

HOLY FAMILY NURSING AND MIDWIFERY TRAINING COLLEGE, BEREKUM

A PATIENT FAMILY CARE STUDY ON BRONCHOPNEUMONIA

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A PATIENT/FAMILY CARE STUDY SUBMITTED TO NURSING AND MIDWIFERY COUNCIL  
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PROFESSIONAL REGISTERED GENERAL NURSE

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## PREFACE

In the past, nursing was limited to signifying little more than the administration of medicines. However, it ought to signify the proper use of fresh air, light, warmth, cleanliness, quietness, the proper selection of diet and so on (Nightingale, 1820-1910). The nursing profession is rapidly changing. This is as a result of the influence of Florence Nightingale, a woman with a vision. Emerging in an age when nursing was regarded with contempt, Miss Nightingale crusaded to change the world's view of nursing. Miss Nightingale's contribution in the education of women, her development of theories of nursing practice and hygienic techniques, the emphasis on the preparation of nurses for the care of the sick, protection and promotion of health of the individual in society are important facts of nursing spectrum today. In line with the nursing services elaborated above, the patient/family care study has become mandatory for every final year student offering the Registered General Nursing (Diploma) programme. This is a pre-requisite for the partial fulfilment for the award of diploma certificate in General nursing by the Nursing and Midwifery Council (NMC) of Ghana. The patient/family care study uses the nursing process as essential tool for gathering information about patient/family and has therefore become advantageous to the student nurse. This is because, it offers the student nurse an opportunity to know more about the condition of the patient, the family and the society as well. It also enables the student nurse to acquire knowledge and skills on interpersonal relationship and communication which are essential ingredients for the provision of competent, holistic, professionally based and quality care to the patient and family. This patient/family care study has not only helped me gain insight into the condition, but it has also equipped me with good communication, observational skill and good interpersonal relationship skills.

## **ACKNOWLEDGEMENT**

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I wish to express my sincere gratitude to client, Mr. A.B. and his family for their co-operation, support, consent to interact with me and necessary information given to me during their stay at the hospital and the home visit.

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I also express my gratitude to the authors and publishers of the various books from which I took valuable information to write this script.

## INTRODUCTION

Mr. A.B. a thirty-four-year-old man was admitted at the Males ward on 14<sup>th</sup> November, 2021 on account of bronchopneumonia.

Client's health problems included difficulty in breathing, high body temperature of 38.2°C, anorexia, difficulty sleeping, dizziness and lack of adequate information about his condition.

Laboratory investigations of malaria parasites proved negative, haemoglobin estimation level of 10.3g/dl and Full Blood Count particularly WBC were carried out. He was managed with the following drugs; metronidazole injection 400mg BD for 24hours, oral rehydrated salt 4sachets for 4days, tablet paracetamol 1g TDS for 5 days, diclofenac 75mg injection stat, intravenous normal saline 1litre for 24hours, intravenous ceftriaxone 2g daily for 48 hours and syrup carbocisteine 15mls 8 hourly for 7days.

Nursing care such as reassurance, maintaining patient's personal hygiene, checking of vital signs, feeding and administration of prescribed drugs were carried out successfully.

Through appropriate medical and nursing interventions and total patient and family cooperation all the goals set were fully met.

During admission, health education was given to patient's family on feeding (diet), oral care (personal hygiene) and good environmental hygiene. Prior to discharge, the patient was given education on the disease condition and the need to continue to give patient the drugs after discharge. On 18<sup>th</sup> November, 2021 during general wards, patient was found to be fit as complains he came with, and problems identified were dealt with and was discharged home with treatment (drugs), after spending five days on

admission. Patient was advised to report to the hospital for early treatment if any problems arise. Three home visits were done. The first visit was done while patient was on admission with a reason of knowing patient's residence and the environment in which he lives, verify the information given to me as well as to identify the predisposing factors to the condition. Second home visit was done after discharge to find out the health status of the patient and to remind him of the review date. Patient came for review on 25<sup>th</sup> November, 2021 when he was in good health. He was not given any medications on review and gave no complaints. The third home visit was to find out how patient was faring after review and to hand over patient to his family members for continuity of care. Family members were thanked for their cooperation. Permission was sought to leave at 3:30pm and was escorted by some relatives. The official care of Mr. A.B ended on 2<sup>nd</sup> December, 2021 where the patient was finally handed over to his family to ensure continuity of care during my third home visit.

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## CHAPTER ONE

### ASSESSMENT OF PATIENT / FAMILY

#### 1.0 Introduction

According to Weller (2014), assessment involves the gathering of information about the health status of the patient, analysis and synthesis of the data, and the making of a clinical nursing judgment. The outcome of the nursing assessment is the establishment of a nurse's diagnosis which is the identification of the nursing problems.

This is the systematic collection of data to determine the patient's health status and any actual and potential health problems and is the first phase in the nursing process. This data can be taken from the patient, his relatives, and the community in which he lives in, medical personnel, patient folder and laboratory investigations. Some methods of collection of the data are through interviews, observations and other techniques. This is done to help identify the patient and family needs and to plan an effective medical and nursing care towards recovery. This forms the basis of nursing care.

#### 1.1 Patient's Particulars

Patient's particulars are defined as the biographical state of an individual within a geographical area at a particular time (Myers, 2006).

Mr. A.B, the subject of the study is a 34-year-old man who was born on the 21<sup>st</sup> of May,1987. He is born to Mr. K.B. and Mrs. R.B. He has one daughter who is alive and healthy. He is dark in complexion. Mr. A.B. weighs 54kg,162cm tall with a BMI of 22.4kg/m<sup>2</sup>. He speaks Bono Twi. He is single.

He is the last born of three children with her next of kin being his one and only daughter. He attended Nkoranza L/A in the Bono East Region. Mr. A.B. is a Christian who worships with Presbyterian Church of Ghana. He lives in Kyeremankuma with house number XK1057 in the Bono East Region. Mr. A.B. is not registered with the National Health Insurance Authority. He has no physical disabilities. He is a maison.

### **1.2 Family's Medical History**

According to Mr. A.B. all his grandparents, parents and siblings are alive and healthy. There is no history of hereditary or mental disorder in the family.

During history taking he made mention that they suffer from some ailments like malaria, headache, fever and abdominal pains which are treated by self-mediation using over the counter medicines and traditional medicines. But if symptoms persist, they report to the Kintampo municipal hospital. He was hospitalized years ago with malaria. According to patient and relatives they buy over-the-counter drugs to treat their headaches, fevers and use traditional medicines but if symptoms persist, they visit the hospital for treatment on out-patient basis. Based on this information I educated the patient and relatives on the effects of the use of over-the-counter drugs and urged them to go for medical care from any health center when they are suffering from any condition.

### **1.3 Family's Socio-Economic History**

Mr. A.B. has no family member noted for being a drug or alcohol addict. He is in a family with a good inter-personal relationship. He revealed to me that a hand full of his family members are public service workers with the rest depending solely on the income made by trading and masonry.

Any family member is always willing to support at every point in time of need. Notwithstanding, his mother has been the most caring lady to him. All his bills are paid in cash whenever he seeks for treatment from the hospital since he is not covered by the National Health Insurance Scheme. Because Patient was not registered with the national health insurance. I took this opportunity to educate patient on the importance of the insurance. So, I encouraged him to try and register with the national health insurance authority as this could reduce their cost of medical bills in the future.

#### **1.4 Patient Developmental History**

Development refers to the process of growth and differentiation which involves cognitive, psychosexual and psychosocial processes (Weller, 2014). Growth is the progressive development of a living thing, especially the process by which the body reaches its complete physical development (Weller, 2014). The developmental history was given by patient himself as told by his mother. Mr. A.B. indicated that his mother had a normal pregnancy of nine months gestation without any pregnancy associated disorders and had normal delivery with the help of medical staff at the St. Theresah's Hospital, Nkoranza. He was born without any congenital abnormality such as cleft lip or palate, hydrocephalus and undescended testis and was immunized against the childhood killer diseases as evidenced by Bacilli Calmette-Guerin (BCG) scar on his right shoulder.

Mr. A.B. was breastfed for a period of five months before he was introduced to supplementary foods like porridge. He went through a normal developmental milestone. Thus, sitting at the 7<sup>th</sup> month, crawling at the 10<sup>th</sup> month, walking, talking and running through the ages of one to three years old. Mr. A.B. at the age of fourteen (14), begun to experience secondary characteristics such as deepening of voice, broadening of chest and facial hair appearance. He started his basic education at the Nkoranza

L/A and dropped out of school at class four. He is currently a mason with one female child. According to Erick Erickson psychosocial development theory he falls under Intimacy versus Isolation (20 to 35 years). This stage covers the period of life where young adults are eager to blend their identity with friends and explore personal relationship because they want to fit in. They begin to do all these by going out with friends to birthday parties, wedding ceremonies. They try to make many and good friends as much as possible. Erick Erickson states that it is critical that young adults interact with others to explore the limit of their abilities within an encouraging environment. They become more confident and secure in their ability to survive in the world when encouraged. If they are neglected, they begin to feel inadequate and may become overly detached and feel sense of isolation in the society.

I am fully convinced that Mr. A.B. falls under intimacy dimension of Erikson's psychosocial development because of his supportive effort towards, friends and family and can love and have a committed and secure relationship.

### **1.5 Patient's Lifestyle and Hobbies**

Mr. A.B. often goes to bed around 9:30pm and wakes up at 6:00am to prepare for work. He maintains his oral hygiene once daily, empties his bowels and takes his bath twice daily with cold water. He usually takes banku with groundnut soup as breakfast for working days due to the exhaustive nature of his work but takes millet porridge with bread on his resting days. He takes three square meals with no snacks in between. Nevertheless, he takes fruits after work and sometimes drinks alcohol when hanging out with friends. He starts work at 8am and closes at 4pm. He loves his daughter very much and therefore always tries to give her the support she needs. He takes his family out every festive season. He always goes to an auditorium nearby to watch football whenever his favorite team,

Liverpool is having a football match. He has a great admiration for football and hardly misses any sports news on Wontumi TV or Super Sports. He also tries as much as possible to go to church on Sunday no matter the situation. My personal impression about him is that he is kind and calm even to other patients on the ward.

### **1.6 Patient's Past Medical History**

According to Mr. A.B., he has never experienced any childhood illness like whooping cough, poliomyelitis, tetanus, tuberculosis and diphtheria and has not identified any allergy to drugs, animals or insects. He revealed that he often suffers from minor ailments like diarrhea, constipation, headache and common colds which he usually treats with traditional medicines and over the counter medicines. He has never been involved in an accident and has no physical disabilities. He could not recall his first hospitalization but could tell it was from severe malaria.

He made it clear to me that he never goes for checkups.

