Respiratory Failure

Data Collection

History of Present Problem:

Juan-Carlos Ortiz is a 53-year old male who presented to the ER with increasing shortness of breath (SOB) over the last 2 days. He also reports several days of severe coughing, producing large amounts of brown sputum. He is accompanied by his wife.

Personal/Social History:

Juan-Carlos lives with his wife and two teenage children. He smokes a pack of cigarettes a day and consumes alcohol daily. His past medical history includes CAD, MI with stent placement, PVD, DM type-2, HTN, and HLD. Upon returning home from work today, his coughing and SOB became significantly worse. Although he was reluctant, his wife insisted they go to the ER.

What data from the histories is important & RELEVANT; therefore it has clinical significance to the nurse?

RELEVANT Data from Present Problem:	Clinical Significance:
Increasing shortness of breath over last 2 days.	With shortness of breath, the oxygen supply to the body is compromised which will decrease tissue perfusion.
Severe coughing and producing large amounts of brown sputum.	Severe coughing could be related to his smoking but could be due to another factor, combined with the brown sputum it could be thought of that the patient has an infection.
RELEVANT Data from Social History:	**Clinical Significance:**
Smoker of one pack per day.	Smoker: Causes inflammation of the alveoli and also causes coronary vasoconstriction and decrease oxygen in general because the lungs are not as compliant.
Alcohol consumption every day.	Alcohol consumption: May cause airway inflammation and interacts with many medications.
CAD	CAD: Decrease oxygen perfusion to tissues
DM II	DM: Uncontrolled glucose level like hypotension can cause similar clinical manifestations of alcohol and since patient has both this will help determine and differentiate the two. It also increases oxygen demand because it correlates with PVD.

MI w/ stent	MI: Just like CAD, it decreases oxygen perfusion to the tissues but there is also permanent damage to the heart.
PVD	PVD: Decreases perfusion to peripheral tissues combine with DM II it decreases even more.
HTN	HTN: Increases the cardiac workload of the heart which can lead to multiple other problems and aggravate existing medical history.
HLD	HLD: Because of PVD and DM II, this can lead to additional vasoconstriction of the blood vessels.

RJ, excellent job identifying the relevant data from the patient's presenting problem, as well as relevant data from his social history. Looking at the clinical significance, you are correct in thinking that the patient possibly has a respiratory infection. BSc

What is the RELATIONSHIP of your patient's past medical history (PMH) and current meds?

(Which medications treat which conditions? Draw lines to connect.)

PMH:	**Home Meds:**	**Pharm. Classification:**	**Expected Outcome:**
CAD PVD HTN HLD DM Type-2	Furosemide 20 mg daily ASA 81 mg daily Enalapril 40 mg daily Simvastatin 40 mg daily Plavix 75 mg daily Metoprolol 50 mg BID Apidra q6h Pioglitazone 15 mg daily	Loop diuretic Salicylate/ Antiplatelets ACE inhibitor Hmg coa reductase Inhibitor	Decrease in blood pressure and removal of excess fluid. Decreases the chance of myocardial infarction. Decrease in blood pressure. Decrease of LDL and total cholesterol levels which reduces the

			chance of plaque buildup in the arteries.
		Platelet aggregation Inhibitors	Decreases the chance of strokes.
		Beta blocker	Decreases blood pressure and heart rate.
		Pancreatics	Helps control blood glucose.
		Thiazolidinedione	Helps control blood glucose

(Vallerand, A.H., Sanoski, C.A., & Deglin, J.H. (2018).

Furosemide = HTN

ASA = CAD, MI w/ stent, PVD

Enalapril = HTN,

Simvastatin = HLD

Plavix = CAD, MI w/ stent, PVD

Metoprolol = HTN, CAD, MI w/ stent

Apidra = DM II

Pioglitazone = DM II

Excellent job identifying the relationship of your patient's past medical history with his current medications. You also did a great job correctly identifying the pharmacologic classification of each medication, as well as the expected outcome. BSc

One disease process often influences the development of other illnesses. Based on your knowledge of pathophysiology, which disease likely developed FIRST that then initiated a "domino effect" in their life?

