

HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

A PATIENT AND FAMILY CARE STUDY ON PEPTIC ULCER DISEASE (PUD)

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

JULY, 2024

PREFACE

Previously, care for the sick was considered to be the responsibilities of priests and religious groups. For instance, in the middle Ages, care for the sick was then handled by the military and religious orders. However, in the 19th Century, Florence Nightingale provided defined rules for the preparation of nurses and redefined the face of the nursing practice. Since then, the scope of nursing has expanded remarkably to its modern state of comprehensive nursing, which involves a systematic process of data collection, problem diagnosis, analysis, care plan development and evaluation. The main objective of the nursing practice today is focused on the promotion, maintenance and restoration of healthy life for the individual, family and community as a whole. The patient and family care study is a comprehensive study carried out on patient with a particular disease condition. The study is based on the nursing process, a systematic method, which has the assessment, analysis, planning, implementation and evaluation as its components. The study provides knowledge and understanding of the causes, pathology, diagnosis and treatment of the patient's condition. It also gives an account of the actual nursing care rendered to a patient and his or her family from the time of admission until time of discharge.

The study forms part of the academic requirements on obtaining the license to practice as a registered general nurse in Ghana. It offers the student nurse the chance to put into practice the theoretical knowledge and experiences gained during the period of training. It broadens the knowledge of the student nurse in terms of a particular disease condition and its management. The study helps the patient /family to comprehend and gain insight into the condition and improve upon their health status.

Finally, it builds a good cordial relationship between the nurse and patient /family as well as other members of the health team.

ACKNOWLEDGEMENT

My first and foremost thanks goes to the Lord Almighty for bestowing upon me, guidance, protection, strength and knowledge to carry out this study successfully.

Next, I wish to express my sincere gratitude to Mr. D.G., my client, and his family for their understanding and co-operation in the course of the study.

Also, special thanks to my supervisor Mr. Ibrahim Alhassam, who spent his precious time in reading through this script and offering suggestions that facilitated the writing of the script. I again express my gratitude to all the tutors of the Holy Family Nursing and Midwifery Training College, Berekum for their advice and direction throughout the process of writing this care study.

Furthermore, my profound appreciation also goes to the nursing staffs at males Ward in Holy Family Hospital, Berekum, especially the ward in-charge Mrs. Appiah Veronica for helping me to get the necessary information to complete this study.

My heartfelt gratitude and appreciation go to my lovely parents, Mr. and Mrs. Antwi for their psychological and financial support throughout the period of the study.

I wish to also acknowledge all my course mates who supported me in various ways during my stay on campus especially, Leticia Eyifah Arthur.

Lastly, I am very grateful to the various authors and publishers from whose books valuable information was obtained to bring this care study to a successful conclusion. God bless you all.

INTRODUCTION

This patient and family care study was carried out on Mr. D.G., a 43-year-old Man. He was admitted at the Males ward on 22nd August, 2023 at Holy Family Hospital, Berekum with a diagnosis of Bronchopneumonia.

My first encounter with him was the day he was admitted (22nd August, 2023) and continued throughout his hospitalization, during follow up and home visits. I welcomed them and reassured them as they appeared very anxious. I introduced myself to them and all the necessary procedures in relation to his condition were carried out. It was during my interaction with them that I sought permission to take Mr. D.G. for a study which they agreed. My interaction with Mr. D.G. in the hospital lasted for Five (5) days. He was managed on the following drugs during his admission; Intravenous cefuroxime 750mg three times daily for 72hours, Intravenous Dexterous Normal Saline 1.5 liters, Tablet Paracetamol 1g tds x 5days, Intravenous Gentamycin 80mg three times daily for 24hours, Azithromycin 500mg daily for 3 days, Tablet Diclofenac 50mg three times daily for 5days, Syrup Carbocysteine 15mls for 7days.

His condition improved as a result of the adequate nursing and medical care, and therefore was discharged on 26th August, 2023. During the period of this study, three home visits were embarked upon. The first visit occurred on the 23rd August, 2023 while patient was still on admission. The second was carried out on the 30th August, 2023 while the third and final visit took place on the 16th September, 2023 during which care was officially terminated. Mr. D.G and his family were chosen for my care study in order to enable me widen my knowledge and understanding about the condition (Bronchopneumonia).

The study has been organized into six chapters according to the nursing process. Chapter one (1) consists of Assessment of the patient and family. Chapter two (2) consists of Analysis of data collected.

Chapter three (3) deals with the planning of patient/family care, Chapter four (4) consists of implementing patient/family care. Chapter five (5) deals with Evaluation care of the patient/family and Chapter six (6) deals with Summary and conclusion.

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CHAPTER ONE

ASSESSMENT OF THE PATIENT AND FAMILY

1.0 Introduction

Assessment according to Baron (2017) is the first step in the nursing process and it involves critical thinking skills and data collection both subjective and objective. Subjective data involves verbal statements from patients and relatives while objective data is measurable, tangible data such as vital signs, intake and output, and height and weight. As the first phase in the nursing process, assessment deals with collection of data from patient / family and review of existing data through observation, physical examination and interviews from which analysis can be made to help in planning and implementation of care. Through assessment, the nurse is able to detect unique health problems of client and individualized holistic care rendered. The chapter therefore will focus on patient particulars, patient's/family's medical and surgical history, patient and family's socioeconomic history, patient's developmental history, past obstetric history, patient's lifestyle/hobbies, past medical history, present medical history, admission of patient, patient's concept of illness, literature review and validation of data.

1.1 Patient's Particulars

Particulars are facts or details such as; name, sex, religion, ethnicity, date of birth, etc. about the patient which are written down and kept as record (Wang & Peura, 2015).

Mr. D.G., a 43-year-old man, was born at Mim Islamic Hospital in the Bono Region on 23rd March, 1980 to late Mr. I.K. and late Madam C.A. He currently resides at Brenyekwa a suburb of Berekum together with his wife Miss V.A. He is a Ghanaian by nationality and an Akan by tribe and he speaks Twi and English. He is a Carpenter. Mr. D.G. is a Christian and a member of the Roman Catholic Church at Mim. Mr. D.G. is dark in complexion, weighs 65 kg and a

height of 180cm. He is married with 3 child. According to Mr. D.G., he had formal education to Junior High School level at Mim. His next-of- kin is Mr. R.G., his first born.

Client has no physical impairment or disability.

1.2 Patient/Family Medical History

The patient/family's medical history provides information about illness in patient's family which has a genetic origin (Weller, 2018).

According to patient, there are no known genetic diseases as well as any chronic illness such as, chronic heart failure, asthma, diabetes, hypertension and chronic renal failure in her family. He also added that there are no communicable diseases like tuberculosis or leprosy neither do they have mental illness such as psychosis existing in their family. According to Mr. D.G., his parents are all dead due to natural cause. He however admitted that his family sometimes suffers minor ailments such as; headache, chills and fever which they treat with over-the-counter (OTC) drugs. Relatives were educated on the risks and effects of over-thecounter drugs and self-medication and also encouraged them to seek medical treatment at the hospital whenever they are sick. Generally, Mr. D.G. is in good condition of health.

1.3 Patient' Family Socioeconomic History

Socioeconomic history is the collection of information about the influence of a patient's finances on social status. The term socioeconomic is often used in explanation to class. It comprises of both the social and economic status of the patient (Farlex, 2018).

Mr. D.G. and his family belong to middle socioeconomic class and they are able to provide all their basic needs such as food, cloth and shelter. Patient said he is a carpenter and his wife Miss V.A. is a farmer and because of that they earn from the carpentry and farm products such as plantain, yam, maize, cashew and groundnut. Mr. D.G. said his job doesn't have fixed monthly income however he earns at least one thousand Ghana Cedis (GH¢1000.00) a month. He also

added that during the cashew season his wife could earn as much as two thousand Ghana Cedis (GH¢2,000.00) a month from sales of the cashew. He said they are registered member of the National Health Insurance Scheme (NHIS). According to client, they are well known in their area because his father was someone who cares for the needy. The relationship between client and his family is cordial as relatives and friends visited him on admission. His family is caring, loving and supportive. Mr. D.G. added that all members of their family are Roman Catholics and are much concerned with their religious responsibilities. The family participates in church activities and programs.

1.4 Patient's Developmental History

Mish (2016) defines growth, development and maturity as: Development is the biological and physiological change that occurs in human beings between birth and the end of adolescence as the individual progresses from dependency of increasing autonomy. Growth however, is the gradual increase in the size of body and its organs while maturation is the change in function of an organism. According to Mr. D.G., he was born on 23rd March, 1980 at Mim Islamic Hospital, Mim. According to the patient, his late mother told him he was born at term through spontaneous vaginal delivery without any congenital abnormality.

He completed all his immunizations against the vaccine preventable diseases which was confirmed on the deltoids of his right arm showing the mark of the Bacillus Calmette Guerin (BCG) vaccination. According to the patient, he had exclusive breastfeeding for four months before he was introduced to family food such as tom brown and porridge. According to Mr. D.G., he progressed through the normal milestone of development. Mr. D.G. claimed he could sit by fourth months, had his teeth erupting at sixth months, crawl by ninth months, stand by a year, walk by a year and half and talk by a year and half although he could make some sounds such as mama and dada as early as six months. According to Mr. D.G., he had formal education up to junior High School level.

Based on the Erik Erikson's theory of psychosocial development, there are eight (8) distinct stages. Each stage builds on the successful completion of earlier stage and challenges of stages not completed may be expected to return as problems in future. Erickson maintained that personality develops in a predetermined order through these eight (8) stages of psychosocial development, from infancy to adulthood. During each age, the person experiences a psychosocial crisis which could have a positive or negative outcome for personality development.

Mr. D.G. is 43 years old and falls under generativity versus stagnation, which is the seventh stage and develops from 40 years to 65 years. During this stage, individuals establish their careers, settle down with relationship with their families and develop a sense of being part of a bigger picture. They give back to society through raising their children, being productive at work and becoming involved in community activities and organization. By failing to achieve these objectives, they become stagnant and feel unproductive. Success at this stage will lead to virtue of love. Mr. D.G. as a Carpenter and also an active member of his community, who is involved in activity and program at the church, Mr. D.G. has therefore attained generativity because, according to our conversation, he makes meaningful and productive contribution to his community by helping with the upbringing of his children and also involved in community activities and organization.

1.5 Patient's Life Style and Hobbies.

Lifestyle/Hobby is a style of living that reflects the attitudes and values of a person or group (Wang & Peura, 2015). According to the client, he wakes up usually at 5:30am. As a Christian, he performs his daily devotional prayers. He performs oral hygiene two times daily and then empty his bowels. He then prepares for work after taking his breakfast around 7:00am which is usually porridge and bread before leaving for work. According to him, he has no known allergy to foods and he is not on any special diet. He takes three (3) square meals a day which is; breakfast, lunch and supper. His favorite meal is Banku and groundnut soup. He gets to work usually early at

8:00am to get settle for the day's work and returns from work at around 4pm in the evening. According to the patient, he enjoys watching television programs such as Christian movies and telenovelas. Mr. D.G. added that he usually use both verbal and non- verbal communication styles such as eye movement and gestures to speak to his child to desist from doing certain things. He takes his supper usually around 5:30pm when he returns from work and sleeps at 9pm. Before going to sleep, he commits himself into the hands of God. He also believes in what to do and what not to do in his religious teachings. He is able to interact with family members freely and comfortably. He attends funerals and weddings on Saturdays and Sundays respectively and also engages himself in communal labor activities. Personal impression about the patient is that, patient is a quiet and reserved person but very friendly when anyone gets closer to him. Mr. D.G. is a calm and easy-going person and because of that other people come for advice and counselling when they have problems or challenges.

