Lakeview College of Nursing **Student Name** ___Ashley Huisinga_____
N433 Pediatrics Clinical Care Plan

CLINICAL DATE___10/26/2019_____

Patient's Age _5_____11____ **Weight** (in kg) **__23.5_____** **BMI_17.99kg/m2 (squared) _____**
Year's months

Allergies/Sensitivities to medications, foods, contact, environmental, etc. Include reactions: ___no known allergies_____

Chief Complaint (Reason for admission): ___adenovirus Pneumonia_____Admit date: __10/26/2019____

Other co-existing conditions: ___otherwise healthy_____

History of Present Illness (What events led up to this child being admitted to the hospital, etc.):
Claire is a 5 year old female with history of T and A and previous Pneumonia who presents to CFH ER with 3 days of worsening cough and fever and decreased oral intake. Per mother patient's symptoms started on Monday when she noticed increased coughing and fever high of 103, She had one episode of NBNB emesis. She was finally seen at urgent care in the morning due to her symptoms here they had done a CXR and was diagnosed with Pneumonia. She was given amoxicillin to be taken at home but patient continued to have coughing spells and continued to look ill and was not able to take medications so mother brought her in to ER. In the ER, she was found to febrile at 103.1 and tachycardic. She was saturating in the low 90s so she was placed on 2L nasal cannula. CBC was done and showed some slight thrombocytopenia, CMP showed mild hyponatremia (Na of 135). She was given 2 boluses in the ER and tachycardia improved. Rocephin was given and RPP was positive for Adenovirus
Pertinent Events during this Admission and Hospitalization (IV starts, lab test, etc.):22 gauge IV in left dorsal hand, pneumococcal UR AG, glucose, POC, UA with reflex culture, Urine culture, respiratory pathogens panel, ABG, blood cultures, cbc w/diff, cmp, INR, PTT, magnesium, VBG, influenza and B viral RNA, RSV viral RNA

Past Medical & Surgical History (illnesses, hospitalizations, immunizations, birth history-any complications?)
Previously hospitalized for Pneumonia in March 2018 required HHNC. Had ekg and echo done during that admission due to high O2 requirements which were normal. Hospitalized 11/26-11/2//13 for fever and vomiting. Previous tonsillectomy and adenoidectomy.
Child's diagnosis: __Pneumonia_____ **Etiology of disease process** (what causes it):__adenovirus_____

Pathophysiology: **(What is the pathophysiology of this disease and what goes on in the body as a result of this disease? Put in your own words & site reference)**

Pneumonia occurs when an organism invades the lungs and creates inflammation. In this specific case, the child was infected with adenovirus that lead to her pneumonia (Mayo Clinic, 2019). This type of virus can be spread through droplets in the air. Pneumonia symptoms can include chest pain, cough, fatigue, fever, sweating, chills, nausea, vomiting and shortness of breath (Mayo Clinic, 2019). The inflammation of the air sacs in the lungs causes fluid buildup which can lead to coughing and difficulty breathing. Because of the viral nature of this specific case of pneumonia, symptomatic control is the mode of treatment.

References:

Mayo Clinic (2018) Pneumonia. Retrieved from https://www.mayoclinic.org/diseases-conditions/pneumonia/symptoms-causes/syc-20354204

Clinical Manifestations of the disease (Highlight those exhibited by your patient) – include lab values, tests, etc:

•Chest pain when you breathe or cough
•Cough, which may produce phlegm
•Fatigue
•Fever, sweating and shaking chills
•Nausea, vomiting or diarrhea
•Shortness of breath

Vital Signs: **(List your source for the Normal ranges)**T___98.3(axillary)_____HR.____118_____ (NL for age) _____65-110_____ RR. ___28____ (NL for age) _____20-30_____ B/P ____99/54__ (NL for age) _____80-110/50-80_____ O2 sat_____95_____ Oxygen- via 1 L nasal cannula

Intake/Output: (IV, PO, Out & Deficits) PO-120 mL, Urine output 300 mL, 215 emesis

Clinical Day Evaluation Data – Head to toe physical assessment (Do not use WNL or WDL):

