N321 Care Plan 3

Lakeview College of Nursing

Junmian Zhao

Demographics (3 points)

Date of Admission 3/9/2021	**Patient Initials** JJ	**Age** 48	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Self-employed	**Marital Status** Married	**Allergies** Seasonal
Code Status Full code	**Height** 5’3”	**Weight** 155 lbs.	

Medical History (5 Points)

Past Medical History: HTN, Psoriasis, Hypothyroidism, GERD, Diabetes

Past Surgical History: No material available

Family History:

Mother – Passed away from cancer when Janis was a child.

Father – HTN, CHF, Diabetes.

Brother – Cancer and HTN.

Social History (tobacco/alcohol/drugs): Patient denies drugs and alcohol use. Patient smokes 1 pack of cigarettes a day.

Assistive Devices: No assistive devices

Living Situation: Live with husband and 3 children at home

Education Level: Graduated high school and attended business college with an associate.

Admission Assessment

Chief Complaint (2 points): Shortness of breath

History of present Illness (10 points): Patient JJ is a 48-year-old woman, 155 lbs. 5’3”. She came to ER because she was suffocating at 0100. JJ states she developed a cold over a week ago and treating with OTC cold medications. A couple days ago, she noticed SOB, productive cough with greenish sputum. She states she is weak, and her husband had to help her get to the car. JJ

complains nausea, and back/chest pain 7/10. JJ also states she has been diagnosed with diabetes 6 month ago but does not have a good understanding. JJ is alert and anxious, her skin looks pale and warm to touch, her mucous membranes are dry. She was breathing using accessory muscles. Her vital signs were obtained. BP: 150/98, pulse: 110/min, which is sinus tachycardia, RR: 28/min, O2 saturation: 90% on Cart oxygen 2 L/min, blood sugar: 336. In ER, JJ has been given: 1.5 mg Dilaudid to treat her pain, 2 L/min Cart oxygen, and 1 hour albuterol nebulizer.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Pneumonia

Secondary Diagnosis (if applicable): Uncontrolled diabetes

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

Pneumonia is inflammation of the lung tissue in which alveolar air spaces fill with purulent, inflammatory cells and fibrin. Infection by bacteria or viruses is the most common cause. When pneumonia occurs, the ventilation and diffusion of the lung will be affected because of the inflammatory reaction (Capriotti, 2020). Both exudates produced by alveoli and the presence of WBCs narrow the airway, interfere with the diffusion of O2 and CO2 which results in hypoventilation. The sounds heard with the stethoscope over the alveoli opening against the exudative fluid are crackles. The venous blood comes in the lung but cannot get oxygenated blood, hypoxemia eventually happens (Capriotti, 2020). Normally the bacterial pneumonia starts at a sudden onset of symptom. Cough with or without productive sputum, chills, fever are early signs. Pleuritic chest pain, which is pain with deep breaths; dyspnea; hemoptysis; and decreased exercise tolerance develop as the disorder continues (Cheever & Hinkle, 2018).

The patient JJ presented in ER because she was suffocating. She looks pale and anxious. She states that she is weak and cough with greenish sputum. She also states she has back pain 7/10. Her vital signs were obtained in ER, BP was elevated at 150/98, breathing using accessory muscle at a rate of 28/min, sinus tachycardia with pulse at 110/min on cardiac monitor, oxygen saturation was 90% on 2L NC, blood sugar was 336. In ER, she was given 1.5 mg Dilaudid to treat her pain, Tylenol to treat her fever, 1 hour albuterol nebulizer to release her SOB. Her head of bed was elevated. 2L NC cart oxygen was given. CBC, CMP, Chest x-ray, ABGs, and sputum culture were ordered. Based on her signs and symptoms, and the lab results. Her diagnosis is pneumonia.