### **1.7 Patient's Present Medical History**

Mr. A.B. was well until the 12<sup>th</sup> of November, 2021 when he started experiencing some minor dyspnea and dizziness, but he did not take it seriously. On the 14<sup>th</sup> of November the symptoms deteriorated and was taken to the Kintampo North Municipal hospital by his friend. He went through the Outpatient Department and was initially diagnosed of suspected Respiratory Tract Infection after laboratory investigation and physical examination.

Patient was admitted to the Males ward after going for a chest x-ray which confirmed the diagnosis as Pneumonia.

## 1.8 Admission of the Patient

Admission is the initial care, usually referring to inpatient care, either lasting for a day or more (Esen, 2011). It is a change of environment to the patient and relatives. This change of environment could either be elective, planned or emergency, unplanned.

On the 14<sup>th</sup> of November, 2021 at 9:38am client was received into the male medical ward of Kintampo Municipal Hospital from the OPD. Client was accompanied by a relative and a staff nurse with the diagnosis of bronchopneumonia. On arrival client and together with the relative and accompanying staff nurses were welcomed and were introduced to the nursing staff. This was done to relax patient and to relieve him of anxiety, Patient's particulars were entered into the daily ward state, admission and discharge book. Patient was made comfortable in an already prepared admission bed.

The following information were gathered at the OPD department as the patient's folder was read through.

Temperature	38.1 <sup>0</sup> C
Blood pressure	120/70 mmHg
Respiration	15 cycles per minute
Pulse	70beats per minute

As a student nurse on duty at that moment, I also assisted by interviewing the patient on her condition and she gave the same complains as in the OPD level. The following were the vital signs I checked and recorded at the ward when we arrived from OPD.

Temperature	- 38.2 <sup>0</sup> C
Blood pressure	- 20/69mmHg
Respiration	- 19 cycles per minute.

Pulse - 85 beats per minute

Spo2 - 98%

Patient weighed 54kg

These investigations had been ordered and carried out on patient.

1. Full Blood Count
2. Blood Film for Malaria Parasites
3. Blood for haemoglobin level estimation.
4. Chest X-ray

A head-to-toe physical examination was conducted on patient and no abnormalities were seen. Patient was oriented in the ward and was introduced to other patients. Client and relative were reassured and were made known of the competency of the doctors and nurses who will take care of him during his admission. The ward routines such as time of administering prescribed drugs, when to expect meals and visitors were explained to client and relative. The doctor on duty examined client and made the following observations, breathlessness and dyspnea. He was asked to get his own bowl, spoon, drinking cup, bathing sponge, bucket, towel, pajamas and other toiletries. The following treatment plan was ordered.

1. Metronidazole injection 400mg BD for 24hours
2. Oral Rehydrated Salt 4sachets for 4days
3. Tablet Paracetamol 1g TDS for 5 days.

4. Diclofenac 75mg injection stat
5. Intravenous Normal saline 1litre for 24hours
6. Intravenous Ceftriaxone 2g daily for 48 hours
7. Syrup Carbocisteine 15mls 8 hourly for 7days

I reintroduced myself to patient as a student nurse of the Holy Family Nursing and Midwifery Training College, Berekum, who would like to take him and his family for a patient/family care study. Mr. A.B. and his family were informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment towards the award of license in Diploma in Registered General Nursing. I explained to the patient and his family the concept of the patient/family care study and assured them of privacy and confidentiality. It was added that a report will be written after the entire process. Mr. A.B. and his relative agreed to my request and assured me of providing the necessary information and assistance. I congratulated them on such a decision. Discharge planning was initiated with the relatives; thus, they were told that the hospital will be a temporal place for their care and would have to continue the care at home once there is an improvement in his condition. I informed the ward in-charge about my interest in using this patient for my care study and a permission was granted for me to move on with the study. I decided to choose this patient for the study because I wanted to get a deeper understanding about the causes, signs and symptoms, prevention and treatment of bronchopneumonia and to be able to differentiate it from other similar abdominal conditions.

### **1.9 Patient's Concept of His Illness**

Mr. A.B. did not attribute his illness to any evil spirit since he has seen other men who have been working with him contract the same disease. He stated that his condition may be from the dust particles he has been inhaling from the construction site and believed that he will get well with the treatment planned for him in the hospital and will prevent any complications from setting in.

## **1.10 Literature Review**

### **REVIEW OF THE ANATOMY AND PHYSIOLOGY OF THE RESPIRATORY SYSTEM**

According to Bryan (2010), the respiratory system consists of the nose, pharynx (throat), larynx (voice box), trachea (windpipe), bronchi and lungs. Its parts can be classified according to either structure or function. Structurally, the respiratory system consists of two parts.

a) The upper respiratory system which includes the nose, pharynx and the associated structure

b) The lower respiratory system includes the larynx, trachea, bronchi and lungs.

Functionally, the respiratory system also consists of two parts.

a) The conducting system, which consists of series of interconnecting cavities and tubes both outside and within the lungs which include the nose, pharynx, larynx, trachea, bronchi, bronchioles and terminal bronchioles. Their function is to filter, warm and moisten air and conduct it into the lungs.

b) The respiratory zone consists of tissue within the lungs where gas exchange occurs

this includes respiratory bronchioles, alveolar ducts, alveolar sacs and alveoli; they are the main site of gas exchange between air and blood.

## **DEFINITION OF PNEUMONIA**

According to Daniels (2012), pneumonia is an acute or chronic infection of one or both lungs caused by microorganisms such as viruses, bacteria, or chemical irritants in which fluid or blood fill some or all of the alveoli, and bronchioles as a result of the inflammatory process of infection or chemical irritant thereby impairing gas exchange.

## **INCIDENCE**

According to National Centre for Health Statistics (2016), it can occur at any age but common among children and the elderly. It is the seventh leading cause of death in the United States of America. In persons, 65 years of age and older, it is the fifth leading cause of death.

## **AETIOLOGY/PREDISPOSING FACTORS**

According to Gilles (2010), bacterial pneumonia is the most common cause of pneumonia, but virus and chemical irritant can cause it. Viral pneumonia is less common but bacterial pneumonia may be a secondary complication. It is the common cause, but other bacteria or virus may cause it. Other non-pathogenic causes include;

1. Aspiration of gastric secretion into the airway
2. Inhalation of chemical gases such as kerosene
3. Radiations from lungs therapy and breast cancer

The following risk factors increase the risk of acquiring pneumonia and influence the likely organism.

1. Cigarette smoking and underlying condition such as bronchitis

2. Stroke or other neuromuscular disorder (aspiration pneumonia)
3. Immunosuppression and malnutrition.
4. Alcoholics and vagrants; this suppresses the cough reflex
5. Prolonged hospitalized patient.

## **TYPES OF PNEUMONIA**

According to Kumar and Clark (2011), the type of Pneumonia is based on structure (anatomically) and infection. Anatomically, three main types of Pneumonia are as follows.

1. Lobar Pneumonia: This is an acute inflammation of the lungs involving a substantial portion of one or the entire lobe or both sides.
2. Bronchopneumonia: This implies that the process is distributed in a patchy fashion having originated in one or more localized areas within the bronchi and extended to the adjacent surrounding lungs parenchyma. Bronchopneumonia is more common than Lobar Pneumonia.
3. Lobular Pneumonia: This describes Pneumonia localized to the lobular tissues of the lung in which the affected portion are completely unconsolidated. Infections also bring about three causes of pneumonia.
  - I. Primary Pneumonia; This result directly from inhalation or aspiration of pathogens such as bacteria or virus.

II. Secondary Pneumonia; This is due to initial damage of the lungs from poisonous chemical or pathogenous spread of bacteria from one part to another.

III. Aspiration Pneumonia; It involves inhalation of foreign matter such as vomitus or food into the bronchi.

### **DEFINITION OF BRONCHOPNEUMONIA**

According to Weller (2014), pneumonia is defined as the inflammation of the lungs with consolidation and exudation. Davis (2010) defined bronchopneumonia as a type of pneumonia marked by scattered consolidation (areas filled with inflammatory exudates) in one or more lobes of the lung.

### **Mode of Transmission of Bronchopneumonia**

It may be spread in several ways.

1. The viruses and bacteria that are commonly found in the nose or throat can infect the lungs when inhaled.
2. They may spread via air-borne droplets from a cough or sneeze.
3. In addition, pneumonia may spread through blood especially during and shortly after birth. (WHO, 2015).

### **Causes/Risk Factors of Bronchopneumonia**

According to Smeltzer et. al, (2010) the causes/risk factors of bronchopneumonia include the following.

1. Alcohol intoxication (because alcohol the body suppresses the body's reflexes may be associated with aspiration and decreases white cell mobilization and tracheobronchial ciliary motion.)
2. Smoking since smoke irritates the lung tissue and disrupt both mucociliary and macrophages activity.
3. Acute viral infection of the respiratory tract. Example is Measles particularly within the first two years of life.
4. Respiratory therapy with improperly cleaned equipment.
5. Living in crowded houses.
6. Obstruction of the bronchial lumen by carcinoma causing obstruction to bronchial secretion which becomes infected.
7. Immunosuppressed patients and those with low neutrophil count (neutropenic).
8. Advanced age, because of possible depressed cough and glottis reflexes and nutritional depletion.
9. Drugs such as sedatives can cause respiratory depression predisposing to the pooling of bronchial secretions which can lead to the development of bronchopneumonia
10. Malnutrition
11. Prolonged stay in bed predisposes an individual to bronchopneumonia due to congestion in the lungs.
12. Extremely cold temperature

13. Placement of nasogastric, orogastric and endotracheal tube.

### **PATHOPHYSIOLOGY**

According to Sommer et al... (2017), bacterial Pneumonia creates problems in both ventilation and diffusion. Any inflammatory reaction initiated by Pneumonia occurs in the alveoli and produces an exudate which in turn interferes with both movement in diffusion of oxygen and carbon dioxide.

White blood cells mostly neutrophils migrate into the alveoli so that the lung segment assumes a more solid structure as the air containing spaces become filled with the exudates. Most areas of the lungs are not adequately ventilated because of secretions, mucosal edema and bronchospasm. These conditions cause partial occlusion of the bronchi or alveoli producing a drop in the alveolar oxygen tension through the under ventilated area and goes out of the lungs to the left side of the heart without being oxygenated. Therefore, the blood appears shunted from the right to the left side of the heart.

This mixing of oxygen and deoxygenated blood eventually results in arterial hypoxia which may result in the complaints of weakness, sweating, headache and persistent cough. The pulse rate and temperature rise and there may be dyspnea, cyanosis, purulent cough, sputum, hemoptysis and pleurisy may occur. The patient may also die from toxemia and cardiac failure.