General appearance: Ill-appearing but nontoxic looking
Head:normocephalic, atraumatic, no palpable lymph nodes, trachea midline,
Ears: pearly grey TM, no lesions, erythema or drainage
Eyes:PERRLA, extraocular movements intact, mild conjunctivitis
Thyroid: not palpable
Chest: Diffuse bilateral crackles, no rhonchi no wheezing no retraction
CV: Normal PMI, regular rate and rhythm, normal S1, S2, no murmurs or gallops
Abdomen: Normal scaphoid appearance, soft, non-tender, without organ enlargement or masses
GU: Decreased urine output
Musculoskeletal: No swelling of the hands or feet
Extremities: cap refill 2 sec, no edema or cyanosis
Skin: Skin color, texture, turgor normal. No rashes, lesions or petechiae
Other: no gross deficit, no lateralization

Pain History & assessment: Type, location, intensity & timing, precipitating factors, relief measures/interventions, rating scale used, physiological and/or behavioral signs, evaluation of pain status after medication is given: verbally stated a pain rating of 0/10

Lab Tests:

TEST	NORMAL (specific for age)			
RBCs	3.90-4.96	4.41	na	
Hgb	10.6-13.2	12.3	na	
Hct	32.4-39.5	36.4	na	
MCV	75.9-87.6	82.5	na	
MCH	24.8-29.5	36.4	na	High MCH can be caused by infection.
MCHC	31.8-34.6	33.8	na	
WBCs	4.27-11.40	6.26	na	
Neutrophils	15-80	Na	na	
Eosinophils	0-3	0.0	Na	
Basophils	0-1	0.2	na	
Monocytes	3–6	13.7	na	Increased monocytes can be due to the inflammation and viral infection the patient is experiencing.
Lymphocytes	1.3–6.5	19.8	na	Increased lymphocytes can be due to the inflammation and viral infection the patient is experiencing.
Platelets	199-367	174	na	Thrombocytopenia can be caused by viral infections such as Adenovirus.
TEST	**NORMAL** (specific for age)			
Glucose	60-99	85	na	
Na^{+}	136-145	135	na	Tylenol use can cause mild hyponatremia. This could also be due to dehydration.
Cl^{-}	98-107	103	na	
K^{+}	3.5-5.1	3.7	na	
Ca^{++}	8.5-10.1	8.1	na	Decreased food intake due to illness could be contributing to this low calcium level.
Phosphorus	2.5-4.9	Na	na	
Albumin	3.4-5.0	3.2	na	Low albumin can be caused by inflammation as well as malnutrition.
Total Protein	6.4-8.2	6.3	na	Patient may have low total protein due to malnutrition experienced during periods of illness.

BUN	7-18	12	na	
Creatinine	0.55-1.02	0.40	na	Patient can have low creatinine due to malnutrition experienced during illnesses.
TEST	**NORMAL** (specific for age)			
Liver Function Tests	na	Na	na	
Urinalysis	Negative	Negative	na	
Urine specific gravity	1.003-1.035	1.026	na	
Urine pH	5.0-7.0	5.0	na	
Creatinine clearance	na	NA	na	
Other Labs:				
PTT INR PT	22.4-35.9 0.9-1.1 12.1-14.9	38.2 1.1 14.7	Na Na Na	Thrombocytopenia can be a side effect of acetaminophen use or due to viral infections such as Adenovirus.

References range reference:

Epic production (2019). Retrieved on 10/26/2019

Diagnostic Studies:

TEST & RESULTS	Correlation to current health status (if abnormal)
Chest x-ray: Cardiomediastinal silhouette. There is increased perihilar interstitial prominence, similar in appearance to prior study. No consolidation, effusion, or pneumothorax	Patient is experiencing shortness of breath, rhonchi, wheezing and crackles in the lungs. The perihilar interstitial prominence could be indicative of these problems.
CT Scan/MRI: na	
Biopsy/Scope:na	
Cultures: Blood cultures-negative	
Other: Respiratory pathogens panel-positive for adenovirus	Adenovirus could be causing the pneumonia in the patient.