1.6. Patient's Past Medical/Surgical History

According to Mr. D.G., he did not have any childhood illness like measles, whooping cough, and diphtheria and has not undergone any surgical procedure prior to his current admission. He occasionally suffers from minor ailments such as headache, abdominal discomfort, and common cold for which he treats with over-the counter drugs from the pharmaceutical shop. Education was given to Mr. D.G. on the need to report promptly to the hospital anytime he feels sick and the dangers associated with over- the -counter drugs were made known to him. Mr. D.G. claimed he has never suffered any road accident but however sustained minor injuries whilst growing up which healed on its own. Mr. D.G. said he has no known allergy to drugs. Patient does not have any physical disability or impairment on any of his body.

1.7. Patient's Present Medical History

According to Mr. D.G. he had been in a normal state of health until 18th August, 2023 when he started experiencing cough and even thought it was normal. Three days later, that is 21st August 2023, he had chest pains, sleeping disturbances and the cough became severe. His temperature

also increased which he said he took cough syrup and paracetamol he bought from an over-the-counter seller. On 22nd August, 2023 around 2:00pm the chest pain was so severe and he could not breathe well or eat well so he was rushed to the emergency department of the Holy Family Hospital, Berekum by his wife. On his arrival he was examined by Dr. E.A and during the examination, his chest was auscultated, wheezing and crackles sounds were heard and with the above symptoms, Mr. D.G. was diagnosed as having Bronchopneumonia. He was detained at the emergency department for about 1 hour and subsequently admitted to the male's ward.

1.8. Admission of Patient

Mr. D.G. was admitted through the Emergency unit to the Males ward of Holy Family hospital, Berekum on 22nd August, 2023 at around 3:40pm by Dr. E.A, with the diagnosis of Bronchopneumonia. Patient came to the ward on wheel chair in alert and conscious state assisted by a staff nurse and his wife.

Mr. D.G. and his wife were welcomed to the ward. They were offered seats to make them feel comfortable, all the staff nurses present were introduced to them including myself.

Patient's Lightwave Hospital Information Management System (LHIMS) number was collected from the accompanying nurse and his name was mentioned to confirm his identity and admission.

They were reassured of competent staff who would ensure complete care and a speedy recovery.

Mr. D.G. was led to an already prepared admission bed. His vital signs were checked and recorded as follows;

- Temperature 38.0°c
- Pulse 75bpm
- Respirations 19cpm
- Blood pressure 158/106mmHg

- Oxygen saturation 93%.

His weight on admission was 65kg. Mr. D.G was given tablet paracetamol 1g tds to control the high body temperature of 38.0°C. The investigations ordered on admission were; Chest Xray, Urine Routine Examination (Urine R/E), FBC for Haemoglobin level estimation, Physical Examination, Sputum for Acid Fast Bacilli to rule out TB and Blood film for malaria parasites,

The following medications were prescribed, collected and served; □

Intravenous cefuroxime 750mg three times daily for 72hours □

Intravenous Dexteros Normal Saline 1.5 liters.

- Tablet Paracetamol 1g tds x 5days.
- Intravenous Gentamycin 80mg three times daily for 24hours
- Azithromycin 500mg daily for 3 days
- Tablet Diclofenac 50mg three times daily for 5days
- Syrup Carbocysteine 15mls for 7days

Mr. D.G. was asked if he has any valuable items with him that the ward can keep safe for him but he insisted he would like to keep everything with his wife. Mr. D.G. and his wife were oriented to the ward by showing them the toilet and bathroom, and nurse's room. He was also introduced to other patients at the ward. Mr. D.G. was informed of the ward routine such as time of doctor's rounds, serving medications, checking vital signs and was encourage to call the nurse whenever the need arose. Patient was already a registered member of the National Health Insurance Scheme so he was advised to continue renewing whenever it expires. Patient and his wife were briefed on visiting hours which were 5:30am - 6:30am in the morning, 12:30pm - 1:00pm in the afternoon and 5:30pm - 6:30pm in the evening each day.

Patient's name was entered in the admission and discharge book, daily ward state, routine book and the nurse's note. Discharge planning was also initiated between the patient and relative by

telling them that the hospitalization is a temporary period and that patient will be discharged home after the treatment.

I then informed him of my intentions to use him for my patient and family care study to which he agreed after I had explained to them the importance and ethics of the study which included confidentiality. It was further explained to them that it is a partial requirement by the Nursing and Midwifery Council of Ghana for the award of a license to practice as a professional Registered General Nurse. I also told him that he can terminate my care at any condition or at any time he feels to. Mr. D.G. was chosen for the care study because it was the first time of nursing a patient with Bronchopneumonia and to have one-on-one experience of rendering comprehensive care to patients and the family.

1.9 Patient's/Family's Concept about the Illness

The patient does not have any knowledge about his condition and but did not attribute his condition to any spiritual or superstitions. Mr. D.G's concerns were not only about his condition but also gaining a maximum recovery and getting back to his family and work as soon as possible. However, he expressed an expectation that with the help of God and the dedication of competent health team, he would recover quickly and resume work as soon as possible.

1.10. Literature Review

This section deals with documented information about the condition Mr. D.G. was diagnosed with (Bronchopneumonia Disease). Literature review of a condition gives a detailed insight into the condition. It talks out the established and laid down facts about the disease condition, which aids in the medical and nursing diagnoses and the appropriate management for that particular disease. It also entails the standard with which the patient's clinical manifestations, diagnostic investigations, treatment and others are compared. It comprises of the following: Definition, incidence, etiology/causes, types, pathophysiology, clinical features, diagnostic investigation, medical management, nursing management, complications and prevention.

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 5th, 6th and 7th 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). (Hinkle & Cheever 2018)

Definition

Pneumonia is the term generally used to indicate an inflammation of the lung tissue. It is an inflammatory condition of the lung in which the alveoli are usually filled with fluid and blood cells. The infection might be caused by either viral or bacterial (Hinkle & Cheever 2018).

Incidence of Pneumonia

- It is common in overcrowded places. It occurs in any age group but most common in people who have had chest disease before, example is chronic bronchitis
- It is also common among people living in poor environmental areas.
- It is common among people who are malnourished, immunocompromised persons and

elderly because of their lowered resistance.

Causes of Pneumonia

Pneumococci are the most common cause but other bacterial or viruses may be the cause. Non-bacterial and non-viral cause include aspiration of gastric secretions, food, fluid or lipoids (aspiratory pneumonia) and retention of secretions which occurs in the immobilized and elderly people (hypostatic pneumonia). (Hinkle & Cheever 2018).

□ Bacterial

A wide range of bacteria known to cause pneumonia are pneumococcus pneumonia, streptococcus, and staphylococcus and mycobacterium tuberculosis pneumonia.

□ Viral

Many viruses are known to cause pneumonia such as virus causing measles, influenza chicken pox and whooping cough.

□ Aspiratory and Hypostatic Pneumonia

These are non-bacterial and non-viral causes. They include aspiration of gastric secretions food and fluids or lipoids. This normally occurs in elderly immobilized or unconscious patients since their gag and cough reflexes are depressed.

Types of Pneumonia

According to Kumar and Clark (2017) pneumonia has been classified according to many ways as follows:

1. By aetiology:

- **Infection** from viruses, bacteria, parasites, fungi, etc.
- **Aspiration** of stomach content into the lungs.

- **Inhalation** of irritative gases

2. By anatomical position

- 1. Lobar or segmental pneumonia:** it occurs when a substantial portion of one or more lobes of the lung are involved. Example, right upper lobar pneumonia which shows the pneumonia is affecting the upper lobe of the right lung.
- 2. Bronchopneumonia:** it is when small areas of the lung alveoli and lobules around small terminal bronchi are affected.
- 3. Lobular pneumonia:** this is when a lobe is involved.

Mode of Transmission

1. Inhalation of poisonous gases or through carbon droplets.
2. Aspiration of food
3. Infections spreading to the lungs through the blood stream.

Pathophysiology of Pneumonia

According to Smeltzer and Hinkle (2018), the pathophysiology of pneumonia has been divided into four main phases. These are:

□ Phase 1 (CONGESTION PHASE)

At this phase, the causative organisms gain entrance into the alveoli of the lung and start inflammatory reaction producing a serous fluid together with the cellular elements of the blood (red and white blood cells) which fill up the alveoli to make the lungs more solid. This stage last for 1-3 days.

□ **Phase II (RED HEPATIZATION PHASE)**

Lots of red cells fill the lung tissues and it appears red in colour. The patient at this stage produces rusty sputum. This stage takes about 2-4days.

□ **Phase III (GREY HEPATIZATION STAGE)**

At this stage, the white blood cells are accumulated and the red cells are re-absorbed. This lasts for 4-8days. The lungs appear grayish in colour and they become solid. The patient produced yellowish and purulent sputum.

□ **Phase IV (RESOLUTION STAGE)**

At this stage, the inflamed tissue returns to normal. The fibers are reabsorbed. The lungs become soft but the elasticity is not restored. It lasts for five to fourteen (5-14) days, the longest period.

During the process of inflammation, there are decreased alveoli ventilations which are the main problem of pneumonia. The patient then becomes dyspneic.

Clinical Features of Pneumonia

Hinkle and Cheever (2018) identified the following as clinical manifestations of Pneumonia;

1. Cough with chest pains.
2. Fever.
3. Respiration becomes rapid and distressed sometimes.
4. Respiration becomes so distressed that he makes use of the accessory muscles of respiration, which are the abdominal muscles.
5. Prostration is marked and becomes aggravated by the cough.
6. There is tachycardia.
7. There is dyspnoea
8. There is cyanosis.

9. Hemoptysis.
10. There is increased leukocytes count.
11. Crackles and wheezing sounds on auscultation.
12. Nausea and vomiting as well as anorexia occur.
13. Nasal flaring occurs.

DIAGNOSTIC INVESTIGATIONS

According to Kumar and Clark (2017), techniques and procedures which aid in making a concrete or valid diagnosis are as listed below;

1. Chest X-ray to assess the anatomical structure of the lung by showing a dense shadow at the affected part. Chest x-rays can reveal areas (seen as white) which represent consolidation.
2. Chest CT (computed tomography) can reveal pneumonia that is not seen on chest x-ray.
3. Sputum specimen for gram stain and culture and sensitivity test which may show acute inflammatory cells and the causative organism and its sensitive antibiotic.
4. Routine sputum culture
5. A complete blood count may show a high white blood cell count, indicating the presence of an infection or inflammation.
6. Sputum for Acid Fast Bacilli to rule out TB
7. Blood analysis may show high erythrocyte sedimentation rate (ESR).
8. Lung needle biopsy
9. Physical examination
10. History and signs and symptoms of the patient will help.
11. Bronchoscopy or Trans tracheal aspiration allows the collection of materials for culture or biopsy.

