N431 Care Plan #1

Lakeview College of Nursing

Morgan Jo Phillips

Demographics (3 points)

Date of Admission	Patient Initials	Age	Gender
02/26/2021	S.J.	84 yrs	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
White/Babtist	Retired	Widowed	Codeine, Penicillin, Nitrofurantoin, Sulfa drugs, Solifenacin, Darifenacin, Phenazopyridine
Code Status	**Height**	**Weight**	
DNR	160 cm	80.5kg	

Medical History (5 Points)

Past Medical History: COPD exacerbation, Stage 3 CKD, Pulmonary HTN, HTN, A-fib, Osteoporosis, DM type II, Obesity, CAD, Anemia, Malignant tumor of renal pelvis, Aortic regurgitation, Bladder Cancer, Aortic Stenosis, Anxiety, Mitral Regurgitation, and hyperlipidemia.

Past Surgical History: Ureterectomy in 2011, Watchman (No Date), Arthroscopy in 2011, repair of macular degeneration in 2003, resection of lesion bladder in 2011, Ureteroneocystostomy in 2011, Excision lipoma upper extremity in 2017

Family History: Father had bone cancer; Mother had HTN, lung cancer, and stroke; Sister has osteoporosis and had a stroke; One of her children have both HTN and DM while her other child only has DM.

Social History (tobacco/alcohol/drugs): Client used Alcohol in the past until 2017 and was a former smoker. Client smoked one pack per day. Client stated she started when she was 20 but stopped at age 75. Client denied any drug use, including recreational drug use.

Assistive Devices: Client uses a walker for an assistive device. Client also has glasses.

Living Situation: Client lives alone at home, however client states that her children come to visit her often and help with her care and doctors' appointments.

Education Level: Client is well educated and is A&O X4. Client is aware of her situation and drugs she is receiving for her illnesses.

Admission Assessment

Chief Complaint (2 points): Shortness of Breath

History of present Illness (10 points):A very pleasant 84-year-old female presents with shortness of breath. Client stated the SOB started the evening of the 24th but increasingly worsened which was the reasoning for her visit to the ER on the 26th. Client states it ongoing SOB that has worsened within the last two days. Client explained she felt the tightness was in her chest. She explained the SOB as shallow, short, labored breathing, not able to fill her lungs completely. Client stated that she could not get up to go to the bathroom or do everyday activities without it aggravating the SOB. Client has a past medical history of COPD with chronic respiratory failure with hypoxia and hypercapnia, chronic diagnosis of CHF, pulmonary HTN, HTN, Dm, CKD, and A-fib. This client was recently admitted to this hospital with similar symptoms and which was later diagnosed as COPD exacerbation and CHF acceleration. After discharge from previous visit, it was noted she was sent home with adjusted COPD regimen to triple therapy via nebulizer. Before coming in client used 4L oxygen with minimal movement to help with the SOB but nothing relieved her SOB. Client also stated she felt wheezy and felt abdominal fullness. Client was given steroids and DuoNeb in route to the hospital via ambulance.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COPD exacerbation

Secondary Diagnosis (if applicable):N/A

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

COPD is a chronic disease that is characterized by poorly reversible airflow limitation caused by chronic bronchitis, emphysema, and hyperreactive airway disease (Capriotti & Frizzle, 2016). This disease is not one that is diagnosed easily. In order to be diagnosed, the client has to have had a cough for 3 months out of the year for 2 consecutive years (Capriotti & Frizzle, 2016). With this disease one will likely see hypersecretion of mucus in large and small airways, hypoxia, and cyanosis (Capriotti & Frizzle, 2016). As mentioned above, emphysema, along with the others, combine to cause COPD. Emphysema is when the alveoli in the body is overdistended causing trapped air which then creates obstruction to expiratory airflow, loss of elastic recoil of the alveoli and high residual volume of carbon dioxide in the lungs (Capriotti & Frizzle, 2016). When the client is struggling to breath it is because COPD causes pathoplogical airway limitations by narrowing of bronchioles and excessive mucus and fibrosis in bronchioles (Capriotti & Frizzle, 2016). It also important to note that COPD causes loss of alveolar elastic recoil and smooth muscle hypertrophy (Capriotii & Frizzle, 2016). When a client chronically has COPD the pulmonary structure become remodeled by inflammatory changes, thickening of the walls, and constriction of the lumens (Capriotti & Frizzle, 2016).

On a cellular level, the inflammation of COPD causes “stimulation of macrophages followed by accumulation of neutrophils, T lymphocytes, and cytokines” (Capriotti & Frizzle, 2016, p. 467). It is also noted that Leukotrienes, interleukins, and tumor necrosis factors are part of the inflammatory process that proteolytically and chronically damage lung structures (Capriotti & Frizzle, 2016). The lungs of clients with COPD are found to have proteolytic-anti-

proteolytic enzyme imbalances that consist with enzymes (Capriotti & Frizzle, 2016). Smoking activates those proteolytic enzymes as well as containing free radials that damage respiratory and arterial endothelial cells (Capritotti & Frizzle, 2016). Chronic bronchitis also combines with emphysema to create COPD, and in this case one will see more poor ventilation and hypoxia (Capriotti & Frizzle, 2016). When poor ventilation and hypoxia occur, that area also shows arterial vasoconstriction, also known as pulmonary hypertension. This client shows signs for this disease on the cellular level in many ways. This client struggles with pulmonary hypertension in her medical history. It is also noted that this client has CHF which is likely because chronic pulmonary hypertension causes increased resistance to the main pulmonary artery (Capriotti & Frizzle, 2016). This resistance of the main pulmonary artery increased right ventricle resistance which then cause right ventricle failure (Capriotti & Frizzle, 2016). When all these cellular affects work together, it causes the clients to become extremely short of breath and cyanosis and poor oxygen profusion becomes an issue. Therefore, oxygen is almost always going to be in the life of a COPD client. This client came in for exacerbation of her disease, which means all of these cellular problems were flaring up at once and it was difficult for this client to handle it without medical treatment.

