I went there also and I was told by the sister that Mr. K.A. often goes there. I educated the friend on the harmful effects of second hand smoking on Mr. K. A's health status and the entire people around. I requested that if possible Mr. K.A. should not be allowed to stay there for a longer period.

After the environmental assessment, I briefly discussed the condition with the family and emphasized on the need to keep the environment and room tidy and also the importance of good ventilation. Moreover, I advised them that it is necessary to cook your own food than buying it from outside because it carries its own consequences like contacting disease if the food is contaminated. Later around 12:15pm I thanked them for their warm reception. Permission was sort to depart and promised to visit them again after discharge of Mr. K.A. They accompanied me to the road side where I bid them goodbye and boarded a taxi back to the house.

Second home visit (6th December, 2022)

I arrived at the house around 1:00pm and his wife and siblings were pleased to see me again. Exchange of greetings were made after which I was warmly welcomed. In a brief discussion and observation, I realized that the family had adhered to the previous health education given to them. They could answer some question concerning pneumonia. I asked the wife how the husband was doing and encouraged her to feed me with any unfamiliar findings after

discharge but there wasn't any. It was verified upon seeing an improvement in his condition as he was actively communicating with his children. The need to keep to scheduled time for review and its importance was stressed in addition to education on avoidance of self-medication and the need to take highly nutritious diet was also given. The family expressed their appreciation and I also thanked them for their co-operation. I also told them that they should report to the nearest clinic at their place when they are not well for first aid.

I was escorted by the aunty to the road side around 2:30pm, where I boarded a taxi back to home.

Review (12/12/22)

Mr. K.A. and Mrs. E.T. reported to the Holy Family hospital Berekum on 12th December, 2022 at 9:30am. I met them at the outpatient department (OPD) and helped them with the registration process. His vital signs were checked and recorded as follows;

BP	130/80mmHg
Temperature	36.2degree Celsius
Pulse	94 beat per minutes
Respiration	22 cycle per minutes
Weight	62 kilograms

I accompanied them to the consulting room where after being examined by the physician, he was declared fit. The wife was advised by the physician to stick to good personal hygiene practice. I reinforced the physician advised. I informed them about my termination of care on my next visit. I took the wife and husband to the lorry station where I saw them off.

Third home visit (17th December, 2022)

I arrived at Mr. K.A.'s house at 10:00am. I greeted and asked them how they were fairing. The whole family were very happy to see me again. I asked wife and the patient if he had any

problems and they made no complains. I used the opportunity to educate them on the need to report to the nearest hospital for treatment when they encounter any health problem. I thanked the family again for allowing me to use them for my patient and family care study. I informed them on the need to terminate my care with the child and family since the child was well. Both the husband and the family were grateful and promised to stick to the advice I have given to them. I handed over to the mother to continue care since there was no health care provider available. I thanked them once again as they saw me off to the road side around 10:45am and I boarded a vehicle.

CHAPTER FIVE

EVALUATION OF CARE RENDERED TO CLIENT AND FAMILY

5.0 Introduction

Evaluation in simple terms is the outcome of nursing actions against the anticipated goals and it is the final step in the nursing process (Hinkle & Cheever, 2018). It involves comparing patient's health status with the goals and objectives of the planned care and determination of the patient's progress.

It is the final phase of updating the plan of the patient's care. Depending on the outcome, unmet

goals are re-examined, modified and re-prioritized after a proper assessment for an effective nursing care to be rendered.

5.1 Statement of Evaluation

During patient's stay at the hospital many goals were set with their specific outcome criteria. They were aimed at providing patient's health with a holistic nursing care to enhance speedy recovery.

a. Mr. K.A was relieved of dyspnea

On 29th November, 2022 at 10:30am Mr. K.A was having difficulty breathing. A nursing diagnosis was formulated as, ineffective airway clearance related to copious tracheobronchial secretions. As such an objective was set to relieve patient of dyspnea within 24 hours was set. The following interventions were carried out to meet the objective set; Patient's vital signs were monitored 30 minutes hourly, patient's top part of bed was elevated, patient was taught encouraged deep breathing exercise, patient's due medication was served and patient's relatives were reassured of competent nursing care and a positive prognosis.

At 10:30am, objective that was set on 29th November, 2022 concerning patient's dyspneic state was as goal fully met on 30th November, 2022 as patient's ABG was recorded as 99% without administration of oxygen and respiratory rate recorded as 19cpm, patient's wife also verbalized that patient can breathe well without difficulty.

b. Patient Was Relieved of Fever (38.7ºC)

On 29th November, 2022, assessment and monitoring on admission revealed that patient had fever with a body temperature of 38.7ºC. At 10:35am nursing diagnosis was formulated as, Ineffective thermoregulation (hyperthermia-38.7ºC) related to infection in the lungs. As such, an objective to help relieve her of fever within 8 hours was set. The following nursing interventions were carried out to achieve the set objective; Patient has been tepid sponged with tepid water, louvres were opened for ventilation, tight clothes and heavy were removed, patient's vital signs were monitored and her prescribed antipyretics (Oral Paracetamol 1g) served.