12. Pulse oximetry may show a reduced arterial oxygen saturation level.

Medical Treatment

According to Kumar and Clark (2017), a client who suffers pneumonia is treated with the under listed therapeutic regimen to enhance recovery

1. Antibiotic like penicillin, Gentamycin, cefuroxime are the best and first drug of choice.
2. Oral rehydration or intravenous fluid such as 5% Dextrose, Normal saline and Ringers lactate for dehydration.
3. Oxygen therapy to treat hypoxemia.
4. Cough mixtures such as Menthox, expertise are given for the relief of coughs.
5. Antipyretics such as acetaminophen are given for pyrexia.

Surgical Treatment

Clients may be managed surgically by;

Thoracentesis: this is done if there is dyspnoea resulting from fluid accumulation in the pleural cavity.

Nursing Interventions

Hinkle and Cheever (2018) outlined the following as nursing management for Pneumonia;

□ Observation

Vital signs; temperature, pulse, respiration and blood pressure are checked and recorded 4 hourly. Intake and output was observed and recorded to know the functioning of the kidneys and to avoid dehydration by administering enough fluids. The skin is also observed for cyanosis and improvement of his/her condition.

□ Position

The patient is nursed in an upright position or propped up in a comfortable bed. The position is changed every two hours.

□ **Rest and Comfort**

i. The patient is nursed in a well ventilated and quite environment. ii.

Temperature is controlled by tepid sponging to provide comfort. iii.

Encourage patient to lie on the affected side to help splint the chest

of that side to reduce the pleural rubbing that causes the discomfort.

iv. Plan and carry out care in such a way that the patient's resting time will not be interrupted.

□ **Diet/Nutrition**

1. Patient with this condition normally have poor appetite due to the unpleasantness of the sputum, so mouth should be cleansed before giving meals.

2. Provide small but frequent meals.

3. The diet should be semi-fluid but rich in protein, carbohydrates and roughages.

4. Instruct patient to ingest foods and fluids slowly.

5. Provide the meals on time.

6. If the client experiences dyspnoea the liquid diet is more preferable to avoid choking.

7. Give adequate fruits to help provide the vitamin needs for maintenance and recovery.

8. The meals should be served attractively in order to boost the patient's appetite.

□ **Maintenance of Airway**

Change the patient's position every 2 hours to prevent pooling of secretions.

If possible, encourage the patient to cough and do deep breathing exercises. If patient is unable to cough out sputum, oropharyngeal suction is done to clear the airway. This is done with great care in order not to introduced foreign substances in the pleural cavity.

□ **Personal Hygiene**

1. Patient should be bath twice daily to maintain personal hygiene and also to induce sleep.

2. Mouth care is given every four hours to prevent halitosis and also to increase appetite.
3. If the patient coughs, provide sputum mug with disinfectant and instruct the patient to handle it well.
4. Give the patient water to rinse the mouth after coughing out sputum due to unpleasant taste of the sputum.
5. The bed linen and the clothing should be changed as soon as it is soiled.

□ Medications

Give medications according to the doctor's orders such as antibiotics, antipyretics, cough mixtures etc.

Administer the drug at the correct time. Observe for the side effects of the drug, record and report it immediately.

□ Psychotherapy

- Explain the procedure and condition to the patient and family so that their anxiety will be allayed.
- Allow them to express their fears.
- Reassure the patient of being in competent hands.

□ Education

- Educate the patient and family on the condition, causes, signs and symptoms and prevention so that they can detect it early and report to the hospital on time.
- The patient/family are educated on the importance of follow-ups and treatment regimen of antibiotics.
- Educate patient/ family not to live in very cold areas, oxygen demand areas such as smoky areas.
- Educate patient on rest to avoid over exertion and possible exacerbation symptoms.
- Educate on breathing exercise.

- Educate patient to assume a proper position to aid breath or promote rest. Examples fowler's position and to change position frequently to enhance secretion clearance and ventilation.

□ Exercise

The patient is taught to embark on deep breathing exercise. The patient is also advised to avoid over exertion.

Complication

According to Kumar and Clark (2017), the following are possible complications of pneumonia.

1. Pleural effusion: A build-up of fluid between the tissues that line the lungs and the chest.
2. Delay in resolution: failure of the radiological findings to resolve within 4 weeks.
3. Pericarditis: A swelling and irritation of the thin, sac-like membrane surrounding the heart (pericardium).
4. Lung abscess: Is a necrotizing lung infection characterized by a pus-filled cavitory lesion.
5. Empyema: Accumulation of pus inside a body cavity.
6. Meningitis: is the inflammation of the tissues surrounding the brain and spinal cord.
7. Cardiac failure: A chronic condition in which the heart doesn't pump blood as well as it should.

Prevention of Pneumonia

The following points gears at preventing the occurrence of pneumonia. (Hinkle and Cheever 2018).

- Health education on regular check-ups in hospital and report if any signs of chest pains and difficulty in breathing occurs.
- Sudden change of body temperature should be reported.
- Avoid excessive intake of alcohol and dusty or smoky environment.
- The patient should avoid smoking.
- The patient should rest and sleep in a well-ventilated room.
- Avoid using drugs which is not prescribed.

1.11 Validation of Data

Validation of data simply means to establish the soundness, accuracy or legitimacy of the data gathered so that it will be free from errors and misinterpretations (Farlex, 2017). Data gathered from Mr. D.G. were confirmed to be true when compared with data given by relatives. Also, during home visits most of the information given by Mr. D.G. and family at the hospital were confirmed by other relatives in the house. Data gathered on Mr. D.G. and diagnostic investigations carried out were similar to those in the literature review. Based on these cross checks it could be concluded that information and data used were valid and suitable for the study.

CHAPTER TWO

ANALYSIS OF DATA

2.0 Introduction

According to Weller (2018), analysis is the process of studying or examining something in detail in order to understand it or explain it. Analysis involves making of conclusion from data collected from a patient and relative. The signs and symptoms exhibited are compared to what exist in the literature review and various laboratory investigations. The nurse analyzed such information to deduce the exact nursing diagnosis to enable him or her to formulate appropriate nursing care plans for the patient. Based on analysis of data, the nurse is able to identify the problems of the patient, her strengths, makes her nursing diagnoses, set objectives and gives appropriate interventions. It comprises:

1. Comparison of data with standard
2. Patient/Family strength
3. Health problems
4. Nursing diagnosis

2.1 Comparison of Data with Standards

This is a method of comparing the data collected about the patient with standard from textbooks. This comprises of diagnostic investigations, causes, clinical manifestations, treatment and complications.

A. Diagnostic Investigations/ Tests

Diagnostic investigations are procedures performed to determine the nature of a disease (Weller, 2014). The following diagnostic investigations/tests were carried out on Mr. D.G. During his period of hospitalization and was ordered by Dr. E.A;

1. Chest x-ray
2. Urine Routine Examination (Urine R/E)
3. FBC for Haemoglobin level estimation
4. Physical Examination.
5. Sputum for Acid Fast Bacilli to rule out TB.
6. Blood film for malaria Parasites.

Table 1: COMPARISM OF TEST DONE TO LITERATURE.

Test outlined in literature review	Test Carried out on Patient
Chest x-ray	Chest x-ray was done.
Chest CT (computed tomography) scan	Chest CT (computed tomography) scan was not done
Sputum specimen for gram stain and culture and sensitivity test	Sputum for gram stain and culture and sensitivity test was not done.
Routine sputum culture	Routine sputum culture was done
A complete blood count	Complete blood count done
Sputum for Acid Fast Bacilli to rule out TB	Sputum for Acid Fast Bacilli to rule out TB Was not done
Blood analysis	Blood analysis was done
Lung needle biopsy	Lung needle biopsy was not done
Physical Examination	Physical Examination was done.
History taking	History taking was done
Bronchoscopy or Trans tracheal aspiration	Bronchoscopy or Trans tracheal aspiration was not done
Pulse oximetry	Pulse oximetry was done
Blood film for malaria Parasites not indicated in the literature review.	Malaria parasite was done.

Blood film was done to rule out malaria parasite but it was not indicated in the literature review.

TABLE 2: Results of Diagnostic Investigations Conducted on Mr. D.G.

DATE	SPECIMEN	INVESTIGATION	RESULT	NORMAL VALUES	INTERPRETATIONS	REMARK
22/3/23	Patient	Chest X – Ray	Irregular areas of consolidation in the bronchioles of the lung.	Absence of consolidation in the bronchioles of the lung.	Irregular areas of consolidation in the bronchioles of the lung show Para pneumonic elusions due to inflammation as a result of infection.	The following drugs were given. 1. Tablet Diclofenac 50mg three times daily for 5days 2. Azithromycin 500mg daily for 3 days
22/3/23	Urine	Urine Routine Examination	Colour: yellow(light) Protein: Negative Glucose: Negative	Colour: yellow(light/pale to dark/deep amber Protein: Negative Glucose: Negative	The characteristics of urine was normal (clear urine)	No treatment given.

TABLE 2: Results of Diagnostic Investigations Conducted on Mr. D.G. cont.

DATE	SPECIMEN	INVESTIGATION	RESULT	NORMAL VALUES	INTERPRETATIONS	REMARK
22/3/23	Blood	Full blood count; White blood cell (WBC) count and Neutrophils	10.73x10 ⁴ μL 6.20 x10 ⁹ μL	3.5 - 10.5 x10 ³ μL 2.0 – 8.0 x10 ⁹ μL	Values within normal range Values within normal range	Intravenous cefuroxime 750mg three times daily for 72hours was given No treatment given
		Red blood cell (RBC) count	3.67 x10 ⁴ μL	3.90 - 5.03 x10 ⁶ μL	Values slightly below normal range	No treatment given
		Haemoglobin level (Hb)	11.5 g/dL	Males: 12-18g/dl Females: 11.5-16g/dl	Values within normal range	No treatment given

TABLE 2: Results of Diagnostic Investigations Conducted on Mr. D.G. cont.

DATE	SPECIMEN	INVESTIGATION	RESULT	NORMAL VALUES	INTERPRETATIONS	REMARK
23/3/23	Sputum	Sputum for Acid Fast Bacilli gram stain and culture and sensitivity test	Negative	There should be absence of bacilli in the sputum after overnight incubation.	The absence of bacilli in the sputum indicates that the infection is not as a result of tuberculosis.	No treatment was given.
23/3/23	Blood	Malaria parasites	Negative	There should be no malaria parasite in the blood.	Normal, no malaria parasite was seen in the blood.	No treatment was given.

