

N432 Newborn Care Plan
Lakeview College of Nursing
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Demographics (10 points)

Date & Time of Clinical Assessment 07/01/2021 1500	Patient Initials KR	Date & Time of Birth 06/29/2021 1231	Age (in hours at the time of assessment) 50.48 hours
Gender Male	Weight at Birth <u>3120 gm</u> <u>6 lb. 14.1 oz</u>	Weight at Time of Assessment <u>2971 gm</u> <u>6 lb. 8.8 oz</u>	Age (in hours) at the Time of Last Weight 33 hours
Race/Ethnicity Black/ African American	Length at Birth <u>48.3 cm</u> <u>19.02 inches</u>	Head Circumference at Birth <u>35 cm</u> <u>13.78 inches</u>	Chest Circumference at Birth <u>34 cm</u> <u>13.39 inches</u>

There are times when the weight at the time of your assessment will be the same as birth

Mother/Family Medical History (15 Points)**Prenatal History of the Mother:**

GTPAL: Gravida 4, Term 2, Preterm 0, Abortion 2, Living 3.

When prenatal care started: 17 weeks 1 days (01/25/21).

Abnormal prenatal labs/diagnostics: The mother tested positive for Group Beta Hemolytic *Streptococcus*; Hemoglobin: 10.3, Hematocrit: 30.4; elevated Glucose at 28 Weeks (147 mg/dL and 189 mg/dL). Ultrasound showed fetal arrhythmia (tachycardia) for an irregular period.

Prenatal complications: The mother was diagnosed with gestational diabetes. There was a detected spontaneous fetal arrhythmia (tachycardia).

Smoking/alcohol/drug use in pregnancy: The mother did not smoke, drink alcohol, or use drugs during pregnancy.

Labor History of Mother:

Gestation at onset of labor: 39 weeks 2 days.

Length of labor: Schedule C-section

ROM: Membranes were taken out during the C-section

Medications in labor: oxytocin injection; morphine; ondansetron; lactated ringers, fentanyl, and bupivacaine epidural

Complications of labor and delivery: None

Past Surgical history: dilation and curettage of uterus (2006); cesarean section (2017); and hand neuroplasty (2019)

Family History: The mother of the baby has no known family history noted on the chart. Father has no known family history.

Pertinent to infant: The mother of the baby has gestational diabetes, sick cell trait, and genital herpes.

Social History (tobacco/alcohol/drugs): Mother and father deny the use of tobacco, alcohol, and drug.

Pertinent to infant: N/A

Father/Co-Parent of Baby Involvement: The father is involved.

Living Situation: The patient lives with the father of the child and her two children at Rantoul, IL.

Education Level of Parents (If applicable to parents' learning barriers or care of infant):

Both parents have a high school diploma. There are no learning barriers. The mother had two children, and this is the father's first child.

Birth History (10 points)

Length of Second Stage of Labor: Length of second stage of labor not applicable to this patient because the mother came for schedule cesarean section.

Type of Delivery: Cesarean section

Complications of Birth: Fetal arrhythmia (tachycardia)

APGAR Scores:

1 minute: 8

5 minutes: 9

Resuscitation methods beyond the normal needed: None

Feeding Techniques (10 points)

Feeding Technique Type: Bottle-fed.

If breastfeeding: The mother is not breastfeeding her baby.

LATCH score: N/A

Supplemental feeding system or nipple shield: N/A

If bottle feeding: The mother chose to bottle-feed her baby.

Positioning of bottle: Semi-upright

Suck strength: The baby's suck strength is strong.

Amount: 20 to 25 ml every 2 hours

Percentage of weight loss at time of assessment: 4.78 %

****Show your calculations; if today's weight is not available, please show how you would calculate weight loss (i.e. show the formula)****

$$3120 - 2971 = 149 / 3120 = 0.0477564102564103 \times 100 = 4.78$$

What is normal weight loss for an infant of this age? The infant can lose up to 10% of their initial weight by 3 to 4 days of age (Ricci et al., 2020).