Pathophysiology References (2) (APA):

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

Capriotti, T. (2020). *Davis Advantage for Pathophysiology Introductory Concepts and Clinical Perspectives* (2nd ed.). F.A. Davis

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	4.2 -5.4 x 10^6/UL	5.0 x 10^6/ UL	N/A	
Hgb	12.0 -16.0 g/dL	11.0 g/dL low	11.0 g/dL low	
Hct	37.0% - 47.0%	40.0%	40.0%	
Platelets	150 – 400 x 10^3/UL	N/A	N/A	
WBC	4.3 -11.0 x 10^3/UL	18.0 x 10^3/UL high	14.0 x 10^3/UL high	Infection process

Neutrophils	37.0% - 85.0 %	N/A	N/A	
Lymphocytes	20.0% - 45.0%	N/A	N/A	
Monocytes	0.0 - 15.0%	N/A	N/A	
Eosinophils	0.0 - 6.0%	N/A	N/A	
Bands	- 10.0%	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 mEq/L	158 mEq/L high	133 mEq/L low	High sodium level could be caused by dehydration due to increased respiratory rate 28/min, and temp. 101.1 F which can result in an increase in insensible fluid loss through skin and exhalation. Low sodium level could be the rapid IV fluid therapy.
K+	3.5 – 5.0 mEq/L	2.3 mEq/L low	3.6 mEq/L	Dehydration affects the balance of sodium and potassium.
Cl-	95 – 110 mEq/L	108 mEq/L	N/A	
CO2	23 – 31 mEq/L	N/A	N/A	
Glucose	70 – 110 mg/dL	405 mg/dL high	225mg/dL high	Uncontrolled diabetes
BUN	8 – 25 mg/dL	28 mg/dL high	18 mg/dL	Elevated BUN indicates dehydration
Creatinine	0.70 -1.50 mg/dL	0.9 mg/dL	0.1mg/dL low	A low serum level of creatinine indicates reduced muscle mass, liver disease, significant fluid overload and poor nutritional status but also augmented renal clearance as seen in pregnancy. Besides, it is said low serum creatinine level is a new risk factor of type 2 diabetes (Harita et al., 2009). That's all I learned. I can link this situation to the patient with DM in addition to

				Tylenol causes liver damage.
Albumin	3.5 – 5.0 g/dL	N/A	N/A	
Calcium	8.4 – 10.3 mg/dL	9.0 mg/dL	N/A	
Mag	1.3-2.3 mg/ dL	2.2 mg/dL	N/A	
Phosphate	2.5-4.5 mg/ dL	2.6 mg/dL	N/A	
Bilirubin	0.1-1.4 mg/ dL	N/A	N/A	
Alk Phos	40 – 150 U/ L	N/A	N/A	
AST	10-30 U/mL	25	N/A	
ALT	10-40 U/mL	16	N/A	
Amylase	25-125 u/L	N/A	N/A	
Lipase	12-70 u/mL	N/A	N/A	
Lactic Acid	0.5-2.2 mEq/L	3.6 mEq/L high	N/A	Lactic acid indicates hypoxia (Foucher, 2020).

Other Tests 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
INR	0.8-1.2	N/A	N/A	
PT	Male:9.6-11.8 sec. Female: 9.5-11.3 sec.	N/A	N/A	
PTT	30-40 sec.	N/A	N/A	
D-Dimer	≤ 250 mg/mL	150	N/A	

BNP	<100 pg/mL	N/A	N/A	
HDL	>60 mg/dL	N/A	55 mg/dL	Smoke, diabetes, are risk factors
LDL	<130 mg/dL	N/A	130 mg/dL	
Cholesterol	<200 mg/dL	N/A	300 mg/dL high	Smoke, diabetes, are risk factors
Triglycerides	<150 mg/dl	N/A	188 mg/dL high	Smoke, diabetes, are risk factors
Hgb A1c	4%-5.6%	12.2% high	N/A	Uncontrolled diabetes
TSH	0.4-4.5 mU/ L	12.0 mU/L high	N/A	A sign of hypothyroidism.

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	Yellow & Clear	N/A	N/A	
pH	5.5 – 7.5	N/A	N/A	
Specific Gravity	1.015 – 1.025	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	Negative	N/A	N/A	
RBC	Negative	N/A	N/A	
Leukoesterase	Negative	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 Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	None Seen	N/A	N/A	
Blood Culture	None Seen	N/A	N/A	
Sputum Culture	None Seen	*Staph. aureus*	N/A	Indicates bacterial infection. Evidence for pneumonia.
Stool Culture	None Seen	N/A	N/A	

Lab Correlations Reference (1) (APA):

Harita, N., Hayashi, T., Sato, K. K., Nakamura, Y., Yoneda, T., Endo, G., & Kambe, H. (2009). Lower serum creatinine is a new risk factor of type 2 diabetes: the Kansai healthcare study. *Diabetes care*, *32*(3), 424–426. https://doi.org/10.2337/dc08-1265

Foucher, C. (2020, November 21). Lactic acidosis. Retrieved March 18, 2021, from https://www.ncbi.nlm.nih.gov/books/NBK470202/

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Chest x-ray with left and right lower lobes. ABGs

Diagnostic Test Correlation (5 points):

Chest x-ray:

Indication: Patient complains chest/back pain 7/10, SOB, productive cough with greenish sputum. Patient was breathing using accessory muscles.

