



DEPARTMENT OF NURSING
NRS222 SUPPLEMENT

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CASE SCENARIO—ANTEPARTUM

Jenny Apple is a G1P0000 and is scheduled for her first obstetric exam. Identify three areas of focus in this exam.

During her exam, the nurse practitioner measures Jenny's fundal height. How is this measured?

What information does fundal height provide about the pregnancy?

Jenny asks when the baby's heartbeat will be heard. When is the fetal heartbeat usually detected?

What is the purpose of Naegle's rule? How is it calculated?

Jenny's last normal menstrual period started on March 22. What is her EDB?

Identify factors that you would consider part of your initial psychological assessment of an antepartal family?

Jenny is complaining of morning sickness and urinary frequency. What recommendations would you make to her?

CASE SCENARIO—NUTRITION

Lynn Patel is a 21 year old G2P0010 who presents for a prenatal exam at an OB/GYN clinic in her neighborhood. She is 26 weeks pregnant and this is her first antenatal visit. The nurse weighs and measures Lynn and finds her to be 5'7" and 102lbs. She states that she doesn't think she has gained any weight and usually doesn't eat much. Give six reasons for poor or no weight gain that the nurse should assess:

1.

2.

3.

4.

5.

6.

What information should be given to a woman with poor or no weight gain?

What are the basic nutritional requirements of pregnancy?

What special considerations apply to women with unusual diets due to either culture or food fads?

What are the nutritional concerns for the pregnant vegetarian?

NEWBORN ASSESSMENT GUIDE

Compare observed newborn with textbook parameters.

1. GENERAL APPEARANCE

A. Skin

1. Color
2. Texture
3. Turgor

B. Muscle Tone

C. Motor Activity

D. State of Consciousness

E. Cry

2. HEAD

A. Hair Distribution and Texture

B. Circumference

C. Shape

D. Fontanelles

3. FACE

A. Eyes

B. Nose

C. Mouth

1. Gums
2. Tongue
3. Palate

D. Ears

4. NECK

5. CHEST

- A. Circumference
- B. Shape
- C. Nipples

6. ABDOMEN

- A. Shape
- B. Circumference
- C. Umbilical Cord

7. ANOGENITAL AREA

- A. Female
- B. Male

8. ELIMINATION

- A. Characteristics of Stool
- B. Characteristics of Urine

9. SKELETAL

10. NERVOUS SYSTEM: REFLEXES

- A. Moro
- B. Rooting
- C. Sucking
- D. Palmar Grasp
- E. Planter Grasp
- F. Stepping
- G. Babinski
- H. Tonic Neck
- I. Prone Crawl
- J. Truncal Incurvation

11. SPECIAL SENSES

- A. Sight
- B. Hearing

12. LAB STUDIES

- A. Blood Group and Rh
- B. HCB & HCT
- C. COOMBS
- D. Bilirubin
- E. PKU, T3, T4
- F. Galactosemia

13. MEDICATIONS

- A. Vitamin K
- B. Erythromycin Ointment
- C. Hepatitis B Vaccine

GESTATIONAL AGE ASSESSMENT (Ballard)

NAME _____ DATE/TIME OF BIRTH _____ BIRTH WEIGHT _____
 HOSPITAL NO. _____ DATE/TIME OF EXAM _____ LENGTH _____
 AGE WHEN EXAMINED _____ HEAD CIRC. _____
 RACE _____ SEX _____ EXAMINER _____
 APGAR SCORE: 1 MINUTE _____ 5 MINUTES _____

NEUROMUSCULAR MATURITY

NEUROMUSCULAR MATURITY SIGN	SCORE						RECORD SCORE HERE
	0	1	2	3	4	5	
POSTURE							
SQUARE WINDOW (WRIST)							
ARM RECOIL							
POPLITEAL ANGLE							
SCARF SIGN							
HEEL TO EAR							
TOTAL NEUROMUSCULAR MATURITY SCORE							

