

## NEWBORN NURSERY GOALS AND OBJECTIVES FIRST YEAR

**Faculty:** Edith Linares, MD  
Director, Well Baby Nursery, LSUHSC

**Goal:** Develop competency in providing care to infants in level 1 nursery.

### Learning Objectives and Curricular Content:

1. Understand the delivery of care to the healthy newborn.
  - a. Identify the series of events the neonate goes through from birth until discharge by describing the prenatal, perinatal and postnatal periods.
  - b. Describe newborn transitional period.
    1. Normal cardiopulmonary changes
    2. Monitoring Procedures: glucose, temperature, vital signs, and behavior
    3. Prevention: Hep B vaccine, vitamin K, eye
  - c. Describe operation and management of the Well Baby Nursery.
    1. Admission, transfers, and discharge planning
    2. Documentation of medical and nursing cares
    3. Infant feeding
    4. Safety
    5. Infection control
2. Perform an assessment of a newborn, using history, physical exam and routine screening procedures.
  - a. Describe risk factors to be assessed from the maternal history: maternal fever, PROM, meconium, pre-eclampsia, diabetes, drug abuse, etc.
  - b. Interpret laboratory results from mother/infant screening tests.
  - c. Identify normal parameters assessment of: RR, HR, BP, temperature, CBC: WBC, H/H, etc.
  - d. Perform a thorough newborn physical:
    1. Assessment of gestational age and growth parameters: AGA, SGA, LGA
    2. Vital signs
    3. General appearance: posture, activity, tone, color (cyanosis, pailor, plethora, jaundice)
    4. Skin: rashes, birthmarks, Mongolian spots, etc.
    5. Head: large, small, misshape, fontanel, caput, cephalohematoma, etc.
    6. Eyes: red reflex, subconjunctival hemorrhage symmetry
    7. Ears: position, shape, tags, dimples, etc.
    8. Mouth: Epstein pearls, lingual frenulum, gum cysts, cleft lip/palate, natal tooth, etc.
    9. Neck and clavicles: congenital torticollis, clavicular fracture, etc.
    10. Chest: symmetry, breasts

11. Heart: murmurs, rhythm, etc.
  12. Lungs: Breath sounds, breathing pattern, etc.
  13. Abdomen: umbilical cord, liver, spleen, kidneys, and bladder
  14. Genitalia: Male (testes, scrotum, hydrocele, and phalis)  
Female: (labia minora and majora, clitoris, hymen)
  15. Extremities: femoral and brachial pulses, range of movement, hips: Ortolani, Barlow maneuvers
  16. Neuralgic behavior, reflexes
  17. Spine hair tuft, sacral dimple
- e. Develop skills to perform accurate Ballard scores for gestational age assessment
3. Perform procedures appropriate for the newborn nursery.
    1. Circumcision
      - a. Gain proficiency in circumcision using the Gomco clamp method
      - b. Counsel mothers about circumcision care
    2. Venipuncture
    3. Lumbar puncture
    4. Arterial puncture
    5. Extradigits/skin tag removal
  4. Understand the delivery of care to the acutely sick infant in the Well Baby Nursery.
    - a. Identify a high-risk neonate by history and physical exam; be able to assess his/her needs.
    - b. Identify an infant with respiratory distress, formulate a differential diagnosis and manage appropriately, arranging transfer to level 2 or 3 nursery as needed.
    - c. Recognize the physical findings seen in a sick infant: poor perfusion, lethargy, hypotonia, cyanosis, plethora, poor feeding, weak cry, etc.
      1. Transient tachypnea of the newborn
      2. Meconium aspiration
      3. Pneumonia
      4. Hyaline membrane disease
  5. Know issues concerning infant nutrition: breast feeding, formula feeding
    - A. Manage breast feeding in the newborn period.
      1. Recognize and describe the benefits of breastfeeding
      2. Learn proper breastfeeding technique issues
      3. Teach, support, and counsel breastfeeding mother
      4. Recognize maternal potential risk factors and difficulties
        - a. Young mother
        - b. Working mother
        - c. Drug abuser
        - d. Mental illness
        - e. Others
      5. Recognize infant potential risk factors and difficulties
        - a. Prematurity

- b. SGA
- c. Poor feeder
- d. Cleft palate
- e. Infant of diabetic mother

- B. Manage bottle feeding in the newborn period.
  - 1. Learn formula feeding issues
  - 2. Teach, counsel, and support mothers of bottle fed infants
  - 3. Identify potential problems and counsel mothers
    - a. Spitting up
    - b. Constipation
    - c. Colic's
    - d. Others
  - 4. Learn about different kinds of formulas and describe their indication
    - a. Modified cows protein
    - b. Soy protein
    - c. Lactose free formulas
    - d. Premie formulas
    - e. Hydrolisate formulas
    - f. Others

- 6. Understand the importance of communicating with parents. Know strategies to convey information to them, and provide support and counseling.
  - A. Describe the benefits of the infants rooming-in with mother
  - B. Be able to provide anticipatory guidance to mother before discharge
    - 1. Importance of primary care pediatrician for her infant's care
    - 2. Exposure to smoke
    - 3. Routine care at home: bathing, cord care, clothing, hygiene, etc.
    - 4. Infant proper sleep position
    - 5. Sibling rivalry
    - 6. Injury prevention
    - 7. Safety: appropriate car seat, safe baby furniture, water temp, etc.
    - 8. Describe expected physical changes on the baby: skin desquamation, transient loss of hair, change of eye color, etc.
  - C. Describe routine newborn nursery policies

**Clinical & Technical Skill Acquisition:**

Recognize and describe management of abnormal physical findings and conditions of illness.

1. Birth marks: hemangiomas, port wine stains, Mongolian spots.
2. Common neonatal rashes: erythema toxicum neonatorum, neonatal transient pustular melanosis, milia, sebaceous gland hyperplasia, etc.
3. Skin lesions secondary to trauma: Subcutaneous fat necrosis, forceps marks, etc.
4. Cyanosis: peripheral and central
5. Hypothermia/hyperthermia
6. Subconjunctival hemorrhage
7. Cephalohematoma, caput succedaneum
8. Facial palsy, Erb/Duchenne palsy
9. Fractured clavicle
10. Swollen breasts
11. Tachypnea
12. Heart murmurs: asymptomatic and symptomatic
13. Abdominal distension, abdominal masses
14. Two vessel umbilical cord
15. Hip clicks
16. Large or small for gestational age
17. Infant of diabetic mother
18. Infant with intra-uterine drug and alcohol exposure
19. ABO/RH incompatibility
20. Prematurity/postmaturity
21. Jitteriness
22. Hypoglycemia, hyponatremia, etc.
23. Vomiting
24. Poor suck
25. Delayed Urination/bowel movement
26. Jaundice
27. Common congenital anomalies

**Reading Materials:**

1. Newborn Nursery notebook comprised of relevant articles and charts/tables.
2. Other articles provided by the nursery faculty.

**Rotation Requirements:**

1. Residents will spend one month as a PL3 in the newborn nursery.
2. Residents will provide care for all babies in the level 1 nursery, including admission evaluations, interval care and discharge evaluation.
3. Residents will round daily with faculty and review all babies as well as participate in teaching rounds.
4. Interns will primarily be responsible for direct patient care, while PL3's will also be responsible for supervision of interns and medical students.
5. Residents will speak to mothers daily informing them of the status

of their babies as well as provide anticipatory guidance and “mom talks”