

Nursing Care Plan

Student Name:

Clinical Location/Ward:

Date:

CARE PLAN

Medical Diagnosis

Pneumonia is a lung infection characterized by swelling of the alveolar, lung parenchyma, and congestion (WHO, 2019). A Pneumonia patient presents with fever, fatigue, chest pain, loss of appetite, cough with mucus, shortness of breath, and nausea. The medical diagnosis for pneumonia includes pulse oximetry to determine oxygen saturation level and a blood test that determines an increase in white blood cells. A physical examination can also be done to identify signs of pneumonia.

Patient EMR

Mrs. Jennifer White is a 65-year-old pneumonia patient whose daughter brought her to the emergency unit at the hospital. The woman had a two-day history of fever and fatigue. Aside from that, she also had difficulty breathing and confusion. Upon admission, Mrs. White had a height and weight of 1.67ft and 103lb, respectively. Mrs. White is a nicotine addict who smokes daily. Additionally, she has a history of hypertension, pneumonia, and Alzheimer's disease. When Mrs. White arrived at the emergency unit, she had a cough with increased sputum production. The patient also presents with an increase in the amount of nasal discharge. Mrs. White lives with her alcoholic daughter, who is often unavailable to take care of her.

Two years ago, she came into the health facility where he was diagnosed with bronchopneumonia. Although the patient appeared thin, she was awake, alert, and cheerful. At this time, the patient had a dry cough. But three days after the nurse administered her levofloxacin antibiotics, she produced a productive cough. The patient was found to have shortness of breath, a respiratory rate of 29 breaths per minute, and her peripheral oxygen saturation was very low.

Aside from this, Mrs. White had difficulty communicating, and thus lungs produced a crackling course sound. Often, Mrs. White performs her daily activities despite her medical condition. Due to the little care that Mrs. White gets from her daughter, the nurse recommended that he be confined in the hospital setup until he could recover. According to the nurse's diagnosis, the patient had an increased respiratory rate (30). The patient also presented with shortness of breath, excess mucus production, and a course crackling breathing sound. The nurse also diagnosed symptoms like fatigue, difficulty communicating, ineffective cough, tightness in bronchial muscles, and ineffective airway clearance.

Part 1: Nursing Process Model

Nursing Assessment	
Subjective	Shortness of breath Fatigue Excess mucus production Difficulty communicating Ineffective cough Unsuccessful airway clearance
Objective	Cough Oxygen saturation level below (90%) Fever Elevated white blood cell count
Database	According to Henig and Kaye (2017), pneumonia can be detected with such symptoms as wheezing, chest pain, and confusion.

Nursing Diagnosis (Priority Nursing Diagnosis and 1 Potential Diagnosis) NANDA	
Priority DX	According to NANDA, the priority diagnosis is ineffective airway clearance.
Potential	Excessive mucus production Fatigue Ineffective cough

Planning (SMART Goals)	
Re: Priority	The patient will achieve a clear airway and effective coughing after four days and until discharge.
Re: Potential	The patient's cyanosis due to low oxygen levels will end after three days until discharge. The patient will be able to regain energy and consume fluids such as warm water, which will enhance the removal of respiratory secretion by the fourth day. The nurse will communicate the sputum's character, odor, amount, and color changes to the patient by the end of three days.

Implementation - A. Independent Nursing Actions (Teaching)	
Activities	- The Registered Nurse will raise the bed's upper part and shift the patient's position to lower her diaphragm. - Together with the Nurse Assistant, the Registered Nurse will assist and guide the patient on proper breathing techniques. -The Registered Nurse will illustrate how to effectively cough and perform chest splinting in an upright position.

Diet and Nutrition	-The Registered Nurse will also administer to the patient warm fluids, which are preferred over cold ones. -The Registered Nurse will provide her with diet supplements and help her to eat small portions of meals to improve her nutritional status. -The nurse will educate the patient on how he can conserve energy and alternate rest and physical activity.
Prevention and Rehabilitation	- The Registered Nurse will observe the patient's mental health condition for the onset of agitation, anxiety, confusion, and drowsiness as the doctor may need it.

Implementation – B. Dependent Nursing Actions: Also state your Nursing Responsibilities	
Medications and Treatments	- Nebulizer treatment. Nebulizers such as bronchodilators will help to thin secretions and enable liquefaction by humidifying the airway - Expectorants, such as guaifenesin, will help the patient produce a more productive cough that cleans the airway. The expectorants will reduce the viscosity of the respiratory secretions and allow them to liquefy. Guaifenesin may be administered orally as a tablet or syrup. Side effects: nausea, headache, constipation, and fatigue. The patient should not chew but swallow the whole capsule. - Mucolytic drugs such as Carbocysteine will help to liquefy and thicken the lung secretions. The drug is administered orally as a capsule and a liquid. Side effects: nausea, drowsiness, sore throat, and running nose.