Is this neonate's weight loss within normal limits? The neonate's weight loss is within normal limits.

Intake and Output (8 points)

Intake

If breastfeeding: The mother is not breastfeeding her baby.

Feeding frequency: N/A

Length of feeding session: N/A

One or both breasts: N/A

If bottle feeding: The mother chose to bottle-feed her baby.

Formula type or Expressed breast milk (EBM): Formula (Similac)

Frequency: Every two hours

Volume of formula/EBM per session: 20-25 ml of formula per session

If EBM, is fortifier added/to bring it to which calorie content: N/A

If NG or OG feeding: No NG or OG feeding.

Frequency: N/A

Volume: N/A

If IV: The infant does not have an IV.

Rate of flow: N/A

Volume in 24 hours: N/A

Output

Age (in hours) of first void: 2.65 hours

Voiding patterns: Every 2-4 hours

Number of times in 24 hours: 5 times in 24 hours

Age (in hours) of first stool: 3.57 hours

Stool patterns: The infant had at least 1-2 stools each day.

Type: Meconium

Color: black or greenish black

Consistency: thick and sticky.

Number of times in 24 hours: 2 times in 24 hours

Laboratory Data and Diagnostic Tests (15 points)

Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Name of Test	Why was this test ordered for THIS client? *Complete this even if these labs have not been completed*	Expected Results	Client's Results	Interpretation of Results
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<p>Blood Glucose Levels</p>	<p>The mother had gestational diabetes, and the infant can be at risk of hypoglycemia. Blood glucose is drawn if infant is at risk or suspected of hypoglycemia (Ricci et al., 2020)</p>	<p>Above 45</p>	<p>89</p>	<p>The glucose is within normal range.</p>
<p>Blood Type and Rh Factor</p>	<p>Blood incompatibility can be fatal to an infant and harm the mother, so it is important to determine blood type and Rh factor (Ricci et al., 2020)</p>	<p>A, B, O, AB Positive or negative</p>	<p>Not done</p>	<p>Not done</p>
<p>Coombs Test</p>	<p>The Coombs test detects the</p>	<p>Negative</p>	<p>Not done</p>	<p>Not done</p>

	<p>patient's antibodies that attack RBC. It helps determine any newborn's hemolytic disease and maternal anti-Rh antibodies (Pagana et al., 2020).</p>			
<p>Bilirubin Level (All babies at 24 hours)</p> <p>*Utilize bilitool.org for bilirubin levels*</p>	<p>Bilirubin level is done to determine the presence of hyperbilirubinemia and if the condition is relatively normal or possibly related to liver function problems or other conditions (Ricci et al., 2020).</p>	<p>According to Burgos & Turner (2021), at approximately 39 hours of age, the bilirubin should be under 14 mg/dL if they are greater than 38 weeks in</p>	<p>9.0 mg/dL</p>	<p>The baby is at a low risk.</p>

		gestation when they are born.		
Newborn Screen (At 24 hours)	Newborn screening is done to test multiple disorders that might not be visually detected at birth. These disorders can be metabolic, hormone-related, or genetic (Ricci et al., 2020)	Negative	(If available—these may be not available until after discharge for some clients) Labs were drawn; however, results are still pending.	Lab results are pending.
Newborn Hearing Screen	Newborn hearing screen is done to test how well the infant hears or identify trouble hearing and further testing needed (Ricci et al., 2020)	Passed	Passed	The newborn can hear in both ears

<p>Newborn Cardiac Screen (At 24 hours)</p>	<p>This screening is done to assess oxygen saturation above and below the heart and critical congenital heart defect (Ricci et al., 2020)</p>	<p>Oxygen saturation needs to be 95% or above and can be only 3% difference between the arm and legs (Ricci et al., 2020)</p>	<p>95% and 97%</p>	<p>The newborn passed the cardiac screening.</p>
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Lab Data and Diagnostics Reference (1) (APA):

Burgos, T., & Turner, S. (2021). *BiliTool*. <https://bilitool.org/>.