### **CLINICAL MANIFESTATION**

According to Smeltzer et al... (2010) the signs and symptoms of bronchopneumonia include the following;

1. There is sudden onset of chills, rapidly rising fever (38.5 to 40.5 degrees Celsius)

2. Respiratory rate may increase as high as 40 to 80 times per minutes in infants and in older children, as high as 30 to 50 times per minute.
3. Cough may be hacking, painful, or less painful.
4. There is cyanosis of the lips, tongue and nail bed.
5. There is elevation in the leukocyte count in some types of pneumococcal and Staphylococcus.
6. In pneumococcal pneumonia, the sputum is usually rusted colored and becomes purulent as resolution takes place.
7. There is stabbing chest pain that is aggravated by respiration and coughing
8. There is marked tachypnoea with other sign of respiratory distress example; Shortness of breath and use of accessory muscles in respiration.
9. There is general malaise.
10. Headache.

### **Assessment and Diagnostic Findings of Bronchopneumonia**

According to Smeltzer and Bare (2010), diagnostic investigations include;

1. Chest X-rays disclose infiltrates, confirming the diagnosis.
2. White blood cell (WBC) count indicates high leukocytosis in bacterial pneumonia and normal or low count in viral or mycoplasmal pneumonia.

3. Blood cultures reflect bacteremia.
4. Bronchoscopy or Trans tracheal aspiration allows the collection of material for culture.
5. Chest auscultation and percussion for fullness and decrease in breath sound.
6. Arterial blood gas (ABG) levels vary depending on the severity of the pneumonia and underlying lung state.
7. Pulse oximetry may show reduced arterial oxygen saturation.
8. Signs and symptoms manifested by the patient.

### **Management**

According to Smeltzer et al... (2010), the management of pneumonia depends on the severity and causative organism as determined by the results of the gram-stain.

### **Specific Medical Treatment.**

- Antibiotic such as Injection Cefuroxime 125mg is given three times for three days depending on severity of the infection. Intravenous Gentamycin 45mg is given daily for seven days or 2.5 mg/kg every 8 hours.
- Analgesic such as paracetamol (acetaminophen): 60mg-120mg, 4-6 hourly for five days per oral and suppository paracetamol 125-250 mg. 1g 8 hourly for adults.

Expectorants such as; acetylcysteine and ambroxol are given to relief cough.

- Intravenous fluids as well as oral rehydration solution are given to correct dehydration and to loosen and make sputum lighter to expectorate according to age and body weight. An example is dextrose saline and Oral Rehydration Salt.
- Nebulization is done to deliver doses of drugs to the airways. The drug is then converted to an aerosol for inhalation. Example is 2.5mg of salbutamol phosphate which was used on patient.
- Haematinics such as multivitamin syrup and Fersolate syrup are given 2.5mls -10mls are given for 15-30days depending on the severity of the anemia. This is given to stabilize patient hemoglobin level when there is anemia.

Other non-pharmacological treatment includes;

1. Respiratory support measures such as endotracheal intubation, mechanical ventilation and positive end expiration pressure (PEEP) may help in treating hypoxia that may result from either shortness of breath or dyspnea.
2. Pneumonectomy; A surgical removal of an entire lung may need if the infection is prone to or leads to complications such as abscess.

### **Complications**

According to Janice and Kerry (2014), without proper treatment, pneumonia can lead to life threatening complication such as;

1. Atelectasis: collapse of the alveoli or a lobule or a large unit due to absence of air.
2. Pleural effusion: collection of fluid in the pleural spaces.
3. Pericarditis: inflammation of the pericardium, a sac enveloping the heart.

4. Endocarditis: inflammation of the endocardium.
5. Meningitis: inflammation of the meninges.
6. Cardiac failure: this is the failure of the heart to maintain the output of the blood to meet the demand of the body.
7. Pulmonary oedema: collection of fluid in the lungs.
8. Respiratory circulatory failure: failure of the lungs to oxygenate blood that circulates through the body correctly.
9. Septicemia: condition in which bacteria or their toxins are present in the blood.
10. Lung fibrosis: this is a condition in which the inner lining of the lungs is replaced by scar tissue.
11. Septic shock: shock cause by bacterial toxins in the blood as a result of infection.

## **Nursing Management**

### **Psychological care**

The patient and family need assistance, explanation and support during this period. The purpose and rationale of the treatment are explained to the patient and family by the physician. Family normally reacts with anxiety to the man's condition especially high temperature and respiratory distress. The family should be allowed to express their fears and the nurse correct all misconceptions and explanation of procedures done on the patient to the family.

**Rest and Sleep:**

The nurse ensures adequate rest and sleep by opening nearby windows to allow enough ventilation, minimizing noise from radio and from other patients. The patient is placed in a sitting up position to ensure comfort and enhance breathing. Give warm bath. Also, a bed, free from creases and crumbs is made to promote rest and sleep. All the above measures are taken to ensure that patient conserves energy and recovers fully.

**Promoting Fluid Intake:**

The respiratory rate of patients with pneumonia increases because of the increased workload resulting from labored breathing and fever. An increased respiratory rate leads to an increase in insensible fluid loss during exhalation can lead to dehydration. It is therefore important to encourage fluid intake unless contraindicated. Intravenous fluids may be administered if necessary.

**Maintaining Nutrition:**

Many patients with shortness of breath and fatigue have a decreased appetite. A nutritional plan that allows for small, frequent meals may be required. The nurse must collaborate with the dietician, physician, social worker, family and patient to identify strategies to ensure an adequate nutritional intake and availability of nutritious food. The patient is given light and balanced, nourishing diet, rich in protein to repair worn out tissue, carbohydrate to provide energy and vitamins to help improve the immune system and help in recovery process.

Infants should be breastfed regularly and on demand since breast milk contains all the

essential nutrients for growth. There may be loss of appetite in adults due to unpleasantness of sputum production and so mouth care should be performed before eating to stimulate appetite.

**Oxygen administration\ Nebulization:**

Patients who experience severe respiratory distress are given oxygen to enhance breathing as well as nebulization of 2.5mg of salbutamol to dilate the alveoli to enhance exchange of gases and to promote breathing.

**Observation:**

Patient is observed for signs and symptoms of respiratory distress. Vital signs such as temperature, pulse, and respiration are monitored every half hour, hourly and four hourly as patient condition improves. Observation is also done to determine whether patient's condition is improving or deteriorating. Intake and output chart is monitored, and infusion site is observed for dislodgement of needle or swelling as well as flow rate is checked and compared with the treatment sheet.

**Personal Hygiene:**

He baths twice with a wet sponge, soap and water. Regular mouth care is given with brush and toothpaste.

**Exercise:**

Patient is encouraged to engage in passive exercises such as change of position as well as stretching of arms and legs.

**Education:**

The patient is educated on the disease, causes and predisposing factors. He is educated to eat well balance diet, take her drugs as prescribed and to report any harmful side effect of drugs given. The patient should also maintain his personal hygiene and to encourage family members to do same. Again, education on the importance of regular checkups or review is given to promote health.

**Medication:**

The nurse should serve prescribed drugs as prescribed with the help of the relative and observe the rules of drug administration. Observe patient's response to treatment.

**1.11 Data Validation**

According to Weller (2005), validation is the extent to which a measure, indicator or method of data collected possesses the quality of being sound or true, as far as it can be judged. I received most of the information from the client. My visit to the client's house also confirmed most of what Mr. A.B. had told me. Information was also sought from the medical team, medical records and Nurses of the Outpatient Department as well as nurses' notes. Also, data collected from patient particulars, clinical features in the literature review obtained from textbooks, I can therefore say that the information collected for the study was free from errors, bias, and misinterpretations and therefore makes it valid and suitable for the study.

## **CHAPTER TWO**

### **ANALYSIS OF DATA**

#### **2.0 Introduction**

Analysis of data is a systematic examination and evaluation of data or information, by breaking it into its component parts to uncover their interrelationship, thus providing basis for problem solving and decision making (Weller, 2014). Analysis of data is the second phase of the nursing process. It contains information on the comparison of data gathered with standards. This helps the nurse to identify the problems of the patient and her family, their strengths and makes her nursing diagnoses, objectives and gives appropriate interventions.

#### **2.1 Comparison of Data with Standard**

In this subsection, data gathered from patient will be compared to standards/literature. Data or information that will be compared includes.

1. Diagnostic investigation/ Tests
2. Causes/ Risk factors
3. Clinical features/ Sign and Symptoms
4. Medical/ Surgical treatment

## A. Diagnostic Investigations/ Tests

Test/ investigations refers to an examination or analysis of the composition of a substance using chemical reagents, and/or to determine the presence or absence of a substance. (Weller, 2014). The diagnostic tests below were carried out on patient to aid in the diagnosis and treatment.

1. Full blood count
2. Physical chest examination
3. Chest X-ray
4. Pulse oximetry
5. Blood film for malaria parasites

**Table 1: Diagnostic Investigations/Tests in Literature Review Compared with Those Carried Out on Patient.**

<b>Diagnostic Test outlined in literature review</b>	<b>Diagnostic Test carried out on the patient</b>
1. Chest X-rays	1. Chest X-ray was not done
2. White blood cell count	2. White blood cell count was estimated
3. Blood cultures to reflect bacteremia	3. Blood cultures to reflect bacteremia was not done
4. Bronchoscopy	4. Bronchoscopy was not done

6. Arterial blood gas (ABG) levels	6. Arterial blood gas (ABG) levels was not done
7. Pulse oximetry.	7. Pulse oximetry were observed.
8, Signs and symptoms manifested by the period.	8. Signs and symptoms manifested by the patient was observed.
9.Chest auscultation and percussion	9. Chest auscultation and percussion was done.
10. Blood firm for malaria parasite not part of literature review.	10.Blood firm for malaria parasite was done.

With reference to the table bronchoscopy, blood cultures to reflect bacteria and arterial blood gas levels were not done because the diagnoses were arrived at and confirmed by history x-ray and physical examination. Malaria parasite estimation was done to rule out malaria because malaria is endemic and perennial in Ghana.

**Table 2: Results of Diagnostic investigations carried Out on Patient**

Date	Specimen	Investigations	Results	Normal values	Interpretation	Remarks
14/11/21	Blood	White blood cell count	22.9 x 10 <sup>9</sup> /l	4.0-10 x 10 <sup>9</sup> /l	Above normal indicating infection	Patient was given 1g of intravenous ceftriaxone.
14/11/21	Blood	Red blood cell count	6.10 (10 <sup>3</sup> )	4.70-6.10 x 10 <sup>6</sup> /mL	Within normal range	No treatment was given
14/11/21	Blood	Platelet	200x10 <sup>3</sup> /mL	140-415x10 <sup>3</sup> /mL	Within normal range.	No treatment was given
14/11/21	Blood	Hemoglobin (Hb) level	10.3g/dl	Males: 12-18g/dl Females: 11-16g/dl	Slightly below normal indicating slight anemia	No treatment given but patient was advised to take in nutritious diet.
14/11/21	Blood	Thrombocyte count	300 x 10 <sup>9</sup> /L	140-440mmol/L	Normal	No treatment was given.
14/11/21	Blood	Malaria parasites	Negative	Negative	Patient has no malaria	No treatment was given

### 2.1.2 Causes of Patient's Condition

Considering the factors that cause bronchopneumonia as indicated in the literature review, Mr. A.B. condition could be due to an invasion of bacteria as evidence by elevated white blood cell count. Also, long exposure to dirt particles may be a contributory factor since he has been working as a mason for a very long time. From the above information, it shows that the cause of his illness conforms to those stated in the literature review.