- Highlight what PMH problem likely started **FIRST**

I think diabetes type 2 started first and then proceed to cause the rest of the patient's previous medical history, and the smoking and alcohol played a big factor in the progression of the diseases.

Great job! Remember, long term complications of DM includes disease of the large and small blood vessels in the body which leads to CAD, PVD, and HTN. Patients who have DM are also always at higher risk for infection because elevated glucose encourages bacterial growth. Therefore, it was the patient's diagnosis of DM that most likely influenced the development of the other illnesses. BSc

- Underline what PMH problem(s) **FOLLOWED** as domino(s)
  Peripheral artery disease followed by hypertension followed by hyperlipidemia followed by coronary artery disease and then myocardial infarction with stent. All of this was aggravated by the patient's history of smoking and daily alcohol consumption.

  Excellent job! BSc

Patient Care Begins:

Current VS:
T: 102.6
P: 122
R: 32
BP: 166/108
SpO2: 82% room air
Pain: 3 (chest)

What VS data is RELEVANT that must be recognized as clinically significant to the nurse?

RELEVANT VS Data:	**Clinical Significance:**
Temperature 102.6	Since the patient has brown sputum, I believe the elevated temperature and fever is caused by an infection.
Pulse 122	The heart is compensating for the lack of SpO2.
RR 32	Hyperventilation can cause respiratory acidosis or alkalosis because it is a way of the body to find a way of maintaining homeostasis.
SpO2 82% RA	Low SpO2 levels mean that there is not enough tissue perfusion
Pain at a scale of 3 out of 10	Pain should always be addressed for patient's regardless of the level and intensity. The patient may not need any interventions but since they complained of pain it needs to be addressed.

Excellent job! BSc

Current Assessment:	
General Appearance:	Patient appears anxious, diaphoretic.
Respiratory:	Crackles throughout, respirations labored. Unable to lie flat.
Cardiac:	Edema to lower extremities. Tachycardic at 118. Radial pulses bounding, pedal pulses weak bilaterally.
Neuro:	Alert and oriented, equal hand grasps.
GI:	Abdomen soft/non-tender, bowel sounds audible per auscultation in four quadrants.
GU:	Patient reports low urine output the past week.
Integumentary:	Patient diaphoretic. Edema to lower extremities. Skin intact.

What assessment data is RELEVANT that must be recognized as clinically significant to the nurse?

RELEVANT Assessment Data:	**Clinical Significance:**
Anxious and diaphoretic.	Anxiety can cause an increase in heart rate and blood pressure and with the patient's history of cardiac disease this needs to be addressed with proper interventions like distracting the patient with watching TV or talking to the patient in general.
Crackles and labored breathing, orthopnea.	Any adventitious sound is never good, and with crackles it may indicate many things, one of them could be a sign of heart failure. Labored breathing and orthopnea will cause the patient to get inadequate oxygen to help with perfusion of the tissues. If we are thinking the patient may have a respiratory infection, what could crackles be indicative of as well? BSc
Edema in lower extremities, tachycardic at a pulse of 118 and is bounding in nature, weak pedal pulses.	This mean the patient is experiencing fluid overload/fluid retention. Combined with the respiratory problems stated above this could further indicate heart failure. It also indicates that the patient's medication, furosemide, is inadequate and a change of medication or increase in dosage may needed. Tachycardia with bounding pulses increases the cardiac workload which we need to address because of the patient's cardiac medical history.

Low UOP for the past week.	Inadequate UOP is never good. The patient already having a loop diuretic should have helped with the patient's UOP and since it is not helping further examination and testing must be done. The patient could be experiencing a kidney insult. BMP should be done.

Great job! You identified all relevant assessment data and interpreted the appropriate clinical significance. BSc

Clinical Reasoning Begins:

What is the primary problem that your patient is most likely presenting with?

Respiratory failure is the primary problem.

Your thinking is on the right track, however, let's back up and think about what could be occurring that is essentially leading to respiratory failure? Do you think it is possible the patient has pneumonia? What signs/symptoms does the patient have that would support this as a primary problem? Can pneumonia lead to respiratory failure? BSc

What is the underlying cause/pathophysiology of this concern?