SCORE
 Neuromuscular _____
 Physical _____
 Total _____

MATURITY RATING

TOTAL MATURITY SCORE	GESTATIONAL AGE (WEEKS)
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

PHYSICAL MATURITY

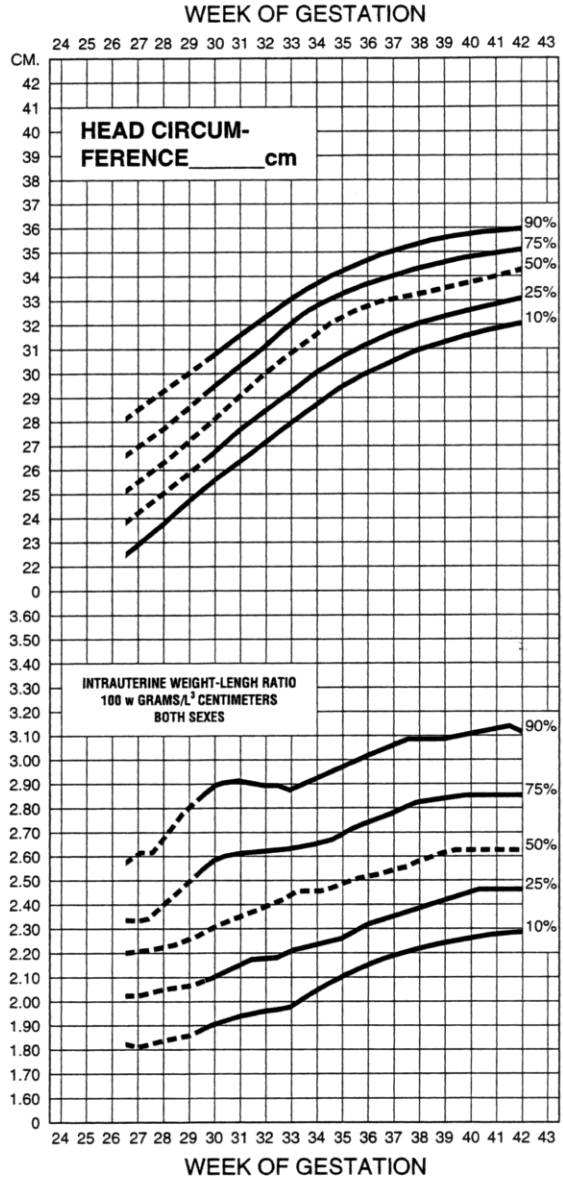
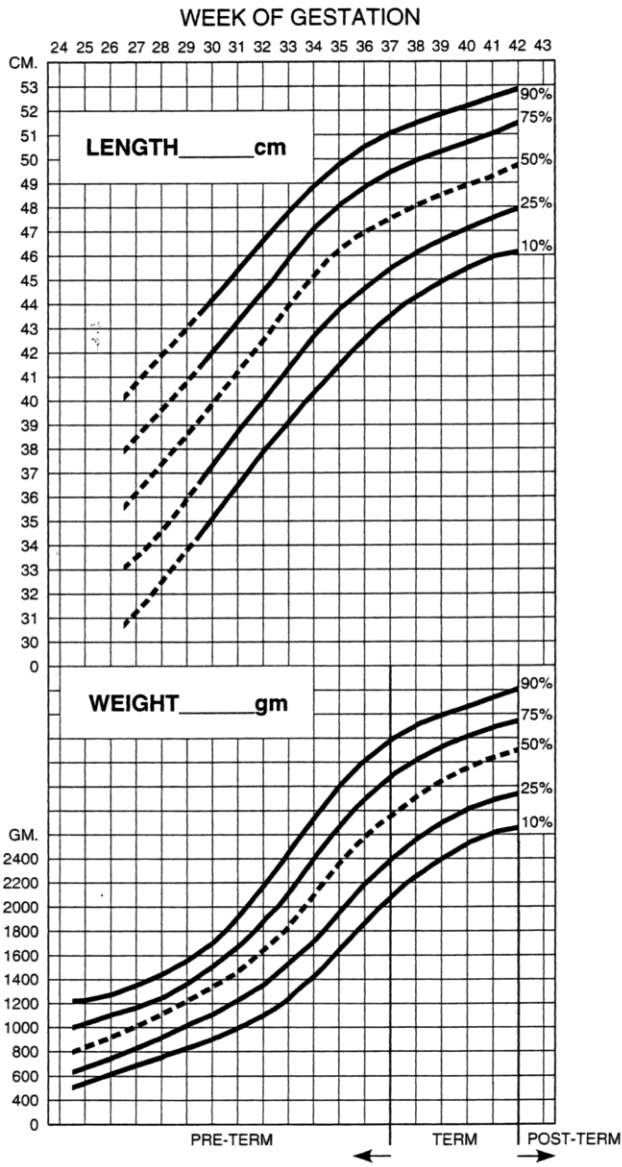
PHYSICAL MATURITY SIGN	SCORE						RECORD SCORE HERE
	0	1	2	3	4	5	
SKIN	gelatinous red, transparent	smooth pink, visible veins	superficial peeling, & or rash few veins	cracking pale area rare veins	parchment deep cracking no vessels	leathery cracked wrinkled	
LANUGO	none	abundant	thinning	bald areas	mostly bald		
PLANTAR CREASES	no crease	faint red marks	anterior transverse crease only	creases ant 2/3	creases cover entire sole		
BREAST	barely percept.	flat areola no bud	stippled areola. 1-2mm bud	raised areola. 3-4mm bud	full areola 5-10mm bud		
EAR	pinna flat, stays folded	sl. curved pinna; soft with slow recoil	well-curv pinna, soft but ready recoil	formed & firm with instant recoil	thick cartilage ear stiff		
GENITALS (Male)	scrotum empty no rugae		testes descending, few rugae	testes down good rugae	testes pendulous deep rugae		
GENITALS (Female)	prominent clitoris & labia minora		majora & minora equally prominent	majora large, minora small	clitoris & minora completely covered		
TOTAL PHYSICAL MATURITY SCORE							

