**CHAPTER 17**

**Fluid and electrolyte imbalances** can alter vital body functions. Aids in the diagnosis and monitoring the child's status. Frequent defecation and some infectious organisms can cause bleeding. Rapid notification of the physician will facilitate treatment. Helps prevent transmission of microorganisms. Prevents exposure of other patients and staff. The child may be weak, incontinent, physically impaired, or anxious and require assistance to use the bathroom. Provides necessary fluids and nutrients. Ensures early intervention.

**NOC Suggested Outcome:**
**Fluid and Electrolyte Balance:** Balance of water and electrolytes in the intracellular and extracellular compartments of the body.

**NIC Priority Intervention:**
**Diarrhea Management:** Prevention and alleviation of diarrhea.

- Obtain baseline vital signs and monitor every 2–4 hours.
- Observe stools for amount, color, consistency, odor, and frequency.
- Test stools for occult blood.
- Monitor results of stool culture and sample for ova and parasites.
- Wash hands well before and after contact with the child.
- Isolate the child until the cause of the diarrhea is determined.
- Assist the child with toileting and hygiene.
- Administer prescribed oral rehydration and intravenous solutions.
- Notify the physician if diarrhea persists, stool characteristics change, or other symptoms of dehydration/electrolyte imbalance occur.

**Rationale**
- Fluid and electrolyte imbalances can alter vital body functions.
- Aids in the diagnosis and in monitoring the child's status.
- Frequent defecation and some infectious organisms can cause bleeding.
- Rapid notification of the physician will facilitate treatment.
- Helps prevent transmission of microorganisms.
- Prevents exposure of other patients and staff.
- The child may be weak, incontinent, physically impaired, or anxious and require assistance to use the bathroom.
- Provides necessary fluids and nutrients.
- Ensures early intervention.

**Expected Outcome**
- The child's bowel function will return to normal.

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**NURSING CARE PLAN**

<table>
<thead>
<tr>
<th>GOAL</th>
<th>INTERVENTION</th>
<th>RATIONALE</th>
<th>EXPECTED OUTCOME</th>
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<tbody>
<tr>
<td>1. Diarrhea related to infectious process</td>
<td>NIC Priority Intervention: <strong>Diarrhea Management:</strong> Prevention and alleviation of diarrhea.</td>
<td></td>
<td>NOC Suggested Outcome: <strong>Fluid and Electrolyte Balance:</strong> Balance of water and electrolytes in the intracellular and extracellular compartments of the body.</td>
</tr>
</tbody>
</table>
| The child's bowel function will be restored to normal. | - Obtain baseline vital signs and monitor every 2–4 hours.  
- Observe stools for amount, color, consistency, odor, and frequency.  
- Test stools for occult blood.  
- Monitor results of stool culture and sample for ova and parasites.  
- Wash hands well before and after contact with the child.  
- Isolate the child until the cause of the diarrhea is determined.  
- Assist the child with toileting and hygiene.  
- Administer prescribed oral rehydration and intravenous solutions.  
- Notify the physician if diarrhea persists, stool characteristics change, or other symptoms of dehydration/electrolyte imbalance occur. | | The child's bowel function returns to normal. |

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**2. Fluid Volume Deficit related to active fluid volume loss**

| NIC Priority Intervention: **Fluid Monitoring:** Collection and analysis of patient data to regulate fluid balance. | | NOC Suggested Outcome: **Fluid and Electrolyte Balance:** Balance of water and electrolytes in the intracellular and extracellular compartments of the body. |
| The child will remain hydrated and will begin to drink fluids within 24 hours of admission. | - Monitor intake and output. Be sure to document time of each voiding.  
- Compare admission weight to preadmission weight. Assess weight daily.  
- Assess level of consciousness, skin turgor, mucus membranes, skin color and temperature, capillary refill, eyes, and fontanels every 4 hours. | | The child has normal fluid and electrolyte balance as indicated by laboratory evaluation and physical examination. |
### Alterations in Gastrointestinal Function

Vomiting frequently accompanies diarrhea and contributes to the child’s fluid loss.

Less invasive than IV fluids. Provides for replacement of essential fluids and electrolytes.

Use of IV replacement is based on the degree of dehydration, ongoing losses, insensible water losses and electrolyte results.

Early assessment and intervention can prevent worsening of the condition.

Minimizes skin contact with chemical irritants from stool and urine.

Minimizes the mechanical and chemical irritation from disposables.

Removes traces of stool if present.

Provides a barrier and protects intact or reddened skin from becoming excoriated.

Promotes air circulation to the area.

Helps loosen any fecal matter without scrubbing, which can cause additional irritation to the skin.

Allows air to circulate and prevents accumulation of moisture.

Provides a barrier and protects intact or reddened skin from becoming excoriated.

### Nursing Care Plan: The Child with Gastroenteritis (continued)

<table>
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<tr>
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</table>
| 2. Fluid Volume Deficit related to active fluid volume loss (continued) | ■ Assess for vomiting.  
■ Provide oral fluid and electrolyte replacement solution if able to tolerate.  
■ Provide and maintain IV replacement therapy, as ordered. | ■ Vomiting frequently accompanies diarrhea and contributes to the child’s fluid loss.  
■ Less invasive than IV fluids. Provides for replacement of essential fluids and electrolytes.  
■ Use of IV replacement is based on the degree of dehydration, ongoing losses, insensible water losses and electrolyte results. | |

3. Risk for Impaired Skin Integrity related to altered fluid status

NOC Priority Outcome: Tissue Integrity: Structural intactness and normal physiologic function of skin.

The child will remain free of skin breakdown and rashes.

NIC Suggested Intervention: Skin Surveillance: Collection and analysis of patient data to maintain skin integrity

Assess skin of perineum and rectum for signs of skin breakdown or irritation.

Provide prevention or restorative care for infants as follows:

- Change diapers every 2 hours or as needed.
- Use cloth diapers rather than disposable.
- Wash diaper area after each soiling.
- Apply A & D ointment.

Minimizes skin contact with chemical irritants from stool and urine.

Minimizes the mechanical and chemical irritation from disposables.

Removes traces of stool if present.

Provides a barrier and protects intact or reddened skin from becoming excoriated.

Promotes air circulation to the area.

Helps loosen any fecal matter without scrubbing, which can cause additional irritation to the skin.

Allows air to circulate and prevents accumulation of moisture.

Provides a barrier and protects intact or reddened skin from becoming excoriated.

**Preventive care:**

- Change diapers every 2 hours or as needed.
- Use cloth diapers rather than disposable.
- Wash diaper area after each soiling.
- Apply A & D ointment.

**Restorative care:**

- Place the infant prone and leave the buttocks open to air.
- Notify the physician if the skin is severely broken or peeling or if a rash is present.
- For toddlers and older children:
  - Tub bath at least daily (if condition allows) in tepid water. Pat the area dry.
  - Discourage the wearing of underwear if possible.
  - Apply A & D ointment at least four times daily.