Result: On the image, the cloudy area (white spot) on both side of the lung shows pneumonia.

ABGs

	Normal value	Admission value	Today's value	Reason for abnormal

PH	7.35 – 7.45	7.44	7.35	
PaCO2	35 – 45 mm Hg	28 mm Hg Low	37 mm Hg	Decreased ventilation and gas perfusion result in hypercapnia, indicate respiratory acidosis
HCO3	22 – 26 mEq/L	24 mEq/L	22 mEq/L	
PaO2	90 – 100 mm Hg	54 mmHg Low	N/A	Decreased ventilation and gas perfusion result in hypoxemia, indicate respiratory acidosis.

Diagnostic Test Reference (1) (APA):

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

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

Home Medications (5 required)

Brand/ Generic	Lisinopril/ Zestril	Pantoprazole/ Protonix	Metformin/ Fortamet	Levothyroxine/ Synthroid	Guselkumab/ Tremfya
Dose	20 mg	40 mg	500 mg	50 mcg	1 Injection (the material did not tell how many mg, in the drugs book, it is 100 mg)
Frequency	Once a day	Once a day in the morning	Twice a day	Once a day	Every 8 weeks (in the drugs book, it is said, week 0, week 4, and every 8 weeks thereafter.)
Route	Oral	Oral	Oral	Oral	SubQ
Classification	Anti-hypertensive/ ACE inhibitor	Antiulcer/ Proton pump inhibitor	Antidiabetic/ Biguanide	Thyroid hormone replacement/ Synthetic T4	Antipsoriatic /Monoclonal antibody
Mechanism of Action	Inhibits conversion of angiotensin I to angiotensin II	Irreversibly inhibits the final step in gastric acid production by blocking the exchange of intracellular H+ and	May promote storage of excess glucose as glycogen in the liver, which reduces glucose production.	Replaces endogenous thyroid hormone	Prevents release of proinflammatory chemokines and cytokines

		extracellular K+, thus preventing H+ from entering the stomach and additional HCL from forming.			
Reason Client Taking	Treatment of HTN, the pt. has a history of HTN	This drug treats erosive esophagitis associated with GERD, the pt has a history of GERD.	Patient is a diabetes, fortamet reduces blood glucose level.	The patient has a history of hypo-thyroidism	The patient has a history of psoriasis.
Contrain-dications (2)	Concurrent aliskiren use in pt with diabetess or pt with renal impairment. Hyper-sensitivity to lisinopril and other ACE inhibitor.	Concurrent therapy with rilpivirine-containing products. Hyper-sensitivity to pantoprazole, substituted benzi-midazoles, or their components.	Advanced renal disease. Hyper-sensitivity to metformin or its components.	Acute MI Hyper-sensitivity to levothyroxine or its components.	Hyper-sensitivity to guselkumab or its components
Side Effects/ Adverse Reactions (2)	Arrhythmias MI	Headache Anxiety Hepatic failure	Hypoglycemia Thrombo-cytopenia Lactic acidosis	Anxiety Hyper-thyroidism Worsening of diabetic control	Headache, migraine Diarrhea, elevated liver enzymes.
Nursing Consi-derations (2)	Be aware that lisinopril should not be given to a pt who is hemo-dynamically. Use cautiously in pt with fluid volume	Don't give the drug within 4 weeks of testing for *H. pylori*. Administer delayed-release oral suspension	Know that metformin should never be given to a pt with severe renal impairment. Give metformin with food.	Be aware that levothyroxine therapy is not to be used for treatment of obesity or for weight loss. Use levothyroxine cautiously in	Assess pt. for TB before drug therapy. Remove prefilled syringe from fridge and allow to warm to room temp.

	deficit, HF, impaired renal function, or sodium depletion.	30 minutes before a meal mixed in apple juice or applesauce.		the elderly and patients with underlying CVD.	

