






INFECTION PREVENTION For Neonate



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Out line

At end of this literature, the listeners should be able to:

-  Know some of facts related to neonatal infection.
-  Identify the common nursing diagnosis related to neonate infection.
-  Know the general nursing infection prevention practice.
-  List the nursing considerations related to neonatal infection.
-  Deal with these newborn.

Facts About Newborn And Infection:

- ☞ Newborns are particularly susceptible to infections disease, much more so than older children and adults.
- ☞ The immune systems aren't adequately developed to fight the bacteria, viruses, and parasites.
- ☞ Newborns who are receiving care in Neonatal Intensive Care Unit (NICU) are at increased risk of nosocomial infections.

Most Common Neonatal Infection:

❖ **Group B Streptococcal Disease (GBS).**

❖ **E. Coli Infection.**

❖ **Listeriosis.**

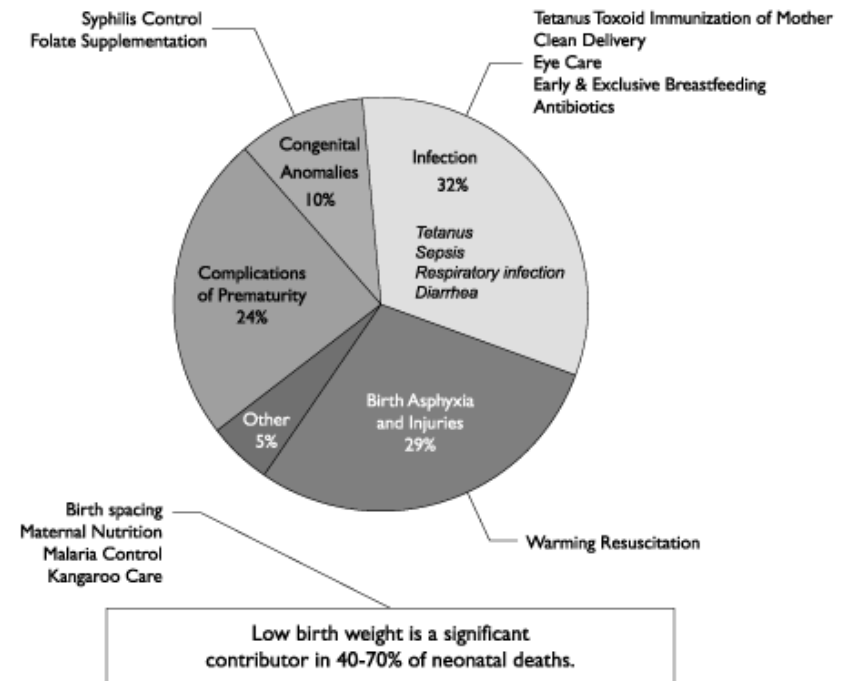
❖ **Meningitis.**

❖ **Sepsis.**

❖ **Conjunctivitis.**

❖ **Candidiasis.**

❖ **Congenital Infections.**



Contributing Factors With Newborn Infection:

- ✓ Professional health is non compliance with infection protocols and policy.
- ✓ Invasive Procedures which interrupt normal body barriers (intubation, cannulation, N.G. tube..... et al).
- ✓ Overcrowding and understaffing in the NICU
- ✓ Immaturity of the immunity system (Preterm).
- ✓ Antibiotic Abuse.

Signs and Symptoms:

Many infections cause similar symptoms. the following are possible signs of infection:

- + Poor feeding.
- + Breathing difficulty.
- + Decreased or elevated temperature.
- + Unusual skin rash or change in skin color.
- + Persistent crying.
- + Unusual irritability.

Nursing Diagnosis For Neonate Infection:

- ➡ Risk for further infection related to cellular immunity suppression.
- ➡ Imbalance nutrition related to increased metabolic demand and side effect of medications.
- ➡ body temperature deficit related to metabolic disturbance.

Continue.....Nursing Diagnosis For Neonate Infection:

- ➡ Impaired gas exchange related to physiology of infection.
- ➡ Impaired tissues integrity related to increased permeability of connective tissue and broken the barriers (Cannula, Endo-treacheal tube..... Et al).
- ➡ Family deficient knowledge related to fear, guilt, misconception, and finical problems.

General Nursing Infection Prevention Practices in Neonate Care Unite (NCU):

The nurses and others health workers should be following the infection prevention practices that will be protect the baby, family, and their self as below:

❑ Use appropriate physical setup of the NCU environment:

1. The nursery and NICU should be isolated from street environment, no window opens to out the side.
2. All nursery and NICU entrance should have elbow or foot operated, soap dispensers and disposable towels.
3. Avoid overcrowding in the nursery and NICU.
4. The NCU should have adequate ventilation.

Continue.....General Nursing Infection Prevention Practices

☐ Hand Washing:

1. Nurses should remove rings, watches, and bracelets when dealing to babies.
2. Fingernails should be trimmed and no false fingernails or nail polish used.
3. Nurse should wet hand thoroughly, washing them for 15-30 second with soap and running water.
4. Rinsing hands under a stream of water, then drying them with clean paper.

