Critical Thinking Response

A 4yo child is admitted to the pediatric unit. The parents report a 4 day history of a cold with a barking cough, inspiratory stridor, sore throat, rhinorrhea and decreased appetite. The parents state the child is more sleep than usual but taking fluids and voiding well. The child is sitting in his mom's lap crying and holding onto mom. This is the first hospital admission for the child.

Based on the history, what areas would you include as part of your assessment??

- Onset of symptoms
- VS
- Auscultation of breath sounds
- Presence of drooling or dysphagia
- Assess for s/s respiratory distress: retractions, nasal flaring, use of assessory muscles
- Are immunizations current/up to date

Based on the initial assessment what priority nursing interventions would be appropriate at this time?

- Place the patient on a pulse oximeter
- Administer humidified O2 to keep pulse ox > 95%; consider humidified O2
- Assist the child to assume a position of comfort to promote breathing
- Have suction and available at bedside
- Administer respiratory treatments bronchodilators as ordered
- Monitor for side effects of respiratory treatments (Increased HR, assessment of Breath sounds before and after treatment, noting if improvement is made

What lab tests are likely to be ordered for this child?

- Throat culture
- Sputum culture
- Complete Blood Count- increase WBC indicative of infection
- Chest X-Ray- r/o atelectasis, pneumonia or any consolidation
- Urine Specific Gravity- dehydration is common in children with Respiratory disease

Throat and sputum culture are negative. WBCs are slightly elevated. CXR is clear with no atelectasis.

At this point based of your assessment what illness do suspect?

- Laryngotracheobronchitis- also known as croup.
- Viral infection- inflammation, edema, narrowing of larynx, trachea, bronchi
- Preceded by URI- para influenza A&B, RSV, mycoplasma pneumoniae
- Most common of Croup syndrome in infants and toddlers
- Assessment findings include:
  - Inspiratory stridor, suprasternal retractions
  - Increased production of thick secretions and edema
  - Hypoxia, respiratory acidosis
  - Gradual onset after URI
  - Low grade fever, barking cough, acute stridor, noisy breathing use of assessory muscles
  - Agitated, restless, sore throat, rhinorrhea

Identify five Nursing Diagnoses that would priority to include in a plan of care for this patient:
Ineffective breathing patterns
Potential alteration in tissue perfusion r/t hypoxia
Risk for Fluid volume deficit r/t decrease fluid intake and increased work of breathing
Fear r/t hospitalization
Altered nutrition: less than body requirements r/t decreased intake

What nursing interventions would be most appropriate based on this patient's diagnosis and Assessment?

- Assess, ascultate and monitor respiratory status q 2hours. Include rate and depth of respirations, any adventitious breath sounds, presence of retractions, nasal flaring, use of accessory muscles, and any s/s of respiratory distress or impending failure
- Monitor patient's O2 status with pulse oximetry
- Encourage high calorie fluids. Administer IVF is patient demonstrates s/s dehydration or inadequate fluid intake
- Monitor Intake and Output, Specific gravity
- Administer Respiratory treatments as ordered and monitor for side effects before and after treatment
- Cluster nursing activities to allow patient time to rest
- Allow parents to room in and assist with care as needed to decrease patient's anxiety

After several days the child's condition improves and he is being discharged home. What key points should be included in your D/C teaching?

- S/S or reoccurrence including : labored breathing, fever >100.4, barking cough, drooling or dysphagia, stridor or noisy breathing, difficulty breathing, restlessness or agitation
- Verify parents understand medication and treatment orders including dose, time and frequency of medication administration, and possible side effects.
- Encourage parents to use a cool mist humidifier until condition improves
- Explain that LTB is a viral illness: practice good hand washing and avoid contact with large groups of people to prevent transmission