N311 Care Plan 3

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N311: Foundations of Professional Practice

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Demographics (5 points)

Date of Admission 9/7/23	**Client Initials** D.J.T.	**Age** 61	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Was a carney worker for many years	**Marital Status** Single	**Allergies** Adhesive Tape
Code Status Full Code	**Height** 54.0 in	**Weight** 91.6 lbs.	

Medical History (5 Points)

Past Medical History: Broken neck (1965), Essential primary hypertension, Chronic respiratory failure unspecified whether with hypoxia or hypercapnia, mild protein-calorie malnutrition, other asthma, hyperlipidemia unspecified, anemia unspecified, other specified arthritis unspecified site, atherosclerotic heart disease of native coronary artery without angina pectoris, generalized anxiety disorder, old myocardial infarction (2023)

Past Surgical History: C-section (1981), hysterectomy (2004), colostomy bag (2005; taken out later that year)

Family History: mom-healthy, dad-diabetes type ll with age along with heart problems, fraternal grandmother- had heart problems and died of a heart attack, fraternal grandfather- healthy, maternal grandparents- healthy, sister-diabetes, brother- healthy

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): Smokes cigarettes, has smoked about a pack a day since the patient was 18 years old, has not smoked for the last three weeks

Admission Assessment

Chief Complaint (2 points): Anxiety

History of Present Illness – OLD CARTS (10 points):

The patient's main complaint on 10/12/2023 is that she deals with quite a bit of anxiety. It has been going on ever since she can remember having health problems. The patient states that the anxiety can last a few minutes to days. The patient says, "I feel nervous, like the worst is going to happen." The anxiety becomes worse when she has any doctor's appointments or labs that are about to happen. The patient states, "I get nervous to see what the doctors are going to say." To make it feel better, the patient says she tries to think of memories from childhood or to talk to someone within Mattoon Rehab. The patient has seen providers for her anxiety in the past.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Hypertension

Secondary Diagnosis (if applicable): COPD, chronic respiratory failure unspecified whether with hypoxia or hypercapnia, mild protein-calorie malnutrition, other asthma, hyperlipidemia unspecified, anemia unspecified, other specified arthritis unspecified site, atherosclerotic heart disease of native coronary artery without angina pectoris, generalized anxiety disorder, old myocardial infarction

Pathophysiology

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

Hypertension is when a person's blood pressure is elevated higher than the normal range. The normal blood pressure range is 120 or lower for systolic and 80 or lower for diastolic. Hypertension affects a person's cardiovascular system, causing two main harmful effects: "it exerts high damaging forces against all the endothelial linings of the arteries. It also causes high

resistance against the heart's left ventricle" (Capriotti & Frizzell, 2020, p. 339). When the blood is forceful against the endothelial linings, it can cause "weakening and injury" to the vessel walls (Capriotti & Frizzell, 2020, p. 340). If the walls get injured, they can begin to narrow. Weakening the arterial vessel walls is dangerous because it could cause an aneurysm (Mayo Foundation for Medical Education and Research, 2022). "Over time, the constant pressure of blood moving through a weakened artery can cause a section of its wall to enlarge and form a bulge" (Mayo Foundation for Medical Education and Research, 2022). In hypertension, the heart's left ventricle is also affected. When a person has HTN, their left ventricle must work harder. This will then cause the myocardial wall in the left ventricle to expand (Capriotti & Frizzell, 2020, p. 340). When the ventricle has expanded, it "requires increased circulation and oxygen" (Capriotti & Frizzell, 2020, p. 340). Our body's circulatory system cannot give the left ventricle its new needs, making it "susceptible to ischemia, infarction, and heart failure" (Capriotti & Frizzell, 2020, p. 340).

There are not many signs and symptoms of hypertension other than high blood pressure. Very few people with hypertension will complain of "headache, nosebleeds, blurred visions, or palpitations" (Capriotti & Frizzell, 2020, p. 341). It is common for many people with hypertension not to know they have it until it becomes more severe and life-threatening (Mayo Foundation for Medical Education and Research, 2022).

There are many a few different stages of hypertension, including stage 1 (130-139 systolic or 80-89 diastolic), stage 2 (greater than 140 systolic or greater than 90 diastolic), and hypertensive crisis (greater than 180 systolic or greater than 120 diastolic) (Capriotti & Frizzell, 2020, p. 341). To be diagnosed with these conditions, one must have two consecutive elevated blood pressures for two doctor's appointments on different days. There are tests a person can do

if they have hypertension. These tests will help to see if the HTN has done any specific organ damage. Some tests are “electrocardiogram, urinalysis, complete blood count, blood glucose, serum potassium, serum creatinine, and serum calcium” (Capriotti & Frizzell, 2020, p. 342). These tests will show if the hypertension has done excessive damage to the body and how severe it is (Capriotti & Frizzell, 2020, p. 342).