At 10:35am, an objective which was set on 29th November, 2022 to help patient gain normal body temperature within 8 hours was evaluated on 30th November, 2022. A body temperature of 36.9ºC was recorded which set goal to be fully achieved.

c. Patient's and relative were relieved of Anxiety

On 29th November, 2022, on observation, I realized that patient's wife looked anxious. Further

interactions revealed that she was very anxious. At 10:30am, an objective was set to relieve wife of anxiety within 24 hours after formulating a nursing diagnosis of anxiety related to unknown outcome of disease process and its management. The following

interventions were carried to ensure that goal was met; Patient's wife was assured of

competent nursing care, measures to avert condition were explained to client's wife and also signs and symptoms were explained to her. Questions asked by her were answered to clear all

doubts. At 10:30am, objective that was set on 29th November, 2022 concerning patient wife's anxiety being relieved within 24 hours was evaluated as goal fully met on 30th November, 2022 with evidence as patient's wife demonstrating problem solving skills about condition, patient's wife verbalizing appropriate range of feelings about the outcome of her husband's condition as the nurses observed patient's wife appearing relaxed and reported that her anxiety is reduced to a manageable level.

d. Patient was relieved from cough

On 30th November, 2022, on assessment, at 7:30am, it was observed that Mr. K.A was persistently coughing. At 7:30am, an objective was set to relieve cough within 24hours after formulating nursing diagnosis of altered body comfort related to secretion and irritations in the airway. The following interventions were carried out to ensure goal was met; patient was educated on good forceful coughing techniques using abdominal muscles, patient was encouraged to hydrated, patient head was propped up with pillows, patient was encouraged to reposition every two hours, patient and relative was reassured and prescribed medications were served. At 7:30am, objectives that was set on 30th November, 2022 concerning patient persistent cough being relived within 24 hours was evaluated as goal fully met on 1st December, 2022 with evidence as patient verbalized absence of cough and nurse observed patient comfortable in bed without persistent cough.

e. Patient's Nutritional Status was improved

On 30th November, 2022 it was observed that Mr. K.A has lost appetite as his wife confirmed that his eating habit changed since the time his condition started. She also said she finds it difficult to feed him. At 09:00am, a nursing diagnosis was formulated as risk for malnutrition related to loss of appetite. An objective was set to help patient's nutritional status to be improved within 48 hours. The following interventions were carried out for improvement in patient's condition; patient's wife was educated on husband's condition, patient's wife has

been educated on how to feed the husband, mouth care was performed for patient with gauze and normal saline and his prescribed medications were also served. At 09:00am, the objective that was set on 30th November, 2022 to help improve patient's nutritional status within 48 hours was evaluated as a met goal on 2nd December, 2022 as patient's wife confirmed that patient was able to eat more than 2/3 of the tom brown served as his breakfast.

f. Patient regained strength

On 30th November, 2022, upon further assessment, at 11:00am, it was observed that Mr. K.A was weak as compared to how active he is before the admission. His wife confirmed. It was observed that patient has lost strength as she could not fully tolerate activities. Nursing diagnoses of activity intolerance related to impaired respiratory function was made. An objective was set to relieve Mr. K.A of his weakness within 72hours. The following interventions were carried out to meet the set objective; Patient was made comfortable in bed, patients respiratory status was monitored, patient's vital signs were checked and recorded every 4 hours, contributing factors to patient's condition were identified with relatives and his due medications served. Procedures performed were documented into the nurses' notes. An evaluation of the objective set to ensure that patient is relieved of weakness within 72 hours on the 29th November, 2022 was done on 3rd December, 2022 at 11:00am and goal was achieved as patient's wife verbalized that there was a measurable increase in activity tolerance of Mr. K.A.

5.2 Amendments of Nursing Care for Partially Met or Outcome Criteria

Upon careful evaluation of the nursing care rendered, goals set for patient were all met.

Therefore, there was no need for any amendment of goals set during the care of patient.

5.3 Termination of Care

Interaction with the patient and wife started on the 29th November, 2022, when he was admitted at the Males' Ward till the date of discharge which was 4th December, 2022. It

continued with two follow-ups after discharge. The termination was done in a suitable manner from the beginning of the intervention to prevent separation anxiety. The family was informed that, my interaction with them will come to an end after patient was handed over care to a public health nurse. On the said date, I set off early Tuesday afternoon around 12:10pm with a taxi. I got to patient's house at around 1:00pm. Patient and family were doing well as they looked cheerful and had no complains. The environment was tidy as there was neither rubbish nor stagnant water around with their weedy areas wed. Patient's family commended me for good work done and accepted to continue the care of Mr. K.A at home. I however stressed on the importance of regular check-ups and to seek prompt medical attention whenever they fall sick and rather than relying on self-medication.