B. Causes of Mr. D.G.'s Condition

With reference to the literature on the causes and risk factors of Bronchopneumonia, it could be deduced Mr. D.G.'s condition was as a result of bacterial due to the high level of white blood cell count and neutrophils and inhalation of dust from the surrounding in which he works due to the present of an untarred road in front of his carpentry shop and inhalation of unknown gas.

CLINICAL FEATURES

TABLE 3: Comparison of Mr. D.G.'s clinical manifestation with standard Literature

CLINICAL MANIFESTATION INDICATED IN THE LITERATURE REVIEW	CLINICAL MANIFESTATION EXHIBITED BY CLIENT
Cough with chest pain	Client was coughing and experienced chest pain.
Fever	Client had fever (38.0 °C)
Rapid respiration	Client had normal respiration of 19 cycles per minute
Distressed respiration	Client had normal respiration
Aggravated prostration as a result of cough	Client did not complain of aggravated prostration as he cough
Tachycardia	Tachycardia was not present
Dyspnoea	Client had dyspnoea
Cyanosis	Client was not cyanosed
Haemoptysis	Haemoptysis was not present
Increased leukocytes count	Client had normal leukocytes count
Crackles and wheezing sounds on auscultation	Client had crackles and wheezing sounds on auscultation
Nausea, vomiting and anorexia	Client exhibited anorexia and nausea but not vomiting.

Nasal flaring	Nasal flaring was not present
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From the table above it can be noticed that Mr. D.G. presented with most of the signs and symptoms of Bronchopneumonia as reported by literature.

C. Treatments given to Mr. D.G.

Treatment is the application of medicines, surgery, psychotherapy, etc., to a patient or to a disease or symptoms (Gest, 2016). Mr. D.G. was put on the following medications; □ intravenous cefuroxime 750mg three times daily for 72hours □ Intravenous Dexterous Normal Saline 1.5 liters.

- Tablet Paracetamol 1g tds x 5days.
- Intravenous Gentamycin 80mg three times daily for 24hours
- Azithromycin 500mg daily for 3 days
- Tablet Diclofenac 50mg three times daily for 5days
- Syrup Carbocysteine 15mls for 7days

Table 4 below shows the treatment given to Mr. D.G. compared with those outlined in the literature review.

5: Pharmacology of drugs administered to Mr. D.G.

Table 4: Comparison of treatment outlined in the Literature Review with those given to patient.

Treatment according to literature	Treatment given to Mr. D.G.
1. ANTIBIOTICS;	
i. Cefuroxime	Cefuroxime was given to the patient
ii. Gentamycin	Gentamycin was given to the patient
iii. Penicillin	Penicillin was not given to the patient
iv. Azithromycin	Azithromycin was given to the patient
2. INTRAVENOUS FLUIDS;	

5: Pharmacology of drugs administered to Mr. D.G.

i. Ringer's lactate	Ringer's lactate was not given to the patient
ii. 5 % Dextrose	5% Dextrose was not given to the patient
iii. Dextrose Normal saline	Dextrose Normal saline was given to the patient
3. COUGH MIXTURES	
i. Syrup Carbocysteine	Syrup Carbocysteine was given to the patient
4. ANALGESICS	
i. Paracetamol	Paracetamol was given to the patient
ii. Diclofenac	Diclofenac was given to the patient.

5: Pharmacology of drugs administered to Mr. D.G.

From the table above, it can be noted that Mr. D.G. received adequate medical treatment since most of the drugs administered belonged to the classes of drugs reported by literature to

be key in the medical management of Bronchopneumonia³⁸

5: Pharmacology of drugs administered to Mr. D.G.

Date	Drugs	Dosage and route of administration According to standard	Dosage, route of administration to Mr. D.G.	Classification	Desired effect	Actual effects observed	Side effects/ Remarks
22/3/23	Gentamycin	Adult dose: 3 to 5mg/kg/day Children dose: 6 to 7.5 mg /kg /day Route: intravenously	50 mg tds x 24hours intravenously	Aminoglycosides	To kill /combat the organism	Patient recovered from dyspnoea and patchy consolidation of the chest	Vestibular and auditory damage , nausea None was observed
22/3/23	Cefuroxime	Adult dose: 500mg for every 12 hours Children dose: 250mg for every 12 hours Route: Oral	750mg tds x 72hours intravenously	Cephalosporin	To inhibit bacteria growth and to kill/ combat the organism	Patient recovered. Chest sound was clear.	Sensitive reaction, anorexia and irritation. None was observed

5: Pharmacology of drugs administered to Mr. D.G.

Mr. D.G. cont.

5: Pharmacology of drugs administered to Mr. D.G.
Mr. D.G. cont.

Date	Drugs	Dosage and route of administration According to standard	Dosage, route of administration to Mr. D.G.	Classification	Desired effect	Actual effects observed	Side effects/ Remarks
22/3/23	Paracetamol	Adult dose: 0.5-1g every 46 hours Children dose: 120-250mg every 4-6 hours Route: Oral.	1g tds x 5days Orally	Antipyretic and analgesic.	To reduce high body temperature and pain	Pain and fever were reduced. Fever was reduced to 36.9°C	Nausea, vomiting, tinnitus None was observed.
22/3/23	Azithromycin	Adult dose: 250-500mg qid orally and 15-20mg/kg given qid as intravenously. Children dose: 30-50mg qid orally 20-40mg/kg qid Route: intravenously	500mg daily x 3days orally	Antibiotic, antibacterial, antiprotozoal	To treat flagellate and infections	The infection was reduced	Nausea and vomiting None was observed.

Date	Drugs	Dosage and route of administration According to literature	Dosage, route of administration to Mr. D.G.	Classification	Desired effect	Actual effects observed	Side effects/ Remarks
22/3/23	Diclofenac	Adult dose: 50mg tds/day Children dose: determined by your doctor Route: Oral	50mg tds x 5days orally	Analgesic	To reduce pain	Pain was reduced	Nausea, and vomiting None was observed.
22/3/23	Dextrose Normal Saline	Adult dose: 1-3 liters x 24 hours Children dose: 1-1.5 liters x 24 hours Route: Intravenously.	1.5 Liters intravenously	Electrolytes and infusions	To replace fluid and electrolyte imbalances	Fluid and electrolytes were restored. Patient gained energy.	Circulatory overload and phlebitis. None was observed

5: Pharmacology of drugs administered to Mr. D.G. cont.

Date	Drugs	Dosage and route of administration According to literature	Dosage, route of administration to Mr. D.G.	Classification	Desired effect	Actual effects observed	Side effects/ Remarks
22/3/23	Syrup Carbocysteine	Adult dose: 15mls for every 8 hours Children dose: 5-10mls for every 8 hours Route: Oral	15mls tds x 7days orally	Mucolytic	To break down thick mucus making it light to spit it out for clearance of airway	Cough was reduced.	Vertigo, heartburns, Nausea and Vomiting. None was observed.

Complication

With reference to the literature review, complications of bronchopneumonia includes pleural effusion, Pericarditis, meningitis, cardiac failure, Lung fibrosis, circulatory failure, Septicaemia, Septic shock etc. Mr. D.G. did not experience any of the above-mentioned complication because he reported to the hospital early and received the right treatment.

2.2 Patient/Family's Strengths

Strength according to Merriam (2015) is the quality that allow someone to deal with problems in a determined and effective way. So, patient/family strength involves the activities the patient can perform and those the patient's family can also do in helping the patient to recover without any complications.

The undermentioned strengths were identified in Mr. D.G.

1. Patient could breathe well when put in semi fowler's position.
2. Patient could tolerate tepid sponging.
3. Patient could verbalize the intensity of the pain.
4. Patient could sleep for 3 to 4 hours uninterruptedly.
5. Patient could eat small amount of food served.
6. Patient was willing to learn about her condition.

2.3 Patient/Family Health Problems

According to McIntosh (2015), health problems is defined as a situation a person or thing needs attention and needs to be dealt with or solved.

Patient health problems were identified for effective nursing care to be rendered throughout the period of hospitalization. This is done through collection of data, observation and interviewing.

The following problems were identified:

1. Patient had difficulty breathing. (22/03/23)
2. Patient had fever (38.0°C). (22/03/23)
3. Patient complains of chest pains. (22/03/23)
4. Patient had difficulty falling asleep. (23/03/23)
5. Patient complains of loss of appetite. (23/03/23)
6. Patient did not have adequate knowledge on his condition (23/03/23)

2.4. Nursing diagnosis

A nursing diagnosis according to NANDA International (2016), is a clinical judgement concerning a human response to health conditions/ life processes, or vulnerability for that response, by an individual, family, group or community. It is a clear and definite statement of the patient's health status that can be influenced by nursing interventions. It is derived from a validated, critically analysed and interpreted data collected during assessment. Conclusions are drawn regarding the patient's needs, problems, concerns or human responses. The nursing diagnosis, once identified provides a central focus as a reminder of the stages that is based on the nursing process. The plan of care is designed, implemented and evaluated, hence making it possible to give comprehensive health care to the problems. This is done by identifying, validating and responding to specific health problems. The nursing diagnosis also provides an efficient method of communicating the patient's health problems. Nursing diagnosis for Mr.

D.G. is as follows;

1. Impaired breathing pattern (dyspnea) related to retained secretions in the airways.
(22/03/23)
2. Fever (38.0°C) related to infections process in the lungs. (22/03/23)
3. Impaired body comfort (chest pains) related to fluid filled in the membrane of the lungs.
(22/03/23)
4. Insomnia related to frequent coughing. (23/03/23)
5. Risk for imbalance nutrition (less than body's requirement) related to loss of appetite.
(23/03/23)
6. Deficient knowledge related to lack of information on pneumonia. (23/03/23)

CHAPTER THREE

PLANNING FOR PATIENT AND FAMILY CARE

3.0 Introduction

Planning is the process of thinking about and organizing the activities required to achieve a desired goal (Anderson, 2016). As the third phase of the nursing process, the chapter entails the process of developing strategies to help tackle patient/family health problems through setting of clear and specific objectives, implementation of nursing care plan and evaluation of outcome.

3.1 Patient/Family Care objective/ Outcome Criteria

Care objectives are goals set up for specific nursing interventions and orders to be carried out in order to meet patient's needs and health problems. Outcome criteria are the measurable changes in conditions as a result of specific intervention or action. With respect to Mr. D.G.'s problems, the following objectives were set for patient and his family during the period of hospitalization.

1. Patient would have normal breathing pattern within 24 hours as evidence by;
 - a. Patient verbalizing that he can breathe well.
 - b. Nurse observing that patient exhibiting normal breathing Sound, rate and rhythm.

2. Patient's body temperature would be reduced to normal (36.2°C-37.2°C) within 24 hours as evidence by,
 - a. Nurse observing that patient's temperature has reduced when checked with thermometer.
 - b. Patient verbalizing that his body's temperature has reduced

3. Patient would be relieved of chest pain within 48 hours as evidence by,
 - a. Nurse observing patient with relaxed facial expression and body posture.