Hypoxemia is the main concern as evidenced by the patient's low SpO2, labored breathing, and adventitious lung sounds. Hypoxemia is a below-normal level of oxygen in your blood, specifically in the arteries which causes poor perfusion. This can be caused by many diseases, but I suspect it is because of pneumonia. My reasoning behind this is because the patient has adventitious lung sounds combined with adventitious lung sounds and SOB with low SpO2. The patient also has a fever and is coughing up sputum which is a clinical manifestation of pneumonia. This is a concern because the alveoli can be filled with fluid and inadequate gas exchange will occur.

Great job! What is the pathophysiology of Pneumonia? BSc

What nursing priority(s) will guide your plan of care? *(if more than one-list in order of PRIORITY)*

To maintain a patent airway, ensure the patient maintains an SpO2 above 93% via oxygen therapy then will be weened off of oxygen when more stable, and to increase oxygen perfusion to the body systems.

What nursing diagnoses would guide your plan of care for this patient? BSc

What interventions will you initiate based on this priority?

Nursing Interventions:	**Rationale:**	**Expected Outcome:**
Place the patient on droplet precautions.	Protect staff and other patients, along with anyone else that can come in contact with the patient.	Droplet precautions are initiated and maintained.
Assess airway patency.	Ensure that there is no obstruction in the	Patient will maintain patent airway and will

	patient's airway and that there is no inflammation happening. Since the patient already has low SpO2 and adventitious lung sounds and SOB this needs to be done.	have intubation tray readily available in the room.
Assess need for suctioning.	Maintain patent airway.	Patient will not need suctioning.
Assess vital signs.	Monitor for changes in oxygenation or respirations	Patient's vital sign will be in the normal/standard range.
Administer oxygen.	Maintain SpO2 above 93%.	SpO2 will increase and stay above 93%.
Raise head of bed to a minimum of 35 degrees unless contraindicated.	Place client at position to achieve maximum respiratory function.	Breathing workload will decrease.
Focused respiratory assessment.	Assess for changing symptoms in client and establish baseline to guide nursing intervention and care.	Will hear crackles and labored breathing.
Assess patient's mental status	See how severe the oxygenation impairment is	Patient will be alert and oriented x3.
Chest X-Ray.	Assess for pneumonia or any lung injury.	Chest X-Ray will display abnormalities or infiltrates.
ABG's	To check patient's acid base balance to guide the treatment.	Results will display the patient is in respiratory acidosis.

Sputum culture	Identify microorganism that is possibly causing infection and guide the type of antibiotics to be given.	Microorganism will be identified, and proper antibiotic will be chosen for the specific microorganism.
12 Lead EKG	Assess for dysrhythmias.	Patient will have a tachycardic rhythm.
Encourage coughing and deep breathing.	Help clear secretions which will result in better oxygenation.	Patient will expectorate secretions.

Great job, RJ. Are there any medications you would want to administer? What about Acetaminophen or an Antibiotic? Why might you want to do this? BSc

What body system(s) will you most thoroughly assess based on the primary/priority concern?

Respiratory system. Skin, and cardiac. Respiratory will be monitored because that is the initial complaint and majority of the signs and symptoms the patient is displaying leads to a respiratory problem. Skin will be monitored because the patient will not be able to ambulate freely because of shortness of breath therefore the patient will be in bed majority of the time and risk for pressure ulcers is a concern. Cardiac is a concern as well because the patient has a medical history of cardiac disease and with decrease oxygenation this will affect the cardiac system and can aggravate the heart and increase the cardiac workload which could lead to further problems besides respiratory.

What is the worst possible/most likely complication to anticipate?

Respiratory arrest would be the worst complication that can may occur and if improper interventions are done it could lead to death.

If we think the patient has an infection (Pneumonia), most likely the worst possible complication to anticipate is going to be that the patient goes into respiratory failure and possibly arrests. Excellent job! BSc

What nursing assessment(s) will you need to initiate to identify this complication if it develops?

