N311 Care Plan 2

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N311: Foundations of Professional Practice

Professor Henry

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Demographics (5 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
10/06/24	L.N	70	Male
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/ Caucasian	Retired- used to own rental homes	Widowed	Aripiprazole, Iodine, Olanzapine, Penicillin's, Quetiapine, Adhesive tape, IV dye [Iodinated Contrast Media], Lisinopril, Ramipril, Alteplase, Sulfa Antibiotics, and Potassium
Code Status	**Height**	**Weight**	
Full	5'5"	186lbs	

Medical History (5 Points)

Past Medical History: Acute on chronic systolic congestive heart failure, aortic valve replaced, arthritis, coronary artery disease, chest pain, congestive heart failure, class 3 severe obesity with serious comorbidity in adult, colitis, chronic obstructive pulmonary disease, continuous positive airway pressure dependence, diabetes mellitus, difficulty hearing, endocarditis, gastroesophageal reflex disease, H/O aortic valve replacement, H/O cardiac radio frequency ablation, heart attack, hypertension, benign (not specified) (04/09/20), hypercholesteremia, leaky heart valve, mixed hyperlipidemia, motor vehicle accident (1995), neuropathy, pneumonia due to infectious organism, presence of combination internal cardiac defibrillator and pacemaker, skin cancer (2001), and sleep apnea.

Past Surgical History: Ptea, artery balloon angioplasty, laparoscopic cholecystectomy, tonsillectomy and adenoidectomy, wrist surgery, knee arthroscopy, gastric bypass surgery, pacemaker placement, coronary bypass graft, cardiac surg procedure, ICD new implant biv, upper gastrointestinal endoscopy, and cardiac defibrillator placement.

Family History: Clotting disorder; brother, Hypertension; sister, Diabetes in brother and sister.

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): Patient denied any use of tobacco, alcohol, and drugs when asked.

Admission Assessment

Chief Complaint (2 points): Shortness of Breath

History of Present Illness – OLD CARTS (10 points): Patient stated that he woke up with shortness of breath on Monday October 7, 2024 around 0900. When asked to describe the shortness of breath, he stated that he was breathing rather quickly, he couldn't catch his breath, and it felt like he wasn't getting enough air. He said that there wasn't anything that made it harder to breathe, and that using the nasal cannula for extra oxygen was helpful. There wasn't any treatment options that were used before hand since the shortness of breath was quickly onset. Patient then stated that he called an ambulance to bring him into the hospital.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Bilateral Pneumonia

Secondary Diagnosis (if applicable): N/A

Pathophysiology

Pathophysiology of the Disease, APA format (20 points):

According to the Mayo Clinic (2024), pneumonia is a lung infection that can be caused by bacteria, viruses, or fungi (Mayo, 2024). The most common bacterial infection is cause by Streptococcus pneumoniae (American Lung Association [ALA], 2024). This bacterium lives within the upper respiratory tract and there are over 900,000 cases documented every year (ALA,

2024). When any of these organisms inflame the alveoli, in one or both lungs, the alveoli can become infected and fill up with pus or possibly fluid (Mayo, 2024). This can make it hard to breathe. The American Lung Association (2024) stated that the severity of pneumonia is dependent on how it was contracted. Anyone is susceptible to contraction pneumonia, however the most at risk are the young, old, and the immune compromised. Especially the children under two years old because of their underdeveloped immune system, and those over the age of sixty-five (ALA 2024).

Common signs and symptoms of pneumonia can include shortness of breath, chest pain, wheezing, fatigue, a productive cough, and of course as with any type of infection a fever (Mayo, 2024). There are also some signs and symptoms that aren't as usually thought about such as nausea, vomiting, lower than normal body temperature, and confusion in the older patients (Mayo, 2024).

There are several things to consider when being diagnosed with pneumonia such as going through a client's medical history, conducting a physical exam, and running diagnostic tests. During the physical exam, a doctor will listen for any abnormal sounds within the lungs with a stethoscope. If it is determined that a diagnostic screen needs to be ran, some tests that can be done are blood tests, chest x-ray, CT scans, pulse oximetry check, sputum test, an atrial blood gas test, pleural fluid culture, and a bronchoscopy if necessary (ALA,2024). Blood tests, sputum tests, and pleural fluid culture tests are used to find out what type of pneumonia they have so the doctors can treat it (ALA,2024). The chest x-ray and the CT scans are used to see how much pneumonia there is or to see if there could be any other masses inside or on the lungs that could be causing issues (ALA, 2024). The pulse oximetry and the atrial blood gas test are used to determine the amount of oxygen being carried throughout the body. The American Lung

Association also stats that a bronchoscopy is a more invasive procedure because they go into the branches of the lungs to look for blockage or to remove fluid or lung tissue if the treatment provided wasn't working (ALA, 2024).