Some signs and symptoms of this disease includes, shortness of breath, wheezing, chest tightness, chronic cough, possible weight loss, and lack of energy (Mayo Clinic, 2017). These symptoms are often seen more with progression of the disease and if the client smokes or was a former smoker (Mayo Clinic, 2017). It as also noted that these clients can also have mucus secretions they may cough up (Mayo Clinic, 2017). One will often try to increase their breathing by pursed lip breathing. These clients will also show possible wheezing and coughing as their main complain (Capriotti & Frizzle, 2016).

For COPD client's, some expected findings include particular focus on respiratory rate, rhythm, and depth (Capriotti & Frizzle, 2016). These clients will likely have increased respirations as they are trying to get more oxygen through their pulmonary pathways. COPD client will often show a barrel-shaped chest or increased anterior-posterior diameter (Caprioitt & Frizzle, 2016). Cyanosis is also very visible in these clients because of hypoxia (Capriotti & Frizzle, 2016). Clubbing of the fingers and use of accessory muscles are also very common in COPD clients because of respiratory distress (Capriotti & Frizzle, 2016).

Diagnosis of this disease is done through pulmonary function tests, CBC, blood chemistry panel, chest x-ray, ECG, and ABG (Caprioitti & Frizzle, 2016). The chest X-ray will show pulmonary vasculature and any characteristics associated with emphysema (Capriotti & Frizzle, 2016). The CBC and blood panel will indicate erythrocytosis and section of erythropoietin from the kidney (Capriotti & Frizzle, 2016). The ECG will show right axis deviation if it is there (Caprioitt & Frizzle, 2016). These client's will also need to have a cough for 3 months out of the year for 2 consecutive years (Capriotti & Frizzle, 2016). This client's Chest X-ray noted left sided opacity. Client's CO2 showed evidence for COPD.

Treatment of COPD is a step by step process that first starts with short acting bronchodilator and then incorporates into long acting (Capriotti & Frizzle, 2016). Oxygen therapy is vital for these clients, which is why portable oxygen tanks are an option (Pietrangelo, 2016). Lifestyle changes are another great tip for COPD treatment/management. Smoking cessation is vital, eat a healthy nutritious diet, and healthy exercise techniques (Pietrangelo, 2016). Medication compliance to bronchodilators are also vital for treatment. This client is compliant to her medications and is ready to try to take on the day to day life again.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: introductory concepts and clinical perspectives.* F.A. Davis Company.

Mayo Clinic. "COPD - Symptoms and Causes." *Mayo Clinic*, 2017, www.mayoclinic.org/diseases-conditions/copd/symptoms-causes/syc-20353679.

Pietrangelo, Ann. "COPD: Stages, Causes, Treatment, and More." *Healthline*, 2016, www.healthline.com/health/copd.

Laboratory Data (15 points)

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	**3.9-5.0**	**3.40**	**2.90**	**This is low because this client has Anemia and a chronic illness which causes RBC to be decreased (Pagana et al., 2019).**
Hgb	**12.0-15.5**	**10.2**	**8.7**	**This is low because this client has Anemia which causes a low hgb level because of the decreased RBC's (Pagana et al., 2019).**
Hct	**35-45**	**30.9**	**26.0**	**This is low because of the client's Anemia, the client's not making enough RBC's to provide the body with sufficient hct levels (Pagana et al., 2019).**

Platelets	**150-500**	**261**	**324**	
WBC	**4.5-11**	**7.2**	**9.1**	
Neutrophils	**45.3-79**	**72.2**	**92.5**	**Elevated neutrophils are an indication of acute suppurative infection and inflammatory issues and in this client's case her body was fighting both cases (Pagana et al., 2019).**
Lymphocytes	**11.8-45.9**	**15.0**	**4.0**	**This is decreased in this client because this client is on steroid drug therapy and has been through radiation because of her previous cancers. All would be an indication as to why her levels are decreased (Pagana et al., 2019).**
Monocytes	**4.4- 12.0**	**8.1**	**3.5**	**This client's monocytes are decreased because she is has anemia from past exposure to radiation and chemotherapy (Pagana et al., 2019).**
Eosinophils	**0.0-6.3**	**4.1**	**N/A**	
Bands	**0.0-5.0**	**N/A**	**N/A**	

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-	**135-145**	**135**	**135**	
K+	**3.5-5.0**	**3.9**	**4.3**	
Cl-	**98-108**	**94**	**93**	**This client is on diuretics which would indicate why her Cl- levels are low (Pagana et al., 2019)**
CO2	**22-29**	**34**	**35**	**This client has increased CO2 levels due to client having emphysema from COPD (Pagana et al., 2019).**
Glucose	**70-100**	**249**	**235**	**Because client is taking steroids and steroids can cause an increase in blood sugar (Pagana et al., 2019)**

