

N311 Care Plan #

Lakeview College of Nursing

Mary Hyatt

Demographics (5 points)

Date of Admission 2/25/2021	Client Initials WH	Age 78	Gender F
Race/Ethnicity White	Occupation Factory	Marital Status Widowed	Allergies Augmentin (nausea) Sulfa drugs (vomiting) Hydrocodone (hives, difficulty breathing) Zithromax (itching, swelling)
Code Status DNR	Height 62"	Weight 216	

Medical History (5 Points)

Past Medical History: Type 2 Diabetes Mellitus (on insulin), Hyperlipidemia, Hypertension, COPD, Paroxysmal Atrial Fibrillation, history of stroke, fall risk, GOUT, depression

Past Surgical History: Cataract Extraction- bilateral (12/22/2015), Total Replacement of Left Knee Joint (9/21/2005), Hysterectomy

Family History: Father: Heart Disease

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

No history of tobacco use (5/10/2017) no notation of drug or alcohol use

Admission Assessment

Chief Complaint (2 points): Fatigue

History of Present Illness – OLD CARTS (10 points): Patient denies any pain, states “I feel good, just sleepy.” No signs of acute distress, no grimacing. When asked if she was feeling pain anywhere today, she said, “I am not in pain.” Full OLDCARTS were unable to be assessed based on patient response. Patient was alert and oriented x 4 during interview.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): COPD

Secondary Diagnosis (if applicable): COVID-19

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

“Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease that causes obstructed airflow from the lungs.” (Mayo Clinic, 2022) Chronic Obstructive Pulmonary Disease is characterized as very complex disease that can result from many factors interacting as one syndrome. (Lange & et al, 2021) While smoking can be a major contributing factor, it is not the only inciting feature. (Lange & et al, 2021) Other factors such as poor ventilation can also be a cause of this disease. This is a disease that is difficult to diagnose until it is at a later stage. (Mayo Clinic, 2022) If a patient presents with other comorbidities such as emphysema or others with similar signs and symptoms, diagnosing this can be much more difficult. Providers will always take into consideration family history, tobacco use, and/or exposure to other lung irritants when making a diagnosis. (Mayo Clinic, 2022)

“Mechanistically and pathologically, COPD is characterized by a combination of structural and inflammatory changes that are reflected, in turn, by the natural history of the disease.” (Lange & et al, 2021) As previously stated, tobacco use plays a major role in the development of COPD. In recent reports written, it has been suggested that cigarette smoke induces oxidative stress-mediated DNA damage and triggers cellular senescence in the lung. (Rashid & et al, 2018) As mentioned in the article, *Lung Cellular Senescence is Independent of Aging in a Mouse Model of COPD/Emphysema* by Rashid & et al, “Cellular senescence is a process of complete and permanent cell cycle arrest.” Cell cycle arrest impairs the body’s ability to repair tissue and function. (Rashid & et al, 2018) Poor ventilation and other lung irritants can have this same effect, thus causing development of COPD. When the body is unable to repair

itself, decline is imminent. COPD causes the body to be unable to carry oxygen to the blood and carry carbon dioxide out. This causes the body to become hypoxic. (Mayo clinic, 2022) When a patient has comorbidities like emphysema and chronic respiratory infections more cellular damage is seen. Emphysema is a lung disease causes destruction of the fragile walls and elastic fibers of the alveoli. Small airways collapse when you exhale, impairing airflow out of your lungs. (Mayo Clinic, 2022) “Chronic bronchitis will force your bronchial tubes become inflamed and narrowed and your lungs produce more mucus, which can further block the narrowed tubes. You develop a chronic cough trying to clear your airways.” (Mayo Clinic, 2022)

“In about 1% of people with COPD, the disease results from a genetic disorder that causes low levels of a protein called alpha-1-antitrypsin (AAt). AAt is made in the liver and secreted into the bloodstream to help protect the lungs. Alpha-1-antitrypsin deficiency can cause liver disease, lung disease or both.” (Mayo Clinic, 2022)