### C. Clinical Features/ Signs and Symptoms

**Table 3: Clinical Features Exhibited by Patient Compared with those in the Literature Review.**

<b>Clinical Features outline Literature Review</b>	<b>Clinical Features Exhibited By Patient</b>
1. Fever and chills	1. Patient had fever and chills
2.Cough	3. Exhibited unproductive cough
3.Cyanosis	4. Patient did not exhibit cyanosis
4.Elevation in leucocyte count	5. There was an elevation of leucocyte count
5.Chest pains	6. Chest pain was not present.
6.Headache	7. Headache was not present.

7.General malaise	8. Patient exhibited malaise
8.Tachypnea	9. Patient exhibited tachypnea on admission
9.Shallow respiration	10. There was shallow respiration rate
11. Anorexia	11. Anorexia was present.

From the comparison in table 3 above, Mr. A.B did not exhibit some of the clinical manifestations mentioned in the literature review like cyanosis and chest pain, because they reported early and was given right and immediate medical and nursing management.

However, he exhibited most of the clinical manifestation stated in the literature.

#### **D. Treatment Given to Patient**

According to Weller (2014), Treatment refers to the mode of dealing with a patient or disease. The following medications were given to patient to enhance the restoration of health status to normal during his period of hospitalization. The following treatment were given to patient.

1. Metronidazole injection 400mg x 24hours
2. Oral Rehydrated Salt 4sachets x 4days

3. Tablet Paracetamol 1g tds x 24hours
4. Diclofenac injection stat
5. Intravenous Normal saline 1litre x 24hours
6. Intravenous Ceftriaxone 2g daily x 48 hours
7. Syrup Carbocisteine 15mls x 7days

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

Treatment in Literature Review	Treatment Given to Patient
1. Antibiotics Examples. <ul style="list-style-type: none"> <li>● Cefuroxime</li> <li>● Gentamycin</li> </ul>	Patient was given antibiotics. A. Metronidazole B. Ceftriaxone
2. Analgesics Examples. <ul style="list-style-type: none"> <li>● Paracetamol</li> <li>● Ibuprofen</li> </ul>	Patient was given analgesics. A. Diclofenac B. Paracetamol
3. Intravenous fluids Examples. <ul style="list-style-type: none"> <li>● Normal saline</li> <li>● 5% Destrose</li> </ul>	Patient was given intravenous fluids. A. Normal saline
4. Bronchodilators Examples. <ul style="list-style-type: none"> <li>● Salbutamol</li> </ul>	No bronchodilator was ordered

● Albuterol	
6. Hematinics Examples. ● Folic acid ● Iron polymaltose	No hematinic was ordered
7. Expectorant Examples. ● Potassium iodine ● Guaifenesin	Patient was given expectorant. A. Carbocistiene

From the above table, the treatments given to patient were in line with the literature.

Hematinics were not given because nutritious diet could get patient hemoglobin level to normal. Analgesics like paracetamol and diclofenac were given to patient since patient had fever. Antibiotics were also given to fight the infection.

**Tables 5: Pharmacology of Drugs Given to Mr. A.B.**

<b>Date</b>	<b>Drug</b>	<b>Dosage/ Route Of Administration (Literature)</b>	<b>Dosage/ Route Of Administration Given To Client</b>	<b>Classification</b>	<b>Desired Effect</b>	<b>Actual Action Observed</b>	<b>Side Effects/Remedies</b>
14/11/21	Metronidazole (Flagyl )	<u>Dose:</u> 400- 800mg three times daily.  <u>Route.</u> Intravenous, oral	<u>Dose:</u> 400mg bd for 24hours  <u>Route:</u> Oral	Nitroimidazole antimicrobials	Nitroimidazoles work by disrupting the DNA of the susceptible bacteria and inhibiting the protein synthesis of the cell wall leading to cell death.	Patient was relieved from infection	Digestive symptoms like nausea, an unpleasant metallic taste, anorexia, vomiting and diarrhoea.  None of these side effects were observed.

**Tables 5: Pharmacology of Drugs Given to Mr. A.B. continued**

<b>Date</b>	<b>Drug</b>	<b>Dosage/ Route Of Administration (Literature)</b>	<b>Dosage/ Route Of Administration Given To Client</b>	<b>Classification</b>	<b>Desired Effect</b>	<b>Actual Action Observed</b>	<b>Side Effects/Remedies</b>
14/11/21	Ceftriaxone	<u>Dose:</u> Tablets 10mg/kg, bd x 10days.  <u>Route:</u> Intravenous	Dose: 2g tid X 48 hours  <u>Route:</u> Intravenous	Cephalosporin antibiotics	Inhibiting the mucoepetide synthesis in the bacteria	Patient was relieved from infection.	Diarrhea, rash, chills, dizziness, flushing and nausea.  None of these side effects were observed.

14/11/21	Diclofenac	<u>Dose:</u> 50-75mg tid X 7 days  <u>Route:</u> Oral, IV, IM, transdermal, rectal	<u>Dose:</u> 75mg stat,  <u>Route:</u> Intramuscular	Non-steroidal  Anti-inflammatory drugs (NSAIDs)	Indicated for pain, postoperative pain and inflammation in rheumatic diseases	Client's pain was relieved	Sneezing, runny nose, wheezing, hives, swelling of your face, lips, tongue or throat.  No side effects were observed.
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**Tables 5: Pharmacology of Drugs Given to Mr. A.B. continued**

Date	Drug	Dosage/ Route Of Administration (Literature)	Dosage/ Route Of Administration Given To Client	Classification	Desired Effect	Actual Action Observed	Side Effects/Remedies
14/11/21	Paracetamol (acetaminophen)	<u>Dose:</u> 250-500mg x 4-6 hourly  <u>Route:</u> oral, intravenous, rectal	<u>Dose:</u> 1g tid X 5 days  <u>Route:</u> <u>Oral</u>	Analgesics and antipyretic	It produces analgesia by blocking generation of pain impulses, probably by inhibiting prostaglandin synthesis in the central nervous system.  It relieves fever by the action in the hypothalamic heat regulating center.	Client temperature reduced to normal gradually and appeared relaxed in bed (37.2).	Skin rashes, liver damage, jaundice.  None of these was exhibited by client.

**Tables 5: Pharmacology of Drugs Given to Mr. A.B. continued**

<b>Date</b>	<b>Drug</b>	<b>Dosage/ Route Of Administration (Literature)</b>	<b>Dosage/ Route Of Administration Given To Client</b>	<b>Classification</b>	<b>Desired Effect</b>	<b>Actual Action Observed</b>	<b>Side Effects/Remedies</b>
14/11/21	Intravenous normal saline	Amount depends on patient's fluid and electrolyte level and age as well as by doctor's prescription.  <u>Route: IV</u>	1litre within 24 hours Intravenously	Isotonic solution of sodium chloride	To correct fluid and electrolyte imbalance	Patient's body fluids and electrolytes were raised	Oedema, over hydration, hypocalcemia. None of these side effects were observed.

**Tables 5: Pharmacology of Drugs Given To Mr. A.B. continued**

<b>Date</b>	<b>Drug</b>	<b>Dosage/ Route Of Administration (Literature)</b>	<b>Dosage/ Route Of Administration Given To Client</b>	<b>Classification</b>	<b>Desired Effect</b>	<b>Actual Action Observed</b>	<b>Side Effects/Remedies</b>
14/11/21	Carbocistiene	<u>Dose:</u> 15mls 8hourly  <u>Route:</u> oral	<u>Dose:</u> 15mls 8 hourly for 7 days  <u>Route:</u> Oral	Mucolytic	To break down mucus and help patient cough it out.	Patient was able to cough out mucus.	Diarrhoea  Malaise  None of this side effect was observed.

## **2.2 Complications**

With reference to the complications listed in the literature review, Mr. A.B. exhibited no complication since he reported to the hospital early for treatment.

## **2.3 Patient/Family Strengths**

According to Lewis (2012), strength is the quality of being strong. This involves activities the Patient can perform and those the family can also perform in helping the Patient recover, The under mentioned strength were observed on client and family.

1. Patient can breathe well when in the sitting up position.
2. Patient's high body temperature reduces when sponged with tepid water.
3. Patient could eat about 70mls of porridge served.
4. Patient could sleep for about 4 hours uninterrupted at night.
5. Patient could walk for a few minutes without assistance.
6. Patient was willing able to ask questions and know more about his condition.

## **2.4. Patient/family's Health Problems**

According to Hornby (2012), health problem is an abnormal or physiologically unbalanced state of the body. Health problems of Mr. A.B. and family are as follows

1. Patient had difficulty in breathing. (**14<sup>th</sup> November,2021**)
2. Patient had high body temperature of 38.2°C (**14<sup>th</sup> November,2021**)

3. Patient complained of dizziness. **(16<sup>th</sup>November,2021)**
4. Patient complained of anorexia. **(15<sup>th</sup> November,2021)**
4. Patient complained of difficulty sleeping. **(15<sup>th</sup> November,2021)**
6. Patient lacks adequate information about his condition **(17<sup>th</sup>November,2021)**  
  
(bronchopneumonia).

## **2.5 Nursing Diagnosis**

According to Smeltzer and Bare (2012), nursing diagnosis is the actual or potential health problem that can be managed by independent nursing interventions. The following nursing diagnoses were made on the patient/family.

1. Ineffective breathing pattern (dyspnea) related to bronchial inflammation. **(14<sup>th</sup> November,2021)**
2. Fever related to infection process. **(14<sup>th</sup> November,2021)**
3. Dizziness related to poor circulation. **(15<sup>th</sup> November,2021).**
4. Imbalanced nutritional pattern (less than body requirement) related to anorexia. **(15<sup>th</sup> November,2021)**
5. Disturbed sleep pattern related to change in normal environment. **(16<sup>th</sup> November 2021)**
6. Deficient knowledge related to lack of adequate information on disease process. **(17<sup>th</sup> November,2021)**

## CHAPTER THREE

### PLANNING FOR PATIENT/FAMILY CARE

#### 3.0 Introduction:

According to smelter et al.... (2010) planning can be defined as goals and outcomes as well as a plan of care defined to assist the patient in resolving the diagnosed problem and achieving the identified goals and outcomes.