BUN	**7-25**	**20**	**37**	**This client's BUN levels are increased because client has stage 3 CKD and increased BUN levels are also seen in CHF clients, which this client also has (Pagana et al., 2019).**
Creatinine	**0.7-1.3**	**1.21**	**1.23**	
Albumin	**3.5-5.2**	**3.8**	**N/A**	
Calcium	**8.6-10.3**	**9.0**	**8.6**	
Mag	**1.6-2.4**	**N/A**	**N/A**	
Phosphate	**3.0-4.5**	**N/A**	**N/A**	
Bilirubin	**0.3-1.0**	**0.5**	**N/A**	
Alk Phos	**34-104**	**67**	**N/A**	
AST	**13-39**	**14**	**N/A**	
ALT	**7-52**	**13**	**N/A**	
Amylase	**30-220**	**N/A**	**N/A**	
Lipase	**11-82**	**N/A**	**N/A**	
Lactic Acid	**0.5-2.0**	**N/A**	**N/A**	
Troponin	**0.0-0.03**	**0.02**	**N/A**	
CK-MB	**0.6-6.3**	**N/A**	**N/A**	
Total CK	**30-223**	**N/A**	**N/A**	

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

Lab Test	Normal	Value on	Today's	Reason for Abnormal

	Range	Admission	Value	
INR	**0.86-1.14**	**1.17**	**N/A**	**This client's level is slightly elevated due to client taking medications such as oral anticoagulant and antibiotics that can interfere with INR levels (Pagana et al., 2019).**
PT	**11.9-15.0**	**15.1**	**N/A**	**This clients level is slightly increased because the client taking antibiotics, and oral anticoagulants which can interfere with PT levels (Pagana et al., 2019).**
PTT	**22.6-35.3**	**36.9**	**N/A**	**This client's PTT levels were likely elevated upon arrival because of DIC (Pagana et al., 2019).**
D-Dimer	**0.0-0.62**	**N/A**	**N/A**	
BNP	**0-100**	**N/A**	**N/A**	
HDL	**>55**	**418**	**N/A**	**This client's levels were highly elevated because this client has hyperlipidemia, HTN, and is taking medications that can increase the levels. All of which is why these levels are elevated (Pagana et al., 2019).**
LDL	**<130**	**N/A**	**N/A**	
Cholesterol	**<200**	**N/A**	**N/A**	
Triglycerides	**35-135**	**N/A**	**N/A**	
Hgb A1c	**4-5.9**	**N/A**	**N/A**	
TSH	**0.5-5.33**	**N/A**	**N/A**	

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	**Low yellow, low-clear**	**N/A**	**N/A**	
pH	**5.0-8.0**	**N/A**	**N/A**	
Specific Gravity	**1.005-1.034**	**N/A**	**N/A**	
Glucose	**Normal**	**N/A**	**N/A**	
Protein	**Negative**	**N/A**	**N/A**	
Ketones	**Negative**	**N/A**	**N/A**	
WBC	**<5**	**N/A**	**N/A**	
RBC	**0-4**	**N/A**	**N/A**	
Leukoesterase	**Negative**	**N/A**	**N/A**	

Arterial Blood Gas 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
pH	**7.35-7.45**	**N/A**	**N/A**	
PaO2	**80-100**	**N/A**	**N/A**	
PaCO2	**35-45**	**N/A**	**N/A**	
HCO3	**22-26**	**N/A**	**N/A**	
SaO2	**95-100**	**N/A**	**N/A**	

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

Test	Normal	Value on	Today's	Explanation of Findings

	Range	Admission	Value	
Urine Culture	**Negative**	**N/A**	**N/A**	
Blood Culture	**Negative**	**N/A**	**N/A**	
Sputum Culture	**Negative**	**N/A**	**N/A**	
Stool Culture	**Negative**	**N/A**	**N/A**	

Lab Correlations Reference (1) (APA):

GlobalRPH. "Laboratory Values - GlobalRPH." *GlobalRPH*, 2019, globalrph.com/laboratory-values/. Accessed 3 March. 2021.

Pagana, K. D., Pagana, T.J., & Pagana, T.N. (2019). *Mosby's Diagnostic and Laboratory Test Reference*. Elsevier.

Sarah Bush Lincoln, (2020). Laboratory values. *Cerner PowerChart.* Cerner

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- Chest X-ray (CXR): This type of test is often used to have visualization of the chest cavity for respiratory conditions, CHF conditions, and more (Hinkle & Cheever, 2018). This test was ordered for this client because the client is complaining of SOB that is persisting which is secondary to her CHF and past diagnosis of COPD.

Diagnostic Test Correlation (5 points):

- After completion of this test, it is determined that this client has left sided opacity in her lungs. This means that this client's airways are being altered by the fluid the client is retaining. This client has a past medical history of CHF and COPD, both can cause

labored breathing because of build up of fluid and not being able to work the secretions out.