Signs and Symptoms of COPD may include shortness of breath, especially during physical activities, wheezing, chest tightness, a chronic cough that may produce sputum, frequent respiratory infections, lack of energy, fatigue, unintended weight loss, edema in the body’s lower extremities. (Mayo clinic, 2022) “People with COPD are also likely to experience episodes called exacerbations, during which their symptoms become worse than the usual day-to-day variation and persist for at least several days” (Mayo Clinic, 2022)

Diagnostic testing for COPD may include Lung (pulmonary) function tests, chest x-rays, CT scans, arterial blood gas analysis, and other various lab tests to determine the cause of symptoms related to the disease. (Mayo Clinic, 2022) Chest x-rays can be used to show emphysema, which is a main cause of COPD. They can also be used to rule out other lung issues and heart failure. (Mayo Clinic, 2022) CT scans are beneficial in detecting emphysema and in

determining if surgery could help in treatment of the disease. (Mayo Clinic, 2022) Arterial blood gas analysis will measure the lung's ability to bring oxygen to the blood, as well as removing carbon dioxide. (Mayo Clinic, 2022) Lab tests may be used is patient shows a family history of COPD. (Mayo Clinic, 2022)

Treatments for COPD may include cessation of smoking, medications such as bronchodilators, inhaled steroids, combination inhalers, oral steroids, phosphodiesterase-4 inhibitors, theophylline, and antibiotics. (Mayo Clinic, 2022) Various others like oxygen therapy and pulmonary rehabilitation programs may also be implemented. (Mayo Clinic, 2022) Surgery may also be an option for COPD patients. These include lung volume reduction surgery, lung transplants, and bullectomy. (Mayo Clinic, 2022) This particular patient's chart shows a note in her chart for the use of Trelegy. Trelegy is drug given via dry powder inhaler. (Mayo Clinic, 2022) It is noted that her cough has improved since she started this intervention.

Pathophysiology References (2) (APA):

COPD. (n.d.). MayoClinic.Org. Retrieved February 17, 2022, from

<https://www.mayoclinic.org/diseases-conditions/copd/diagnosis-treatment/drc-20353685>

Lange, P., Ahmed, E., Lahmar, Z. M., Martinez, F. J., & Bourdin, A. (2021). Natural history and mechanisms of COPD. *Respirology (Carlton, Vic.)*, 26(4), 298–321.

<https://doi.org/10.1111/resp.14007>

Rashid, K., Sundar, I. K., Gerloff, J., Li, D., & Rahman, I. (2018). Lung cellular senescence is independent of aging in a mouse model of COPD/emphysema. *Scientific Reports*, 8(1), 1–14. <https://doi.org/10.1038/s41598-018-27209-3>

Reports, 8(1), 1–14. <https://doi.org/10.1038/s41598-018-27209-3>

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC				
Hgb				
Hct				
Platelets				
WBC				
Neutrophils				
Lymphocytes				
Monocytes				
Eosinophils				
Bands				

Chemistry Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-				
K+				

Cl-				
CO2				
Glucose				
BUN				
Creatinine				
Albumin				
Calcium				
Mag				
Phosphate				
Bilirubin				
Alk Phos				

Urinalysis **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity				
pH				
Specific Gravity				
Glucose				
Protein				
Ketones				
WBC				
RBC				

Leukoesterase				
----------------------	--	--	--	--

Cultures **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture				
Blood Culture				
Sputum Culture				
Stool Culture				

Lab Correlations Reference (1) (APA):

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Diagnostic Imaging Reference (1) (APA):

**Current Medications (10 points, 2 points per completed med)
*5 different medications must be completed***

Medications (5 required)

Brand/Generic					
Dose					
Frequency					
Route					
Classification					
Mechanism of Action					
Reason Client Taking					
Contraindications (2)					
Side Effects/Adverse Reactions (2)					

Medications Reference (1) (APA):

Assessment

Physical Exam (18 points) – **HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS**