Auscultate lungs throughout, monitor for blood tinged sputum and mucus in general, get an order for lab draw, monitor intake and output, monitor urine color, assess patient's vital signs, assess mental status, and assess all pulses.

Medical Management: Rationale for Treatment & Expected Outcomes

Care Provider Orders:	Rationale:	Expected Outcome:
Chest X-ray (CXR)	To get a better look at the lungs and determine what is going on and it will help determine what course of action needs to be done.	Patient will have infiltrates and abnormalities which would lead to the diagnosis of pneumonia.
Complete Blood Count (CBC)	Assess white blood cell count to determine infection.	Patient will have increased white blood cells level.
Basic Metabolic Panel (BMP)	To get lab values of the patient's creatine, BUN, and electrolytes because the patient has decreased urinary output.	Patient's creatinine and BUN levels will be elevated.
Arterial Blood Gas (ABGs)	To determine PaCO2, PaO2, HCO3, and pH.	Patient will have low pH, low PaO2, high PaCO2.
Furosemide 40 mg IVP	To help with patient's urinary output and decrease patient's edema.	Patient will have increase urinary output and edema will decrease as well. If both happen, a decrease in blood pressure will occur as well.
Oxygen (titrate for SpO2>93)	Improve patient's SpO2.	Patient's SpO2 will stay above 93%.
Pipercillin/tazobactam (Zosyn) 4.5 g q6h	Will be administered to fight the suspected infection.	Patient's fever will decrease and slowly rid the body of the infection.

Place Foley catheter	To get an accurate urinary output measurement.	Patient's urinary output will be accurately measured.
Blood Culture	Determine if there is any microorganism causing the patient's infection/medical problem.	There will be a microorganism identified if it is in the blood.
Urine Analysis/Urine Culture (UA/UC)	Assess patient's hydration status and will assist to determine microorganism causing infection.	Specific gravity will b we elevated and may or may not find a microorganism causing the infection.
Acetaminophen 650 mg. q6h for temp > 100.1	Treat patient's fever.	Patient's temperature will decrease and combined with antibiotic treatment will get rid of the fever completely.

Awesome job! BSc

PRIORITY Setting: Which Orders Do You Implement First and Why?

Care Provider Orders:	**Order of Priority:**	**Rationale:**
Place Foley Catheter Pipercillin/tazobactan 4.5 g q6h Oxygen (titrate for SpO2>93)	Oxygen	ABC's are always a priority in patient care and since the patient is experiencing respiratory problems this needs to be the priority.
ABGs CBC	CBC	This will need to be done before administration of antibiotics to get an accurate white blood cell count.
CXR	ABG	This blood draw will be done the same time

		as the CBC that is why this is the third priority.
	Antibiotics	Treating the infection as soon as possible increases the chance for less complications related to infection but since a blood draw was needed that took priority to get accurate results.
	Foley	Get an accurate urinary output measurement and can be done will radiology is preparing the x-ray room.
	CXR	Assess for pneumonia and any other potential problem that can be detected

Great job with your priority setting and rationales. My only feedback would be, would you consider obtaining the CXR first to see if the patient has pneumonia before starting the antibiotic? Would this give us a better idea of what antibiotic we should use? BSc

Radiology Reports:

What diagnostic results are RELEVANT that must be recognized as clinically significant to the nurse?

RELEVANT Results:	**Clinical Significance:**
CXR: Infiltrates present in lower lobes bilaterally. Significant right and left pleural effusions.	Pneumonia is present and confirmed. Because of the determination that there are pleural effusions is an important finding because if left untreated it could cause atelectasis and further impair the patient's respiratory problems which could lead to my main concern of respiratory arrest.

Lab Results:

Complete Blood Count (CBC):	**Current:**	**High/Low/WNL?**

WBC (4.5-11.0 mm3)	17.5	HIGH
Hgb (13.5-17.5 g/dL)	9.8	LOW
HCT (41-49%)	32	LOW
Platelets (150-450 X 10^3 µL)	175	WNL

What lab results are RELEVANT that must be recognized as clinically significant to the nurse?