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2020). *Mosby's diagnostic and laboratory test reference* (15th ed.). Elsevier.

Ricci, S. S., Kyle, T., & Carman, S. (2020). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Newborn Medications (7 points)

<p>Brand/Generic</p>	<p>Aquamephyton (Vitamin K)/ Phytonadione</p>	<p>Illotycin (Erythromycin Ointment)</p>	<p>Recombivax HB/ Hepatitis B Vaccine</p>	<p>Xylocaine/ Lidocaine</p>	<p>Acetaminophen/ Tylenol</p>
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Dose	1 mg	5 mg	0.5 ml	50 mg	40 mg
Frequency	One time after birth	One time birth	First dose after birth	One time	PRN Q 4-6 hours
Route	Intramuscular	Topical (both eyes)	Intramuscular	Infiltration injection at two dorsolateral sites of the penis	PO
Classification	Vitamin/ Clotting agent	Macrolide Antibiotic	Inactivated Viral Vaccine	Local anesthesia	Antipyretic, nonopioid analgesic
Mechanism of Action	This medication increases the patient's coagulability by initiating hepatic prothrombin synthesis.	This medication binds with a ribosomal subunit of 70s in aerobic and anaerobic bacteria, causing RNA synthesis inhibition.	This immunization triggers the body's immune system to form antibodies resistant to the hepatitis B virus.	This medication block nerve impulse by decreasing the permeability of neuronal membrane to sodium that produce local anesthesia effect.	This medication inhibits the production of prostaglandin interfering with pain impulse generation in the peripheral nervous system
Reason Client Taking	To prevent vitamin K deficiency bleeding of the newborn.	To prevent ophthalmia neonatorum	Hepatitis B prophylaxis	Circumcision procedure	For pain
Contraindications (2) -There are no other pertinent contraindication for the infant	Hypersensitivity to Phytonadione; Hyperbilirubinemia	Hypersensitivity to erythromycin; minor ocular irritation	Hypersensitivity to Hepatitis B vaccine; Hypersensitivity to yeast	Hypersensitivity to lidocaine New or worsening arrhythmia	Hypersensitivity to acetaminophen; impaired liver function
Side Effects/Adverse Reactions (2)	Tachycardia; discomfort to the injection site	Hepatotoxicity; fever	Pain at the injection site; fever	Bradycardia ; respiratory depression	Hypotension ; hypokalemia
Nursing Considerations (2)	Administer with 1 to 2 hours after birth.	Gently squeeze tube to apply	First dose should be given within 12 hours of	Monitor respiratory status due to risk of	Ensure daily dose do not exceed maximum

	Hold the legs firmly and inject medication slowly.	medication into the conjunctival sac from the inner cantus to the outer cantus of each eyes.	birth. Hold the legs firmly and inject medication slowly.	respiratory depression. Assess injection site for any hypersensitivity reaction	limit. Make sure dosage are measured correctly
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess the baby's weight and vital sign	Assess baby's vital sign and ensure there is no injury to the eye.	Assess baby vital sign such as temperature before giving vaccine	Assess infant's vital sign such as heart rate and respiration	Assess for pain before giving medication
Client Teaching needs (2)	Inform the parents the purpose of vitamin K injection. Inform the parents about the risk of not receiving it such as risk of bleeding.	Inform the parents the reason why the ointment is recommended for the baby. Teach the parents about the adverse effect of the treatment.	Inform the parents about why hepatitis B vaccine are given. Inform the parents when the second dose should be given.	Tell parents that lidocaine is used to numb area and reduce discomfort for the baby. Tell the patient to monitor baby's breathing and any sign of hypersensitivity reaction.	Educate the parents about how to accurately measure the dosage and maximum dosage per day. Educate the parent about ensuring infant is not already taking medicines with acetaminophen.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). *2020 nurse's drug handbook* (19th ed.). Jones & Bartlett Learning.