Diagnostic Test Reference (1) (APA):

Hinkle, J. L. & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing (14th ed.).* Wolters Kluwer Health Lippincott Williams & Wilkins

Current Medications (10 points, 1 point per completed med)
10 <u>different</u> medications must be completed

Home Medications (5 required)

Brand/Generic	**Furosemide/ Lasix**	**Atorvastatin/Lipitor**	**Metoprolol Tartrate/ Lopresor (CAN)**	**Lisinopril/ Prinivil**	**DuLoxetine/ Cymbalta**
Dose	**40mg/ 1 tab**	**20mg/ 1 tab**	**50mg**	**5mg**	**60mg**
Frequency	**Daily**	**HS**	**BID**	**Daily**	**Daily**
Route	**PO**	**PO**	**PO**	**PO**	**PO**
Classification	**Antihypertensive, diuretic**	**Antihyperlipidemic**	**Antihypertensive**	**Antihypertensive**	**Antidepressant**
Mechanism of Action	**Inhibits sodium and water reabsorption in the loop of Henle and increased urine formation Furosemide reduced**	**Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in**	**Inhibits stimulation of beta 1 receptor sites, located mainly in the heart, resulting in decreased cardiac**	**Reduce BP by inhibiting conversion of angiotensin I to angiotensin II. Angiotensin II is a potent vasoconstric**	**Inhibits dopamine, neuronal serotonin, and norepinephrine reuptake to potentiate noradrenergic and**

	blood pressure by reducing intracellular and extracellular fluid volume.	**the liver and by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown.**	**excitability, cardiac output, and myocardial oxygen demand. These effects help relieve angina, minimize cardiac tissue damage from myocardial infarction, and help relieve symptoms of heart failure. This drug also helps with reducing BP by decreasing renal release of renin**	**tor that also stimulates adrenal cortex to secrete aldosterone.**	**serotonergic activity in the CNS. These activities may elevate mood and inhibit pain signals stemming, from peripheral nerves adversely affected by chronically elevated serum glucose level.**
Reason Client Taking	**The client is taking this medication because the client has HTN and also CHF. This medication works to control both the CHF symptoms by excreting the fluid and also**	**This client has a past medical history of hyperlipidemia.**	**This client is taking this medication because she has HTN.**	**Because the client struggles with HTN and this medication helps to control.**	**Because client struggles with depression**

	controlling the BP.				
Contraindications (2)	**Anuria, Hypersensitivity**	**Active Hepatic disease, breastfeeding**	**Acute HF, pulse less than 45 beats per minute**	**Hereditary or idiopathic angioedema or history or angioedema related to previous treatment with an Ace inhibitor; concurrent aliskiren use in patients with DM or patients with renal impairment**	**Chronic liver disease including cirrhosis, hypersensitivity to duloxetine or its component severe renal impairment**
Side Effects/Adverse Reactions (2)	**Arrhythmias, thromboembolism**	**Hypoglycemia, hepatic failure**	**Cardiac arrest, hepatitis**	**Hypotension, MI**	**Neuroleptic, seizures**
Nursing Considerations (2)	**Obtain patient's weight before and periodically during furosemide therapy to monitor fluid loss; expect client to have periotic hearing tests during prolonged or high-dose I.V. therapy**	**Monitor DM patient's blood glucose levels because it can affect blood glucose control; expect to measure lipid levels 2-4 weeks after therapy starts**	**Expect to taper dosage over 1 to 2 weeks when the dug is discontinued; If dosage exceeds 400mg daily, the patient should be monitored for bronchospasm and dyspnea because it completely blocks beta 2 receptors.**	**Be aware that lisinopril should not be given to a patients who is hemodynamically unstable after an acute MI; use cautiously in patients with fluid volume deficit, HF, impaired renal function, or sodium depletion.**	**Watch closely for evidence of suicidal thinking or behavior, especially when therapy starts or dosage changes; Monitor patients serum sodium level, as ordered, especially if patient is elderly is taking a diuretic, or**

					has volume depletion because drug may lower serum sodium level.
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	**When using this drug it is important to look at electrolyte levels to monitor for electrolyte imbalances. Always look at weight when giving this.**	**Expect liver function tests to be performed before therapy starts and thereafter as clinically necessary. Monitor blood glucose levels in patients who have DM.**	**Be sure to Assess the client's BP to ensure the client is not too low and if it is it indicates we cannot give metoprolol. It is also important to assess the clients heart and heart rate when giving metoprolol.**	**Monitor potassium levels because this medication can cause a hypokalemic state.**	**Obtain patients baseline blood pressure before duloxetine therapy starts, and assess it periodically thereafter for changes.**
Client Teaching needs (2)	**Take at the same time each day and continue to take it as prescribed even if you start to feel well.**	**Ensure the client knows it is used as an adjunct to-not a substitute for- low cholesterol diet, Take drug at the same time each day to maintain its effects.**	**Advise patient to notify prescriber if pulse rate falls before 60, urge diabetic patients to check their glucose often during therapy**	**Instruct patient to report any dizziness especially during first few days of therapy; Take at the same time every day**	**Take that capsule as a whole and do not chew it or crush it; Tell client that full effect of this drug may take weeks to occur.**

Hospital Medications (5 required)

Brand/Generic	**Aspirin/ Ancasal (CAN)**	**Diltiazem (24 hr. extended release)/ Cardizem**	**Enoxaparin/Lovenox**	**Ferrous Sulfate/ Mol-Iron**	**Loratadine/ Claritin**
Dose	**81mg**	**180mg**	**40mg**	**325mg**	**10mg**
Frequency	**Daily**	**Daily**	**Daily**	**Daily**	**Daily**
Route	**PO**	**PO**	**Sub Q**	**PO**	**PO**
Classification	**NSAID**	**Antihypertensive**	**Anticoagulant**	**Nutritional supplement**	**Antihistamine**
Mechanism of Action	**Relieving pain by prostaglandins play a tole in pain transmission from the periphery to the spinal cord. Aspirin inhibits platelet aggregation by interfering with production of thromboxane A2, a substance that stimulates platelet aggregation.**	**Inhibits calcium movement into coronary and vascular smooth-muscle cells by blocking slow calcium channels in cell membranes.**	**Potentiates the action of antithrombin III and coagulation inhibitor. By binding with antithrombin II, lovenox rapidly bind with and inactivates slotting factors.**	**Acts to normalize RBC production bu binding with hemoglobin or by being oxidized and stored as hemosiderin or aggregated ferritin in reticuloendothelial cells of the bone marrow, liver, and spleen. Iron is needed for catecholamine metabolism and normal neutrophil function.**	**Works to inhibit H1 receptors primarily located on respirator smooth muscle cells, vascular endothelial cells, the GI tract, and immune cells. This works with H1 receptors to inhibit vascular permeability by precenting edema, flushing, and bronchodilation. (Sidhu and Akhondi, 2020)**