Pathophysiology References (2) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* (2nd ed.). F.A. Davis Company.

Mayo Foundation for Medical Education and Research. (2022, January 14). *How high blood pressure can affect the body*. Mayo Clinic. https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/high-blood-pressure/art-20045868

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	4.2-5.4 /mcL	4.58 x 10^6/mcL	4.67 x 10^6/mcL	normal value
Hgb	12.0-16.0 g/dL	13.4 g/dL	15.0 g/dL	normal value
Hct	35-47%	41.4%	43%	normal value
Platelets	156–405 K/mcL	346 K/mcL	322 K/mcL	normal value
WBC	4.5-10.8 K/mcL	8.6 K/mcL	8.4 K/mcL	normal value
Neutrophils	55-70%	70%	78.4%	normal value

Lymphocytes	20-40%	5% (low)	8%	According to (Iftikhar, 2023), a low lymphocyte count could be caused due to malnutrition. My patient has malnutrition, so this would make sense as to why the count is low.
Monocytes	2-8%	2%	2%	normal value
Eosinophils	<5%	0.1%	1%	normal value
Bands	N/A	N/A	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 mmol/L	139 mmol/L	141 mmol/L	normal value
K+	3.5-5.0 mmol/L	4.2 mmol/L	3.7 mmol/L	normal value
Cl-	97-107 mmol/L	91 mmol/L (low)	93 mmol/L	Hypocholemia can be caused by "Chronic respiratory acidosis, which is when your body can't remove all the carbon dioxide it produces" (WebMD, n.d.). When a person has COPD, they have trouble removing all the CO2 from the body.
CO2	22-30 mmol/L	43 mmol/L (high)	34 mmol/L	A person with COPD will likely have a high CO2 count because they can not get all the CO2 out of their body (Capriotti and Frizzell, 2020 p. 504)
Glucose	60-110 mg/dL	160 mg/dL (high)	140 mg/dL	According to (Inácio, 2018), "glucose levels are higher in the airways of people with COPD because inflammation in the lungs makes them leakier so the glucose can move from the blood into the airways."
BUN	7-18 mg/dL	14 mg/dL	9 mg/dL	normal value
Creatinine	0.4-1.2 mg/dL	0.47 mg/dL	0.64 mg/dL	normal value
Albumin	3.5-5.0 g/dL	4.3 g/dL	4.8 g/dL	normal value
Calcium	8.5-10.5 mg/dL	9.4 mg/dL	8.9 mg/dL	normal value

Mag	1.3-2.7 mEq/L	1.7 mEq/L	1.9 mEq/L	normal value
Phosphate	2.5-4.5 mg/dL	4.2 mg/dL	3.3 mg/dL	normal value
Bilirubin	0.1-1.0 mg/dL	0.4 mg/dL	0.4 mg/dL	normal value
Alk Phos	42-128 unit/L	70 unit/L	91 unit/L	normal value

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	clear and yellow	clear and yellow	clear and yellow	normal value
pH	4.5-8.0	6.5	6.8	normal value
Specific Gravity	1.002-1.030	1.023	1.027	normal value
Glucose	0-0.8 mmol/L	0.34 mmol/L	0.37 mmol/L	normal value
Protein	30 mg/g or less	21 mg/g or less	19 mg/g or less	normal value
Ketones	0.6 mmol/L or less	0.43 mmol/L	0.39 mmol/L	normal value
WBC	0-5 (wbc/hpf)	4.32 wbc/hpf	4.78 wbc/hpf	normal value
RBC	4.2-5.4 million/mcL	4.73 million/mcL	5.13 million/mcL	normal value
Leukoesterase	5-15 cells/hpf	8.43 cells/hpf	8.92 cells/hpf	normal value

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	<10,000	6,500	7,125	normal finding
Blood Culture	10-30	13	16	normal finding
Sputum Culture	>25 leukocytes <10 epithelial	28 leukocytes 5 epithelial	30 leukocytes 7 epithelial	normal finding

Stool Culture	7-7.5	7.2	7.3	normal finding

Lab Correlations Reference (1) (APA):

Capriotti, T. & Frizzell, J.P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* (2nd ed.). F.A. Davis Company.