List of active orders on this patient:

ORDER	COMMENTS/RESULTS/COMPLETION
Activity: bedrest	**Patient is very fatigued due to increased work of breathing and inability to get good rest due to coughing fits.**
Diet/Nutrition:increase PO fluids and food	**Patient is not eating or drinking well due to illness, the goal is to increase fluids and eat at least 50% of her meals.**
Frequent Assessments:respiratory/O2	**Patient has very coarse lung sounds. Tried to decrease from 1L nasal cannula to room air and pt. d-stat to the mid-80s very quickly, had to reattach nasal cannula**
Labs/Diagnostic Studies: na	
Treatments: nebulizer machine	**Patient had her last nebulizer treatment around 12 pm and is able to have another every 4 hours, prn.**
New Orders for Clinical Day	
ORDER	**COMMENTS/RESULTS/COMPLETION**
No new orders at this time	

Teaching & Learning: Identified teaching need (be specific): Patient needed education on deep breathing and coughing.

Summarize your teaching (prioritization in care, methods used, materials used, time to provide, etc.): First I explained to the patient and her mother the benefits of deep breathing and coughing. I explained that this is used to prevent lung collapse as well as expel mucous secretions from the respiratory tract. I then demonstrated the technique to the child 2-3 times and asked if she would like to try it. Patient said she wanted me to do it with her once first and then she would do it by herself. We both proceeded to do the technique and then patient was able to correctly demonstrate the technique back to me by herself.

Evaluation of your teaching (establish expected outcomes and describe if met; effectiveness of materials/approach, what next?):
I felt the teaching plan was effective and that learning took place. The patient was able to demonstrate correct completion of the activity.

Developmental Assessment: Be sure to HIGHLIGHT the achievements of any milestone if noted in your child. Be sure to HIGHLIGHT any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading.

Age Appropriate Growth & Developmental Milestones

1. Tie shoelaces
2. skipping
3. printing some letters

Age Appropriate Diversional Activities

1. Drawing

2. Copying geometric shapes

3. Counting up to 10

Psychosocial Development: Which of Erikson's stages does this child fit? Initiative vs Guilt

What behaviors would you expect? Feels remorse when making wrong choices or behaving badly. Cooperates with other children and adults.

What did you observe? Patient was cooperative when I was taking vitals and seemed eager to please when we were doing the deep breathing and coughing exercises.

Cognitive Development: Which stage does this child fit, using Piaget as a reference? Preoperational Sub stage: Intuitive phase

What behaviors would you expect? I would expect the child to be able to classify and relate objects and have intuitive thoughts. I would expect her to understand if something is right or wrong even if she does not understand why.

What did you observe? I observed her cognitive process when we were discussing the reasons for deep breathing and coughing. She may not have understood exactly why we were doing the activity but understood that it was beneficial to her to participate.

Vocalization/vocabulary: Development expected for child's age and any concerns? Child should be able to explain how items are used as well as talk about past, present and future events. This child demonstrated talking about each of these time periods by discussing what she will do when she will get out of the hospital. She also talked about past events such as playing with her friends.

Any concerns regarding growth and development? No concerns

Potential Complications that can occur because of this disease/disorder:

Potential Complication	Signs/Symptoms	Preventative Nursing Actions
1. Hypoxemia	Cyanosis, shortness of breath, retractions, rapid heart rate, confusion, cough, rapid respiratory rate	Monitor vital signs, especially pulse ox. Elevate HOB, keep 1L nasal cannula attached and unkinked. Administer prn nebulizer treatment of albuterol if oxygen saturation drops below acceptable level.