<p>GENERAL: Alertness: Orientation: Distress: Overall appearance:</p>	
<p>INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: Drains present: Y <input type="checkbox"/> N <input type="checkbox"/> Type:</p>	
<p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p>	
<p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input type="checkbox"/> Edema Y <input type="checkbox"/> N <input type="checkbox"/> Location of Edema:</p>	
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input type="checkbox"/> Breath Sounds: Location, character</p>	
<p>GASTROINTESTINAL:</p>	

<p>Diet at home: Current Diet Height: Weight: Auscultation Bowel sounds: Last BM: Palpation: Pain, Mass etc.: Inspection: Distention: Incisions: Scars: Drains: Wounds: Ostomy: Y <input type="checkbox"/> N <input type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input type="checkbox"/> Type:</p>	
<p>GENITOURINARY: Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input type="checkbox"/> Type: Size:</p>	
<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Score: Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	
<p>NEUROLOGICAL: MAEW: Y <input type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input type="checkbox"/> N <input type="checkbox"/> if no -</p>	

Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:	
PSYCHOSOCIAL/CULTURAL: Coping method(s): Developmental level: Religion & what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):	

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
11:00 am	96	124/84	13	36.3 C	90

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
10:30 am	(numeric) 0 out of 10	N/A	N/A	N/A	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
• Include full	• Explain			• How did the

<p>nursing diagnosis with “related to” and “as evidenced by” components</p> <ul style="list-style-type: none"> Listed in order by priority – highest priority to lowest priority pertinent to this client 	<p>why the nursing diagnosis was chosen</p>			<p>client/family respond to the nurse’s actions?</p> <ul style="list-style-type: none"> Client response, status of goals and outcomes, modifications to plan.
<p>1. Fatigue</p>	<p>This was the client’s main complaint. It affected her the most while in our care.</p>	<p>1. Alternate activities with periods of rest</p> <p>2. Encourage patient to eat foods that are rich in iron and minerals</p>	<p>1. Patient will verbally express an increased feeling of energy.</p>	<p>Patient understood teachings of nutrient rich diet, thus helping patient to regain strength and subside feelings of fatigue in her daily life.</p>
<p>3. Activity Intolerance</p>	<p>This was chosen because client was unable to stay awake during exam. She felt a need to get right back to bed after meals.</p>	<p>1. identify activities patient considers meaningful</p> <p>2. teach patient exercises for increasing strength and endurance</p>	<p>1. Patient will state desire to increase activity level</p>	<p>Patient expresses she has more ability to complete ADL’s.</p>

Other References (APA):

Phelps, L. (2020). *Sparks & Taylor’s nursing diagnosis reference manual* (11th ed.). Wolters Kluwer Health.

Concept Map (20 Points):

Subjective Data

Pain is rated a 0 out of 10
What brought you to the facility? "Because I'm old."
How are you feeling today? "I'm good, just sleepy." "I'm exhausted."
"I'm not in any pain today."
(Time of assessment: 10:30 am)

Nursing Diagnosis/Outcomes

Fatigue: Patient will verbally express an increase in energy.
Activity Intolerance: Patient will express desire for an increase in activity level due to an increase in stamina and endurance from exercises provided to her by staff.

Objective Data

Time: 11:00 am
Pulse: 96
B/p: 124/84
Respirations: 13
Temperature: 36.3 C
O2 Saturation: 90
Objective data is supported by the subjective data. The client has no complaints, and the vital signs are all within normal ranges.

Client Information

Patient is a 78-year-old female who was admitted to the facility with a primary diagnosis of COPD and a secondary diagnosis of COVID-19. Patient is compliant.

Nursing Interventions

Fatigue: Patient will alternate strenuous activities with periods of rest. Staff will encourage patient to eat a diet enriched with iron and minerals.
Activity Intolerance: Staff will work with the patient to identify activities the patient finds to be important and meaningful in her life. Staff will teach patient exercises to help increase strength and endurance