Continue..... Hand Washing

5. Hand washing is necessary even when gloves have been worn in direct contact with babies.
6. It should immediately follow the removed of gloves and before touching another infant.
7. The nurse should teach the family how to wash their hands before and after handling or feeding the baby.

Handwashing with soap and water



1
Remove jewellery and wet hands and wrists with warm water.



2
Use 1 or 2 squirts of liquid or foam soap.



3
Lather soap and scrub hands well, palm to palm.



4
Scrub in between and around fingers.



5
Scrub back of each hand with palm of other hand.



6
Scrub fingertips of each hand in opposite palm.



7
Scrub each thumb clasped in opposite hand.



8
Scrub each wrist clasped in opposite hand.



9
Rinse thoroughly under running water.



10
Pat hands dry with paper towel.

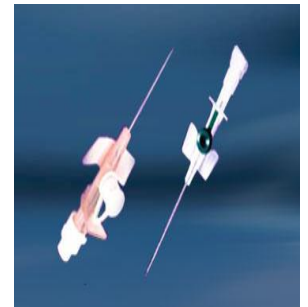


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Turn off water using same paper towel.

Continue.....General Nursing Infection Prevention Practices

❑ Good Routine Care for Newborn Baby:

1. Neonate should be bathed three times per week using baby soap.
1. Electrodes should be changed every third day if attached.
2. The umbilical stump is cleaned with alcohol at every shift or when needed.
3. Prophylactic eye drops applied at the first hour of life.
4. Replace I.V fluid daily.
5. Cannula should changed every 72 hours.
6. Feeding tubes should changed every 2-3 days.
7. Change breathing circuits of the ventilator or CPAP every 3 days.



Don't place two or more babies in the same cot or incubator or under same radiant warmer or phototherapy unit without good scrub.

Continue.....General Nursing Infection Prevention Practices

❑ Protective Clothing and Gloves:

1. The nurse must be worn gowns and gloves when direct contact to baby and change them between babies.
2. The nurse should be worn gloves when handling the neonate until blood and amniotic fluid removed from skin.
2. Wear closed toe shoes.

If one gown is used repetitively for each baby, the nurse should discard it regularly.



Continue.....General Nursing Infection Prevention Practices

❑ During Surgical and Invasive Procedures:

1. Nurse should wear sterile gloves for contact with broken skin or for invasive procedures.
2. Nurse should wear heavy rubber or latex gloves for handling contaminated items.

Don't Forget you should be worn gloves with dealing to babies at all times.



Continue.....General Nursing Infection Prevention Practices

☐ Preparing Antibiotics and Others Medications:

1. Nurse should use sterile needle and syringe at each time of medication.
2. Nurse must record on vial the date and time it was opened, and use it according to directions and protocols and then discard.
3. Discard opened glass ampoules to prevent reused them for others babies.
 1. Discard diluent solutions (e.g. Sterile water or normal saline) after 24 hours.



Continue.....General Nursing Infection Prevention Practices

☐ During Cleaning and Disinfectant Instrument and Equipment:

1. Nurse must wash or clean the instrument or equipment (e.g. Stethoscope and incubator) with soap and water before disinfecting.
2. Use disinfectant solution (0.5 chloride Bleach) to wipe off equipments that dose not come with direct contact with the blood stream.

Nursing Considerations:

- ✖ The nurse should maintain constant assessment and documentation of subtle changes in the infant's vital signs, physical assessments, feeding tolerance, responsiveness, and/or general behavior.
- ✖ Maintain good proper hand washing, use of disposable equipment, and adequate housekeeping of the environment and equipment ... et al).
- ✖ Apply appropriate body neonate temperature.
- ✖ Administration neonatal antibiotics medications with precautions:
 - ☞ Given them as scheduled and in proper administration guidelines.
 - ☞ Monitor the side effects of the specific antibiotics.



Continue.....Nursing Considerations:



- ☛ The should know that the antibiotics predispose the infant to growth of resistant organisms from fungal agents such as Candida.
- ✗ The nurses are responsibility to deal with babies in all types of isolation exclusively for each of them.
- ✗ Daily weight, intake and out put record.
- ✗ Give the baby small, frequent feeding to provide opportunity caloric intake.
- ✗ The nurse should be careful when used rectal thermometers, incubator doors, pulse oxymeter probes, used suction catheters, and nutritional source (parenteral nutrition solutions and formula).

Continue.....Nursing Considerations:



- ✖ The nurse must awareness of the potential routes for transmission of infectious pathogens will also help identify those infants at risk for developing infection.
- ✖ Took with or teach the family about:
 - ☑ Modes and prognosis of infections.
 - ☑ Proper way for dealing with their baby.
 - ☑ Let them to participate in caring of their baby regarding medication administration, monitoring weight intake and outet al.

THANKS