IM5 (Pediatrics) Critical Thinking Worksheet **Patient Age:** 10 yrs old **Patient Weight:** 35.2 kg

Student Name: Chelsie Callesen	**Unit:** Pedi 3N **Pt. Initials:** S.H.	**Date:** 9/13/2022
1. Disease Process & Brief Pathophysiology (Identify Key Concepts to Your Patient and Include Reference): Status asthmaticus is a medical emergency. An extreme form of asthma exacerbation characterized by hypoxemia, hypercarbia, and secondary respiratory failure. It involves premature airway closure during exhalation, cauasing an increase in functional residual capacity and air trapping. Exposure to an allergen or trigger causes a characteristic form of airway inflammation in susceptible individuals, leaving them with a difficulty breathing.	**2. Factors for the Development of the Disease/Acute Illness:** Genetic predisposition, environmental factors (P), history of atopy, positive skin test results, gastroesophageal reflux, viral infections (P), air pollutants (dust, cigarette smoke, and industrial pollutants) (P), medications (beta-blockers, aspirin, and nonsteroidal anti-inflammatory drugs), cold temperature, exercise, severe stress, respiratory infections (P).	**3. Signs and Symptoms:** Short and shallow breaths, wheezing, coughing, difficulty breathing, heavy sweating, trouble speaking, fatigue and weakness abdominal, back, or neck muscle pain, panic or confusion, blue-tinted lips or skin, loss of consciousness.
4. Diagnostic Tests Pertinent or Confirming of Diagnosis: Physical exam (P), lung function test (P), spirometry, FeNO test, Bronchial provacation or "trigger" test, allergy test, CBC	**5. Lab Values That May Be Affected:** Complete blood cell (CBC) count (P), arterial blood gas (ABG) analysis (P), serum electrolyte levels (P), serum glucose levels (P), peak expiratory flow measurement, chest radiography, electrocardiogram (in older patients), blood theophylline levels (if indicated), IgE level in selected patients.	**6. Current Treatment (Include Procedures):** Respiratory Therapy: Albuterol treatment (P)

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7. Pain & Discomfort Management: List 2 Developmentally Appropriate Non-Pharmacologic Interventions Related to Pain & Discomfort for This Patient. 1. Take patient down to teen town in order to get them out of their room and up and walking around. **2.** Play a board game with the patient or have child life bring some other toys/fidgets for them to occupy their minds. ***List All Pain/Discomfort Medication on the Medication Worksheet** Click here to enter text.	**8. Calculate the Maintenance Fluid Requirement (Show Your Work):** 1st 10 kg x 100 = 1,000 2nd 10 kg x 50 = 500 Remaining 15.2 kg x 20 = 304 Total = 1,804 mL/kg/24 hours **Actual Pt MIVF Rate:** 1,500 mL/24 hours **Is There a Significant Discrepancy?** Yes **Why?** Patient hasn't been eating/drinking as much as they typically would due to being congested and suffering from a secondary enteroviral infection.	**9. Calculate the Minimum Acceptable Urine Output Requirement (Show Your Work):** 0.5 mL x 35.2 kg = 17.6 mL/hour **Actual Pt Urine Output:** 1 immersurable urine occurance/hour

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<tr><td></td><td colspan="2">10. Growth & Development: List the Developmental Stage of Your Patient For Each Theorist Below and Document 2 OBSERVED Developmental Behaviors for Each Theorist. If Developmentally Delayed, Identify the Stage You Would Classify the Patient:

Erickson Stage: Industry vs. Inferiority
1. When I entered the patient's room at one point, I found them disappointed because they were trying to mix slime for them to place with and they didn’t mix it properely, so it didn't end up turing out as it should have.

2. I found them to be very inquisitve about what was going on. They wanted to know what was going to be happening next and especially when they would be getting to go home.

Piaget Stage: Concrete Operational Period
1. Very interested in what was outside their room. They kept coming out into the hallway to go get a drink or to look around. Once they knew what was there, they couldn't stop wanting to get out of their room to go explore.

2. Very communicative and humorus. Not afraid to start a conversation with anyone that walked in the room.</td></tr>
<tr><td>11. Focused Nursing Diagnosis:
Innefective airway clearance

12. Related to (r/t):
Related to bronchospasms and increased pulmonary secretions.</td><td>15. Nursing Interventions related to the Nursing Diagnosis in #11:
1. Teach the patient the proper ways of coughing and breathing. (e.g., take a deep breath, hold for 2 seconds, and cough two or three times in succession).

Evidenced Based Practice:
E/B: An easy, effective way of removing most secretions is coughing. So, it's necessary to assist the patient during this activity to ensure they're doing this in the most effective way possible. Deep breathing also, promotes oxygenation before controlled coughing.</td><td>16. Patient/Caregiver Teaching:
1. Educate on what to look for and how to know whne they need to come see the doctor.

2. Educate on proper use of an inhaler and have them teach back, to ensure they're using it the proper way.

3. Educate on the importance on maintaining fluid intake throughout the day to ensure the mucous membranes remain moist.</td></tr>
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<tr><td>13. As evidenced by (aeb):
As evidenced by the inability to go more than four hours without having a breathing treatment in order to break up all the extra secretions.</td><td rowspan="2">2. Encourage patient to maintain a consistent fluid intake per day.

Evidenced Based Practice:
E/B: Fluids help minimize mucosal drying and maximize ciliary action to move secretions.

3. Pace activities especially for patients with reduced energy. Maintain planned rest periods. Promote energy-conservation methods.

Evidenced Based Practice:
E/B: Fatigue is a contributing factor to ineffective coughing and can further exacerbate the underlying issue.</td><td rowspan="2">17. Discharge Planning/Community Resources:
1. Provide information on a community asthma program -- in order to receive more education and information as necessary and to provide support.

2. Ensure patient has a follow/up appointment in place.

3. Provide informational pamphlets on what to watch for and when to know to bring the patient back to the doctor, as well as how to prevent another episode.</td></tr>
<tr><td>14. Desired patient outcome:
Patient will be able to make it at least 5 hours without having to have another albuteral treatments by 1900 on Tuesday, 9/13/2022.</td></tr>
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