RELEVANT Lab(s):	**Clinical Significance:**
WBC 17.5 Hgb 9.8 HCT 32	An increased or elevated white blood cell count indicates that the patient indeed has an infection. Respiratory failure leads to the patient not being able to maintain oxygen perfusion to the tissues, causing a decrease in because the red blood cells die which decreases the transportation of oxygen which leads to decreased Hgb and HCT. All in all these blood values indicate that the patient has decreased tissue perfusion to the body system.

Excellent job! BSc

Basic Metabolic Panel (BMP):	**Current:**	**High/Low/WNL?**
Sodium (135-145 mEq/L)	135	WNL
Potassium (3.5-5.0 mEq/L)	3.1	LOW
Chloride (95-105 mEq/L)	95	WNL
CO2 (Bicarb) (21-31 mmol/L)	25	WNL
Glucose (70-110 mg/dL)	188	HIGH
Calcium (8.4-10.2 mg/dL)	7.8	LOW
BUN (7-25 mg/dL)	42	HIGH
Creatinine (0.6-1.2 mg/dL)	1.38	HIGH

RELEVANT Labs:	**Clinical Significance:**
Potassium 3.1 Glucose 188 Calcium 7.8 BUN 42	Potassium is a very important electrolyte to monitor and if it is in an abnormal range it could cause dysrhythmias which could lead to problems for the patient and since the patient has previous cardiac insults this needs to be monitored Any medications the patient is taking that could cause this lab value to be decreased? BSc This means that the patient has bad control over they DM II and education to control the disease needs to be considered if the patient has no education about the disease. If left untreated it can cause muscle spasm and even neurological problems. This means that there are renal problems occurring which could

Creatinine 1.38	be the reason for the edema and low urinary output. This means that there are renal problems occurring which could be the reason for the edema and low urinary output.

ABGs:	**Current:**	**High/Low/WNL?**
pH (7.35-7.45	7.15	LOW
pO2 (80-100)	72	LOW
pCO2 (35-45 mmHg)	88	HIGH
HCO3 (22-26)	25	WNL

RELEVANT Labs:	**Clinical Significance:**
pH 7.15 pCO2 88 pO2 72 HCO3 25	A low pH with a high pCO2 indicates respiratory acidosis. Poor perfusion to the tissues is occurring because the inadequate oxygen levels. This means the respiratory acidosis is uncompensated. **Interpretation:** Patient is indeed experiencing respiratory acidosis which causes deprivation of oxygen your organs need to function properly. Excellent job! BSc

Clinical Reasoning-Lab Results:

Does your initial nursing priority or plan of care need to be modified in any way after obtaining these lab results?

I would recommend having the patient wear a non-rebreather mask for the oxygen therapy. I would also recommend a BiPap or CPap or some type of breathing machine. Maybe a bronchodilator to assist the patient in breathing if it is not contraindicated. If respiratory acidosis progresses and treatment does not work, the patient can go into shock or respiratory failure so maybe recommending an order for sodium bicarbonate.

What are your current nursing priorities that will determine your plan of care?

Ensuring proper and adequate gas exchange to allow proper organ function and to ensure the airway is patent and not obstructed.

Evaluation:

One hour later, all physician orders have been implemented.

Current VS:	**Most Recent:**
T: 102.2	**T**: 102.6
P: 134	**P**: 122
R: 34	**R**: 32
BP: 170/110	**BP**: 166/108
SpO2: 80% on 10L via non-rebreather	**SpO2**: 82% room air
	Pain: 3 (chest)

Physical assessment is unchanged with the exception of 500 mL dark yellow urine in the Foley drainage bag.

What clinical data is RELEVANT that must be recognized as clinically significant?