CHAPTER SIX

SUMMARY AND CONCLUSIONS

6.0 Introduction

This is the last chapter for 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

On the 29th November, 2022, at 10:15am, Mr. K.A. was brought to the males' ward accompanied by his wife from the Accident and Emergency Unit of Holy Family Hospital Berekum. They were warmly welcomed. They were given seat to make them comfortable for assessment to commence. Six health problems were identified and appropriate nursing interventions were put in place to curtail the problems. Patient complained of severe chest pain and cough and I asked Mr. K.A.'s wife about what was wrong with her husband and she complained of coughing, chest pains, vomiting, fever and rapid breathing which were recorded under the nurses' continuation notes.

Five (5) laboratory investigations were carried out and they were prepared towards discharged from the first day of admission. Vital signs before discharge was;

- Temperature 36.8^{oC}
- Pulse 98 bpm
- Respiration 18cpm
- Weight 59.6kg
- BP 110/76mmHg

Six health problems and nursing diagnosis were formulated. Patient recovered within 6days without complication and was scheduled for review on 12th December, 2022. Patient was relieved of his symptoms; education was given on the condition and the importance of review. Visiting was made to his house while he was on admission and also after discharged. His environment was studied during the visits and offered the needed education. Care was terminated on the 4th December, 2022.

6.2 Conclusions.

Mr. K.A. and his family care study has really given me a deeper knowledge about holistic nursing care to a patient and family. The understanding of this care has exposed me to situation where the knowledge I received in classroom had practically be demonstrated on the patient and his family on the ward. This study has given me adequate knowledge on management of pneumonia with the nursing process through supervision. Although writing patient and family care study is a very difficult task, I encourage each and every student nurse to write one as it is enriching in knowledge and practice. It should therefore be maintained in General Nursing Programme by the Nursing and Midwifery Council of Ghana. I recommend that the nurses in practice should be asked to present a care study every three years in clinical practices to keep them update with the nursing and new research method in rendering quality care to patient.

APPENDIX

Table 6.7: shows the vital signs recorded for MR. K.A.

DATE	TIME	TEMPERATURE (^{O}C)	PULSE (BPM)	RESPIRATION (CPM)	SPO2 (%)
29/11/22	10:20am	38.7	75	28	98
	6:00pm	36.2	84	24	96
	10:00pm	36.5	91	23	97
	6:00am	36.5	95	25	97
	10:00am	36.3	64	22	98
30/11/22	02:00pm	37.1	77	20	98
	6:00pm	36.7	70	21	97
	10:00pm	36.9	83	18	98
	2:00pm	36.5	67	21	96
	6:00pm	37.0	78	20	98
01/12/22	10:00pm	36.6	81	19	99
	6:00am	36.8	91	22	97
	10:00am	35.8	67	23	99
	2:00pm	37.2	99	20	96
	6:00pm	37.0	87	22	99
02/12/22	10:00pm	36.6	73	21	98
	6:00am	36.8	69	19	97
	10:00am	37.0	89	18	95
03/12/22	2:00pm	36.3	92	22	98
	6:00pm	36.6	89	19	99
	10:00pm	36.2	81	22	99
04/12/22	6:00am	36.6	78	19	98
	10:00am	36.8	98	18	98

Table 6.8: Symbols/Abbreviation and Their Meaning

SYMBOL/ABBREVIATION	MEANING
Mls	Milliliters
Mg	Milligram
Bpm	Beats per minute
Cpm	Cycles per minute
°C	Degree Celsius
I.V	Intravenous
Tid	Three times daily
Bid	Twice daily
Qid	Four times daily
OD	Once daily

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OTHER

Patient Folder Number – AAD9150/22. Holy Family Hospital, Berekum.

SIGNATORIES

1. THE STUDENT NURSE

NAME: OSEI MAXWELL AMANKWAH

SIGNATURE.....

DATE..... 5th July, 2023

2. THE NURSE-IN-CHARGE OF THE MALES' WARD (HOLY FAMILY HOSPITAL, BEREKUM)

NAME: MR. EFFAH BENJAMIN

SIGNATURE.....

DATE..... 05/07/2023

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

NAME: MR. AYAMBA DRAMANI

SIGNATURE.....

DATE..... 5/07/2023

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

NAME: MONICA NKRUMAH

SIGNATURE.....

DATE..... 11th July, 2023

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