GESTATIONAL AGE (weeks)
 By dates _____
 By ultrasound _____
 By score _____

Reference
 Ballard JL, Novak KK, Driver M. A simplified score for assessment of fetal maturation of newly born infants. *J Pediatr* '95 769-774, 1979
 Reprinted by permission of Dr Ballard and *Journal of Pediatrics*

CLASSIFICATION OF NEWBORNS— BASED ON MATURITY AND INTRAUTERINE GROWTH

Symbols: X-1st Exam O-2nd Exam



	1st Exam (X)	2nd Exam (O)
LARGE FOR GESTATIONAL AGE (LGA)		
APPROPRIATE FOR GESTATIONAL AGE (AGA)		
SMALL FOR GESTATIONAL AGE (SGA)		
Age at Exam	hrs	hrs
Signature of Examiner	M.D.	M.D.

APGAR SCORING

SIGN	0	1	2
HEART RATE	absent	below 100	above 100
RESPIRATORY EFFORT	absent	slow, irregular	good crying
MUSCLE TONE	flaccid	some flexion of extremities	active motion
REFLEX IRRITABILITY	none	grimace	vigorous cry
COLOR	pale blue	body pink, blue extremities	completely pink

CASE SCENARIO—APGAR SCORING

Baby Smith was born to a Gravida 3 P3003 woman, who was in labor for 24 hours and delivered her son by emergency cesarean section for fetal distress. The infant was limp, had a weak cry, gasping respirations, a HR of 80 beats/min., and was cyanotic at 1 minute of life. After 3 minutes of resuscitative efforts, the infant had spontaneous respirations, a HR of 120 beats/min., had regained some flexion, was crying with stimulation, and was acrocyanotic.

What was the initial 1 minute APGAR score for this infant?

What is the baby's 5 minute APGAR SCORE?