- b. Patient verbalizing that he is comfortable and that he is not in pain.
4. Patient would regain his normal sleeping pattern (6 to 8) hours within 48 hours as evidence by.
- a. Nurse observing that patient had a sound uninterrupted sleep for 6 to 8 hours.
 - b. Patients verbalizing that he was able to sleep for 6 to 8 hours without coughing attacks.
5. Patient would maintain his nutritional status throughout hospitalization as evidenced by,
- a. Nurse observing that he can eat two third of food served.
 - b. Patient verbalizing that he has regain appetite.
6. Patient would gain adequate knowledge of Broncho pneumonia within 48 hours as evidence by;
- a. Nurse observing patient answering questions on pneumonia
 - b. Patient verbalizing the preventive measures of pneumonia

Table 6: Nursing care plan for Mr. D.G.

Date/ Time	Nursing Diagnosis	Objectives /Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
22/3/23 3:40pm	Impaired breathing pattern (dyspnea) related to retained secretions in the air ways.	<p>patient would have normal breathing pattern within 24 hours as evidence by;</p> <p>1. Patient verbalizing that he can breathe well.</p> <p>2. Nurse observing that patient exhibiting normal breathing Sound, rate and rhythm.</p>	<p>1. Reassure patient</p> <p>2. Put patient in comfortable Position.</p> <p>3. Remove all tight cloths.</p> <p>4. Encourage patient to take in adequate fluids.</p> <p>5. Monitor vital sign especially respiration.</p>	<p>1.Patient was reassured that he will be relieved of breathing difficulties</p> <p>2.Patient was assisted to change position by raising the head end of the bed to improved breathing</p> <p>3. Tight cloths around patient neck and chest were removed.</p> <p>4.Patient was encouraged to take in more fluids loosing pulmonary secretions</p> <p>5. Vital signs were monitored, putting much attention on respiration every 4 hours.</p>	23/3/23 3:40pm	Goal was fully met, as evidence by: patient verbalizing that he can breathe well and the nurse observing patient exhibiting normal breathing sound, rate and rhythm.	A.M.S

Table 6: Nursing care plan for Mr. D.G. cont'd

Table 6: Nursing care plan for Mr. D.G.

Date /Time	Nursing Diagnosis	Objectives /Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
22/3/23 3:45pm	Fever (38.0°C) related to infections process in the lungs.	<p>Patient's body temperature would be reduced to normal (36.2°C-37.2°C) within 24 hours as evidence by,</p> <p>1. Nurse observing that patient's body temperature has reduced to normal (36.2°C-37.2°C) when checked with thermometer.</p> <p>2. Patient verbalizing that his body's temperature has reduced.</p>	<p>1. Reassure patient of competent nursing care.</p> <p>2. Remove all heavy clothing.</p> <p>3. Tepid sponge patient</p> <p>4. Encourage ventilation.</p> <p>5. Serve patient with cold drinks</p> <p>6. Serve prescribed antipyretics.</p>	<p>1. Patient was reassured that his temperature will reduce to normal (36.2°C-37.2°C).</p> <p>2. Blanket and excess clothing were removed.</p> <p>3. Warm water was used to tepid sponged patient</p> <p>4. Windows were opened to encourage ventilation.</p> <p>5. Patient was served with cold drinks (water, malt).</p> <p>6. Prescribed Paracetamol was served.</p>	23/3/23 3:45pm	Goal was fully met as evidence by nurse observing that patient's body temperature has reduce to normal (36.2°C-37.2°C) when checked with thermometer and patient verbalizing that his body's temperature has reduce.	A.M.S

cont'd

Date /Time	Nursing Diagnosis	Objectives /Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
22/3/23 3:50pm	Impaired body comfort (chest pain) related to fluid filled in the membrane of the lungs.	Patient would be relieved of chest pain within 48 hours as evidence by, 1. Nurse observing patient with relaxed facial expression and body posture. 2. Patient verbalizing that he is comfortable and that he is not in pain.	1. Reassure patient of competent nursing care. 2. Put patient in a comfortable position. 3. Encourage and assist patient to perform chest splitting techniques when coughing to reduce pain. 4. Provide calm environment and encourage enough sleep. 5. Administer prescribed drugs (analgesic) and monitor the side effects.	1. Patient was reassured that; necessary measures will be put in place to ensure pain relief. 2. Patient was positioned in an upright position in bed for lung expansion. 3. Patient was thought and encouraged to perform chest splitting techniques to reduce pain when coughing. 4. Visitors were restricted to ensure rest and sleep. 5. Prescribed analgesics (diclofenac) was administered and side effects observed.	24/3/23 3:50pm	Goal was fully met, as evidence by: nurse observing patient with relaxed facial expression and body posture and patient verbalizing that he is comfortable and that he is not in pain.	A.M.S

Table 6: Nursing care plan for Mr. D.G. cont'd

Date /Time	Nursing Diagnosis	Objectives /Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
23/3/23 9:00am	Insomnia related to frequent coughing.	<p>Patient would regain his normal sleeping pattern (6 to 8) hours within 48 hours as evidence by.</p> <p>1. Nurse observing that patient had a sound uninterrupted sleep for 6 to 8 hours.</p> <p>2. Patients verbalizing that she was able to sleep for 8 to 10 hours without coughing attacks.</p>	<p>1. Assist client to take a warm bath.</p> <p>2. Make a comfortable bed without creases and cramps for client.</p> <p>3. Position client well to relieve her of dyspnoea to encourage sleep.</p> <p>4. Plan nursing activities at a go.</p> <p>5. Reduce noise in the ward.</p>	<p>1. Client was assisted to take a warm bath to help induce sleep, to improve circulation and promote relaxation.</p> <p>2. A comfortable bed free from creases and cramps was made available to patient for comfort ability and induce sleep.</p> <p>3. Client was put in sitting up position by raising the head end of the bed to help relieve him of dyspnoea</p> <p>4. Nursing activities such as vital signs and medications were planned in order not to disturb patient during sleep.</p> <p>5. Volumes of radio, television and visitors were reduced.</p>	25/3/23 9:00am	<p>Goal was fully met' as evidence by the nurse observing that patient had a sound uninterrupted sleep for 6 to 8 hours and patient verbalizing that he was able to sleep for 6 to 8 hours without coughing attacks.</p>	A.M.S

Table 6: Nursing care plan for Mr. D.G. cont'd

Date /Time	Nursing Diagnosis	Objectives /Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
23/3/23 9:10am	Risk for imbalance nutrition (less than the body required) related to loss of appetite.	Patient would maintain his nutritional status throughout hospitalization as evidenced by, 1. Nurse observing that patient can eat two third of food served. 2. Patient verbalizing that he has regain appetite.	1. Perform oral care twice a day and rinse mouth before and after feeding. 2. Prepare and serve patient favorite meal. 3. Serve food in small quantities at regular intervals 4. Encourage the patient to eat well. 5. Serve nutritious diet. 6. Provide a pleasant environment during meals	1. Oral care was performed twice a day and patient mouth was rinsed before and after feeding. 2. Banku and groundnut soup was prepared and served. 3. Banku and groundnut soup was served in small quantities at regular intervals. 4. Patient was encouraged to eat nutritious foods. 5. Fruits and vegetables were served 6. The environment was always kept neat and free from nauseated substances such as vomits, urine, stool and dirty linen to stimulate client's appetite.	26/3/23 9:10am	Goal fully met, as evidence by the nurse observing that patient can eat two third of food served and patient verbalizing that he has regain appetite.	A.M.S

Table 6: Nursing care plan for Mr. D.G. cont'd

Date /Time	Nursing Diagnosis	Objectives /Outcome Criteria	Nursing Orders	Nursing Interventions	Date/ Time	Evaluation	Sign
23/3/23 9:15am	Deficient knowledge related to inadequate information on Broncho-Pneumonia.	Patient would gain adequate knowledge of Pneumonia within 48 hours as evidence by; 1. Nurse observing patient answering questions on pneumonia 2. Patient verbalizing the preventive measures of pneumonia	1. Create a conducive environment for the patient. 2. Access patient knowledge on causes, effects, complication, management and prevention of pneumonia 3. Educate patient on the condition. 4. Allow patient to ask questions and provide answer in simple terms. 5. Evaluate patient by asking him to summarize the teachings.	1. Conducive environment was created for the patient. 2. Patient's knowledge was accessed on causes, effects, complication, management and prevention of pneumonia. 3. Client was educated the cause, signs and symptoms, treatment and preventive measures using a simple language she could understand. 4. Patient was allowed to ask questions and answers were provided in simple terms. 5. Patient was asked to summarize the teachings.	25/3/23 9:15am	Goal fully met, as evidence by Nurse observing patient answering questions on pneumonia and patient verbalizing the preventive measures of pneumonia.	A.M.S

CHAPTER FOUR

IMPLEMENTATION OF PATIENT/ FAMILY CARE

4.0 Introduction

This chapter forms the fourth part of the patient/family care study. Implementation is the actualization of the nursing care plan through nursing intervention (Smeltzer and Hinkle, 2018). It gives the vivid account of the actual nursing care that was given to the patient/family from the day of admission until discharged based on the patient's health problems identified. This chapter also includes the preparation of the patient and his family towards discharge, home visit and continuity of care.

4.1 Summary of actual nursing care

First Day of admission (22nd August, 2023)

On the 22nd August, 2023, Mr. D.G. was admitted as a planned admission to the male's ward of Holy Family Hospital Berekum at 3:40pm. His admission was ordered by Dr. E.A, with the diagnosis of Bronchopneumonia. Patient came to the ward on wheel chair in alert and conscious state assisted by a staff nurse and his wife.

Mr. D.G. and his wife were welcomed to the ward. They were offered seats to make them feel comfortable, all the staff nurses present were introduced to them including myself.

Patient's Lightwave Hospital Information Management System (LHIMS) number was collected from the accompanying nurse and his name was mentioned to confirm his identity and admission. I also read through his chart and his admission was stated clearly there by the doctor. His particulars were recorded into the admission and discharge book. I introduced myself as a second-year student of the Holy Family Nursing and Midwifery Training College,

Berekum and the nurses around were also introduced. Mr. D.G. was assured of speedy recovery from the availability of quality care which would lead to his discharge as soon as possible. I also assured him of confidentiality of information about his health and personal life.

His vital signs were checked and recorded as follows;

- Temperature 38.0°c
- Pulse 75bpm
- Respirations 19cpm
- Blood pressure 158/106mmHg
- Oxygen saturation 93%.

His weight on admission was 65kg. Mr. D.G was given tablet paracetamol 1g tds to control the high body temperature of 38.0°c. The investigations ordered on admission were; Chest Xray, Urine Routine Examination (Urine R/E), FBC for Haemoglobin level estimation, Physical Examination, Sputum for Acid Fast Bacilli to rule out TB and Blood film for malaria parasites,

The following medications were prescribed, collected and served; □

Intravenous cefuroxime 750mg three times daily for 72hours □

Intravenous Dexteros Normal Saline 1.5 liters.