Reason Client Taking	**Because client had a past medical history of clotting/stroke**	**Because Client is using this to control HTN, increase exercise activity, and control A-fib.**	**Because client has history of clotting and client is not ambulating well so it is important to ensure she is not clotting and not forming DVT's or clots**	**Because client has anemia**	**Because client has allergies**
Contraindications (2)	**Active bleeding or coagulation disorder; current or recent GI bleed or ulcers**	**Acute MI; 2nd or 3rd degree AV block**	**Active major bleeding; HIT**	**Hemochromatosis, hemolytic anemias**	**Hypersensitivity to the drug or components, children under the age of 2 due to antihistamine properties ((Sidhu and Akhondi, 2020)**
Side Effects/Adverse Reactions (2)	**CNS depression, leukopenia**	**Acute renal failure, a-flutter**	**CVA, Hemorrhage**	**Hypotension, hemolysis**	**Headaches, dizziness (Sidhu and Akhondi, 2020)**
Nursing Considerations (2)	**Do not crush time-released or controlled release aspirin tablets; ask about tinnitus because this reaction usually occurs**	**Assess patients for signs and symptoms of heart failure; Expect to discontinue drug is adverse skin reactions persist although some may be severe.**	**Do not give by IM injection; Expect to give this drug with aspirin with unstable angina**	**Give with a full glass of juice or water; to maximize absorption give 2 hour before meals and 2 hours after meals**	**Assess for CNS depression, assess for dryness of nasal and oral mucosa (Sidhu and Akhondi, 2020)**

	when blood aspirin level reaches or exceeds maximum dosage for therapeutic effect.				
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	**Ensure client's liver levels can handle the NSAID administration.**	**Ensure you are giving this medication through a clean IV and not the same IV line as acetazolamide, ampicillin, phenytoin, sodium bicarbonate, diazepam, heparin, furosemide, or cefoperazone.**	**Watch closely for bleeding and check serum potassium levels for elevation, especially in patients with renal impairment**	**Assess for hypertension before giving because initially this drug can cause hypertension**	**Assess patients kidney and liver function before administration because this drug is hard on those two organs.**
Client Teaching needs (2)	**Take with food or after meals because it may cause GI upset; advise patient with tartrazine allergy not to take aspirin.**	**Tell client that stopping the drug suddenly may cause life threatening effects; Monitor BP and pulse regularly and report any changes**	**Tell patient not to rub the site after giving the injection to minimize bruising; review safe handling and disposal or syringes and needles.**	**Tell client eat chicken, fish, lean red meat, and turkey as well as vitamin C rich foods; Avoid foods that impair iron absorption such as milk and dairy products**	**Take once per day and follow medication regimen; Do not crush, chew, or break this medication. (Sidhu and Akhondi, 2020)**

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). 2019 nurse's drug handbook (18th ed.). Jones & Bartlett Publishers.

Sidhu, Gursharan, and Hossein Akhondi. "Loratadine." *PubMed*, StatPearls Publishing, 2020, www.ncbi.nlm.nih.gov/books/NBK542278/.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** Alert **Orientation:** Client is oriented to self, location, time or situation. A&OX4 **Distress:** Client is in a pleasant mood and is not distressed. Client did show signs of distressed when exerting herself. **Overall appearance:** The is well kept, well nourished and in a good mood. She was very interactive with me and her daughter that was there visiting.	**Client was awake and orientated to person, place, time, and situation X4. Client responded well to my questions and was interacting well with me and her daughter that was in her room. Client did not show signs of distress with the expectation of labored breathing when client was getting up to go to the bathroom.**

INTEGUMENTARY (2 points): **Skin color:** pink, white, normal for race **Character:** Dry and Intact **Temperature:** warm **Turgor:** Loose **Rashes:** none **Bruises:** none **Wounds:** none **Braden Score:** 20 **Drains present: Y☐ N ☒** **Type:**	**Braden Score: 20** **This client was pink/white, normal for race color. Client's skin was dry, warm, and intact with a lose skin turgor but showed adequate hydration and normal for age. Client had no rashes, bruises, or wounds. Client had no drains present.**
HEENT (1 point): **Head/Neck:** Trachea is midline, oral mucosa is most and intact. Head is symmetrical and normocephalic, Uvula is midline. No tonsil exudate noted. Tongue is pink and moist. **Ears:** TM are pearly silver and no abnormal drainage was noted bilaterally **Eyes:** PERRLA, sclera was white and there were no conjunctival inflammation or abnormalities. Client's eyes were symmetrical bilaterally. **Nose:** Septum is midline. No epistaxis. **Teeth:** Client has top dentures that were intact and not cracked. Dentures are well taken care of. Bottom teeth are not cracked and normal for race.	**This client's head is normocephalic. Trachea is midline with oral mucosa and tongue being pink, moist and intact. Uvula is midline and tonsil exudate is not noted. Client's tympanic membrane (TM) was pearly silver bilaterally and no abnormal drainage bilaterally. PERRLA was noted with sclera appearing white bilaterally with no conjunctival inflammation or drainage, bilaterally. Nasal septum is midline with no epistaxis noted.**
CARDIOVASCULAR (2 points): **Heart sounds:** S1, S2, heart sounds are assaulted **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** Normal Sinus Rhythm **Peripheral Pulses:** +3 bilaterally for radial pulse and +3 bilaterally for pedal pulses **Capillary refill:** <3 seconds **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	**Auscultated S1 and S2 Normal Sinus Rhythm. Client had 3+ bilaterally radial pulse and 3+ bilaterally pedal pulses. Client had a capillary refill or less than 3 seconds with no edema, or neck vein distention noted.**
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Client's respirations were equal bilaterally, Posterior and Anterior in all lobes. There were no wheezes noted but lung sounds were diminished bilaterally in all lobes, posterior**