Hospital Medications (5 required)

Brand /Generic	Toradol / Ketorolac tromethamine	Tylenol/ Aceta-minophen	Zosyn/ Piperacillin Tazobactam	Solu Medrol/ Methyl-prednisolone	Ipratropium bromide/ Atrovent
Dose	30 mg	650 mg	3.375g	125 mg	3 mL
Frequency	Every 8 hours	Every 4-6 hours PRN	Every 6 hr.	Every 6 hr.	Every 4 hr.
Route	IV	Oral	IV	IV	Inhale
Classi-fication	Analgesic/ NSAID	Antipyretic, nonopioid/ Nonsalicylate	Piperacillin/ antibiotic Tazobacta m/ beta lactamase inhibitor	Corti-costeroid/ Gluco-corticoid	Broncho-dilator/ Anti-cholinergic

Mechanism of Action	Blocks cyclo-oxygenase, the enzyme needed to synthesize prostaglandins, which mediate inflammatory response and cause local vasodilation, pain, and swelling.	Inhibits the enzyme cyclo-oxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system. This drug also acts directly on temperature-regulating center in hypothalamus by inhibiting synthesis of prostaglandin E2	Killing the bacteria and preventing their growth.	Binds to intracellular gluco-corticoid receptors and suppresses inflammatory and immune responses by inhibiting accumulation of monocytes and neutrophils at inflammation sites.	Relaxes smooth muscles and cause broncho-dilation by blocking acetyl-choline's effects in bronchi and bronchioles.
Reason Client Taking	Relief the patient's pain.	Treat pt's fever. Her temp. was 101.1 F when she presented in ER.	This combination injection is used to treat bacterial infections in many different parts of the body such as lung.	In addition to antibiotic, corti-costeroids significantly reduced mortality and morbidity for severe pneumonia.	The patient has pneumonia with SOB and productive cough. This drug open the pt's airway, release the symptom SOB.
Contra-indications (2)	Advanced renal impairment or risk of renal impairment. Labor and delivery.	Hyper-sensitivity to aceta-minophen or its components, severe hepatic impairment, severe active liver disease.	Allergic to penicillin family drugs. Drugs in the cephalosporin class	Fungal infection Hyper-sensitivity to cow's milk for Solu-Medrol 40-mg formulation.	Hyper-sensitivity to atropine, ipratropium bromide, or their components. Hyper-sensitivity to peanuts.
Side Effects/ Adverse	GI bleeding Respiratory depression	Hypotension Hepatotoxicity Thrombo-	Thrombo-cytopenia Diarrhea	Adrenal insufficiency Pulmonary	A fib. Supra-ventricular

Reactions (2)		cytopenia		edema	tachycardia
Nursing Con-siderations (2)	Be aware that NSAIDs like Toradol be avoided in pt. with a recent MI Know that the risk of HF increases with Toradol	Use cautiously in pt. with hepatic impairment or active hepatic disease, alcoholism. Monitor liver function test results, including AST, ALT, bilirubin, and creatinine levels.	This combination drugs could cause severe allergic reaction, include anaphylaxis, watch closely the S&S of allergy such as hives, trouble breathing and swallowing. Teach patient about the side effects.	Administer with extreme cautiously in pt. with a recent MI. Give the drug with food to reduce GI irritation.	Use cautiously in patients with angle-closure glaucoma. When using a nebulizer, apply a mouthpiece to prevent drug from leaking out around mask and causing blurred vision or eye pain.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). *2020 nurse's drug handbook* (9th ed.). Jones & Bartlett Learning.

Stern, A., Skalsky, K., Avni, T., Carrara, E., Leibovici, L., & Paul, M. (2017). Corticosteroids for pneumonia. *The Cochrane database of systematic reviews*, *12*(12), CD007720. https://doi.org/10.1002/14651858.CD007720.pub3

Piperacillin and Tazobactam (INTRAVENOUS Route) description and brand names. (2021, February 01). Retrieved March 15, 2021, from https://www.mayoclinic.org/drugs-supplements/piperacillin-and-tazobactam-intravenous-route/description/drg-20072716