Planning is the third stage of nursing process in which the nurse and the patient together consider the goals to achieve in meeting the patients identified or potential problems in daily life to produce an individual care plan. The nursing care plan enables continuity of care and also interventions to be carried out to help the patient to be relieved of his problems.

#### 3.1 Objective for patient/family care

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

1. Patient would be relieved of dyspnea within 24 hours as evidence by;
  - a. Nurse observing patient to have absence of difficulty in breathing.
  - b. Patient verbalizing that he can breathe without difficulty.
2. Patient would maintain a normal body temperature (36.2°c to 37.2°) within 24 hours as evidence by;
  - a. Nurse observing that patient's body temperature falls within normal range of (36.2-37.2)

- b. Patient verbalizing that he has been relieved of high body temperature.
3. Patient would be relieved of dizziness within 24 hours as evidence by;
- a. Patient verbalizing that he no longer feels dizzy.
  - b. Nurse observing patient performing daily task freely.
4. Patient would regain his normal eating pattern within 48 hours as evidence by;
- a. Nurse observing patient consume at least half of meal served.
  - b. Patient verbalizing that he was able to eat more than half of meals served.
5. Patient would regain his normal sleep pattern within 48 hours as evidence by;
- a. Patient and relatives verbalizing that he has regained his normal sleeping pattern.
  - b. Nurse observing that patient sleeps at least 6 hours at night and a daytime nap of at least 30 minutes uninterrupted.
6. Patient would gain adequate knowledge on disease condition within 24 hours as evidence by;
- a. Patient and relatives verbalizing understanding of what they are taught on bronchopneumonia.
  - b. Nurse observing that patient and relatives practice what was taught.

**Table 6: Nursing care plan for Mr. A.B.**

<b>Date/ Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date/ Time</b>	<b>Evaluation</b>	<b>Sign</b>
14/11/21  11:40am	Ineffective  breathing  pattern  (dyspnea)  related to  tracheal  Bronchial  inflammation.	Patient will be  Relieved of dyspnea  within 24 hours as  evidenced by  1. Nurse observing patient to have absence of difficulty in breathing.  2. Patient having normal respiratory rate ( 20-35 cycles per minute)	1. Reassure patient and his relative.  2.Put patient in a comfortable position  3. Remove tight clothing  4. Provide adequate ventilation to enhance air circulation.  5. Assess respiration depth and breathing sound every 30mins.  6. Serve prescribed medication,	1.Patient and family were reassured of the competent staff to take care of her during the period of hospital.  2. Patient was put in a semi-fowlers and supported with pillow at the back to expand optimally to facilitate breathing.  3. Tight shirts were removed to ensure smooth respiration and circulation.  4. Nearby windows were opened to allow fresh air to move into the ward.  5. Patient respiratory depth and breathing sound was assessed by counting the rise and fall of the chest, whilst the depth, rhythm and the sound of the breath were assessed at the same time.  6. Prescribed medication was served  (ceftriaxone to combat the infection).	15/11/ 21    11:40 am	Goal fully met as patient exhibited an absence in difficulty in breathing with a normal respiratory rate (18 cpm)	

**Table 6: Nursing care plan for Mr. A.B.**

<b>Date/ Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date/ Time</b>	<b>Evaluation</b>	<b>Sign</b>
14/11/21  2:00pm	Fever related to infection process.	Patient would regain normal body temperature within 24hours as evidenced by;  1. Nurse observing that patient's body temperature falls within the normal range (36.2°c to 37.2°c)  2. Patient verbalizing that he has been relieved of high body temperature	1. Reassure patient's mother.  2. Tepid sponge patient.  3.Ensure good ventilation  4. Serve prescribed antipyretic drugs.  5.Remove heavy clothing such as blankets  6. Re-check temperature four hourly until temperature subsides to normal.	1. Patient and family were reassured that the pyrexia is associated with the disease condition therefore measures will be taken to bring the temperature to normal. This is done to allay fears and anxiety.  2. Patient was tepid sponged with tepid water and soft towel leaving drops of water on the skin to be dried by evaporation to bring temperature to normal.  3. Nearby windows were opened to improve ventilation and reduce temperature to normal.  4. Syrup paracetamol 5mls TID x 3 was given to reduce fever.  5. Patient's clothing were removed to facilitate proper circulation of air on patient body to reduce temperature to normal.  6. Patient was served cold drinks which helped reduce temperature after a recheck.	15/11/21  2:00pm	Goal fully met as patient's temperature reduced from 38.2 degrees celcius to 37.1 degrees celcius  Through thermometer reading.	

**Table 6: Nursing care plan for Mr. A.B. continued**

Date/Time	Nursing Diagnosis	Objective/ Outcome Criteria	Nursing Orders	Nursing Intervention	Date/Time	Evaluation	Sign
15/11/21  10:00am	Dizziness related to poor circulation	Patient will be relieved of dizziness within 24 hours as evidenced by :  1. Patient verbalizing that he no longer feels dizzy.  2. Nurse observing patient performing daily task freely.	1. Reassure patient and family.  2. Ensure bed rest.  3. Nurse patient on bed with side rails.  4. Place frequently used items within patients reach.  5. Encourage patient to ask for assistance.	1. Patient and family were reassured of competent nursing care.  2. Bedrest was ensured to prevent falls.  3. Patient was nursed on bed with side rails to prevent falls.  4. Patient's frequently used items were within easy reach to prevent falls.  5. Patient was encouraged to ask for assistance to reduce frequent movement.	16/11/21  10:00am	Goals fully met as patient verbalized he no longer feel dizzy.	

**Table 6: Nursing care plan for Mr. A.B. continued**

<b>Date/ Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date/ Time</b>	<b>Evaluation</b>	<b>Sign</b>
15/11/21 11:00am	Imbalance nutritional pattern: (less than body requirement) related to anorexia	Patient would regain his normal eating pattern within 48 hours as evidenced by;  1.Nurse observing patient eat at least more than half of meal served.  2.Patient's relative verbalizing that patient was able to eat more than half of meal served	1.Reassure patient  2. Perform oral hygiene for patient.  3. Discuss diet with patient's relative.  4. Provide a clean environment to stimulate apptetite.  5. Serve meal in bits and attractively.  6. Serve snacks in between meals.	1. Patient was reassured that he will be able to eat very soon.  2. Patients oral hygiene performed for him in order to promote salivation and stimulate appetite.  3. Patient diet was discussed with patient in order to come out with the food he likes.  4. An environment free from nauseous items was provided.  5. Meals were served in bits and attractively in order to stimulate patient's appetite.  6. Snacks such as fruits juice were served in between meals to stimulate patient's appetite.	17/11/21 11:00am	Goal was fully met as patient was able to eat more than half of food served.	

**Table 6: Nursing care plan for Mr. A.B. continued**

<b>Date/ Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing orders</b>	<b>Nursing Intervention</b>	<b>Date/ Time</b>	<b>Evaluation</b>	<b>Sign</b>
16/12/21 9:00am	Disturbed sleep pattern related to change in normal environment	Patient will regain his normal sleep within 48 hours as evidenced by; 1. Nurse observing patient sleep uninterrupted at night. 2. Patient verbalizing that he was able to sleep well during the night.	1.Minimize environmental activities and noise 2. Limit the number of visitors and their length of interaction with patient. 3. Nursing activities should be performed at a go to make time for patient to rest. 4.Put patient in a sleeping position to promote breathing 5. Provide ventilation by opening windows 6. Provide a dim light.	1.Environmental activities and noise were minimized to provide quiet environment for patient to sleep. 2.Visitors were restricted to allow patient to sleep 3.Nursing activities were performed at a go to avoid distracting patient from sleeping. 4. Patient was place on the bed with the head slightly elevated to promote breathing. 5. Nearby windows were opened to allow proper ventilation into the room to facilitate sleep. 6. Lights were switched off to enhance sleep.	18/11/21 9:00am	Goal was fully met as patient verbalized that he was able to sleep uninterrupted during the night.	

**Table 6: Nursing care plan for Mr. A.B. continued**

<b>Date/ Time</b>	<b>Nursing Diagnosis</b>	<b>Objective/ Outcome Criteria</b>	<b>Nursing Orders</b>	<b>Nursing Intervention</b>	<b>Date/ Time</b>	<b>Evaluation</b>	<b>Sign</b>
17/11/21 9:00am	Deficient knowledge related to lack of adequate information on disease process.	Patient would gain adequate knowledge on disease condition (bronchopneumonia) within 24 hours as evidenced by 1. Nurse observing patient verbalize acquired knowledge correctly 2. Patient being able to give adequate information about patient condition.	1.Reassure patient of competent staff. 2. Assess patient’s level of awareness of the condition. 3.Educate patient on the disease condition 4.Allow patient and relative to ask questions. 5.Ask patient questions on what she has learnt. 6. Use visual aids on bronchopneumonia	1. Patient was reassured on the competence of staff. 2. Patient was made comfortable in a relaxed environment and privacy was provided. He was asked about what he knows about the disease condition, causes, signs and symptoms and its prevention. 3. Patient was educated on the cause, signs and symptoms, treatment and the prevention to build on what he knows to enable him to understand the disease well and its management. 4. Patient was allowed to ask questions to ascertain her level of understanding.	18/11/21 9:00am	Goal was fully met as patient was able to give adequate information about his condition (bronchopn eumonia)	

				<p>5. Patient was asked questions on causes, prevention, management and prevention of disease condition.</p> <p>6. Visual aids with pictures on bronchopneumonia were given to the patient.</p>			
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## **CHAPTER FOUR**

### **IMPLEMENTING PATIENT/FAMILY CARE**

This is the fourth phase in nursing process where actions are implemented according to the patient's needs. The implementation of nursing orders in the care plan ensures that the nurse performs established activities on the client. Such activities are geared towards the promotion of patient's recovery.

#### **SUMMARY OF ACTUAL NURSING CARE**

This involves the actual implementation of the nursing orders in the nursing care plan. A comprehensive nursing care was rendered to Mr. A.B. from the day of admission, which was on the 14<sup>th</sup> of November,2021 and continued till he was discharged on the 17<sup>th</sup> of November,2021. The nursing cares rendered to client are summarized on daily basis as follows.

#### **FIRST DAY OF ADMISSION (14/11/21)**

On the 14<sup>th</sup> November, 2021 at 9:38am client was received into the male medical ward of Kintampo Municipal Hospital from the OPD. Client was accompanied by a relative and staff nurse with the diagnosis of bronchopneumonia. On arrival client and together with the relative and accompanying staff nurses were welcomed and were introduced to the nursing staff. This was done to relax patient and to relief him of anxiety, Patient's particulars were entered into the daily ward state, admission and discharge book. Patient

was made comfortable in an already prepared admission bed.

