Lakeview College of Nursing **Student Name ___Kelly Raineri____**
N433 Pediatrics Clinical Care Plan

CLINICALDATE__09/21/2019**_____**

Patient's Age __6 months_____ **Weight** (in kg) **___7.484kg_____**
BMI____17.78 kg/m3_____

Allergies/Sensitivities to medications, food, contact, environmental, etc. Include reactions: NKA

Chief Complaint (Reason for admission): "coughing fits **"____Admit date: ___**9/20/2019**__**

Other coexisting conditions: _NA**_____**

History of Present Illness (What events led up to this child being admitted to the hospital, etc.):

6-month-old male presents to the emergency department on 6/20/19 for cough and difficulty breathing. Accompanied by mother, who provides history. She states chronic cough and he was seen by pediatric GI doctor. The doctor started him on Ranitidine which gave no relief. The coughing fits are random and not related to feeding, the infant cannot cough his breath during them. Associated symptoms are redness in face and reduced oral intake.

Pertinent Events during this Admission and Hospitalization (IV starts, lab test, etc.):A chest x-ray was conducted to rule out any respiratory related illnesses.

Past Medical & Surgical History (illnesses, hospitalizations, immunizations, birth history-any complications?

Past Medical History: Acid reflux, discharge from right eye, tachycardia, cesarean section, circumcision.

Immunizations: Hepatitis B, Hepatitis A, DTap/Tdap/Td, Haemophilus Influenzae Type B, Pneumococcal, Polio, Rotavirus, MMR, Meningococcal.

Child's diagnosis: _____Dyspnea___ **Etiology of disease process** (what causes it): Dyspnea is the sensation of being short of breath that can be related to chronic obstructive pulmonary disease, bronchospasms of asthma, or congestion.

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).**

Dyspnea, often referred to as shortness of breath, occurs when a patient's respiration and breathing are compromised due to an underlying condition. This sensation is characterized by labored breathing and indicates that there is a complication within the airway, lungs, or heart (Raman, 2016). Other manifestations of dyspnea include coughing, fatigue, wheezing, and shallow breathing. To expand on the pathophysiology of dyspnea, it can be a result of a failed respiratory effort and chemoreceptor stimulation preventing bronchodilation (Capriotti & Frizzell, 2016, p. 427). The respiratory system is the conductor of breathing and includes ventilatory functions and gas exchange that work together to prevent dyspnea from happening (Raman, 2016). The alveolar epithelium controls gas exchange and the nervous system regulates the airways. When any of these components are interrupted, dyspnea occurs (Raman, 2016).

There can be multiple causes of dyspnea such as cardiovascular, respiratory, gastrointestinal/hepatic, renal, hematological, and neuromuscular (Raman, 2016). The primary condition causing dyspnea in patients is the deficient amount of oxygen reaching the alveoli, causing the nervous system to react and lack of oxygen to occur (Raman, 2016). Furthermore, the underlying conditions that can cause this include asthma, bronchitis, chronic obstructive

pulmonary disease, croup, pneumonia, anemia, inhalation injury, low oxygen levels, and anxiety (Capriotti & Frizzell, 2016, p. 426). To relate this to clinical, my patient was being evaluated for croup, an upper airway infection. The doctors decided to rule this out when the symptoms of dyspnea were present after a coughing episode, indicating that anxiety could be triggering the shortness of breath. In result of the anxiety attacks, the infant demonstrated quick, shallow breathing in attempt to compensate for the lack of oxygen. Dyspnea can be life threating to an infant; u understanding the pathophysiology behind it is essential to prioritize nursing interventions and treat the underlying cause.

Reference:

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology Introductory Concepts and Clinical Perspectives*. Philadelphia, PA: F.A. Davis Company.

Raman, D. (2016). Dyspnea. Retrieved from http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/pulmonary/dyspnea/

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

Clinical manifestations of dyspnea can be similar to numerous other respiratory conditions. Common signs and symptoms include cough, rapid shallow breathing, pallor, redness, weak pulse, bradypnea, and orthopnea. Tests used to determine the cause or rule out other diseases include ABGs, chest x-ray of chest and lungs, culture and sensitivity, CT scan, MRI. The results of the Arterial Blood Gases would demonstrate any abnormal serum blood values. The PCO2 and PO2 determine if the ability of the lungs to provide oxygen and remove carbo dioxide. These

ranges would signify impairment if they were to fall below 35 mm Hg or a PO2 below 90 mm Hg.

