Critical Thinking Exercise

Case Study #2

A 6 month old infant is being admitted to the pediatric unit for vomiting and diarrhea. Upon arrival to the unit the child is sleeping quietly in the mother’s arms. The mom reports a 3 day history of vomiting and loose watery brown stools. The child’s mucous membranes are dry, poor skin turgor and the child’s fontanel is sunken. Extremities are warm and cap refill is 2-4 seconds. VS are as follows:
T= 100.4 axillary P=136 RR=40 BP= 60/p

What would you want to include in your immediate assessments?

- Assessment of the child's hydration status - mild, moderate or severe based on percent of body weight lost, level of consciousness, blood pressure, pulse, skin turgor, mucous membranes, urine, thirst, fontanel and extremities- this child is mild-moderately dehydrated
- Assess amount, color, consistency of stool and vomitus. Note how many times/day, and when was the last episode
- Assess patient's weight and determine weight loss since onset of symptoms
- Assess child's activity level

What lab values and diagnostic tests would be indicated?

- Stool culture- r/o bacteria, ova, parasites or rotovirus
- Stool specimen to check for ph, leukocytes, glucose, and presence of blood
- Serum Electrolytes; especially Na, K, glucose, BUN and creatinine

The child is diagnosed with dehydration secondary to vomiting and diarrhea caused by a viral illness. What would your Nursing plan of care be for this patient? Be sure to include: Goals, Nursing Diagnoses, Interventions, Parent teaching and Evaluation

Goals:

- The child will be well hydrated AEB moist mucous membranes, good skin turgor, adequate urine output (> 1cc/kg/hour) and specific gravity WNL.
- The child will demonstrate normal elimination patterns with no diarrhea AEB soft formed brown stools less than four in 24 hour period

Nursing Diagnoses:

- Fluid volume deficit r/t frequent loose diarrhea stools and vomiting
- Altered nutrition: less than body requirements r/t inadequate po intake
- Risk for Infection AEB low grade fever and vomiting and diarrhea

Interventions:

- Monitor VS q 4 hours (avoid rectal temperatures)
- Monitor for s/s of dehydration include: mucous membranes, skin turgor, patient's activity level
- Weigh child daily
- Monitor and document strict Intake and Output. Diapers should be weighed and amount recorded
- Monitor urine specific gravity with each void
- Monitor lab tests ordered: stool cultures, electrolytes
- Administer IVF hydration as ordered. Child is usually placed on NPO initially and then begin oral rehydration with clear liquids. Advance diet as follows: Clear liquids (pedialyte) to BRAT diet (bananas, rice, applesauce, toast) then advance to regular diet. Avoid milk products until patient recovered and can tolerate with emesis or diarrhea
- Administer antipyretics and/or antidiarrheals as ordered
- Practice universal precautions and good hand washing with patient care to prevent spread of infection
- Provide good skin care with each diaper change to prevent skin breakdown secondary to frequent loose stools

**Evaluation:**

- Child is free from vomiting and diarrhea
- Child is able to tolerate a regular diet
- Skin integrity is intact
- Child demonstrates signs of adequate hydration and good urine output

**Parent Teaching:**

- Teach the importance of good hand washing to prevent spread of infection
- Provide information on causes of vomiting and diarrhea
- Provide instruction of hydration therapy for a child with dehydration
- Teach S/S of dehydration, and S/S that would require modification of the pediatrician