Newborn Assessment (20 points)

Area	Your Assessment	Expected Variations and Findings *This can be found in your book on page 645*	If assessment finding different from expectation, what is the clinical significance?
Skin	Skin is smooth, flexible, warm to touch, and well hydrated. Color of skin is usual for ethnicity, and Mongolian spots are noted on the buttocks.	Skin smooth, flexible, warm to touch, well hydrated, color consistent with genetic background. Common newborn skin variation includes vernix caseosa, stork bites, salmon patches, milia and Mongolian spots (Ricci et al., 2020)	No variation noted
Head	Head is normal, symmetrical, and round. Palpable fontanel	Head should be symmetric and round. Size varies with age, gender, and ethnicity. Molding can happen due to vaginal birth (Ricci et al., 2020)	No variation noted
Fontanel	Both fontanel palpable, soft, flat, and open	Two fontanel (anterior and posterior) palpable, soft, flat, and open (Ricci et al., 2020)	No variation noted
Face	Facial feature are symmetrical and full cheeks noted.	Facial feature are symmetrical and full cheeks (Ricci et al., 2020)	No variation noted
Eyes	Eyes can open, clear and symmetrically placed. Eyes are aligned with ears	Eyes are open, clear, and symmetrically placed. Eye should be aligned with ears (Ricci et al., 2020)	No variation noted
Nose	Nose is midline,	Nose is midline,	No variation noted

	<p>small and narrow. Patent nares and intact septum. Nostrils are equal and patent.</p>	<p>small and narrow. Nares are patent and septum are intact. Nostrils are equal and patent. Newborn able to smell (Ricci et al., 2020)</p>	
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Mouth	Newborn's lips are midline and intact. Soft and hard palate are intact. No lesion and Epstein pearls noted.	Lips is midline, intact and movement are symmetrical. Soft and hard palate intact. No lesion noted. Other normal variation includes Epstein pearls and erupted natal teeth (Ricci et al., 2020)	No variation noted
Ears	Newborn's ears are soft and pliable. Recoils easily and quickly when folded and release. Ears are aligned with eyes.	Ears should be soft, pliable and recoil easily. Ears are aligned with outer canthus of the eye. Newborn should be able to hear (Ricci et al., 2020)	No variation noted
Neck	Newborn's neck is short and move freely.	Neck will be short, creased and move freely in all direction. Newborn should be able hold head in midline (Ricci et al., 2020)	No variation noted
Chest	Chest was round, symmetric and smaller than head	Chest should be round, symmetric, and smaller than head (Ricci et al., 2002)	No variation noted
Breath Sounds	Breath sounds are heard. No crackles or diminished breath sounds. Respiration was 39 breaths per minute.	Breath sounds should be heard bilaterally. No crackles, tachypnea, and diminished breath sounds. Respiration should be between 30-60 breaths per minute (Ricci et al., 2020).	No variation noted

Heart Sounds	S1 and S2 are present. Heart rate was 150 bpm.	S1 and S2 should be clear. Heart rate should be between 110-160 bpm (Ricci et al., 2020)	No variation noted
Abdomen	Abdomen is protuberant but not distended. Abdominal movement synchronizes with respiration. No mass noted	Abdomen is protuberant and not distended. Abdominal movements are synchronous with respiration. No masses and tenderness on palpation (Ricci et al., 2020)	No variation noted
Bowel Sounds	Bowel sound heard all four quadrants	Bowel sound should be heard all four quadrants (Ricci et al., 2020)	No variation noted
Umbilical Cord	No sign of infection, bleeding, redness, inflammation, and purulent drainage on the umbilical cord.	No sign of infection, bleeding, redness, inflammation, swelling, and purulent drainage (Ricci et al., 2020)	No variation noted
Genitals	The newborn was circumcised. Glans were smooth and meatus centered at the tip of penis. It has redness in appearance. Scrotum appears large with well-formed rugae.	Circumcised male newborn' glans should be smooth, and meatus centered at the tip of penis. It will appear reddened until it heals. Uncircumcised will have foreskin that covers the glans. Scrotum will appear relatively large with well-formed rugae. Testes should be equal, firm and smooth both side (Ricci et al., 2020)	No variation noted
Anus	Newborn's anus is	Anus should be	No variation noted