The following information were gathered at the OPD department as the patient's folder was read through.

Temperature	38.1 <sup>0</sup> C
Blood pressure	120/70 mmHg
Respiration	15 cycles per minute
Pulse	70beats per minute

As a student nurse on duty at that moment, I also assisted by interviewing the patient on her condition and he gave the same complains as in the OPD level. The following were the vital signs I checked and recorded at the ward when we arrived from OPD.

Temperature	-	38.2 <sup>0</sup> C
Blood pressure	-	120/69mmHg
Respiration	-	19 cycles per minute.
Pulse	-	85 beats per minute
Spo2	-	98%

Patient weighed 54kg

These investigations had been ordered and carried out on patient.

1. Full Blood Count

2. Blood Film for Malaria Parasites
3. Blood for haemoglobin level estimation.
4. Chest X-ray

A head-to-toe physical examination was conducted on patient and no abnormalities were seen. Patient was oriented in the ward and was introduced to another patient.

Client and relative were reassured and were made known of the competency of the doctors and nurses who will take care of him during his admission. The ward routines such as time of administering prescribed drugs, when to expect meals and visitors were explained to client and relative. The doctor on duty examined client and made the following observations, breathlessness, dyspnea, annexes. He was asked to get his own bowl, spoon, drinking cup, bathing sponge, bucket, towel, pyjamas and other toiletries.

The following treatment plan was ordered.

1. Metronidazole injection 400mg BD for 24hours
2. Oral Rehydrated Salt 4sachets for 4days
3. Tablet Paracetamol 1g TDS for 5 days.
4. Diclofenac 75mg injection stat
5. Intravenous Normal saline 1litre for 24hours
6. Intravenous Ceftriaxone 2g daily for 48 hours
7. Syrup Carbocisteine 15mls 8 hourly for 7days

I reintroduced myself to patient as a student nurse of the Holy Family Nursing and Midwifery Training College, Berekum who would like to take him and his family for a patient/family care study. Mr. A.B. and his family were informed that the care study is a requirement by the Nursing and Midwifery Council of Ghana in partial fulfillment towards the award of license in Diploma in Registered General Nursing. I explained to the patient and his family the concept of the patient/family care study and assured them of privacy and confidentiality. It was added that a report will be written after the entire event. Mr. A.B. and his relative agreed to my request and assured me of providing the necessary information and assistance. I congratulated them on such a decision. Discharge planning was initiated with the relatives; thus, they were told that the hospital will be a temporal place for their care and would have to continue the care at home once there is an improvement in his condition. I informed the ward in-charge about my interest in using this patient for my care study and a permission was granted for me to move on with the study. I decided to choose this patient for the study because I wanted to get a deeper understanding about the causes, signs and symptoms, prevention and treatment of bronchopneumonia and to be able to differentiate it from other similar abdominal conditions.

At 11:40pm, nursing assessment was conducted to validate dyspnea presented by A.B on admission. Quickly a nursing diagnosis of Ineffective breathing pattern (dyspnea) related to tracheal Bronchial inflammation was formulated. An objective was set to relieve dyspnea within 24 hours. Nursing interventions rendered were; Patient and family were reassured of the competent staff to take care of him during the period of

hospital, patient was put in a comfortable position (semi-fowlers) and supported with pillow at the back to expand optimally to facilitate breathing, tight shirts were removed to ensure smooth respiration and circulation, nearby windows were opened to allow fresh air to move into the ward, patient respiratory depth and breathing sound was assessed by counting the rise and fall of the chest, whilst the depth, rhythm and the sound of the breath were assessed at the same time, prescribed medication was served (ceftriaxone to combat the infection).

At 2:00pm during vital signs, patient had a high body temperature. A nursing diagnosis was formulated as Fever related to infection process. Objectives were set to regain normal body temperature within 24hours, and the following interventions were put in place; Patient and family were reassured that the pyrexia is associated with the disease condition therefore measures will be taken to bring the temperature to normal. This is done to allay fears and anxiety, patients clothing were removed to facilitate proper circulation of air on patient body to reduce temperature to normal, nearby windows were opened to improve ventilation and reduce temperature to normal, patient was tepid sponged with tepid water and soft towel leaving drops of water on the skin to be dried by evaporation to bring temperature to normal, patient was served cold drinks which helped reduce temperature, syrup paracetamol 5mls TID x 3 was given to reduce fever.

Patient was served with banku and groundnut soup as supper and he took very little of the food.

At 6:00pm, patient's vital signs were checked and recorded as shown in the appendix and all due medications were served.

Patient slept around 8:50pm.

### **SECOND DAY OF ADMISSION (15/11/2021)**

In the morning of 15<sup>th</sup> November,2021 which was the second day of admission of the patient, the night nurses reported that, A.B woke up around 5:00am. At 5:50am, patient had his bath with warm water, soap and sponge as well as oral hygiene performed using toothbrush and toothpaste. At 6:35am, patient was served with porridge and bread and was not able to eat more than half of the quantity served. Mr. A. B's vital signs were checked and recorded at 6:00am as;

Temperature      37.2<sup>0</sup>C

Pulse                72bpm

Respiration        15cpm

Blood pressure    110/80 mmHg

His prescribed drugs for the morning were served and recorded. During ward rounds at 8:00am, patient did not report any new problem.

But at 10:00am in the morning, I engaged the patient in a conversation, and he complained of feeling dizzy. A nursing diagnosis was formulated at 10:00am as dizziness related to poor circulation. Objectives were set to relieved of dizziness within 24 hours. Nursing actions carried out were patient and family were reassured of competent nursing care, bedrest was ensured to prevent falls, patient was nursed on bed with side rails to prevent falls, patient's frequently used items were within easy reach

to prevent falls, patient was encouraged to ask for assistance to reduce frequent movement.

Based on my observation, I conducted a nursing assessment on the patient, and it was realized that client had lost appetite.

At 11:00am a nursing diagnosis was formulated as, Imbalance nutritional pattern: (less than body requirement) related to anorexia. The following nursing actions were implemented; Patient was reassured that he will be able to eat very soon, patients oral hygiene performed for him in order to promote salivation and stimulate appetite, patient diet was discussed with patient in order to come out with the food he likes, an environment free from nauseous items was provided, meals were served in bits and attractively in order to stimulate patient's appetite, snacks such as fruits juice were served in between meals to stimulate patient's appetite.

At 11:40am, an evaluation of the objective to relieve dyspnea within 24 hours was done and goal was fully met as patient exhibited an absence in difficulty in breathing with a normal respiratory rate (18cpm)

Afternoon vital signs were checked and recorded at 2:00pm as indicated in the appendix, Client was later served with his afternoon medications.

At 2:00pm, an evaluation of the set objective to regain normal body temperature within 24hours was done and goal was fully met as patient's temperature reduced from 38.9°C to 37.1°C through thermometer reading. Patient took in rice with kontomire stew and meat for lunch.

I informed patient about my plan to visit his home while he is still on admission. I explained that the visit is to validate the data he gave me, inspect the environment and to identify any factor that could have led to his illness.

At 6:00pm, vital signs were checked and recorded as shown in the appendix, due medications were then served. He had fufu and light soup for supper. Patient was made comfortable in bed, and he slept around 9:50pm.

### **THIRD DAY OF ADMISSION-16/11/2021**

On 16<sup>th</sup> November, 2021, this was the third day of admission of patient, patient woke up at 5:30am, mouth care was done with toothbrush and toothpaste and took his bath with warm water, and afterwards he took tea and bread for breakfast. I reassured him and the relative and told them that Doctor will come to see him again. I assisted the ward nurse. In doing dusting, bed making and to prepare for Doctor Rounds. His vital signs were checked and recorded at 6:00am as.

Temperature	36.2 <sup>0</sup> C
Pulse	70bpm
Respiration	20cpm
Blood pressure	120/60 mmHg

The night nurses reported that patient could not sleep during the night and was confirmed by the patient himself.

At 11:00am a nursing diagnosis was formulated as, Sleep pattern disturbance (insomnia) related to change in normal environment. The following nursing actions were implemented; Environmental activities and noise were minimized to provide quiet environment for patient to sleep, visitors were restricted to allow patient to sleep, nursing activities were performed at a go to avoid distracting patient from sleeping, patient was placed on the bed with the head slightly elevated to promote breathing, nearby windows were opened to allow proper ventilation into the room to facilitate sleep, lights were switched off to enhance sleep.

Later during the day, patient was educated on good oral hygiene, personal and environmental hygiene. Patient ate jollof rice at 12:00pm. At 2:00pm, vital signs were checked and recorded, and due medications were served and recorded. I made my first visit to client's home on this day while he was still on admission to know patient's residence and the environment in which he lives, verify the information given to me, identify the risk factors and stresses that could have led to his condition.

At 6:00pm, patient ate fufu with groundnut soup where he consumed little. At 6:20pm. Patient took his bath by after eating. Evening vital signs were checked, and due medications were served around 8:00pm, patient slept around 8:30pm. Evening vitals were checked and recorded in the continuation notes at 10:00pm.

#### **FOURTH DAY OF ADMISSION-17/11/2021**

Patient woke up around 5:20am. At 5:30am, objective that was set on 15/11/2021 to relieve patient of and goal was fully met as patient verbalized that patient would gain adequate knowledge on disease condition (bronchopneumonia) within 24 hours. His personal hygiene was maintained by himself including bathing and oral care around 5:50am followed by breakfast. At 6:00am, due medications were served, and vital signs checked and recorded as follows.

Temperature            37.0<sup>0</sup>C

Pulse                    75 bpm

Respiration            17cpm

Blood pressure        110/80 mmHg

At 9:00am, upon interacting with patient, I realized that he had less knowledge on condition (Bronchopneumonia). Therefore, a nursing diagnosis of deficient knowledge related to lack of adequate information on disease process. An objective was set to help him gain adequate knowledge on disease condition (bronchopneumonia) within 24 hours. Nursing interventions implemented included Patient was reassured on the competence of staff, patient was made comfortable in a relaxed environment and privacy was provided. He was asked about what he knows about the disease condition, causes, signs and symptoms and its prevention, patient was educated on the cause, signs and symptoms, treatment and the prevention to build on what he knows to enable him to understand the disease well and its management, patient was allowed to ask questions to ascertain her level of understanding, patient was asked questions on causes,

prevention, management and prevention of disease condition, visual aids with pictures on bronchopneumonia were given to the patient.

At 2:00pm vital signs were checked and recorded, and due medications were served and recorded in the Nurses notes. Patient took a nap around 3:05pm and woke up around 5:30pm and took his bath. 6:00pm Vital signs was checked and recorded as in the appendix; due medications were served. Patient took rice balls with groundnut soup. Patient went to bed around 8:30pm.