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	JJ is alert and orientated. She was anxious and breathing using accessory muscles. Overall appearance was normal and well groomed.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 20/23 **Drains present: Y☐ N ☒** **Type:**	The skin is intact, pale, dry and hot. No rashes, bruises, and wounds no drains noted. Skin turgor is return within A seconds. Braden score is 20/23.
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	JJ looks pale. Her lips are dry and no JVD noted. PERRLA noted bilaterally. No abnormalities on ears, eyes, nose and teeth noted.
CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:**	S1 and S2 auscultated with no murmur. Sinus tachycardia at 110/min with a regular rhythm is observed on cardiac monitor. All peripheral pulses are palpable and strong bilaterally. Nailbeds are pale, and the capillary refill is A seconds bilaterally. No neck vein distention noted. No edema.
RESPIRATORY (2 points): **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	JJ is breathing using accessory muscles. Wheezing heard in lower lobes bilaterally. JJ complains chest tightness and back pain, and productive cough with greenish sputum.
GASTROINTESTINAL (2 points): **Diet at home:** Regular diet **Current Diet:** Clear liquid **Height:** 5'3" **Weight:** 155 lbs. **Auscultation Bowel sounds:** **Last BM:** N/A	The abdomen is normal with normal bowel sounds in all quadrant. No tenderness, no pain. JJ complains nausea.

Palpation: Pain, Mass etc.: **Inspection:** **Distention:** No **Incisions:** No **Scars:** No **Drains:** No **Wounds:** No **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	
GENITOURINARY (2 Points): **Color:** Yellow **Character:** Clear **Quantity of urine:** N/A **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** Normal **Catheter: Y ☐ N ☒** **Type:** **Size:**	JJ has no genitourinary issue.
MUSCULOSKELETAL (2 points): **Neurovascular status:** **ROM:** **Supportive devices:** NO **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☒ N☐** **Fall Score: 10** **Activity/Mobility Status:** **Independent (up ad lib)** ☐ Independent **Needs assistance with equipment** ☐ NO **Needs support to stand and walk**☐ NO	She has normal ROM bilaterally. All extremities strength are equal bilaterally. She is independent with no supportive devices, no ADL assistance.
NEUROLOGICAL (2 points): **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	JJ is alert, orientated and anxious.

PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** Effective Developmental level: Adult **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	JJ speaks English and belongs to the first united Methodist church. She lives with her husband and three children. She is a housewife and sells Tupperware online.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	110/min	150/98	28/min	101.1 F	90% on 2L NC
1130	108/min	126/84	24/min	N/A	95% 3L NC

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0730	1-10	Back	7/10	Dull	1.5 mg Dilaudid
1130	1-10	back	5/10	Dull	Toradol

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 18 gauge **Location of IV:** Left Forearm **Date on IV:** 3/9/2021 **Patency of IV:** Patent **Signs of erythema, drainage, etc.:** No tenderness, redness noted. **IV dressing assessment:** Dry and intact	0.9% NS with 20 mg KCL at 100 ml/hr.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
N/A	N/A

Nursing Care

Summary of Care (2 points)

Overview of care:

Procedures/testing done: Chest x-ray, EKG, CBC, CMP, Sputum Culture, ABGs and Cardiac Panel

Complaints/Issues: No significant complaint except chest pain at 5/10 after Toradol.

Vital signs (stable/unstable): Before discharge, the patient's vital signs are stable except the chest pain at 5/10 after Toradol.

Tolerating diet, activity, etc.: The patient was cooperating with clear liquid diet and tolerating with moderate activities under the nurse's supervising.

Physician notifications: Educated the patient to inform her primary provider about the new diagnosis of pneumonia.

Future plans for patient: The patient will discharge to live with her husband and children at home. She will receive follow-up care from outpatient service and her primary care provider.

Discharge Planning (2 points)

Discharge location: The patient will be discharged home with her family.

Home health needs (if applicable): No home health needs are necessary this time.

Equipment needs (if applicable): No equipment needed.

Follow up plan:

1. The patient will have follow-up plan with the outpatient service within two days

2. The patient will have follow-up plan with her primary care provider within 7 days after discharge from hospital.
3. The patient will have follow-up plan with her primary care provider after 2 month to check her cholesterol level.

Education needs:

1. Educate JJ about how to manage medications. Due to her history of nonadherence to the medication. Emphasize the importance of taking the full course of the medications. Do not skip, follow the prescription.
2. Educate JJ the new medications. Indication, side effects, contraindications, and allergies.
3. Educate JJ what is DM and how to manage her blood sugar level.
4. Educate diet high in fiber, low in fat, low in simple sugar.

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

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
Ineffective airway clearance related to sputum production evidenced by breathing using accessory muscles.	The inflammation process narrows the airway and reduces ventilation and perfusion of the gas, eventually results in hypoxemia.	**1.** Elevate HOB. **2.** Assess cough effectiveness and productivity	The patient (should) feels better after raising the HOB and follows the nurse's instruction to cough up. The goal is the patient will keep the airway patent, absence of SOB and using accessory muscles.