	patent. Meconium passed.	patent. Meconium passage indicates patency (Ricci et al., 2020).	
Extremities	Upper and lower extremities are symmetrical and moves freely without hesitation.	Upper and lower extremities should be symmetric and moves through range of motion without hesitation (Ricci et al., 2020).	No variation noted
Spine	Spine is midline and no dimple noted.	Spine should be in midline. No dimple on the spine (Ricci et al., 2020)	No variation noted
Safety <ul style="list-style-type: none"> • Matching ID bands with parents • Hugs tag • Sleep position 	Baby’s ID band match with parents. Hug tag was present. The baby sleeps on back.	Baby’s ID should match with parents. Hug tags should be present. Baby should sleep on their back (Ricci et al., 2002)	No variation noted

Complete the Ballard Scale grid at the end to determine if this infant is SGA, AGA, or LGA—be sure to show your work (*PDF file)

The Ballard scale is used to determine gestational age. It consists of physical maturity and neuromuscular maturity. Using gestational age, birth weight, length, and head circumference can determine if the newborn is small for gestational age, appropriate for gestational age large for gestational age (Ricci et al., 2020). The neuromuscular score for this baby was 24. The physical maturity score was 14. The total score was 38 which indicate the gestational maturity of the infant was 39 weeks. The baby was 39 weeks and two days. He weighs 3120 grams, 40.3 cm long, and has a head circumference of 35 cm.

What was your determination? The baby’s weight, length and head circumference are appropriate for gestation age which all between 10th to 90th percentile.

Are there any complications expected for a baby in this classification? There is no complication expected for this baby.

Vital Signs, 3 sets (6 points)

Time	Temperature	Pulse	Respirations
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Birth	98.4 F	154 bpm	55 bpm
4 Hours After Birth	99.0 F	144 bpm	42 bpm
At the Time of Your Assessment	98.1 F	150 bpm	39 bpm

Vital Sign Trends: The infant's vital signs were consistent and within normal range.

Pain Assessment, 1 set (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1500	FLACC scale	No pain noted	0/10	No pain noted	No pain noted

Summary of Assessment (4 points)

Discuss the clinical significance of the findings from your physical assessment:

This neonate was delivered on 06.28.21 at 1231 by scheduled cesarean section delivery with an estimated delivery date of 07.04.21. The baby was born at 39 weeks and two days with a birth weight of 6 lbs. 14.1 oz, 19.02" inches long. Upon assessment, all systems are within normal limits; Apgar scores 8/9; the last set of vitals 98.1 F/150/39; bilirubin level at 24 hours per scan was 9.0. Feeding every two hours with average consumption of 20-25 ml of milk. Neonate expected to be discharged with mother on 07.01.21 and do a follow-up check with pediatrician within 48 hours.

Nursing Interventions and Medical Treatments for the Newborn (6 points)

Nursing Interventions and Medical Treatments (Identify nursing interventions with “N” after you list them, identify medical treatments with “T” after you list them.)	Frequency	Why was this intervention/ treatment provided to this patient? Please give a short rationale.
Swaddling the newborn (N)	As frequent as possible except bathing	It is important to swaddle a newborn because it provides comfort, calms, and soothes the baby. It also helps keep the baby warm.
Monitor weight (N)	Daily (same time every day)	It is important to monitor and weigh the baby daily to ensure they are not losing more than 10% of the initial birth weight. It also helps in assessing the hydration status of a newborn.
Monitor vital sign such as temperature, heart rate and respiration. (N)	Q4 hours	It is important to monitor baby’s vital signs to ensure the baby is well and without complication. Vital sign can help identify range of complications (Ricci et al., 2020)
Ensure proper identification (N)	Every time the baby is taken out of the room and given back to the mother.	It is important to check that the baby has ID bands that match the mother for safety purposes. Proper identification prevents infant abduction (Ricci et al., 2020).