Iftikhar, N. (2023, March 15). Lymphocytopenia: Causes, symptoms, and treatment. Healthline. https://www.healthline.com/health/lymphocytopenia

Inácio, P. (2018, January 9). High glucose in COPD Airways may be linked to increase in infections. COPD News Today.

WebMD. (n.d.). Hypochloremia: Causes, symptoms, and more. WebMD. https://www.webmd.com/a-to-z-guides/what-is-hypochloremia

Diagnostic Imaging

All Other Diagnostic Tests (10 points): There were no diagnostic tests that were shown for my patient. Looking at her history with COPD, our patient would have likely had many chest X-rays or CT scans. Both tests can help the provider see how severe the disease is or how much worse it has gotten. A chest X-ray can "help support the diagnosis of COPD by producing images of the lungs to evaluate symptoms of shortness of breath or chronic cough" (RSNA and ACR, n.d.). On the other hand, a CT scan can "be performed to help support the diagnosis of COPD or determine if the disease has worsened" (RSNA and ACR, n.d.). Since the patient has had a history of COPD for a long time, she has more than likely had these done, but they have not been uploaded into Mattoon Rehab's charts.

Diagnostic Imaging Reference (1) (APA):

Radiological Society of North America (RSNA) and American College of Radiology (ACR). (n.d.). *COPD*. Radiologyinfo.org. https://www.radiologyinfo.org/en/info/copd

Assessment

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

General, Psychosocial/Cultural, and ONE focused assessment specific to the client is required.

The student and instructor may complete these assessments together.

GENERAL: **Alertness: A/0 x4** **Orientation: A/O x4** **Distress: nervous for doctor's appointment** **Overall appearance: well dressed, groomed, good appearance**	The patient was very alert when asked questions such as name, date of birth, the year, and where they are. The patient stated, "I am doing well but am nervous for my doctor's appointment." The patient's appearance looked good. She was well-groomed and had clean clothes on.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:**	Client's skin was pale, thin, dry, intact, and wrinkly. When the skin was felt from the back of the hand it had a warm feeling. Skin turgor was tested on the back of the patient's hand and it was poor. The patient's skin took over three seconds to fall back into place. No rashes or wounds were seen on the patient. There were a few bruises on the forearm, and the

Braden Score: **Drains present: Y☐ N ☐** **Type: n/a**	patient did not know where they were from. There were no drains present. The patient's Braden score is 21.
HEENT: **Head/Neck:**	.symmetrical facial features, no lesions, no jugular vein distention, no abnormalities
Ears:	no drainage or lesions, hearing was good by her responses to me
Eyes:	PERRLA, pupil size 5, EOM good
Nose:	Symmetrical, no drainage
Teeth:	yellow tinted from smoking, gums and lips-pink and moist
CARDIOVASCULAR: N/A **Heart sounds:** **S1, S2, S3, S4, murmur etc.**	. normal heart sounds, no murmurs
Cardiac rhythm (if applicable):	normal rhythm
Peripheral Pulses:	peripheral pulses- +2, normal
Capillary refill:	less than three seconds capillary refill in the fingernails
Neck Vein Distention: Y ☐ N ☐	No vein distention
Edema Y ☐ N ☐ **Location of Edema:**	No edema
RESPIRATORY: N/A **Accessory muscle use: Y☐ N ☐**	. No accessory muscle use
Breath Sounds: Location, character	Breath sounds anterior and posterior are normal
GASTROINTESTINAL: N/A **Diet at home:**	. unknown
Current Diet	normal diet
Height:	54 inches
Weight:	91.6 pounds
Auscultation Bowel sounds:	normal bowel sounds
Last BM:	10/18/2023

Palpation: Pain, Mass etc.:	no abnormalities found with palpation
Inspection: **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:**	inspection-scar from previous ostomy, no other scars, wounds, drains, distention, or incisions
Ostomy: Y ☐ N ☐	No ostomy
Nasogastric: Y ☐ N ☐ **Size:**	No nasogastric
Feeding tubes/PEG tube Y ☐ N ☐ **Type:**	No feeding tubes
GENITOURINARY: N/A **Color:**	yellow
Character:	no odor, no cloudiness
Quantity of urine:	normal quantity
Pain with urination: Y ☐ N ☐	no pain when urinating
Dialysis: Y ☐ N ☐	no dialysis
Inspection of genitals:	genitals looked normal when inspected
Catheter: Y ☐ N ☐ **Type:** **Size:**	no catheter
MUSCULOSKELETAL: **Neurovascular status:**	. Cap refill was under 3 seconds, pulses are 2+, circulation is good throughout the body
ROM:	Full range of motion
Supportive devices:	wheelchair
Strength:	Majority of strength with weakness
ADL Assistance: Y☐ N ☐	No assistance with ADL as long as the patient has her oxygen tank
Fall Risk: Y ☐ N☐	No fall risk
Fall Score:	0
Activity/Mobility Status:	Patient gets around on a wheelchair due to her