Vital Signs: (**List your source for the Normal ranges)**
T___36.8__
HR._____130_____ (NL for age) ____128-162_____
RR. ___30_____ (NL for age) _____24-60_____
B/P ____117/57_____ (NL for age) ____117/57_____
O2 sat_____100_____
Room Air or Oxygen_____RA_____

Reference:

Carle Lab Ranges from Epic Charting

Intake/Output: (IV, PO, Out & Deficits) _intake: 240 Output: 109

Clinical Day Evaluation Data – Head to toe physical assessment (Do not use WNL or WDL):
General: alert, active, well-appearing, no acute stress.

Skin- pink, no noted rashes, warm, perfusing, pale/mottled

HEENT- normocephalic, anterior fontanelle flat and soft; eyes- conjunctiva clear; nose-clear, normal mucosa, oropharynx clear, palate intact

Neck-supple, full range of motion

Chest- symmetric, lungs clear to auscultation bilaterally

Heart-regular rate and rhythm, normal S1 S2 heard, no murmur, capillary refill <2 seconds

Abdomen-soft, non-tender, round, bowel active all four quadrants, no masses

Extremities-moves all extremities with equal strength, symmetric, normal muscle tone

CNS-alert, active, normal cry, no irritably, no focal neuro deficit, difficult to arouse

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: FLACC score - 0

Lab Tests:

TEST	**NORMAL** (specific for age)	**Prior**	**Clinical Day**	**Correlation to current health status & comment on trending (comment only on abnormal lab results)**
RBCs	3.02-4.22	3.71	NA	NA
Hgb	8.9-12.7	12.2	NA	NA
Hct	26.8-37.5	34.5	NA	NA
MCV	84.3-94.2	93.0	NA	NA
MCH	27.8-32	32.9	NA	NA
MCHC	32.3-34.8	35.4	NA	NA
WBCs	8.14-14.99	10.26	NA	NA
Neutrophils	0.83-4.23	4.41	NA	NA
Eosinophils	0.05-0.57	0.08	NA	NA
Basophils	0.01-0.07	0.02	NA	NA
Monocytes	0.28-1.05	0.91	NA	NA
Lymphocytes	2.47-7.95	4.77	NA	NA
Platelets	229-562	721	NA	NA

TEST	NORMAL (specific for age)	Prior	Clinical Day	Correlation to current health status & comment on trending
Glucose	60-99	84	NA	NA
Na^{+}	136-145	138	NA	NA
Cl^{-}	98-107	108	NA	NA
K^{+}	3.5-5.1	4.4	NA	NA
Ca^{++}	8.5-10.1	10.0	NA	NA
Phosphorus	54-369	267	NA	NA
Albumin	3.4-5.0	3.4	NA	NA
Total Protein	6.4-8.2	6.0	NA	NA
BUN	7-18	9	NA	NA
Creatinine	0.70-1.30	<0.15	NA	NA

TEST	NORMAL (specific for age)	Prior	Clinical Day	Correlation to current health status & comment on trending
Liver Function Tests	AST-15-37 ALT-12-78	AST-44 ALT-47	NA	NA
Urinalysis	1.003-1.035	NA	NA	NA

Urine specific gravity	5.10-7.0	NA	NA	NA
Urine pH		NA	NA	NA
Creatinine clearance		NA	NA	NA
Other Labs:	NA			

Reference:

Carle Lab Ranges from Epic Charting

Diagnostic Studies:

TEST & RESULTS	**Correlation to current health status** (if abnormal)
Chest x-ray: Normal- well expanded, no focal lung consolidation, pleural effusion, or pneumothorax, hear size and mediastinal contours normal, bones intact	Chest x-ray results were normal.
CT Scan/MRI:	No CT Scan or MRI was needed.
Biopsy/Scope:	No biopsy needed.
Cultures:	No cultures needed.
Other:	NA

List of active orders on this patient:

ORDER	COMMENTS/RESULTS/COMPLETION
Activity:	Patient should remain playful and active to promote breathing. Mother instructed to play with infant using the provided toys in crib. Order completed.
Diet/Nutrition:	Enfamil 4 ounces with Dr. Brown Newborn Nipple. Mother sent home with some. Order completed.
Frequent Assessments:	Heart and lung sound assessment every four hours. Clear to auscultation bilaterally. Order competed.
Labs/Diagnostic Studies:	No labs or diagnostic studies were found for this admission date.
Treatments:	Nose Frieda suction device recommended to patient's family. Mother stated she will purchase one. Order completed.
New Orders for Clinical Day	
ORDER	**COMMENTS/RESULTS/COMPLETION**
No other orders at this time.	