Discharge Planning (2 points)

Discharge location: The newborn will be going home with his parents.

Equipment needs (if applicable): None.

Follow up plan (include plan for newborn ONLY): The newborn will be receiving a routine follow up appointment within 24-48 hours. The newborn will wear a Holter-monitor for 7 days to assess arrhythmia.

Education needs: The mother will be educated about general newborn safety and circumcision care.

Nursing Diagnosis (30 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

Two of the Nursing Diagnoses must be education related i.e. the interventions must be education for the client.”

2 points for correct priority

<p>Nursing Diagnosis (2 pt each) Identify problems that are specific to this patient. Include full nursing diagnosis with “related to” and “as evidenced by” components</p>	<p>Rational (1 pt each) Explain why the nursing diagnosis was chosen</p>	<p>Intervention/Rational (2 per dx) (1 pt each) Interventions should be specific and individualized for his patient. Be sure to include a time interval such as Assess vital signs q 12 hours.” List a rationale for each intervention and using APA format, cite the source for your rationale.</p>	<p>Evaluation (2 pts each)</p> <ul style="list-style-type: none"> How did the patient/family respond to the nurse’s actions? Client response, status of goals and outcomes, modifications to plan.
<p>1. Risk for ineffective thermoregulation related to newborn as evidenced by newborn little ability to conserve heat.</p>	<p>Newborns have thin skin and lack of subcutaneous fat which leads then to loss heat easily.</p>	<p>1. Encourage skin-to-skin contact with the parent. Rationale: Skin-to-skin contact helps maintain the newborn’s body temperature. It is the first line of treatment for hypothermia (Ricci et al., 2020). 2. Swaddle the baby and ensure that they are wearing a hat and socks. Rationale: Swaddling the baby and wearing a hat and socks keep the baby warm and prevent them from losing heat (Ricci et al., 2020)</p>	<p>Goal: Maintain the newborn’s body temperature.</p> <p>The parents know the importance of skin-to-skin contact. They keep the baby on swaddle. The baby is also wearing a hat. Thermoregulation was well maintained.</p>

<p>2. Risk for infection related to newborn as evidence by newborn's immune systems is not adequately developed yet.</p>	<p>Newborns are susceptible to infection because their immune system does not fully develop yet to fight infection.</p>	<p>1. Teach the parents about the importance of handwashing. Rationale: Handwashing is important because it removes bacteria from the hands prevents any infection spreading to infant (Swearingen & Wright, 2019). 2. Teach the parents about the importance of keeping the baby's immunization up to date. Rationale: Immunization is vital to disease prevention (Ricci et al., 2020). Keeping immunization up to date will help the baby be protected from diseases that can be easily spread during infancy.</p>	<p>Goal: Prevent and reduce the risk of infection to the newborn.</p> <p>The family is fully aware of the importance of keeping the baby's immunization up to date. They know it is essential for the baby to be immunized to prevent infection from happening. We talked about the importance of doing handwashing before caring for the baby.</p>
<p>3. Knowledge deficit related to circumcision care as evidence by verbalization of questions.</p>	<p>During the assessment, the patient asked how to take care of circumcision wounds of her baby.</p>	<p>1. Instruct the parents to check daily for any sign of foul-smelling drainage, bleeding, or unusual swelling on the penis Rationale: It is important to check daily for a sign of infection to report provider immediately for intervention (Ricci et al., 2020) 2. Instruct the mother to put petroleum jelly in the circumcision every diaper changes Rationale: Putting petroleum jelly helps prevent the baby's penis from sticking to the diaper (Ricci et al., 2020)</p>	<p>Goal: The mother will learn how to properly care for the circumcision site. We demonstrate the importance of putting petroleum jelly in the circumcision, and the patient verbalizes understanding about it. We also educate the patient about the sign and symptoms of infection.</p>
<p>4. Risk for impaired parenting related to</p>	<p>The mother has two more</p>	<p>1. Encourage the parents to discuss their parenting</p>	<p>Goal: To improve parenting and balance</p>