Dehydration related to insensible loss occurring with tachypnea (28/min) and fever (101.1 F) evidenced by dried and cracked lips.	An increased respiratory rate and temp. lead to an increase in insensible fluid loss during exhalation and can lead to dehydration, and inadequate moisture in the airways makes respiratory mucus thick and difficult to cough up.	**1.** Assess intake and output I&O, be alert to and report urinary output less than 30 mL/hr or 0.5 mL/kg/hr **2.**Encourage fluid intake 2-3 L daily. Maintain IV lfuid therapy as prescribed.	Before discharge, the patient drinks water 2-3 L daily and be able to report urinary output. The desired outcome for this care is the absence of dehydration such as dry and cracked lips, normal urinary output, and balanced I & O.
Deficient knowledge (maybe) related to unfamiliarity with information as evidenced by uncontrolled diabetes at blood sugar of 336mg/d/L.	DM can affect many body systems. Uncontrolled blood sugar can lead to neuropathy, CAD, kidney damage. It is important that teach the patient self-care of DM.	**1.**Explain to patient the long-acting insulin and regular insulin. **2.** Teach patient to follow a diet that is low in simple sugars, low in fat, and high in fiber and whole grains.	The desired outcome of this care is before discharge, patient will demonstrate knowledge of insulin injection, symptoms, and treatment of hypoglycemia and diet.

Other References (APA):

Vera, M. (2021, March 04). Diabetes Mellitus nursing Care Plans: 17 Nursing diagnosis. Retrieved March 18, 2021, from https://nurseslabs.com/diabetes-mellitus-nursing-care-plans/2/

Vera, M. (2020, December 05). Pneumonia nursing Care Plans: 10 Nursing diagnosis. Retrieved March 18, 2021, from https://nurseslabs.com/pneumonia-nursing-care-plans/

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: Medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Elsevier.

Concept Map (20 Points):

Subjective Data

JJ presents in ER because of SOB and chest pain with 7/10. She states had a cold over one week ago, and then d[illegible] also states that she has back/chest pain at 7/10. She feels weak and her husband had to help her to get into the car. She has productive cough with greenish sputum. She has been diagnosed DM six months ago, but she does not have a good understanding. She also has history of HTN, Psoriasis, Hypothyroidism, and GERD. Medications she takes at home are: lisinopril, Tremfya injection, multi vitamin, Synthroid, which h[illegible] had refilled for 3 months, [illegible], Metformin, and Levemir.

Nursing Diagnosis/Outcomes

[illegible]ffective airway clearance related to sputum production evidenced by breathing using accessory muscles.
Desired outcome: the patient will keep airway patent, absence of SOB and using accessory muscles.
Dehydration related to insensible loss occurring with tachypnea (28/min) and fever (101.1 F) evidenced by dry and cracked lips.
Desired outcome: the absence of dehydration such as dry and cracked lips, normal urinary output, and balanced I & O.
Deficient knowledge (maybe) related to unfamiliarity with information as evidenced by uncontrolled diabetes at blood sugar of 336/dL.
The desired outcome: before discharge, patient will demonstrate knowledge of insulin injection, symptoms, and treatment of hypoglycemia and diet.

Objective Data

JJ is 5'3", and weigh 155 lbs. Her admission vitals are: BP 150/98, Pulse 110/min, temperature 101.1 F, RR 28/min, oxygen saturation is 90% on 2L cart oxygen, Blood Glucose 336. She is alert but anxious, and she is breathing using accessory muscles. She is pale and warm to touch. She is coughing up yellowish green color sputum.

Patient Information

JJ is a 48-year-old Caucasian female, full-cold. She is admitted on 3/9/2021. Her primary diagnosis is pneumonia, secondary diagnosis is uncontrolled diabetes.
JJ has seasonal allergy, allergic reaction is N/A.

Nursing Interventions

1. Elevate HOB.
2. Assess cough effectiveness and productivity.

[illegible] Assess intake and output I&O, be alert to and report urinary output less than 30 mL/hr or 0.5 mL/kg/hr
2.Encourage fluid intake 2-3 L daily. Maintain IV fluid therapy as prescribed.

1.Explain to patient the long-acting insulin and regular insulin.
2. Teach patient to follow a diet that is low in simple [illegible]ugars, low in fat, and high in fiber and whole grains.