2. Pleural Effusion	Coughing, shortness of breath, chest pain, rapid respiratory rate, fever, hiccups	Encourage coughing and deep breathing, identify underlying cause, keep patient in high fowlers position, encourage incentive spirometer use

Nursing Care Plan

Nursing Diagnosis **Prioritize-most important to least**	Outcomes (Patient/Family will: …... and **give time line**) **(MUST BE MEASURABLE)**	Nursing Interventions **With rationale (At least 2 nursing interventions per outcome)**	Evaluation of **EACH** outcome
Impaired gas exchange Related to: inflammation of airways and alveoli AEB (as evidenced by): dyspnea and tachypnea	1) Patient will maintain optimal gas exchange as evidenced by pulse oximetry in acceptable range by 12 pm today 2) Patient will participate in actions to maximize oxygenation by 12 pm today.	1. Assess respirations: note quality, rate, rhythm, and depth, use of accessory muscles, ease, and position assumed for easy breathing. Rationale: Manifestations of respiratory distress are dependent on/and indicative of the degree of lung involvement and underlying general health status as patients will adapt their breathing patterns to facilitate effective gas exchange. Rapid, shallow breathing patterns and hypoventilation directly affects gas exchange. Hypoxia is associated with signs of increased breathing effort. Tripod positioning is an evidence of significant dyspnea. 2. Observe color of skin, mucous membranes, and nail beds, noting presence of peripheral cyanosis (nail beds) or central cyanosis (circumoral). Rationale: As oxygenation and perfusion become impaired, peripheral tissues become cyanotic. Cyanosis of nail beds may represent vasoconstriction or the body's response to fever/chills. Cyanosis of earlobes, lips and nose can indicate hypoxemia. 1. Maintain bedrest by planning activity and rest periods to minimize energy use. Encourage use of relaxation techniques and diversional activities Rationale: Prevents over exhaustion and reduces oxygen demands to facilitate resolution of infection. Relaxation techniques helps conserve energy that can be used for effective breathing and coughing efforts 2. Elevate head and encourage frequent position changes, deep breathing, and effective coughing	Outcomes Met/ Partially met/ Not met (with Explanation) 1. Partially met. Patient was able to keep up oxygen saturation in the acceptable range while on 1 L nasal cannula but was unable to maintain and acceptable pulse ox when the oxygen supplementation was removed. 2. Met. Patient was experiencing fatigue and did not get up and around very much due to exhaustion. Patient was able to take a deep breath and cough after a demonstration. This loosened mucus that she was able to spit out and overall breathe better. What next? We will continue to try and wean patient off if nasal cannula to see if she can maintain oxygen saturation without supplemental oxygen. Once patient is able to do this, discharge will be discussed.

		Rationale: promote maximum chest expansion, mobilize secretions and improve ventilation	

Nursing Care Plan

Nursing Diagnosis **Prioritize-most important to least**	Outcomes (Patient/Family will: …... and **give time line) (MUST BE MEASURABLE)**	Nursing Interventions **With rationale (At least 2 nursing interventions per outcome)**	Evaluation of **EACH** outcome
Activity intolerance Related to: Exhaustion associated with interruption in usual sleep pattern because of discomfort, excessive coughing, and dyspnea AEB (as evidenced by): Tachycardia in response to activity	1. Patient will demonstrate a measurable increase in tolerance to activity with absence of dyspnea and excessive fatigue by 12 pm today. 2. Patient will demonstrate and acceptable pulse oximetry range during activity by 12 pm today.	1. Determine patient's response to activity. Note reports of dyspnea, increased weakness and fatigue, changes in vital signs during and after activities Rationale: Establishes patient's capabilities and needs and facilitates choice of interventions 2. Explain importance of rest in treatment plan and necessity for balancing activities with rest Rationale: Bedrest is maintained during acute phase to decrease metabolic demands, thus conserving energy for healing. Activity restrictions thereafter are determined by individual patient response to activity and resolution of respiratory insufficiency 1. Pace activities such as self-care to reduce fatigue. Rationale: Effective coughing may exhaust an already compromised patient. Fatigue may be a contributing factor to ineffective coughing 2. Assist patient to assume a comfortable position for rest and sleep Rationale: Patient may be comfortable with head of bed elevated.	Outcomes Met/ Partially met/ Not met (with explanation) 1. Not met. Patient was unable to do self-care or toileting activities without tiring and becoming tachypnic. 2. Not met. Patient was having difficulty keeping pulse ox in acceptable range on room air, even when just sleeping. What next? Patient will continue to rest and group self-care activities but complete them at a slow pace to keep from tiring, becoming tachypnic and desaturating.