Independent (up ad lib) ☐	shortness of breath patient can do everything on her own
Needs assistance with equipment ☐	No
Needs support to stand and walk ☐	No
NEUROLOGICAL: **MAEW: Y** ☐ **N**☐ **PERLA: Y** ☐ **N**☐ **Strength Equal: Y** ☐ **N** ☐ **if no - Legs** ☐ **Arms** ☐ **Both** ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	. Yes Yes Yes Patient oriented Good mental status Normal speech normal sensory LOC-very aware
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** take deep breaths when feeling short of breath, lean over with elbows on knees when feeling short of breath **Developmental level:** good developmental level with age, the patient looks their age **Religion & what it means to pt.:** patient stated no strong beliefs or religions **Personal/Family Data (Think about home environment, family structure, and available family support):** patient has not had the greatest home environment; although she has smoked a lot, she was also exposed to a lot of secondary smoke from her family members; her family support is her sister who she lived with for a couple of years and who comes to visit her in Mattoon Rehab	.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0845	77	118/68	18	97.9 deg. F	96%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1136	6/10	chest	mild	She feels it is hard to catch her breath.	She takes deep breaths while sitting up in her bed to help.

Intake and Output (2 points)

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

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

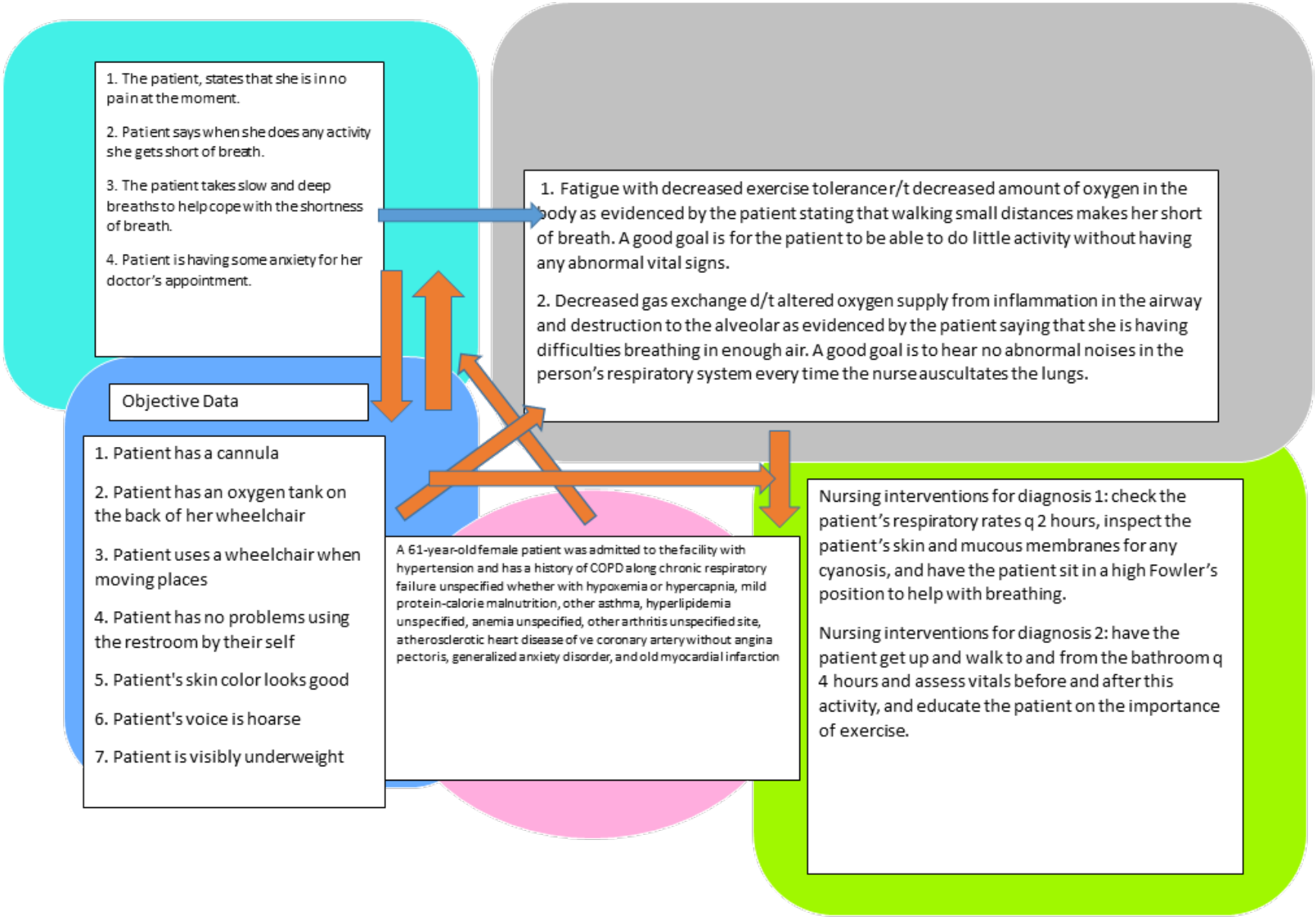
Nursing Diagnosis ● Include full nursing diagnosis with "related to" and "as evidenced by" components ● Listed in order by priority – highest priority to lowest priority pertinent to this client	Rationale ● Explain why the nursing diagnosis was chosen	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation ● How did the client/family respond to the nurse's actions? ● Client response, status of goals and outcomes, modifications to plan.
Decreased gas exchange due to decreased blood flow with vasoconstriction of the capillaries (Swaringen & Wright, page 190) as evidenced by the patient complaining of shortness of breath.	The patient is having difficulty breathing because their capillaries are narrowing, which causes them to use extra effort to breathe. (Swaringen & Wright, page	1. Check the patient's respiratory rates q 2 hours. 2. Inspect the patient's skin and mucous membranes for any cyanosis. 3. Have the	A good goal for the patient is normal respiratory rates and no extra effort used when breathing within 24 hours.	The patient should respond with no complaints of shortness of breath when sitting in bed.