	and anterior. **Client becomes SOB with excretion and still uses BIPAP @ night.** **Client is on constant 3L of Oxygen.**
GASTROINTESTINAL (2 points): **Diet at home:** Regular as desired **Current Diet:** Heart Healthy, 1500 to 1700 calorie 75gram CHO **Height:** 160cm **Weight:** 80.5Kg **Auscultation Bowel sounds:** Present and active in all 4 quadrants **Last BM:** 02/28 in the evening **Palpation: Pain, Mass etc.:** No pain or masses noted **Inspection:** **Distention:** none **Incisions:** none **Scars:** none **Drains:** none **Wounds:** none **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Client explained she was not on any special diet at but likes to eat healthy if possible. While at the hospital the client is on a heart healthy diet with a 1500 to 1700 calorie 75gram CHO. Client's Bowel sounds are present and active in all four quadrants. The client reports no pain and there was no pain with palpitation or masses noted.**
GENITOURINARY (2 Points): **Color:** Yellow **Character:** Clear **Quantity of urine:** 175mL **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** No genital abnormalities noted **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Client is voiding 175mL of yellow clear urine with no pain while urinating. The client had no genital abnormalities and anatomy was normal for race.**
MUSCULOSKELETAL (2 points): **Neurovascular status:** Radial Pulse is 3+ bilaterally and pedal pulse is 3+ bilaterally. Skin is warm and intact bilaterally in upper and lower extremities. Client has no loss of feeling or pain. Skin is pale pink and not cyanotic.	**Fall Score: 60** **Client is a little shaky when going to the bathroom. She ambulates well however, the initial standing up process is what gives her most trouble. Client is able to perform active range of motion in both upper and lower**

ROM: Client demonstrates functional active range of motion in upper and lower extremities. **Supportive devices:** Walker **Strength:** 5/5 strength bilaterally in upper and lower extremities **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score:** 60 **Activity/Mobility Status:** 1 Assist with ambulation **Independent (up ad lib) ☐ No** **Needs assistance with equipment ☐** Client uses a walker with ambulation **Needs support to stand and walk☐** Client needs support with ambulation and uses walker to ambulate. Client is 1 assist	**extremities bilaterally. She showed equal strength bilaterally in all 4 extremities. Client is a 1 assist with a walker.** **Client is working on ambulating and the goal is be able to ambulate without COPD exacerbation.**
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation:** A&OX4 **Mental Status:** Appropriate for age **Speech:** Not slurred, easily understood, no difficulties talking **Sensory:** intact **LOC:** Alert	**Client speaks English well and does not struggle to communicate aside from being hard of hearing. She is alert and orientated X4. Client has equal strength bilaterally in upper and lower extremities. Sensory is intact and LOC is alert.**
PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** spending time with family **Developmental level:** Bachelors **Religion & what it means to pt.:** Baptist **Personal/Family Data (Think about home environment, family structure, and available family support):**	**Client explains her coping methods as spending time with family. Her family come to see her daily and her sister has very close relationship with her. Client is very developed and has a high education level of a bachelors in accounting. Client is Baptist religion and attends it regularly. Client looks up to her religion. Client Family supports her well but she is widowed which does cause some of her depression. She has as great support group.**

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen

0730	**84**	**145/75**	**18**	**36.0**	**99%**
1100	**90**	**118/71**	**20**	**36.7**	**98%**

Vital Sign Trends: This client's baseline heartrate it within normal limits of 60-100. This client does have HTN which explains the slightly elevated HTN at 0730. This client had not received her medications, Metoprolol and Lisinopril yet which is why her HTN was on the rise. Client's oxygen level is staying between 95%-100% on constant 3L of oxygen.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	**Numeric**	**N/A There was no pain.**	**0/10**	**N/A There was no pain.**	**N/A Client was not in pain, so no interventions were done.**
1100	**Numeric**	**N/A There was no pain.**	**0/10**	**N/A There was no pain.**	**N/A Client was not in pain, no interventions were done.**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20G **Location of IV:** Right AC **Date on IV:** February 26th **Patency of IV:** Patent **Signs of erythema, drainage, etc.:** None **IV dressing assessment:** Clean, dry, and intact	Client has a 20G Saline Lock IV in her Right AC started on Feb. 26th. IV is patent with no signs of erythema or drainage noted. IV is clean dry and intact.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
300ML	**951ML**

Nursing Care

Summary of Care (2 points)

Overview of care: This student preformed a head to toe assessment on the client, administered medications, assisted with ambulation to the restroom multiple times throughout the day, preformed vital signs on this client. There were two pain assessments done on this client.