#### **FIFTH DAY OF ADMISSION- 18/11/ 2021**

The fifth day of admission patient woke up around 5:45am. Mouth care and personal hygiene were maintained. Night report indicated that, the patient had a sound sleep. Family members who visited patient were happy because of the tremendous improvement of Mr. A.B. Patient looked cheerful and active as he was talking with his relatives. His personal hygiene was maintained and at 6:00am, the vital signs were checked and recorded as follows.

Temperature	37.0 <sup>0</sup> C
Pulse	80 bpm
Respiration	18cpm
Blood pressure	120/70 mmHg

At 8:20am, objective that was set on 17/11/2021 to help him gain adequate knowledge on disease condition (bronchopneumonia) within 24 hours was evaluated and goal was

fully met as patient was able to give adequate information about his condition (bronchopneumonia).

At 9:00am, an evaluation of the objective to regain his normal eating pattern within 48 hours was done and goal was fully met as patient was able to eat more than half of food served.

During ward rounds around 9:30am, in the morning, he was found to be fit by the doctor and was discharged home. Patient was informed to come for a review on 25<sup>th</sup> November 2021. The doctor ordered laboratory investigation of full blood count (FBC) to be filled for the patient on the day of review, patient to come along with it to the OPD on the day of review. I educated patient on the need to comply with the treatment regimen and the need to come for review on the scheduled date. The patient was educated on the need for good diet and the introduction of fruits to boost patient's immune system and the need to continue medication at home. Patient was also educated on personal and environmental hygiene.

He was also reminded of the causes, signs and symptoms, and the prevention of his condition and the need to report to the hospital early when signs and symptoms manifest. Patient's bills were estimated and made known to patient and his relative to enable them to settle his bills. Patient relative paid bills in cash. He had no difficulty in paying his bills. His receipt was brought and checked to ensure his debt was settled prior to discharged.

The dosage of the drugs was further explained, and assistance was given to the relative

to pack his belongings. Education on the need for continuity of medication, personal hygiene, and checking of vital signs were documented into the nurse's notes. The discharge was entered into the admission and discharge book and the daily ward state. They were seen off to the hospital gate at 11:45am and promised to come on the review date. I promised to visit them at home to know how he is faring and remind him of the review date. The bed linen used patient was decontaminated and bed was cleaned with 0.5% bleach solution and left for air to dry.

#### **4.2 PREPARATION OF PATIENT AND FAMILY FOR DISCHARGE AND REHABILITATION.**

Preparation of patient and family towards discharge started on the day of admission till the day of discharge. The aim of the care rendered to patient and family was to promote recovery for the patient and to the community as early as possible without any ill health. On the day of discharge, Mr. A. B. and family were given health education on the causes, signs and symptoms and prevention of the disease condition. Patient and family were also told that the condition is curable, and all the medication should be taken as prescribed. He was told to quickly report to the hospital if he reacts to the drug. He was advised to avoid exposure to cold or dust since they can lead to the condition. He was informed to wear heavy clothes during cold weather and informed to consult the doctor

for treatment whenever they experience any respiratory infection.

Prior to discharge, the patient and relative were given education on the disease condition and the need to give patient the discharge medication.

On 18<sup>th</sup> November,2021 during the general ward rounds, patient was found to be fit and was discharged home. Patient was educated on the dosages and the need for personal hygiene and good nutrition and was told of the date of review, which was on Tuesday 25<sup>th</sup> November,2021.

#### **4.3 FOLLOW UP/HOME VISIT/CONTINUITY OF CARE**

A home visit is a visit to the home of the patient with the aim of promoting health through education and assessment of health status. It is carried out before and after discharge.

The reasons for this home visit is to help assess the nature of patient and family's home/community and the people in the home/community to determine people at risk (vulnerable) of contracting the disease. It also helps patient's family to be educated on any unhealthy living and factor that will be identified. State of patient and family's health are assessed and documented.

#### **FIRST HOME VISIT -16/11/ 2021**

The first home visit was made on the 16<sup>th</sup>November,2021 whilst patient was still on admission. The purpose of this visit was to know patient's residence and the

environment in which he lives, verify the information given to me as well as to identify the predisposing factors such as extreme cold environment, malnutrition, exposure to smoke etc. The direction of his house was given to me earlier by the relative. I had already informed him about the visit a day before and explained that it was to familiarize myself with their environment. It was 2:00pm patient tenant came to visit them in the afternoon where I took the opportunity to go and visit patient's house. It is a 15 minutes' drive away from the hospital.

I visited patient's house at Kyeremankuma, a suburb of Kintampo in the Bono East municipality. The house is 5meters away from Kintampo yam market and in front of the house is untarred road. On entering the house, around 2:32pm, a quick observation was made on the environment, and it was found to be clean. It was a compound house built with blocks and roofed with aluminum roofing sheet which patient's owned one room and a kitchen they prepare their food. They share bathroom and toilet facilities. Their water supply is from a standpipe in the middle of the house. They have access to electricity supply. The household refuse was kept in a plastic dustbin and finally disposed of at the main refuse dump provided by the District Assembly every day. Patient's house tenants were happy when I visited them. I also educated the relatives present about the condition, thus its causes, signs and symptoms, treatment and prevention. They were congratulated for keeping a neat compound. I educated his relatives on the need to always keep the surrounding clean. The rooms in the house were spacious enough for ventilation. However, the untarred road in front of the house made the net of the windows dusty. They were encouraged to dust them often to prevent

minor upper respiratory tract infections like common cold that impaired respiratory function and suppresses the immune system. I also encouraged patient's relatives to continue assisting Mr. A.B in all his activities to enable him to recover fully. I made it clear to them that I will visit them frequently even when patient has been discharged home. I then asked for permission to leave which was granted and I left at 3:30pm.

### **SECOND HOME VISIT -21/11/ 2021**

My second home visit was on Thursday, 21st November 2021, three days after patient was discharged to find out the health status of patient after discharge and to remind patient of the review date.

On entering the house, Mr. A.B. and his family welcomed me warmly. After exchange of greetings, they introduced me to other family members who were not around during my first home visit. Enquiry was made of any new complaint and general health of Mr. A.B and the family. There were no complaints as he looked very active and cheerful.

Again, it was enquired if patient has been administering the drugs correctly and was advised to adhere to treatment regimen. Mr. A.B was also encouraged to continue a balanced diet. Education on sanitation to family members during my first home visit was ensured as environment had been kept clean and many more.

He was reminded of the review date, which was 25<sup>th</sup>November,2021. After some conversation on Mr. A. B's condition, permission was sought to leave. Another visit was promised as they saw me off to the main street.

## **DAY OF REVIEW – 25/11/ 2021**

On 25<sup>th</sup> November, 2021, patient and relative were met at the Outpatient Department of Kintampo Municipal Hospital around 8:00am. Patient looked well and cheerful. I accompanied them to go for patient's folder. Vital signs were checked and recorded as follows.

Temperature            36.5<sup>0</sup>C

Pulse                    90bpm

Respiration            20cpm

Blood pressure    118/70 mmHg

Weight measured and recorded as 54 kg.

Patient was seen by the doctor in consulting room 2 and Laboratory investigation was ordered, and results was as follows.

1. Haemoglobin level 11.5g/dl
2. White Blood Cells    230 x 10<sup>9</sup>/l

Upon the doctor's examination, he was found to be healthy. Mr. A.B. made no new complains. Patient was asked to take balanced diet, protect himself against cold weather, smoke, and dust particles. He was also informed to wash hands with soap and water before eating. Patient was reminded of my third visit which will be my last visit and to terminate care. Patient and relative were seen off at the taxi rank to board a taxi.

### **THIRD HOME VISIT -2/12/ 2021**

On the 2<sup>nd</sup> of December 2021, around 9:00am, a visit was paid to parent's house to find out how patient was faring after review and to hand over patient to a community health nurse for continuity of care. Upon reception and exchange of greetings, enquiry was made about the general condition of the patient. No new complains were made as patient's condition looked improved. Because patient had already been informed about my visit and its purpose, the community health nurse (Madam A.S) was introduced to them for the continuity of care and they were very thankful.

Patient and family were thanked for their co-operation throughout my study, and this ended our interaction. I bade them farewell and patient and family members gave me a handshake as a sign of gratitude, and I left the house around 1:55pm.

## **CHAPTER FIVE**

### **EVALUATION OF CARE RENDERED TO PATIENT AND FAMILY**

#### **INTRODUCTION**

Evaluation is the final process of the nursing process. It is looking back over health activities one has performed to find out whether goals and objectives previously set have been achieved.

#### **STATEMENT OF EVALUATION**

During evaluation, various objectives set for the identified health problems were fully met. Below are the evaluations made on Mr. A.B and his family after identifying their problems during their period of hospitalization.

##### **1. Patient was relieved of dyspnea (15<sup>TH</sup> NOVEMBER 2021).**

On 14<sup>th</sup> November,2021 at 11:40pm, nursing assessment was conducted to validate dyspnea presented by Mr. A.B on admission. Therefore, a nursing diagnosis of Ineffective breathing pattern (dyspnea) related to tracheal Bronchial inflammation. An objective was set to relieved dyspnea within 24 hours. Nursing interventions rendered were patient and family were reassured of the competent staff to take care of him during

the period of hospital, patient was put in a comfortable position (semi-fowlers) and supported with pillow at the back to expand optimally to facilitate breathing, tight shirts were removed to ensure smooth respiration and circulation, nearby windows were opened to allow fresh air to move into the ward, patient respiratory depth and breathing sound was assessed by counting the rise and fall of the chest, whilst the depth, rhythm and the sound of the breath were assessed at the same time, prescribed medication was served (ceftriaxone to combat the infection) of drugs given.

On the 15<sup>th</sup> of November 2021 at 11:40pm, goal was fully met as Goal fully met as patient exhibited an absence in difficulty in breathing with a normal respiratory rate (18cpm)

## **2. Patient was relieved of fever (37.1<sup>0</sup>C) (15<sup>TH</sup> NOVEMBER,2021).**

On the 14<sup>th</sup> November, 2021 at 2:00pm during vital signs, patient had a high body of temperature. A nursing diagnosis was formulated as fever related to infection process. Objectives were set to regain normal body temperature within 24 hours and the following interventions were put in place; Patient and family were reassured that the pyrexia is associated with the disease condition therefore measures will be taken to bring the temperature to normal. This is done to allay fears and anxiety, patients clothing were removed to facilitate proper circulation of air on patient body to reduce temperature to normal, nearby windows were opened to improve ventilation and reduce temperature to normal, patient was tepid sponged with tepid water and soft towel leaving drops of water on the skin to be dried by evaporation to bring temperature to

normal, patient was served cold drinks which helped reduce temperature, syrup paracetamol 5mls TID x 3 was given to reduce fever.