Relevant VS and Assessment Data:	**Rationale:**
Temperature 102.2	Temperature most likely decreased because of the administration of acetaminophen. Has the temperature really decreased though? BSc
Pulse 134 RR 34	The pulse and RR has increased because of the patient in adequate oxygenation and the body is trying to compensate via increase in these two vital signs. It also indicates increase cardiac workload.
Blood pressure 170/110	This is extremely high blood pressure. If it increases more it will be considered a hypertensive crisis and some providers may deem that it is already a hypertensive crisis which could damage blood vessels and as a result, the heart may not be able to pump blood effectively.
SpO2 80% via non-rebreather on 10L	The interventions and treatment is not working and the patient's condition is worsening and is most likely because of respiratory acidosis. New treatment or additional treatment needs to done before respiratory failure or shock occurs.
Pain level at a 3 located at the chest.	Pain always should be monitored, and proper interventions should be done to relieve a patient's pain but, in this scenario, because the patient is experiencing pain located at the chest and the patient has respiratory problems this could indicate that the patient's status is worsening.

Has the status improved or not as suspected to this point?

The patient has not improved to this point and is worsening.

Does your nursing priority or plan of care need to be modified in any way after this evaluation assessment?

Since the respiratory status has worsened and is already on oxygen therapy, I would suggest maybe a BiPap or Cpap but if that does not work or maybe the patient will have to put on a ventilator.

Great job! BSc

Based on your current evaluation, what are your nursing priorities?

Depending on the situation I might call a MET if indicated since there are other variables to be considered. I would also notify the charge nurse of the situation and the staff nurses that are working with me so they are aware of what could happen to my patient and be prepared for interventions. But I will call the health care provider and explain the situation and recommend the BiPap, CPap or the ventilator. Most likely lean more towards the ventilator.

Excellent job! Yes, this is definitely a situation that would warrant a MET call. BSc

Because you have not seen the level of improvement you were expecting in the medical interventions, you decide to update the physician and give the following SBAR:

Situation:
Patient is Juan-Carlos Ortiz who is a 53-year old male. Patient is experiencing respiratory acidosis and the current treatment is not working and the patient's SpO2 is constantly dropping.
Background:
Patient is experiencing respiratory acidosis and the oxygen therapy and medication therapy is not working, the patient has been steadily worsening. The patient was admitted to the ER initially because of SOB and cough with mucus. The patient had a chest x-ray done and it showed infiltrates and pleural effusions. The patient was having UOP problems, but it seems to be resolved as the patient has had 500mL of dark urine. I recommend you to keep monitoring this especially because of the patient's lab results. Patient has a history of CAD, MI with stent placement, PVD, DM II, HTN, and HLD.
Assessment:
Current Vital Signs = Temperature 102.2 Pulse 134 RR 34 Blood Pressure 170/110 SpO2 80%

via non-rebreather 10L. Patient's ABGs are as follows: pH 7.15, pCO2 88, pO2 72, HCO3 25. Patient is experiencing respiratory acidosis. Patient BUN is 42 and creatinine is 1.38. Patient also has edema in lower extremities. Patient also has adventitious lung sounds (crackles) and cough with brown sputum. Patient is also experiencing chest pain with a level of 3 out of 10. Here, you would also want to inform the physician of any medications you have administered so far as well. BSc
Recommendation:
Since the initial oxygen therapy is not working and I believe the patient should be mechanically ventilated to improve his oxygenation to ensure proper perfusion to the body systems and reduce the chance of shock.

The physician agrees with your concerns and decides to intubate the patient to protect his airway and improve his oxygenation. The patient is successfully intubated with an 8 mm ET tube, 24 cm. at the teeth. The ventilator was set to Assist Control with the following settings: tidal volume 500, rate 12, FiO2 40%, PEEP 5. An OG tube was also placed. There is a new order for ABGs to be drawn in a half-hour.

Following intubation:

Current VS:	**Most Recent:**
T: 100.8	**T:** 102.2
P: 86	**P:** 134
R: 16	**R:** 34
BP: 145/90	**BP:** 170/110
SpO2: 99% on mechanical ventilation	**SpO2:** 80% on 10L via non-rebreather

ABGs:	**Current:**	**Most Recent:**
pH (7.35-7.45	7.25	7.15
pO2 (80-100)	88	72
pCO2 (35-45 mmHg)	52	88
HCO3 (22-26)	24	25

Has the status of the patient improved or not as expected to this point?