- Tablet Paracetamol 1g tds x 5days.
- Intravenous Gentamycin 80mg three times daily for 24hours
- Azithromycin 500mg daily for 3 days
- Tablet Diclofenac 50mg three times daily for 5days
- Syrup Carbocysteine 15mls for 7days

Mr. D.G. was asked if he has any valuable items with him that the ward can keep safe for him but he insisted he would like to keep everything with his wife. Mr. D.G. and his wife were oriented to the ward by showing them the toilet and bathroom, and nurse's room. He was also introduced to other patients at the ward. Mr. D.G. was informed of the ward routine such as time of doctor's rounds, serving medications, checking vital signs and was encourage to call the nurse whenever the need arose. Patient was already a registered member of the National Health Insurance Scheme so he was advised to continue renewing whenever it expires. Patient and his wife were briefed on visiting hours which were 5:30am - 6:30am in the morning, 12:30pm - 1:00pm in the afternoon and 5:30pm - 6:30pm in the evening each day.

Patient's name was entered in the admission and discharge book, daily ward state, routine book and the nurse's note. Discharge planning was also initiated between the patient and relative by telling them that the hospitalization is a temporary period and that patient will be discharged home after the treatment.

I then informed him of my intentions to use him for my patient and family care study to which he agreed after I had explained to them the importance and ethics of the study which included confidentiality. It was further explained to them that it is a partial requirement by the Nursing and Midwifery Council of Ghana for the award of a license to practice as a professional Registered General Nurse. I also told him that he can terminate my care at any condition or at any time he feels to. Mr. D.G. was chosen for the care study because it was the first time of nursing a patient with Bronchopneumonia and to have one-on-one experience of rendering comprehensive care to patients and the family.

On admission at 3:40pm, Patient had difficulty breathing, a diagnosis of impaired breathing pattern (dyspnea) related to retained secretions in the air ways was made. An objective was set to restore patient's normal breathing pattern within 24 hours and the following interventions were carried out; Patient was reassured that he will be relieved of breathing difficulties, Patient was assisted to

change position by raising the head end of the bed to improved breathing, Tight cloths around patient neck and chest were removed, Patient was encouraged to take in more fluids loosing pulmonary secretions, Vital signs were monitored, putting much attention on respiration every 4 hours.

At 3:45pm, Patient had fever (38.0°C). Therefore, a nursing diagnosis of Fever (38.0°C) related to infections process in the lungs was made and an objective was set that patient's body temperature would be reduced to normal (36.2°C-37.2°C) within 24 hours. The following interventions were carried out: Patient was reassured that his temperature will reduce to normal (36.2°C-37.2°C), Blanket and excess clothing were removed, Warm water was used to tepid sponged patient, Windows were opened to encourage ventilation, Patient was served with cold drinks (water, malt), Prescribed Paracetamol was served.

At 3:50pm, Patient complained of chest pains so, a diagnosis of impaired body comfort (chest pain) related to fluid filled in the membrane of the lungs was formulated. An objective was set to relieve patient chest pain within 48 hours. The following interventions were carried out: Patient was reassured that; necessary measures will be put in place to ensure pain relief, Patient was positioned in an upright position in bed for lung expansion, Patient was thought and encouraged to perform chest splitting techniques to reduce pain when coughing, Visitors were restricted to ensure rest and sleep, Prescribed analgesics (diclofenac) was administered and side effects observed.

At 10:00pm, vital signs were checked and recorded and due medications served. Patient slept at 11:00pm.

Second day of admission (23rd August, 2023)

At 5:00am, Mr. D.G. was already awake. He brushed his teeth and took his bath which was assisted by his wife. His bed was well laid before he returned from the bathroom. By 7:00am,

his breakfast which was brown porridge and butter bread was ready. His vital signs were checked and recorded at 6:00am as follows:

- Temperature 36.6°C □ Pulse 66bpm
- Respiration 18cpm
- Blood Pressure 110/90mmHg
- SP0₂ 98%

During ward rounds at 8:00am, after assessment the doctor ordered to continue his medications for the next 24 hours.

At 9:00 am, patient reported that he was unable to sleep well in the night. A diagnose of Insomnia related to frequent coughing was therefore made, and an objective was set to help patient regain his normal sleeping pattern within 48 hours and the following intervention were put in place; Patient was assisted to take a warm bath to help induce sleep, to improve circulation and promote relaxation, A comfortable bed free from creases and cramps was made available to patient for comfort ability and induce sleep, Client was put in sitting up position by raising the head end of the bed to help relieve him of dyspnoea, Nursing activities such as vital signs and medications were planned in order not to disturb patient during sleep, Volumes of radio, television and visitors were reduced.

At 9:10 am, Patient complained of loss of appetite. A nursing diagnosis of risk for imbalance nutrition (less than the body required) related to loss of appetite was formulated, and an objective was set to maintain patient nutritional status throughout hospitalization and the following interventions were put in place; Oral care was performed twice a day and patient mouth was rinsed before and after feeding, Banku and groundnut soup was prepared and served, Banku and groundnut soup was served in small quantities at regular intervals, Patient was encouraged to eat nutritious foods, Fruits and vegetables were served, The environment

was always kept neat and free from nauseated substances such as vomits, urine, stool and dirty linen to stimulate client's appetite.

At 9:15am, Patient patient was observed to not having adequate knowledge on his condition (Broncho-Pneumonia). A nursing diagnosis of Deficient knowledge related to inadequate information on Broncho-Pneumonia was formulated. An objective was set to help Patient gain adequate knowledge on Broncho-Pneumonia within 48 hours. The following interventions were put in place; Conducive environment was created for the patient, Patient's knowledge was accessed on causes, effects, complication, management and prevention of pneumonia, Client was educated the cause, signs and symptoms, treatment and preventive measures using a simple language she could understand, Patient was allowed to ask questions and answers were provided in simple terms, Patient was asked to summarize the teachings.

At 12:00pm, Patient was encouraged to take his lunch which was rice with cabbage stew.

At 2:00pm, vital signs were checked and recorded and due medications were served.

At 3:40pm, an objective that was set on (22/03/2023) to restore patient's normal breathing pattern was evaluated and goal was fully met, as evidence by: patient verbalizing that he can breathe well and the nurse observing patient exhibiting normal breathing sound, rate and rhythm.

At 3:40pm, an objective that was set on (22/03/2023) to reduce patient's body temperature to normal (36.2°C-37.2°C) was evaluated and Goal was fully met as evidence by nurse observing that patient's body temperature has reduce to normal (36.2°C-37.2°C) when checked with thermometer and patient verbalizing that his body's temperature has reduce.

At 5:30pm, patient had his bath and took yam and stew for supper. The vital signs were checked and recorded and evening medications served at 6:00pm.

At 10:00pm, vital signs were checked and recorded and due medications served. Patient slept at 10:30pm.

Third Day of Admission: (24th August, 2023)

At 5:30am, Mr. D.G. was out of bed, brushed his teeth, emptied his bowel and took his bath. His bed was laid and the locker cleaned. His vital signs were checked and recorded at 6am as;

- Temperature 36.9°C.
- Pulse 67 bpm.
- Respiration 18 cpm.
- Blood pressure 110/80mmHg.
- SPO2 98%

Patient took rice porridge and bread as breakfast around 7:30am. During ward rounds at 9:00am, patient was reviewed by doctor E.A. who ordered for treatment to be continued. Banku with okro soup was served as lunch. At 2:00pm, vital signs were checked and recorded and due medications served. Patient had rice and stew for supper and after which she took her bath.

At 3:50pm, an objective that was set on (22/03/2023) to relieve patient chest pain was evaluated and goal was fully met, as evidence by: nurse observing patient with relaxed facial expression and body posture and patient verbalizing that he is comfortable and that he is not in pain.

Vital signs were checked and recorded and prescribed medications were administered and recorded at 6:00pm.

At 10:00pm, vital signs were checked and recorded and due medications served. Patient slept at 10:20pm.

Fourth day of Admission (25th August, 2023)

Mr. D.G. woke up around 5:30am in the morning and had his bath and mouth care carried out. The night nurse reported that patient had a good night sleep. He was doing well and wanted to know when he would go home. I explained to him that, he will be discharged as soon as the doctor declares his fit to go home. Morning ward routines such as straightening of bed linens, changing of soiled bed linen were done. His vital signs were checked and recorded in the vital signs chart (LHIMS) at 6am as;

□ Temperature	-	36.6 °C
□ Pulse	-	78 bpm
□ Respiration	-	20 cpm
□ Blood Pressure	-	110/70 mmHg
□ Oxygen Saturation	-	97%

Patient took Hausa porridge and koose for breakfast after which prescribed medications were served and recorded. He was made comfortable in bed waiting for doctor's rounds.

During the ward rounds at 9:00am, patient did not have any complains so Dr. E.A. ordered a continuation of the patient's treatment.

At 9:00am the objective set on (23/03/2023) to help patient regain his normal sleeping pattern was evaluated and goal was fully met as evidence by the nurse observing that patient had a sound uninterrupted sleep for 6 to 8 hours and patient verbalizing that he was able to sleep for 6 to 8 hours without coughing attacks.

At 9:15am, the objective set on (23/03/2023) to help Patient gain adequate knowledge on Broncho-Pneumonia was evaluated and goal was fully met as evidence by Nurse observing patient answering questions on pneumonia and patient verbalizing the preventive measures of pneumonia.

Yam with kontomire stew was served as lunch. Afternoon medications were served, vital signs were checked and documented. Patient took Banku and Okro stew for supper.

At 6:00pm, patient's medications were served and vital signs were checked and recorded.

Mr. D.G. took a warm bath at 7:00pm. At 10:00pm, vital signs were checked and recorded and due medications served. Patient slept at 10:30pm.

Fifth day of admission (Day of Discharge) - 26th August, 2023.

I arrived at the ward at 7:40am on this day to find Mr. D.G. looking cheerful and fit. Patient told me he had a sound sleep throughout the night. He had his mouth care, had his bath and had emptied his bowel. He took porridge and bread for breakfast.

Vital signs checked and recorded at 6:00am were as follows:

- Temperature - 36.6°C
- Pulse - 74 bpm
- Respiration - 22cpm
- Blood Pressure - 100/70 mmHg
- Oxygen Saturation - 98%

During ward rounds at 9:00am, patient had no complains so he was discharged home to continue treatment with already prescribed medications and to come for review on 2nd September, 2023. Education was given to patient on the need to complete the prescribed medication, diet and the need to report any observed ailment and side effect of drugs. I also explained his medications and its dosage to him and relative. The date for review which was 2nd September, 2023 was again mentioned to patient and relative.

His particulars were entered into admissions and discharges book as well as the daily census records. Patient was discharge with the following additional drugs:

- Azithromycin 500mg daily for 3 days
- Tablet Diclofenac 50mg three times daily for 5days

- Syrup Carbocysteine 15mls for 7days

At 9:10am, objective that was set on (23/03/2023) to maintain patient nutritional status throughout hospitalization was evaluated and goal fully met, as evidence by the nurse observing that patient can eat two third of food served and patient verbalizing that he has regain appetite.

After he had settled his bills. I helped him to pack all his belongings. Mr. D.G. and his family thanked the staff present and other patients at the ward and bid them goodbye. I escorted them to the hospital gate and bid them goodbye. I came back to the ward to remove patient's bed linen and put into the laundry container, then patient's bed was carbolized with already prepared breach solution, cleaned and left to dry. All care done was documented.