On 15<sup>th</sup> November,2021 at 2:00pm evaluation was conducted, and Goal fully met as patient's temperature reduced from 38.9 degrees Celsius to 37.1 degrees Celsius through thermometer reading.

### **3. Patient was relieved of dizziness (16<sup>th</sup> NOVEMBER,2021).**

On 15<sup>th</sup> November,2021 at 10:00am patient complained of dizziness. A nursing diagnosis was formulated at 10:00am as dizziness related to poor circulation. Objectives were set to relieved of dizziness within 24 hours. Nursing actions carried out were patient and family were reassured of competent nursing care, bedrest was ensured to prevent falls, patient was nursed on bed with side rails to prevent falls, patient's frequently used items were within easy reach to prevent falls, patient was encouraged to ask for assistance to reduce frequent movement.

On 16<sup>th</sup> November,2021 at 10:00am evaluation was conducted, and Goals fully met as patient verbalized, he no longer feels dizzy.

### **4. Patient's Nutritional pattern was restored (17<sup>TH</sup> NOVEMEBER, 2021).**

On 15<sup>th</sup> November,2021. Patient was served with porridge with bread for breakfast, he was able to consume just one-third of the porridge. Based on my observation, I conducted

a nursing assessment on the patient, and it was realized that client had lost appetite.

At 11:00am a nursing diagnosis was formulated as, Imbalance nutritional pattern: (less than body requirement) related to anorexia. The following nursing actions were implemented; Patient was reassured that he will be able to eat very soon, patients oral hygiene performed for him in order to promote salivation and stimulate appetite, patient diet was discussed with patient in order to come out with the food he likes, an environment free from nauseous items was provided, meals were served in bits and attractively in order to stimulate patient's appetite, snacks such as fruits juice were served in between meals to stimulate patient's appetite.

On 17<sup>th</sup> November,2021 at 11:00am Goal was fully met as patient was able to eat more than half of food served.

#### **5. Patient Sleeping Pattern was restored (18<sup>th</sup> November,2021).**

The night nurses reported that client was not able to sleep well, I interacted with the client, and he confirmed it to be true and he indicated that it was as a result of the abdominal pain. So, at 9:00am a nursing diagnosis was formulated as, Sleep pattern disturbance (insomnia) related to difficulty in breathing. The following nursing actions were implemented; Environmental activities and noise were minimized to provide quiet environment for patient to sleep, visitors were restricted to allow patient to sleep, nursing activities were performed at a go to avoid distracting patient from sleeping, patient was place on the bed with the head slightly elevated to promote breathing,

nearby windows were opened to allow proper ventilation into the room to facilitate sleep, lights were switched off to enhance sleep.

On 18<sup>th</sup> November,2021 at 9:00am Goal was fully met as patient verbalized that he was able to sleep uninterrupted during the night.

#### **6. Patient gained knowledge on condition (18<sup>TH</sup> NOVEMBER,2021).**

At 8:20am on 17<sup>th</sup> November,2021, patient was engaged in an interaction, and it was realized that patient had less knowledge on condition (Bronchopneumonia). The nursing diagnosis formulated was Deficient knowledge related to lack of adequate information on disease process. An objective was set to help him gain adequate knowledge on disease condition (bronchopneumonia) within 24 hours. Nursing interventions implemented included patient was reassured on the competence of staff, patient was made comfortable in a relaxed environment and privacy was provided. He was asked about what he knows about the disease condition, causes, signs and symptoms and its prevention, patient was educated on the cause, signs and symptoms, treatment and the prevention to build on what he knows to enable him to understand the disease well and its management, patient was allowed to ask questions to ascertain her level of understanding, patient was asked questions on causes, prevention, management and prevention of disease condition, visual aids with pictures on bronchopneumonia were given to the patient.

On 18<sup>th</sup> November,2021 at 8:20am, goal was fully met as patient was able to give adequate information about his condition (bronchopneumonia).

### **AMMENDMENT OF NURSING CARE FOR CLIENT MET OR UNMET CRITERIA.**

Mr. A.B presented with six health problems during his period of hospitalization such as dyspnea, fever, dizziness, anorexia, insomnia, and knowledge deficit. Objectives were set to relieve patient/family of their health problems. Effective nursing interventions were instituted with the aim of achieving the objective that has been set. All the goals were fully met within the stated time without any complications and hence there was no need for amendment.

### **TERMINATION OF CARE**

Termination of care is one of the most difficult but essential aspect of every nurse-patient interaction. It is the break in the therapeutic relationship established between the client /family and the nurse.

At this stage, the client family and the nurse had established good interpersonal relationship and had great memories for each other.

The client and family were made aware on admission that, our interaction would come to a halt someday, as the client would become well and will be discharged to continue his normal activities. Client and family were therefore prepared for termination of care to help them cope with the situation.

Preparation of client for termination of care began from the day of admission on the 14<sup>th</sup> of November,2021 till he was discharged on 18<sup>th</sup> of November 2021.

Before discharge, first home visit was made, and the necessary arrangements were made in order to prepare them adequately for termination of care. They were informed about the need to avoid overcrowded room, by explaining to them that, it will help her cope with the condition at home when discharged.

Third home visit was made with the aim to terminate the care. Client's family members were advised on the importance of good health. I told them to send client to the hospital early whenever any problem arises.

I thanked them for their co-operation, and they asked for God's blessings for me and that ended the interaction and termination of care.

## **CHAPTER SIX**

### **6.0 INTRODUCTION**

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

#### **6.1 SUMMARY**

According to Hornby (2010), summary is a short statement that gives only the main

points of something, not in details.

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.

Mr. A.B. a thirty-four-year-old man was admitted at the Males ward on 14<sup>th</sup> November. 2021 on account of bronchopneumonia.

Client's health problems included difficulty in breathing, high body temperature of 38.2°C, anorexia, difficulty sleeping, dizziness and lack of adequate information about his condition.

Laboratory investigations of malaria parasites proved negative, haemoglobin estimation level of 10.3g/dl and Full Blood Count particularly WBC were carried out. He was managed with the following drugs; metronidazole injection 400mg BD for 24hours, oral rehydrated salt 4sachets for 4days, tablet paracetamol 1g TDS for 5 days, diclofenac 75mg injection stat, intravenous normal saline 1litre for 24hours, intravenous ceftriaxone 2g daily for 48 hours and syrup Carbocisteine 15mls 8 hourly for 7days.

Nursing care such as reassurance, maintaining patient's personal hygiene, checking of vital signs, feeding and administration of prescribed drugs were carried out successfully.

Through appropriate medical and nursing interventions and total patient and family cooperation all the goals set were fully met.

During admission, health education was given to patient's family on feeding (diet), oral care (personal hygiene) and good environmental hygiene. Prior to discharge, the patient's mother was given education on the disease condition and the need to continue to give patient the drugs after discharge. On 18<sup>th</sup> November, 2021 during general wards, patient was found to be fit as complains he came with, and problems identified were dealt with and was discharged home with treatment (drugs), after spending five days on admission. Patient was advised to report to the hospital for early treatment if any problems arise. The official care of Mr. A.B ended on 2<sup>nd</sup> December, 2021 where the patient was finally handed over to his family to ensure continuity of care during my third home visit. Three home visits were done. The first visit was done while patient was on admission with a reason of knowing patient's residence and the environment in which he lives, verify the information given to me as well as to identify the predisposing factors to the condition. Second home visit was done after discharge to find out the health status of the patient and to remind the mother of the review date. Patient and mother came for review on 25<sup>th</sup> November, 2021 when he was in good health. He was not given any medications on review and gave no complaints. The third home visit was to find out how patient was faring after review and to hand over patient to his family members for continuity of care. Family members were thanked for their cooperation especially the mother. Permission was sought to leave at 3:30pm and was escorted by some relatives.

## **6.2 CONCLUSION**

According to Hornby (2010), 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 must be given to individual patient and what efficient nursing care can do for a hospitalized patient. The care rendered to Mr. A.B and his family has really helped me to gain a great knowledge on bronchopneumonia after nursing Mr. A. B. It had also offered me a great opportunity to know how to nurse individuals with bronchopneumonia. It has also helped me to practice my skills acquired in the classroom theoretically. It has deepened my relationship with patients, families and the people in each community.

Finally, it is my recommendation that all students should be given the opportunity to embark on the patient/family care study in order to render individualized comprehensive care to patients/families.

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## **APPENDIX 1.0**

### **TABLE 7.0 Vital Signs check for MR. A.B. of Admission till Discharge**

<b>Date</b>	<b>Time</b>	<b>Temperature(<sup>0</sup>C)</b>	<b>Pulse(bpm)</b>	<b>Respiration(cpm)</b>	<b>Blood Pressure</b>
14/11/2021	9:40 am	38.2 <sup>0</sup> C	70bpm	19cpm	120/69 mmHg
	2:00 pm	38.1 <sup>0</sup> C	75bpm	15cpm	120/70 mmHg
	6:00 pm	37.5 <sup>0</sup> C	72bpm	18cpm	118/70 mmHg
	10:00pm	37.5 <sup>0</sup> C	70bpm	18cpm	118/70 mmHg
15/11/2021	6:00 am	37.2 <sup>0</sup> C	72bpm	15cpm	110/80 mmHg
	10:00 am	37.2 <sup>0</sup> C	75 bpm	18cpm	120/80 mmHg
	2:00 pm	37.3 <sup>0</sup> C	70bpm	16cpm	120/80 mmHg
	6:00 pm	37.0 <sup>0</sup> C	77bpm	16cpm	118/70 mmHg
	10:00 pm	37.5 <sup>0</sup> C	75bpm	17bpm	118/70 mmHg
16/11/2021	6:00 am	36.2 <sup>0</sup> C	70 bpm	20cpm	120/60 mmHg
	10:00 am	36.7 <sup>0</sup> C	85 bpm	18cpm	120/80 mmHg
	2:00 pm	36.5 <sup>0</sup> C	70bpm	18cpm	120/80 mmHg
	6:00 pm	36.7 <sup>0</sup> C	70 bpm	18cpm	120/80 mmHg
	10:00 pm	37.0 <sup>0</sup> C	85 bpm	19cpm	118/70 mmHg

17/11/2021	6:00 am	37.0 <sup>0</sup> C	75 bpm	17cpm	110/80 mmHg
	10:00 am	36.8 <sup>0</sup> C	70bpm	17cpm	125/80 mmHg
	2:00 pm	37.0 <sup>0</sup> C	88 bpm	16cpm	120/80 mmHg
	4:00 pm	37.2 <sup>0</sup> C	70 bpm	18cpm	120/80 mmHg
	10:00 pm	37.0 <sup>0</sup> C	85 bpm	19cpm	118/70 mmHg
18/11/2021	6:00 am	36.8 <sup>0</sup> C	80 bpm	18cpm	120/70 mmHg

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