The patient is improving. The patients overall vital signs have improved though the blood pressure is still high but since the patient has HTN this may be close to his normal blood pressure level. The patient still has elevated temperature which indicates that there is still an infection, but it has dropped significantly from the previous temperature. Patient's ABGs are almost to the normal values and most importantly the SpO2 has extremely improved from 80% to 99%.

Great job! BSc

What data supports this evaluation assessment?

The patient's ABG levels are almost to the regular/normal values. All of the patient's vital signs have improved.

Your patient who is still in the ED is now being transferred to the intensive care unit (ICU) for close monitoring. Effective and concise handoffs are essential to excellent care and if not done well can adversely impact the care of this patient. You have done an excellent job to this point, now finish strong and give the following SBAR report to the nurse who will be caring for this patient:

Situation:
Patient is Juan-Carlos Ortiz who is a 53-year old male. Patient has respiratory acidosis going on but is now going back to normal. He was admitted to the ED with SOB and a productive cough, Had ABGs taken which showed respiratory acidosis as I mentioned earlier. Patient was initially on 10L oxygen via non-rebreather mask, but treatment was not working so the health care provider put him on a mechanical ventilator. Patient has a 8mm ET tube, 24 cm at the teeth. Assist Control setting with TV 500, R-12, FiO2 40%, PEEP 5. An OG tube was also initiated in ER. Patient's new ABG draw is ordered to be taken 30 minutes from now.
Background:
The patient is a 53-year old male who lives with wife and two teenage children. He is a smoker and consumes alcohol daily. Patient has a history of CAD, MI with stent placement, PVD, DM II, HTN, and HLD.
Assessment:
Current Vital Signs = Temperature 100.8 Pulse 86 RR 16 Blood Pressure 145/90 SpO2 99%

via mechanical ventilator. Patient's current ABGs are as follows: pH 7.25, pCO2 52, pO2 88, HCO3 24. Patient is still experiencing respiratory acidosis. Patient's foley catheter recently drained 500 mL dark yellow urine. Patient still has edema in the lower extremities. Patient had adventitious lung sounds.
Recommendation:
To continue to monitor ABGs and patient's respiratory status along with urinary output. Educate patient on what to expect and see because of the ventilator.

Education Priorities/Discharge Planning

What will be the most important discharge/education priorities you will reinforce with their medical condition to prevent future readmission with the same problem?

Priority would be smoking and alcohol cessation. Possibly recommend an exercise regimen and diabetes management since the patient had high blood glucose levels but that level may be his normal. Teach the patient and family the clinical manifestations of pneumonia or respiratory acidosis so they can recognize and go to the doctor sooner. I would also educate them on a heart healthy diet because of his past medical history like a DASH diet.

Excellent! BSc

What are some practical ways you as the nurse can assess the effectiveness of your teaching with this patient?

If the patient is able to talk back or communicate back, I will utilize the teach back method as this ensures that the patient understands the teachings that have been taught. I will also ensure that I allow the patient and his family to ask questions and answer appropriately and if I do not know the answer, to make sure that I find out for them. I will also give handout to get additional information regarding the patient's disease process.

Caring and the "Art" of Nursing:

What is the patient likely experiencing/feeling right now in this situation?

Since the patient has gone from breathing normal to having shortness of breath and now being mechanically ventilated, I would imagine has an overwhelming feeling of anxiety and fear. The patient's family may be experiencing the same feelings right now. He is probably all confused and stressed as well.

What can you do to engage yourself with this patient's experience, and show that he/she matters to you as a person?

I will ensure that the patient and his family know that I am always available to answer any questions they have. I will also ensure I utilize therapeutic communication. I will also ensure that I will still explain all the nursing interventions I am doing to the patient even though he cannot talk or may be asleep. I will do the same for the family and explain the nursing interventions that are being done.

RJ,

You did an excellent job with this unfolding case study. Please take the time to revisit the areas in which I identified there may have been some missing information, or more information that could be added after further deliberation and deeper thinking. This will greatly benefit you and your care in the clinical setting in the future. Keep up all your hard work! BSc