Diet and Nutrition	The patient should drink a lot of water - Analgesics such as Acetaminophen will improve coughing and reduce discomfort. Acetaminophen is administered orally as a tablet or capsule. Side effects include headache, rash, stomach pain, loss of appetite and nausea. Overuse may lead to liver damage or even death. Analgesics shall be carefully used as they can depress respiration Limit the drug use to prevent overdose.
Diagnostic Procedures	- The nurse assists the patient to be mentally ready for the upcoming diagnostic test. -To prepare for the procedure, the nurse help the patient get ready by helping them to obtain samples for culture - The nurse also assists the patient and the health practitioner in charge during the testing process. The nurse does this by positioning the patient correctly and administering drugs as needed. -The nurse also monitors the patient's vital signs, such as breathing and pulse rates. - The nurses disconnect and connect monitor devices as the need may arise. - The nurse reports the results obtained from the diagnostic tests. Results may be sent to other specialists through phone, computer, or mail.
LAB Exams	A laboratory examination is done to help diagnose the health condition and plan treatment. - Complete white blood count. An increase in white blood cells indicates the presence of infection in the body - Use the oximeter to determine the oxygen saturation

	level. A normal oxygen saturation level is above (95%). Low oxygen saturation level confirms pneumonia in patients - Sensors such as capnography can be used to determine the respiratory rate. A normal respiratory rate is between 16–18 breaths per minute. RR above this may indicate that the patient has severe pneumonia.
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Evaluation (Outcome of Activities):

- The patient coughs effectively when she can maintain a clear airway.
- Decreased viscosity of lung secretions.
- Assist in the suctioning process.

Nursing Actions

Action	Rationale
- The nurse in charge will raise the bed's upper part and shift the patient's position to lower her diaphragm. - The registered nurse will administer to the patient warm fluids, which are preferred over cold ones. - The nurse will provide her with diet supplements and help her to eat small portions of meals. - The nurse in charge will encourage patient movement.	- Doing so encourages aeration of lung segments, secretory expectoration, mobilization, and chest expansion. - These fluids will help expectorate and mobilize secretions. They will also decrease secretion viscosity and enable the cilia to eliminate secretions effectively. - Improve her nutritional status and help in the energy recovery of the patient.

- Together with the nurse assistant, the registered nurse will assist and guide the patient on proper breathing techniques. - Nurses will then assist the patient in clearing secretions by providing tissue and gently suctioning the pharynx. - The nurse will administer drugs such as Mucolytic and bronchodilators.	- Aid in the reduction of atelectasis and the mobilization of secretions from the respiratory tract. - Deep breathing allows small airways and the lungs' airways to expand to their maximum capacity, consequently improving cough output. - Suction stimulates cough and clears the airway. - Mucolytic will help to liquefy and thicken the lung secretions. Bronchodilators will enable the lungs to be dilated, which consequently eases breathing.
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Part 2: Clinical Judgment Model- Ref: Caputi (2019).

Recognize Cues - NOTICING	
Signs and Symptoms • Appearance • Behavior • Cognition • Thought processes	- Patient appears fatigued and coughs with bloody mucus. - The patient presents with breath shortness, sweating and shaking. - The patient presents with confusion - Patient is forgetful due to amnesia
Analyze Cues - INTERPRETING	
• Clustering of information • Recognizing inconsistencies • Determining the importance of information	- Patient has a history of Alzheimer's. - Confusion, amnesia, cough and shortness of breath. - Link the patient assessment to the

• Distinguishing the relevant from irrelevant information • Judging how much ambiguity is acceptable • Comparing and contrasting	pathophysiology of the patient to avoid inconsistencies. - Patient information is essential to improve the care and management of the patient. - Data on amnesia and confusion is irrelevant because the patient has a history of dementia. However, elderly patients with pneumonia present with confusion. - The patient has a history of pneumonia along with confusion and other clinical signs that are currently evident.
Prioritize Hypotheses	
• Setting Priorities	- The patient has severe pneumonia, and the patient should achieve a clear airway after four days until he is discharged. - Patient should be able to eat and drink by the third day until he is discharged
Generate Solutions	
• PLAN nursing interventions ☐ Per disease process ☐ Patient activities ☐ Diet and Nutrition ☐ Medication ☐ Therapeutic procedures	- The nurse will administer antibiotics against the pneumonia infection. - The nurse will encourage the patient to indulge in a deep breathing technique - The nurse will position the patient in an upright position for airway expansion and increase the oxygen saturation level

	- The nurse will provide the patient with dietary supplements and small meal portions - The nurse will administer drugs including paracetamol, carbocisteine and guaifenesin in the management of patient - The nurse will use nebulizers such as bronchodilators
Take Action – RESPONDING	
• Delegating • Communicating • Teaching • Implementation	- The Registered Nurse will require the CNA to examine breathing sounds as needed until the patient is discharged. They will also observe the respiratory patterns, such as the depth rate and effort, until she is discharged. - The Registered Nurse will require the Assistant nurse to assist the patient in movement and physical activities. - The nurse will illustrate how to effectively cough and perform chest splinting in an upright position. Then they will also encourage the patient to do so often. Deep breathing allows small airways and the lungs' airways to expand to their maximum capacity, consequently improving cough output - The nurse will educate the patient on how he can conserve energy and alternate rest and physical activity. - The nurse will maintain sufficient hydration by pushing fluids to at least 2500 mL/day unless contraindicated. - The registered nurse will also administer to the patient warm fluids, which are preferred over cold ones. These fluids will help expectorate and mobilize secretions.

Evaluate Outcomes – REFLECTION	
• Effectiveness of: ☐ Accuracy of diagnosis ☐ Interventions conducted ☐ Medication ☐ Procedures done	- Correct diagnosis helped to identify the specific patient's health problem. - Restored and improved patient health. - Medications reduced the cough, chest pains and cleared the airway. - The procedures done, such as Nebulizer treatment, helped to thin secretions and enable liquefaction by humidifying the airway.

References

Caputi, L. J. (2019). Reflections on the next generation NCLEX with implications for nursing programs. *Nursing Education Perspectives*, 40(1), 2-3.

Henig, O., & Kaye, K. S. (2017). Bacterial pneumonia in older adults. *Infectious Disease Clinics of North America*, 31(4), 689-713. <https://doi.org/10.1016/j.idc.2017.07.015>

WHO. (2019, August 2). Pneumonia. WHO | World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/pneumonia>