4.2 Preparation of Patient/Family for Discharge and Rehabilitation.

Preparation of Mr. D.G. and his family for discharge and rehabilitation commenced on the first day of admission (22nd August, 2023). The primary aim was to enable him to take active role in his care for a speedy recovery and also to give him an insight into his condition. Emphasis was made on the need to visit the hospital immediately with any illness that may occur, in order to promote early detection and treatment of diseases to avoid complications.

They were educated on the following;

Nutrition

Patient was encouraged to take meals that are well balanced to improve his health. She was also advised to stay away from precipitation factors such as smoke, dust etc. Patient and family were encouraged to take enough roughage to enhance bowel elimination. Vitamin and minerals such as fruits like banana and pawpaw should be encouraged to boost up his immune system.

Personal and Environmental Hygiene

Patient and family were educated on the need to adhere to good personal hygiene practice. Oral hygiene should be done twice daily with toothpaste and toothbrush to prevent mouth odour and to prevent the harbouring of micro bacteria. Bathing twice daily with water, soap, sponge and towel to prevent body odour and to remove microorganisms from the skin was encouraged. Patient was also educated to care for hands and feet by soaking them in water and trimming the nails with nail clippers and washing the nails, which will prevent harbouring of microbes and to prevent injury from scratching. Patient and family were also encouraged to weed their surroundings and also to avoid littering the environment with rubbish to prevent infections.

Self-medication

Mr. D.G. and his family were educated to avoid self-medication, which is buying drugs which is not prescribed by a doctor (over-the-counter medications) and herbal medications.

Drugs

Mr. D.G. was advised to continue the medication or treatment regimen as prescribed to prevent relapse of the disease condition. Patient was educated on how to take his drugs, the dose to be taken and side effects of the drugs were also explained to him. I educated him on the importance of the continuity of treatment at home.

4.3 Follow Up, Home Visit and Continuity of Care

Follow up or home visit is a friendly but purposeful visit to the patient and family with the aim of preventing complications, promoting and maintaining health and utilizing client's environment to facilitate in disease prevention through health education. It also helps to monitor patient's progress of recovery after being discharge.

First Home Visit (23rd August, 2023)

My first visit to the patient's house was on 23rd August, 2023 while patient was still on admission. The purpose of this visit was to know more about the patient's environment, how his surroundings can influence his health and to identify vulnerable people in his home. This home visit was also done to help me confirm certain information given to me by my patient. I made a successful journey to his home around 11:00am. The house is about 15 minutes' drive from the Holy Family Hospital Berekum. It is located at Brenyekwa, a suburb of Berekum district. Most of their roads are well constructed making transportation easier. Patient's house was located with the help of his wife miss V.A. who escorted me to their home. On arrival, I met my patients' neighbours in their house. They warmly welcomed me and were very happy on seeing me. I greeted them and they responded nicely. I was offered a seat on their corridor and was served with a glass of water. They asked about the patient's health and I responded that he was doing well. The house is built of blocks, well plastered but not painted. The entire house was roofed with aluminium sheet. The main source of water to the house is a bore hole which was about 5 minutes' walk from their house. The house has three bedrooms which were all occupied by my patient and his sons. They have a kitchen where they usually cook, situated in-front of the house. The ventilation system in the rooms were good because the rooms have louvers which I was told that it was opened every morning. The source of light to the house is electricity (PREPAID) from the Volta River Authority (VRA). Water in the house was stored in a big plastic container which was well covered with a suitable lid. Rubbish was collected into a rubbish bin with a lid. They also had KVIP toilet in the house which looked clean. On observation, I realized that the drainage system from the bathroom was poor. Water from the bathroom was choked behind the house which formed a stagnant pit. There was rubbish which

was gathered in the stagnant water behind the bathhouse. The environment behind the house was also bushy.

I educated my patient's wife and neighbours around to drain the stagnant water behind the bathhouse because it could serve as a breeding place for mosquitoes which may bring conditions like malaria. I advised that they should redirect the water into a larger pit which could be covered with concrete. I also advised that they weed around their compound to prevent habitation of dangerous animals like snakes and also breeding grounds for mosquitoes. I again educated them on personal hygiene. Emphasis was made on the need to avoid self-medication but rather visit the hospital for treatment if any condition arises. I then encouraged them to ask questions bothering them and they were answered tactfully. After spending one hour with them to know more about their environment and spending time with them, I sought permission to leave. They thanked me for the visit and they escorted me to the roadside and I made goodbye to them. I left there around 2:00 noon.

Second Home Visit (30/08/2023)

My second home visit was on 30th August, 2023 after patient's discharge. This was to assess the state of health of my patient at home and also to find out if Mr. D.G. was following his treatment regimen and to remind him of the review date which was 2nd September, 2023. On arrival at 2:50pm, I met Mr. D.G. and his wife Miss V.A. We exchanged greetings. I was warmly welcomed. Mr. D.G. said, he had no complains and because he wanted a speedy recovery, he takes his drugs as prescribed. I encouraged him to continue and also educated him. I was much happy for seeing that the bushy area behind their house was cleared and also the rubbish which was gathered in the stagnant water behind the bathhouse was dealt with. He assured me that he will practice the health education given him. They were informed that they will be paid a final visit during which patient will be handed over to community health nurse for continuity of care.

He was reminded of the date of review (2nd September, 2023) which he assured me he would comply. I asked permission to leave and they thanked me for the visit and he accompanied me to the road side. I left around 3:30pm.

Day of Review (2nd September, 2023)

On 2nd September, 2023, I met Mr. D.G and Miss V.A. his wife at the Out Patient Department where we exchanged pleasantries. I helped to activate his hospital card from the records department. His vital signs were checked and recorded at 8:15am as:

- Temperature 36.6°C
- Pulse 82bpm
- Respiration 20cpm
- Blood pressure 100/80mmHg
- Oxygen Saturation 97%
- Weight 75kg

We proceeded to the consulting room where he was reviewed by Dr. E.A. There were no complaints on the day of review so no new drugs were prescribed for him. He was encouraged to complete his medication and to take his daily meals as expected and practice good personal hygiene. Patient was reminded of the third visit which will be my last visit. I escorted them to the hospital entrance and bid them good bye.

Third Home Visit (16th September, 2023)

My third home visit was to find out how client was doing after review and to terminate care. On the 16th September, 2023 at 2:00pm, I visited my patient in the company of the community health nurse from Emmy Health Centre at Brenyekwa, named Miss J.O.M since arrangements were done for patients hand over.

On arrival, we met patient and family. We exchanged greetings and offered a seat. Mr. D.G conditions had improved and no complaints were presented. Since this was my last visit, I took my time and highlighted on the various health education that I had previously given. They were also advised to seek medical treatment whenever they fall sick to prevent complications and should not practice self-medication. Patient was reminded again take his daily meals as expected. They were grateful and promised to adhere to the education given. I educated patient on the need for continuity of care and the importance of the community health nurse. The community health nurse was again introduced and patient/family were handed over to her for continuity of care. Patient and family were encouraged to give their maximum co-operation to the community health nurse. She promised to do follow up visits and give any information which would be needed by the family members. I congratulated them for that and I made them aware that it was my last visit but I may come around anytime to say hello to them. I thanked Mr. D.G. and family for the cooperation and opportunity offered me to take him and the family for the care study and promised to keep any information confidential. We then asked for permission to leave and Mr. D.G. escorted us to the road side. I thanked him for his hospitality rendered to me, and finally we exchanged good-bye. I left around 3:30pm.

CHAPTER FIVE

EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY

5.0 Introduction

According to smelter and Hinkle (2018), Evaluation is the determination of the patient's responses to the nursing interventions and the extent to which the outcomes have been achieved. Evaluation is the final phase of the nursing process.

5.1 Statement of evaluation.

Below are the evaluations made on Mr. D.G. and his family after identifying their problems during his period of hospitalization.

1. Patient maintained normal breathing pattern (23/08/2023).

On admission (22nd August, 2023) at 3:40pm, Patient had difficulty breathing, a diagnosis of impaired breathing pattern (dyspnea) related to retained secretions in the air ways was made. An objective was set to restore patient's normal breathing pattern within 24 hours and the following interventions were carried out; ; Patient was reassured that he will be relieved of breathing difficulties, Patient was assisted to change position by raising the head end of the bed to improved breathing, Tight cloths around patient neck and chest were removed, Patient was encouraged to take in more fluids loosing pulmonary secretions, Vital signs were monitored, putting much attention on respiration every 4 hours.

On 23rd August, 2023 at 3:40pm, an objective that was set on (22/03/2023) to restore patient's normal breathing pattern was evaluated and goal was fully met, as evidence by: patient verbalizing that he can breathe well and the nurse observing patient exhibiting normal breathing sound, rate and rhythm.

2. Patient's body temperature was reduced to normal (23/08/2023).

On 22nd August, 2024 at 3:45pm, Patient had fever (38.0°C). Therefore, a nursing diagnosis of Fever (38.0°C) related to infections process in the lungs was made and an objective was set that patient's body temperature would be reduced to normal (36.2°C-37.2°C) within 24 hours. The following interventions were carried out: Patient was reassured that his temperature will reduce to normal (36.2°C-37.2°C), Blanket and excess clothing were removed, Warm water was used to tepid sponged patient, Windows were opened to encourage ventilation, Patient was served with cold drinks (water, malt), Prescribed Paracetamol was served.

On 23rd August, 2023 at 3:40pm, an objective that was set on (22/03/2023) to reduce patient's body temperature to normal (36.2°C-37.2°C) was evaluated and Goal was fully met as evidence by nurse observing that patient's body temperature has reduce to normal (36.2°C-37.2°C) when checked with thermometer and patient verbalizing that his body's temperature has reduce.

3. Patient was relieved of chest pain. (24/08/2023)

On 22nd August, 2023 at 3:50pm, Patient complained of chest pains so, a diagnosis of impaired body comfort (chest pain) related to fluid filled in the membrane of the lungs was formulated. An objective was set to relieve patient chest pain within 48 hours. The following interventions were carried out: Patient was reassured that; necessary measures will be put in place to ensure pain

relief, Patient was positioned in an upright position in bed for lung expansion, Patient was thought and encouraged to perform chest splitting techniques to reduce pain when coughing, Visitors were restricted to ensure rest and sleep, Prescribed analgesics (diclofenac) was administered and side effects observed.

On 24th August, 2023 at 3:50pm, , an objective that was set on (22/03/2023) to relieve patient chest pain was evaluated and goal was fully met, as evidence by: nurse observing patient with relaxed facial expression and body posture and patient verbalizing that he is comfortable and that he is not in pain.