Teaching & Learning: Identified teaching need (be specific):_Nasal Suction_____
Summarize your teaching (prioritization in care, methods used, materials used, time to provide, etc.):

The patient will utilize a Nose Frieda Suction to eliminate any nasal congestion present. The priority of this is to educate the family to promote sufficient breathing in the infant to reduce

dyspnea or hypoxia. This device allows for the mother to actively suction any particles out of the infant's nose before feedings and before sleeping. The nurse and I verbally explained the equipment to the family member present until there was a clear understanding. The mother stated that she would purchase the material at discharge.

Evaluation of your teaching (establish expected outcomes and describe if met; effectiveness of materials/approach, what next?):

The family member understood the teaching and is prepared to purchase a Nose Frieda suction after discharge. The goal is for the family members to express willingness to be actively involved in managing respiratory symptoms by discharge. Goal met. Verbally explaining the device to the mother allowed a better representation of how to utilize the Nose Frieda and was effective. The next steps for this patient and family is to follow up with their primary care provider to ensure that the nasal congestion and coughing fits were resolved. If not, further intervention is needed.

Developmental Assessment: Be sure to HIGHLIGHT the achievements of any milestone if noted in your child. Be sure to circle 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. Lifts head up when prone
2. Moves all arms and legs equally
3. Recognizes mother's voice and follows her with eyes

Age Appropriate Diversional Activities

1. Use of pacifier
2. Music
3. Toys

Psychosocial Development: Which of Erikson's stages does this child fit? Trust vs. mistrust

What behaviors would you expect?

There are certain behaviors expected for Erikson's stage of Trust vs. Mistrust. To initiate trust with the parent or caregiver, he or she must meet the basic needs of the infant. The first expected behavior is that the baby will cry when needing something from the caregiver. The baby learns to feel safe knowing that he or she will receive care when they need it Erik Erikson's Theory of Psychosocial Development 2019. Crying is the most frequent behavior of the trust vs mistrust stage.

What did you observe?

I observed the infant crying when he was getting hungry or had been sitting in a dirty diaper for too long. This was expected, and the mother responded appropriately.

Cognitive Development: Which stage does this child fit, using Piaget as a reference? Sensorimotor

What behaviors would you expect?

The expected behaviors for Piaget's Sensorimotor stage involved using their senses to understand the world. They taste, touch, smell, shake, bang, or grasp objects to learn more through trial and error (Picture Perfect Playgrounds, 2017). Other expected behaviors involve repeating movement of parents such as blinking dramatically as they do.

What did you observe?

In this 6-month-old infant, I observed him shaking his rattle repeatedly to hear the shaking nose. Along with this, he was eager to place the toys in his mouth and feel each item within reach. This included his rattle, blanket, toy elephant and pacifier.

Vocalization/vocabulary: Development expected for child's age and any concerns?

The infant mumbles sound that insinuates he is trying to say "mama". Along with this, he can prop himself up, roll from back to front, and grasp items in his hands. There are no concerns regarding this patient.

Resources:

Erik Erikson's Theory of Psychosocial Development (2019). Retrieved from https://www.psychologynoteshq.com/erikerikson/

Picture Perfect Playgrounds, Inc. (2017). Retrieved from https://www.pgpedia.com/s/sensorimotor-stage

Any concerns regarding growth and development? Developmental milestones appropriate for age

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

Potential Complication	Signs/Symptoms	Preventative Nursing Actions
1. Cyanosis	Red to blue discoloration of face, dizziness, heart palpitations, fever, nausea, vomiting, fatigue, reduced appetite	Frequent airway assessments, elevated head of bed, maintain patent airway, encourage pulmonary hygiene, provide oxygenations as ordered, deep breathing, check oxygen saturations frequently.