Procedures/testing done: No procedures or testing were done on this client while I was at clinical. Before clinical there was a chest X-ray completed with results of left sided opacity.

Complaints/Issues: Client reported there were no complaints or issues during the period of care.

Vital signs (stable/unstable): Client's Vital signs were stable with an exception of a slight elevation of the 0730 blood pressure reading. The client's blood pressure was 145/75 which was slightly higher than normal, however the client was due for her HTN medications at 0800 which is likely the reasoning for the slight elevation. Temperature, pulse, respiration, and oxygen were all within normal limits.

Tolerating diet, activity, etc.: This client is on a heart healthy diet and tolerating it well. Client is staying hydrated and is eating the nourishing foods. Client's activity level is slightly limited due to shortness of breath on excretion. However, client is working on the ambulation process with goals of going home within the next 2-3 days.

Physician notifications: The doctor was not there during clinical visit, nor was her contacted for this clinical visit.

Future plans for patient: The future plans for this client is to be able to ambulate around her living space without becoming short of breath. Client's plans include ambulation improvement.

Discharge Planning (2 points)

Discharge location: This client is to likely be discharged back to her home. Client is widowed and lives at home alone, however her children help to care for her around the house. Client's home is in an apartment facility with lots of people, which indicate there are people there to help her if things do not go as planned. This nursing student believes that if this client's oxygen levels increase with ambulation then going back home is in her near future.

Home health needs (if applicable): This client will need to stick to her medication regimen and physician's order at home to decrease worsening of COPD.

Equipment needs (if applicable): Client will continue to use at home oxygen as she used to. Client will also continue to walker to aid with ambulation needs.

Follow up plan: Client will need to follow up with her provider for any worsening or un-relieving shortness of breath.

Education needs: This client will need education needs will include walker education for client's ambulation. This client will also need educated on medications and reasonings for adherence to the medications. Client will need to be educated on rest periods and exertion periods to ensure the client does not pass her limitations.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

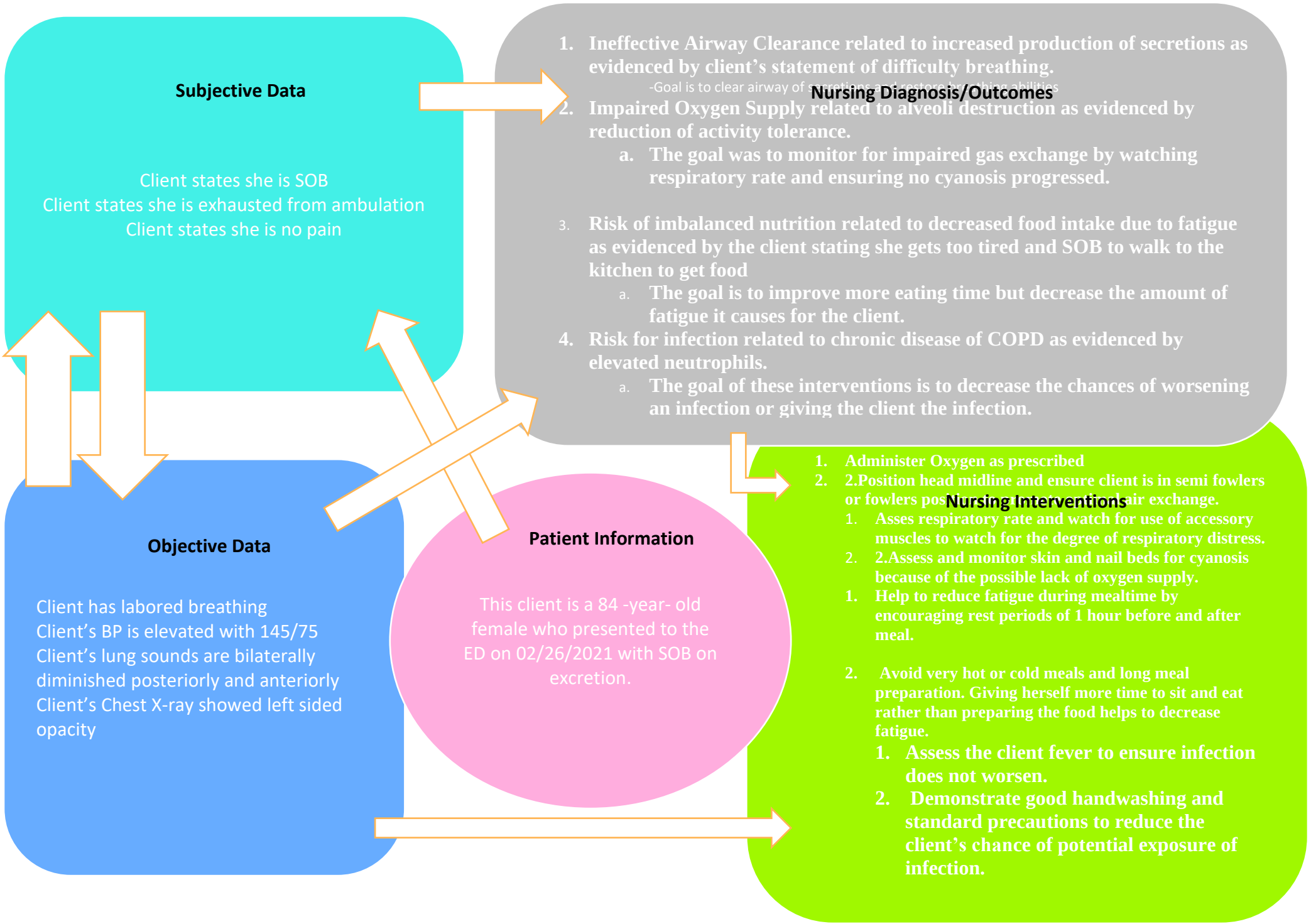
Nursing Diagnosis	Rational	Intervention (2 per	Evaluation