<p>bring the newborn home as evidence by mother having two more children at home.</p>	<p>children, ages 4 and 16. The mother may have difficulties taking care of the newborn and two other children at the same time.</p>	<p>concerns. Rationale: The nurse must spend time with parents to allow them to ask questions and provide them some answers (Ricci et al., 2020). Knowing the parent's concern will help the nurse create a plan on how to improve their parenting. 2. Teach the mother how to balance caring and spending time for the newborn and other children Rationale: It is important that the mother individual time with the newborn, her toddler and teenage son to prevent sibling rivalry (Ricci et al., 2020).</p>	<p>taking care of all children. I was not able to implement this intervention during clinical rotation, so the goal was not met. If this intervention is implemented, the parents will better understand how to improve parenting and ensure that the three children, especially the newborn, are well-taken care.</p>
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Other References (APA):

Ricci, S. S., Kyle, T., & Carman, S. (2020). *Maternity and pediatric nursing* (4th ed.). Wolters Kluwer.

Swearingen, P. L., & Wright, J. D. (2019). *All-in-one nursing care planning resource medical-surgical, pediatric, maternity, and psychiatric-mental health* (5th ed.). Elsevier.

Ballard Gestational Age Scale

Neuromuscular Maturity

Score	-1	0	1	2	3	4	5
Posture							
Square window (wrist)	> 90°	90°	60°	45°	30°	0°	
Arm recoil		180°	140-180°	110-140°	90-110°	< 90°	
Popliteal angle	180°	160°	140°	120°	100°	90°	< 90°
Scarf sign							
Heel to ear							

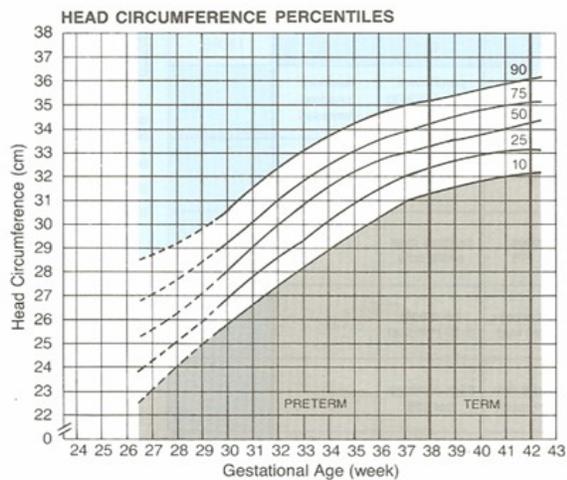
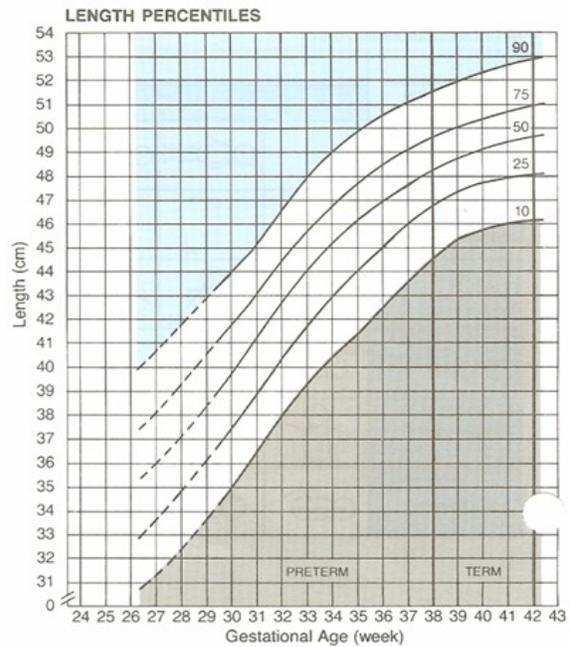
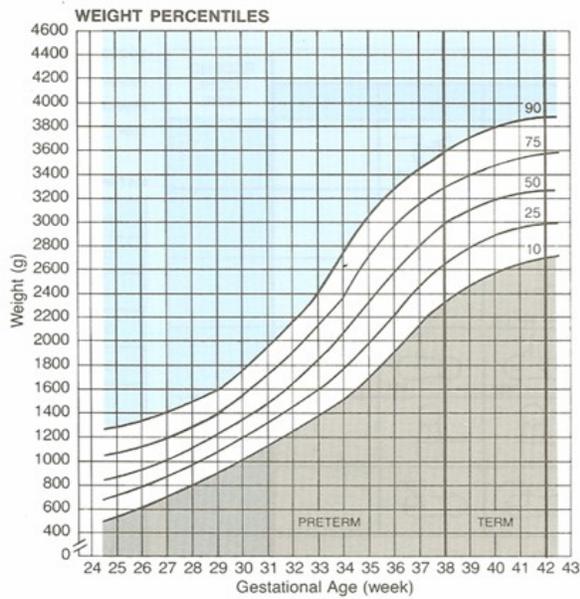
Physical Maturity