Pathophysiology References (2) (APA):

Association, A. L. (2024). *Pneumonia symptoms and diagnosis*. American Lung Association. https://www.lung.org/lung-health-diseases/lung-disease-lookup/pneumonia/symptoms-and-diagnosis

Mayo Foundation for Medical Education and Research. (2020, June 13). *Pneumonia*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/pneumonia/symptoms-causes/syc-20354204#:~:text=Most%20pneumonia%20occurs%20when%20a,within%20your%20lungs%20(alveoli).

Vital Signs, 1 set (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0820	61	98/40	18	97.5° F	98
1630	60	110/54	18	97.8° F	97

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1540	1-10	N/A	0	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
360+240= 600mL	570mL

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective breathing pattern in relation to fatigue and as evidence by hyperventilation (77).	Patient stated he came to the hospital by ambulance because he woke up hyperventilating.	**1.** Administer oxygen as ordered. (79) **2.** Observe for signs of respiratory distress. (79)	**1.** Patient demonstrates maximum lung expansion with adequate ventilation (79).	Client responded well to nurse's actions. Client's status was not achieved at time of clinical end.
2. Impaired spontaneous ventilation in relation to respiratory muscle fatigue and as evidence by dyspnea (654).	Patient stated he was short of breath, and no matter how much air he took in he felt like he wasn't getting any.	**1.** Monitor patient for nasal flaring, change in depth and pattern of breathing, use of accessory muscles, and cyanosis to detect signs of severe	**1.** Patient's breathing returns to baseline. (656)	Client seemed to be doing well with the nurse's actions. Client's status was not achieved during clinical time.

		respiratory distress.(655) **2.** Elevate the head of the bed to increase comfort and to promote adequate chest expansion and diaphragm excursion, thereby decreasing work of breathing. (655)		

Other References (APA):

Phelps, L. L. (2023). *Nursing diagnosis reference manual*. (pp. 77-79) Wolters Kluwer.

Phelps, L. L. (2023). *Nursing diagnosis reference manual*. (pp. 654-656)Wolters Kluwer.

Concept Map (23 Points):

Subjective Data

Patient states he woke up around 0900 Sunday October 6, 2024 and he couldn't catch his breath. He said no matter how much he tried he didn't feel as if he was retaining any air.

Patient denied any pain as well as any other symptom.

Objective Data

*Patient had very low blood pressure. At 0820 blood pressure was documented as 98/40. In the evening at 1630, blood pressure was documented as 110/54.
*Patient's pulse was documented at 61bpm and 60bpm at 0820 and 1630.
*Patients respiratory rate was documented at 18bpm at both 0820 and 1630.
*Patient's temperature was 97.5 at 0820 and 97.8 at 1630.
*Patient's oxygen was recorded at 98% saturation at 0820 and 97% saturation at 1630. Patient was also receiving oxygen through nasal canula.
* Patients labs were elevated in BUN-40,42; BUN/Creatine ratio-25; Creatine, blood-2.09,1.71; Glucose- 110,100; SGOT-158; SGPT-162; Lactic acid- 2.9,2.5; Bedside Glucose- 108,163; Troponin1, high sensitivity- 36; 32,941; B Type Natriuretic Peptide- 400; Base Artirial- 2.1; D-Dimmer-380; RDW- 16.4; Neutrophils- 90.2; and Procalcitonin- 0.38.
* Patient labs were low in Hydrocarbonate-33; Potassium-3.3; GFR, Estimated-32,43; Calcium-8.1; Magnesium, Serum- 1.5; GRF Nonafrican-32,40; GFR, EST. African-38,48; Po2(Arterial)- 77; O2 SAT ART, Measured-93;Lymphocytes-5.5; and Absolute lymphocytes-0.30
* Patient had Chest X-ray that showed extensive and patchy consolidates in the lower zones of his left and right lung, as well as the middle of his left lung. The impression suggested pulmonary edema with a possible superimposed infection. The x-ray also showed a possible mild left pleural effusion.
* A Lung CT scan without contrast was also preformed. The findings included countless patches of ground glass patches congruent with pneumonia. They also showed a calcific nodule of 6.5mm.

Client Information

Patient is a 70-year-old male with a history of pneumonia due to an infectious disease. Patient was admitted due to shortness of breath.

Nursing Diagnosis/Outcomes

1.) Ineffective breathing pattern in relation to hyperventilation.
   a. Patient demonstrates maximum lung expansion with adequate respiratory function.
2.) Impaired spontaneous ventilation in relation to respiratory muscle fatigue and as evidence by dyspnea.
   a. Patient's breathing returns to baseline.

Nursing Interventions

1.) Administer oxygen as ordered.
2.) Observe for signs of respiratory distress.
3.) Monitor patient for any evidence of fatigue or advancing change in depth and pattern of breathing, use of accessory muscles, and decreased chest expansion with diagnosis of severe respiratory distress.
4.) Elevate the head of the bed to increase comfort and to promote adequate chest expansion and diaphragm excursion, thereby decreasing work of breathing.