References:

Nurse Labs (2019) Nanda nursing diagnoses for pneumonia. Retrieved from https://nurseslabs.com/8-pneumonia-nursing-care-plans/#impaired-gas-exchange on 10/26/2019

N308 Medication Form

Patient Initials: CV Patient Age: 5 Patient Weight (in kg): 23.5 kg

Scheduled Medications				
Medication **Trade & Generic Names, Pharmaceutical Class** **Action of the medication** (how does the medication work in the body **in your own words**)	**Dose, route, & frequency ordered for this patient**	**Concentration Available** **Why is this pt. taking this?**	**Calculate the safe dose ranges for this child. This is done by multiplying the safe dose range by the child's weight.** https://www.epocrates.com/liteRegHonorsRegistrationProcess.do **What is the maximum dose that can be given in a 24 period? (Show Calculations)**	**Nursing Considerations** (at least 3 & must be appropriate for this patient, & include any labs that need to done to monitor pt. while taking this medication) **Contraindications** **Common side effects**
Albuterol/Ventolin **Beta 2 agonist** **Relaxes bronchial muscles**	**2.5 mg** **Q 4** **nebulizer**	**2.5 mg/3 mL** **pneumonia**	**≥20 kg: 20 mg/hour**	1) **Evaluate efficiency of treatment** 2) **Monitor vitals** 3) **Monitor lung sounds** **Cx: hypersensitivity** **SE: Nausea, vomiting, tremor, pharyngitis, back pain, aches, pains, rhinorrhea**
Acetaminophen/Tylenol **Antipyretic** **Tylenol inhibits the hypothalamic heat-regulating center to lower body temperature**	332.8 mg Prn Liquid oral solution	**160 mg/5 ml** **fever**	15 mg/kg × 23.5 kg	**1)Monitor liver function** **2)Monitor vitals (esp. temperature)** **3)monitor for hypersensitivity/skin rash** **Cx: Hypersensitivity to acetaminophen or any component of the formulation; severe hepatic impairment or severe active liver disease** **SE:** skin rash**,** Decreased serum

				bicarbonate, decreased serum calcium, decreased serum sodium, hyperchloremia, hyperuricemia, increased serum glucose
Guaifenesin/Robitussin **Expectorant** **Guaifenesin hydrates the ciliary tract and enables movement of mucous out of this tract**	100 mg Prn Liquid oral solution	**100 mg/5 mL** **coughing**	50 to 100 mg every 4 hours as needed; do not exceed 6 doses in 24 hours	1) Administer with a large quantity of fluid to ensure proper action 2) Monitor for aspiration of mucus 3) Monitor for hyposensitivity Cx: extended release tablets in children under 12. SE: dizziness, drowsiness, headache, skin rash, nausea, stomach pain

References:

Lexicomp. (2019). retrieved from www.lexicomp.com

N308 CARE PLAN
GRADING RUBRIC FOR HOSPITAL

Name: _____ Date _____ Grade _____

Section	Definition	Possible Points	Final Points
Age/Weight/BMI	Age is written in years & months. Weight is calculated in kilograms. BMI is written correctly	1	
Allergies & reaction to each	Allergies/sensitivities to food, contact, environmental. Include reactions	2	
Chief Complaint/Medical Diagnosis/Co-existing Conditions	Chief complaint, reason for admission, current primary diagnosis. Are there any other health/medical co-morbidities?	3	
History of Present Illness	Describe what has happened to the child that caused this child to be admitted	5	
Pertinent Events during this Admission	i.e., Surgery, instability during hospitalization, diagnostic tests, IV starts, procedures	1	
Past Medical & Surgical History	Past surgeries, previous health issues and diagnoses	2	
Pathophysiology	Explain in your own words the pathophysiology of the current, primary diagnosis. If a resource is used, please site the reference.	5	
Vital Signs and I & O	All vital signs and document normal vital signs for child's age. **All** I & O is documented with deficits	2	
Clinical Day Evaluation	Head to toe physical assessment with comments (DO NOT use WNL/WDL) & emphasis on systems affected by chief complaint/medical diagnosis.	8	
Pain Assessment	Pain rating and pain scale used	2	
Lab Tests	Labs day of clinical and prior tests (trend them if numerous test). Give rationale for abnormal lab tests.	2	
Diagnostic Studies	X-rays, biopsies, EKG, CT scans, MRI, scopes, cultures, etc.	2	
Patient Orders Clinical Day	Activity, diet, assessments, labs/studies, treatments, code status, etc.	1	
Clinical Day new orders	Activity, diet, assessments, labs/studies, treatments, code status, etc.	1	
Teaching and learning	Identify teaching need. Summarize teaching. Evaluate teaching.	3	
Developmental Assessment	3 Age appropriate growth and developmental milestones that should be expected for the child's age. 3 Age appropriate Divirsional/Distraction activities appropriate for child's age. Erikson's psychosocial development stage and behaviors expected for child's age. Piaget's cognitive development stage and behaviors expected for child's age. Vocalization/vocabulary development expected for child's age and is the child's language appropriate for that age. Any concerns regarding growth and development for the child.	6	
Potential Medical Complications	Complications that can occur because of primary medical diagnosis/disease/condition. Signs & Symptoms of complication. Preventative nursing actions.	6	

Nursing Diagnosis # 1 Related to or AEB	Nursing diagnosis is pertinent to patient condition/diagnosis. Reflects and supports current primary medical diagnosis R/T the pathophysiology for the current primary diagnosis/condition (not medical diagnosis). AEB: signs and symptoms that support the nursing diagnosis	4	
Expected Outcomes	Patient will/Family will…. and must have a desired outcome timeline. (Must be measurable, specific, & objective) (Ex: patient will ambulate around the nurse's station **once** during clinical or patient will verbalize **3** signs and symptoms of infection by the end of clinical day).	4	
Nursing Interventions	What nursing interventions will you do to support meeting the patient outcomes and give rationale for each intervention of why this intervention is important? (Need at least 2 interventions per outcome)	8	
Evaluations & What's Next	Goal met/partially met/not met, why or why not, what's next? (Explain your evaluation of outcomes met, partially met, or not met (i.e., patient/family was not able to verbalize 3 signs and symptoms of infection) What's next? (What is/are the next intervention/s for the patient/family to help them meet the intended outcome)?	3	
Nursing Diagnosis #2 Related To and AEB (as evidenced by)	Nursing diagnosis is pertinent to patient condition/diagnosis. Reflects and supports current primary medical diagnosis, **MUST** prioritize the most important nursing diagnosis to the least important R/T the pathophysiology for the current primary diagnosis/condition (not medical diagnosis). AEB: signs and symptoms that support the nursing diagnosis	4	
Expected Outcomes	Patient will/Family will…. and must have a desired outcome timeline. (Must be measurable, specific, & objective) (Ex: patient will ambulate around the nurse's station **once** during clinical or patient will verbalize **3** signs and symptoms of infection by the end of clinical day).	4	
Nursing Interventions	What nursing interventions will you do to support meeting the patient outcomes and give rationale for each intervention of why this intervention is important? (Need at least 2 interventions & rationale per outcome)	8	
Evaluations & What's Next	Goal met/partially met/not met, why or why not, what's next? (Explain your evaluation of outcomes met, partially met, or not met for each outcome (i.e., patient/family was not able to verbalize 3 signs and symptoms of infection) What's next? (What is/are the next intervention/s for the patient/family to help them meet the intended outcome)?	3	
Medications			
Scheduled & PRN	Trade/Generic name, Pharmacologic Class & Action of the medication. Indications for this patient.	3	
	Dose, Route, Frequency ordered for this patient	1	
	Concentration available and why is the child taking this medication	1	
	Calculate dose ordered times child's weight (give parameters for this medication if needed) and is this dose that's ordered safe for the child?	2	
	Three nursing considerations/implications for each medication specific to this patient and give Contraindications and Common Side Effects	3	
	Total Points	**100**	