Skin	Sticky, friable, transparent	Gelatinous, red, translucent	Smooth, pink; visible veins	Superficial peeling and/or rash; few veins	Cracking, pale areas; rare veins	Parchment, deep cracking; no vessels	Leathery, cracked, wrinkled
Lanugo	None	Sparse	Abundant	Thinning	Bald areas	Mostly bald	Maturity Rating
Plantar surface	Heel-toe 40-50 mm: -1 < 40 mm: -2	> 50 mm, no crease	Faint red marks	Anterior transverse crease only	Creases anterior 2/3	Creases over entire sole	
Breast	Imperceptible	Barely perceptible	Flat areola, no bud	Stippled areola, 1-2 mm bud	Raised areola, 3-4 mm bud	Full areola, 5-10 mm bud	-10 20
Eye/Ear	Lids fused loosely: -1 tightly: -2	Lids open; pinna flat; stays folded	Slightly curved pinna; soft; slow recoil	Well curved pinna; soft but ready recoil	Formed and firm; instant recoil	Thick cartilage, ear stiff	-5 22
Genitals (male)	Scrotum flat, smooth	Scrotum empty, faint rugae	Testes in upper canal, rare rugae	Testes descending, few rugae	Testes down, good rugae	Testes pendulous, deep rugae	0 24
Genitals (female)	Clitoris prominent, labia flat	Clitoris prominent, small labia minora	Clitoris prominent, enlarging minora	Majora and minora equally prominent	Majora large, minora small	Majora cover clitoris and minora	5 26
							10 28
							15 30
							20 32
							25 34
							30 36
							35 38
							40 40
							45 42
							50 44

*Ballard Score PDF file

**CLASSIFICATION OF NEWBORNS (BOTH SEXES)
BY INTRAUTERINE GROWTH AND GESTATIONAL AGE ^{1,2}**

NAME _____ DATE OF EXAM _____ LENGTH _____
 HOSPITAL NO. _____ SEX _____ HEAD CIRC. _____
 RACE _____ BIRTH WEIGHT _____ GESTATIONAL AGE _____
 DATE OF BIRTH _____



CLASSIFICATION OF INFANT*	Weight	Length	Head Circ.
Large for Gestational Age (LGA) (>90th percentile)			
Appropriate for Gestational Age (AGA) (10th to 90th percentile)			
Small for Gestational Age (SGA) (<10th percentile)			

*Place an "X" in the appropriate box (LGA, AGA or SGA) for weight, for length and for head circumference.

References
 1. Battaglia FC, Lubchenco LO: A practical classification of newborn infants by weight and gestational age. *J Pediatr* 1967; 71:1-10,163

***PDF file**