2. Neuro deficits related to hypoxia	Developmentally delayed, not reaching milestones	Assess for nasal congestion, assess oxygen saturation, promote optimal breathing through positioning

Nursing Care Plan

Nursing Diagnosis **Prioritize-most important to least**	Outcomes (Patient/Family will: …... and **give timeline**) **(MUST BE MEASURABLE)**	Nursing Interventions **With rationale (At least 2 nursing interventions per outcome)**	Evaluation of **EACH** outcome
Ineffective breathing pattern (Swearingen, 2016, p. 166) Related to: Dyspnea and nasal congestion AEB (as evidenced by): Need for more	1. The family will express willingness to be actively involved in managing respiratory symptoms by discharge. 2. Patient will demonstrate improved breathing comfort and decrease anxiety by utilizing a Nose Frieda at discharge.	1. Maintain patent airway, position for optimal breathing by raising head of bed, encouraging pulmonary hygiene, administer oxygen as needed, assess pulse ox every two hours with vitals (Swearingen, 2016, p. 166). 2. Keep patient sitting upright after feedings and keep infant active to promote breathing (Swearingen, 2016, p. 166).	Outcomes Met/ Partially met/ Not met (with Explanation) 1. Goal met. Family member actively asking questions pertaining to patient's care. 2. Goal met. Mother stated she will purchase a Nose Frieda at discharge.

air while sleeping, reddish discoloration in face, and 97% 02 saturations.			What next? The next steps for this patient and family is to follow up with their primary care provider to ensure that the nasal congestion and coughing fits were resolved. If not, further intervention is needed.

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

Anxiety Related to: Respiratory distress secondary to cough and nasal congestion AEB (as evidenced by): Panicking cry when episodes occur	1.Family will identify two strategies to reduce patient anxiety by discharge. 2.Patient will have a positive response to anxiety interventions by discharge and demonstrate fewer episodes	1.Interventions to relax patient include parent touch, play time, and music therapy 2.Minimize separation from parents and establish a trusting relationship.	Outcomes Met/ Partially met/ Not met (with explanation) 1. Goal met. The mother utilizes music therapy and playing with toys to reduce anxiety. 2. Goal met. Patient had few anxiety attacks when family members used calming techniques. What next? The next steps for this patient and family is to follow up with their primary care provider to ensure that anxiety, nasal congestion, and coughing fits were resolved. If not, further intervention is needed.

N433 Medication Form

Patient Initials: _ZG_____ Patient Age: __41
Days_____ Patient Weight (in kg): _____3.14
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 by what is given as a safe dose times the child's weight. Do this for a 24 hour period. (Show Calculations)** **Is this dose safe for this pt.?**	**Nursing Considerations** (at least 3 & must be appropriate for this patient, & include any labs that need to do to monitor pt. while taking this medication) **Contraindications** **Common side effects**
Sucrose 24% (SWEET-EASE) Bulk chemicals	Oral PRN	Pain or discomfort		

Acetaminophen (Tylenol) Analgesic/Antipyretic Analgesic effects occur due to activation of decreasing serotonergic inhibitory pathways in the central nervous system. Antipyretic effects due to inhibition of heat regulation center.	115.2mg PO Q 4 hours PRN	Fever, Pain	10-15 mg/kg/day Q4-6 hours Maximum 5 doses/24 hours Yes	Nursing Considerations: assess ALT, AST; assess for adverse reactions, assess for hypersensitivity Contraindications: Hypersensitivity, severe hepatic impairment, active impaired liver disease Common Side Effects: Skin rash, anemia, nausea, headache, pruritus

Ibuprofen (NSAID) oral suppository Analgesic/antipyretic Reversibly inhibits COX-1 and 2 enzymes, resulting in decreased formation of prostaglandin precursors, analgesic, antipyretic, and anti-inflammatory properties.	PO Q 6 hours PRN	Fever, Pain 10mg/kg	Yes	Nursing: Shake before use, give with food, monitor blood pressure, assess for allergies Contraindications: hypersensitivity, preterm neonate, GI bleeds, GI ulcers Common Side Effects: drowsiness, dizziness, GI upset, platelet adhesion, anemia, hyperkalemia, dermatitis