4. Patient regained his normal sleeping pattern. (25/08/2023)

On 23rd August, 2023 at 9:00 am, patient reported that he was unable to sleep well in the night. A diagnose of Insomnia related to frequent coughing was therefore made, and an objective was set to help patient regain his normal sleeping pattern within 48 hours and the following intervention were put in place; Patient was assisted to take a warm bath to help induce sleep, to improve circulation and promote relaxation, A comfortable bed free from creases and cramps was made available to patient for comfort ability and induce sleep, Client was put in sitting up position by raising the head end of the bed to help relieve him of dyspnoea, Nursing activities such as vital signs and medications were planned in order not to disturb patient during sleep, Volumes of radio, television and visitors were reduced.

On 25th August, 2023 at 9:00am the objective set on (23/03/2023) to help patient regain his normal sleeping pattern was evaluated and goal was fully met as evidence by the nurse observing that patient had a sound uninterrupted sleep for 6 to 8 hours and patient verbalizing that he was able to sleep for 6 to 8 hours without coughing attacks.

5. Patient maintained his nutritional status. (26/08/2023)

On 23rd August, 2023 at 9:10 am, Patient complained of loss of appetite. A nursing diagnosis of risk for imbalance nutrition (less than the body required) related to loss of appetite was formulated, and an objective was set to maintain patient nutritional status throughout hospitalization and the following interventions were put in place; Oral care was performed twice a day and patient mouth was rinsed before and after feeding, Banku and groundnut soup was prepared and served, Banku and groundnut soup was served in small quantities at regular intervals, Patient was encouraged to eat nutritious foods, Fruits and vegetables were served, The environment was always kept neat and free from nauseated substances such as vomits, urine, stool and dirty linen to stimulate client's appetite.

On 26th August, 2023 at 9:10am, objective that was set on (23/03/2023) to maintain patient nutritional status throughout hospitalization was evaluated and goal fully met, as evidence by the nurse observing that patient can eat two third of food served and patient verbalizing that he has regain appetite.

6. Patient demonstrated adequate knowledge on Broncho-Pneumonia (25/08/2023).

On 23rd August, 2023 at 9:15am, Patient patient was observed to not having adequate knowledge on his condition (Broncho-Pneumonia). A nursing diagnosis of Deficient knowledge related to inadequate information on Broncho-Pneumonia was formulated. An objective was set to help Patient gain adequate knowledge on Broncho-Pneumonia within 48 hours. The following interventions were put in place; Conducive environment was created for the patient, Patient's knowledge was accessed on causes, effects, complication, management and prevention of pneumonia, Client was educated the cause, signs and symptoms, treatment and preventive measures using a simple language she could understand, Patient was allowed

to ask questions and answers were provided in simple terms, Patient was asked to summarize the teachings.

On 25th August, 2023 at 9:15am, the objective set on (23/03/2023) to help Patient gain adequate knowledge on Broncho-Pneumonia was evaluated and goal was fully met as evidence by Nurse observing patient answering questions on pneumonia and patient verbalizing the preventive measures of pneumonia.

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

With support from other members of the health team and competent nursing care rendered to Mr. D.G., all goals were fully met. Patient and his family also co-operated to enhance speedy recovery. Due to this, there was no amendment of the nursing care plan.

5.3 Termination of Care

The nursing care of my patient started on the 22nd August, 2023 and came to an end on 16th September, 2023 after my last home visit. Patient/family were made to understand that patient's hospitalization was temporal and would be discharged to go home after his condition had improved. Patient and family were educated during admission and after discharge. They were also advised during home visits on measures to promote health, the need for review and continuation of medication. On 23rd August, 2023 I embarked on my first home visit, purpose of this visit was to know my patient's residence and the environment in which he lives. On 30th August, 2023 my second home visit was made, this was to assess the state of health of my patient at home and also to find out if Mr. D.G. was following his treatment regimen and to remind him of the review date which was 2nd September, 2023.

Patient was told about the termination of care. I embarked on the third home visit on 16th September, 2023, the purpose of the home visit was to terminate care and hand over patient into the care of a community health nurse. He was handed over to the community health nurse named Miss J.O.M. stationed at Brenyekwa clinic near where the patient lives for continuity of care. I thanked Mr. D.G. and his family for the cooperation and opportunity offered me to take him and the family for the care study and promised to keep any information confidential. I sought permission to leave and permission was granted and I left at 3:30pm.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.1 Summary

According to Hornby (2016), summary is a brief account giving the main point to a health problem. Mr. D.G., a 43-year-old man was admitted to the Males ward of Berekum Holy Family Hospital on 22nd August, 2023 at 2:00pm and he was diagnosed of BronchoPneumonia disease by Dr. E.A. He was managed on the following medications: intravenous cefuroxime 750mg three times daily for 72hours, Intravenous Dexterous Normal Saline 1.5 liters, Tablet Paracetamol 1g tds x 5days, Intravenous Gentamycin 80mg three times daily for 24hours, Azithromycin 500mg daily for 3 days, Tablet Diclofenac 50mg three times daily for 5days, Syrup Carbocysteine 15mls for 7days and laboratory investigation include; Chest xray, Urine Routine Examination (Urine R/E), FBC for Haemoglobin level estimation, Physical Examination, Sputum for Acid Fast Bacilli to rule out TB, Blood film for malaria Parasites. Nursing problems identified, nursing diagnoses were formulated, and objectives set, nursing orders carried out and goals fully met within the expected time. Patient was discharged on 26th August, 2023 and came for review on 2nd September, 2023. Patient and relatives were educated on Broncho-Pneumonia disease and its preventive measures and early seeking of

medical treatment. Three home visits were made and care was terminated on 16th September, 2023. During the third home visit, patient was handed over to a community health nurse for continuity of care.

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.

6.2 Conclusion

According to Hornby (2016), conclusion refers to the final part that brings something to a close. The patient and family care study has helped me to know and understand comprehensive nursing care that has to be given to individual patient. This study has equipped me with much knowledge on Broncho-Pneumonia disease. It has also helped me to put into practice the knowledge and skills acquired during the course of the training. The study has aided me to comprehend and gain insight into patient conditions so as to offer the necessary remedy to solve and improve upon their health status.

Finally, it builds a good cordial relationship between the nurse and patient /family as well as other members of the health team. I recommend that every student should write a care study as it helps enrich one's knowledge and practice. Therefore, it should be maintained in the nursing program by the nursing and midwifery council.

BIBLIOGRAPHY

Anderson, T. (2016). *Theories for Learning with Emerging Technologies* (Vol 10.). Canada:

Athabasca University Press.

Baron (2017). *Principles of Anatomy and physiology* (12th Ed.). U.S.A, Wadsworth Cengage Learning.

Farlex (2012). *Farlex Partner Medical Dictionary* (1st Ed.). Boston, Houghton Mifflin Co.

Gest, J. (2016). *Objectives of Excellence in Research, Scholarship, and Education* (6th Ed.).

United Kingdom, Oxford University Press.

Hinkle & Cheever (2018). *Brunner and Suddarth' Textbook for Medical-Surgical Nursing. Philadelphia.*

Hornby, A.S. (2016). *Oxford Advanced Learner's Dictionary* (8th Ed.). Great Clarendon Street.

Ox 26 Dp, Oxford : Oxford University Press.

Kapoor P, (2015), *Mediated chromatin remodeling*. Stanford, Stanford University. Kumar,

P. J., & Clark, M. L. (2019). *Kumar and Clark clinical medicine*. Edinburgh;

Elsevier Saunders.

Kumar, P. J., (2015). *Kumar clinical medicine*. Edinburgh; Elsevier Saunders. Kurata,

N. (2016). *Learning Processes within Certain Contexts (2nd Ed.)*. Japanese;

Australian University.

Merriam, S. B., (2015). *Qualitative Research: A Guide to Design and Implementation (4th Ed.)*. Hoboken, NJ: Wiley.

McIntosh, C. (2017). *Cambridge Advanced Learner's Dictionary (4th Ed.)*. USA, Cambridge University Press

Mish, C. (2016). *Cambridge Advanced Learner's Dictionary (4th Ed.)*. Cambridge University Press.

NANDA International (2016). *International Journal Of Nursing Diagnoses*. Philadelphia. USA.

Wang E. & Peura A, (2015). *British national formulary (7th Ed.)*. London, BMJ Publishing and Royal Pharmaceutical Society of Great Britain.

Weller, F.B. (2018). *Bailliere's Nurses' Dictionary for Nurses and Health Workers*. (pg. 33). New York: Bailliere Tindal Elsevier Limited.

Others

Patient's folder Number, Holy Family Hospital- Berekum

APPENDIX

Table 1: Vital Signs of Mr. D.G. throughout hospitalization

Date	Time	Temperature	Pulse	Respiration	Blood Pressure	Oxygen Saturation
22/08/2023	2pm	38.0 ⁰ C	75bpm	19cpm	158/106mmHg	93%
	6pm	37.4 ⁰ C	76bpm	19cpm	140/102mmHg	93%
	10pm	36.4 ⁰ C	70bpm	18cpm	120/100mmHg	94%
23/08/2023	6am	36.6 ⁰ C	66bpm	18cpm	110/90mmHg	95%
	10am	36.5 ⁰ C	70bpm	19cpm	110/80mmHg	96%
	2pm	36.5 ⁰ C	74bpm	18cpm	120/80mmHg	95%
	6pm	36.3 ⁰ C	65bpm	17cpm	130/70mmHg	96%
	10pm	36.2 ⁰ C	60bpm	16cpm	100/60mmHg	96%
24/08/2023	6am	36.9 ⁰ C	67bpm	18cpm	110/80mmHg	98%
	10am	36.5 ⁰ C	74bpm	18cpm	110/90mmHg	100%
	2pm	37.1 ⁰ C	78bpm	19cpm	110/80mmHg	97%

	6pm	36.4 ⁰ C	68bpm	19cpm	100/80mmHg	99%
	10pm	36.0 ⁰ C	60bpm	18cpm	100/70mmHg	96%
25/08/2023	6am	36.6 ⁰ C	78bpm	20cpm	110/70mmHg	97%
	10am	36.8 ⁰ C	70bpm	19cpm	110/80mmHg	100%
	2pm	36.4 ⁰ C	72bpm	20cpm	120/70mmHg	97%
	6pm	36.5 ⁰ C	80bpm	21cpm	100/80mmHg	99%
	10pm	36.8 ⁰ C	68bpm	18cpm	110/80mmHg	97%
26/08/2023	6am	36.6 ⁰ C	74bpm	22cpm	100/70mmHg	98%

SIGNATORIES

The Student Nurse

NAME OF STUDENT: ANTWI MARFOWAA SELINA

SIGNATURE..... *Selina*

DATE..... *11/06/2024*

The Nurse In-Charge of Males Ward, Holy Family Hospital, Berekum

NAME OF WARD-IN-CHARGE: MRS. APPIAH VERONICA

SIGNATURE..... *Av*

DATE..... *11/06/24*

The Supervisor, Holy Family Nursing and Midwifery Training College, Berekum

NAME OF SUPERVISOR: MS. RITA AGYEI BOAKYE

SIGNATURE..... *Rita*

DATE..... *11-06-24*

The Principal Holy Family Nursing and Midwifery Training College, Berekum

NAME OF PRINCIPAL: MONICA NKRUMAH

SIGNATURE..... *Monica*

DATE..... *11/06/24*

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