• Include full nursing diagnosis with "related to" and "as evidenced by" components	• Explain why the nursing diagnosis was chosen	**dx)**	• How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective Airway Clearance related to increased production of secretions as evidenced by client's statement of difficulty breathing.	**This nursing diagnosis was chosen because client was dyspneic with excretion and having a hard time ambulating without struggling to breath.**	**1.Administer Oxygen as prescribed** **2.Position head midline and ensure client is in semi fowlers or fowlers position to promote optimal air exchange.**	**The client was compliant to these interventions and was tolerant. The goal is to improve her oxygen status to above the 95 percentiles. After putting oxygen on and positioning client in fowler position, the client began to calm down and oxygen levels increased.** **The family responded well and was happy to see their loved one become less stressed.**
2. Impaired Oxygen Supply related to alveoli destruction as evidenced by reduction of activity tolerance.	**This nursing diagnosis was chosen because this client explained she could not walk to the bathroom without becoming short of breath. Client was concerned about doing ADL's if she can't even go to the bathroom without becoming short of breath.**	**1. Asses respiratory rate and watch for use of accessory muscles to watch for the degree of respiratory distress.** **2.Assess and monitor skin and nail beds for cyanosis because of the possible lack of oxygen supply.**	**The client was compliant to these interventions and was tolerant to let this nursing student do the needed assessments. The goal was to monitor for impaired gas exchange by watching respiratory rate and ensuring no cyanosis progressed. The outcome of this was that the client did not worsen and gas exchanged was improved.** **The family was happy with these interventions and were compliant to our requests.**
3. Risk of imbalanced	**This nursing diagnosis was**	**1. Help to reduce**	**The client was compliant to this nursing**

nutrition related to decreased food intake due to fatigue as evidenced by the client stating she gets too tired and SOB to walk to the kitchen to get food	**chosen because the client stated she cannot ambulate to the kitchen without becoming short of breath. If this client is too tired she will not get up to get the needed food.**	**fatigue during mealtime by encouraging rest periods of 1 hour before and after meal.** **2 Avoid very hot or cold meals and long meal preparation. Giving herself more time to sit and eat rather than preparing the food helps to decrease fatigue.**	**interventions and was happy to have tips to help with her at home. The goal is to improve more eating time but decrease the amount of fatigue it causes for the client. The outcome is the client being able to make it to the kitchen with still enough energy to eat the meals.** **The family was very happy with these interventions and was ready for their loved one to get her nutritional levels back.**
4. Risk for infection related to chronic disease of COPD as evidenced by elevated neutrophils.	**This lab was chosen because the client's neutrophils were elevated which indicates infection.**	**1. Assess the client fever to ensure infection does not worsen.** **2. Demonstrate good handwashing and standard precautions to reduce the client's chance of potential exposure of infection.**	**Client was compliant and tolerant of these nursing interventions. Client stated she does not feel bad and she does not feel any signs of infections. The goal of these interventions is to decrease the chances of worsening an infection or giving the client the infection. The outcome is the client stays infection free.** **The family was compliant and reacted well to these interventions.**

Other References (APA):

Concept Map (20 Points):


Subjective Data
Client states she is SOB
Client states she is exhausted from ambulation
Client states she is no pain
Nursing Diagnosis/Outcomes
1. Ineffective Airway Clearance related to increased production of secretions as evidenced by client's statement of difficulty breathing.
-Goal is to clear airway of secretions and restore breathing abilities
2. Impaired Oxygen Supply related to alveoli destruction as evidenced by reduction of activity tolerance.
a. The goal was to monitor for impaired gas exchange by watching respiratory rate and ensuring no cyanosis progressed.
3. Risk of imbalanced nutrition related to decreased food intake due to fatigue as evidenced by the client stating she gets too tired and SOB to walk to the kitchen to get food
a. The goal is to improve more eating time but decrease the amount of fatigue it causes for the client.
4. Risk for infection related to chronic disease of COPD as evidenced by elevated neutrophils.
a. The goal of these interventions is to decrease the chances of worsening an infection or giving the client the infection.
Objective Data
Client has labored breathing
Client's BP is elevated with 145/75
Client's lung sounds are bilaterally diminished posteriorly and anteriorly
Client's Chest X-ray showed left sided opacity
Patient Information
This client is a 84 -year- old female who presented to the ED on 02/26/2021 with SOB on excretion.
Nursing Interventions
1. Administer Oxygen as prescribed
2. 2.Position head midline and ensure client is in semi fowlers or fowlers position to promote optimal air exchange.
1. Asses respiratory rate and watch for use of accessory muscles to watch for the degree of respiratory distress.
2. 2.Assess and monitor skin and nail beds for cyanosis because of the possible lack of oxygen supply.
1. Help to reduce fatigue during mealtime by encouraging rest periods of 1 hour before and after meal.
2. Avoid very hot or cold meals and long meal preparation. Giving herself more time to sit and eat rather than preparing the food helps to decrease fatigue.
1. Assess the client fever to ensure infection does not worsen.
2. Demonstrate good handwashing and standard precautions to reduce the client's chance of potential exposure of infection.