	190).	patient sit in a high Fowler's position to help with breathing.		
Fatigue with decreased exercise intolerance due to "generalized weakness and imbalance between oxygen supply and demand" (Swaringen & Wright, page 191) as evidenced by the patient using the wheelchair to move around and the patient stating that she is always tired.	When the patient feels weak, it makes them very tired. If the patient is tired, then she will have no desire to do any sort of activity that is not necessary.	1. Have the patient get up and walk to and from the bathroom q 4 hours and assess vitals before and after this activity. 2. Educate the patient on the importance of exercise.	A good goal for this patient is to walk to and from the bathroom with no shortness of breath within 24 hours.	The patient should respond with no troubled breathing and know the benefits that any sort of activity can do for the body.

Other References (APA):

Swaringen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource: medical surgical, pediatric, maternity, and psychiatric-mental health.* St. Louis, MO: Elsevier.

Concept Map (20 Points):


1. The patient, states that she is in no pain at the moment.
2. Patient says when she does any activity she gets short of breath.
3. The patient takes slow and deep breaths to help cope with the shortness of breath.
4. Patient is having some anxiety for her doctor's appointment.
1. Fatigue with decreased exercise tolerance r/t decreased amount of oxygen in the body as evidenced by the patient stating that walking small distances makes her short of breath. A good goal is for the patient to be able to do little activity without having any abnormal vital signs.
2. Decreased gas exchange d/t altered oxygen supply from inflammation in the airway and destruction to the alveolar as evidenced by the patient saying that she is having difficulties breathing in enough air. A good goal is to hear no abnormal noises in the person's respiratory system every time the nurse auscultates the lungs.
Objective Data
1. Patient has a cannula
2. Patient has an oxygen tank on the back of her wheelchair
3. Patient uses a wheelchair when moving places
4. Patient has no problems using the restroom by their self
5. Patient's skin color looks good
6. Patient's voice is hoarse
7. Patient is visibly underweight
A 61-year-old female patient was admitted to the facility with hypertension and has a history of COPD along chronic respiratory failure unspecified whether with hypoxemia or hypercapnia, mild protein-calorie malnutrition, other asthma, hyperlipidemia unspecified, anemia unspecified, other arthritis unspecified site, atherosclerotic heart disease of ve coronary artery without angina pectoris, generalized anxiety disorder, and old myocardial infarction
Nursing interventions for diagnosis 1: check the patient's respiratory rates q 2 hours, inspect the patient's skin and mucous membranes for any cyanosis, and have the patient sit in a high Fowler's position to help with breathing.
Nursing interventions for diagnosis 2: have the patient get up and walk to and from the bathroom q 4 hours and assess vitals before and after this activity, and educate the patient on the importance of exercise.