At which time interval after birth has the APGAR score been shown to correlate with morbidity and mortality in newborns?

What are the indications from the APGAR score for the need to resuscitate?

CASE SCENARIO—GESTATIONAL AGE ASSESSMENT

As part of the admission process, the newborn's gestational age is determined. Using the Ballard Gestational Age Tool, determine Baby Taylor's gestational age.

Baby Taylor's gestational exam reveals the following assessments of her physical maturity: her skin is cracking and has pale areas, some areas have no lanugo present, the breast bud is 1 to 2 cm with stripped areola, the ears are formed and firm with instant recoil; plantar surface reveals creases extending over anterior two-thirds of the sole; and the labia majora completely cover the minora and clitoris. Assessment of Baby Taylor's neuromuscular development shows posture with flexion of the arms and hips, 0 degree square window, 90-100 degree arm recoil, popliteal angle of 110 degrees, scarf sign with elbow at midline, and a score of 4 for the head to ear maneuver.

Baby Taylor's birth weight was 3202 gm, her length was 49 cm, and her head circumference was 33.5 cm.

The baby's Ballard score is: _____ which equates to a gestational age of _____ weeks.

Based on the gestational age you determined, correlate it with the baby's weight and classify her as LGA, AGA, OR SGA.

Plot the baby's length, weight, and head circumference on chart.

CASE SCENARIO—NEWBORN ASSESSMENT

Explain the difference between caput succedaneum and cephalohematoma.

List what can be assessed by observing the newborn. (Hands-off assessment)

How long would you listen to assess for respirations in newborn? Why?

Baby boy Freeman is an 9lb 4oz newborn brought to the nursery after a vaginal birth. His APGAR score was 8 in one minute and 9 in five minutes. Your initial “hands off” assessment reveals an infant who is pink with acrocyanosis, lusty cry, asymmetrical moro reflex, telangiectatic nevi on eyelids and glabella, molded head, and active motion with flexion of extremities, though arms appear less flexed than legs.

Using the information above, discuss what may have happened during the second stage of labor.

What was the reason the baby did not receive a 10 on the APGAR score at 5 minutes?

Explain why you might see an asymmetrical moro reflex. How could this relate to this baby's birth? What other observations might correlate?

The parents of the baby are brought into the nursery. The baby is 20 minutes old and now in a quiet, alert state. The parents are concerned about "the large red mark between the baby's eyebrows". How would you respond to the parents?

What are six essential areas of information you would need to ascertain about the baby's perinatal, intranatal, and immediate postnatal period? How could you obtain this information?

1.

2.

3.

4.

5.

6.

List and prioritize eight nursing actions you would carry out during the first 4 hours (transition period) of the newborn's life.

1.

2.

3.

4.

5.

6.

7.

8.

CASE SCENARIO—LABOR AND DELIVERY

Carol Sanchez is a 34 year old, 41 week gestation, G3P2002 who arrived in labor on Friday morning at 10:20AM. She awoke with some pelvic heaviness, but ignored it as she prepared to send her 9 year old and 6 year old to school. She then became aware that she was contracting regularly, though she describes the contractions as mild and cramp-like. Because her previous labors were quick (first pregnancy 10 hours, second pregnancy 4 hours), Carol went right to the hospital without notifying her physician or husband.

Admission assessment includes:

Maternal VS within normal limits

Fetal heart tones 148 RLQ

Contractions q5-6 minutes, 30-45 seconds, mild to moderate intensity

Cervix 2cm dilated, 70% effaced, Fetal position ROP, -1 station

What additional findings would reassure the nurse that Carol was in true labor?

What is the significance of the baby's position and station?

What additional assessments would be helpful to the nurse in planning care for this family?

What factors may contribute to the baby's position of ROP?

Shanika Carter is a G1P0000 who is 6 cm dilate, 100% effaced, and 0 station. She begins to indicate many signs of discomfort and anxiety. Her previous methods to increase relaxation are no longer effective. Based on your assessment, you select the nursing diagnosis of Pain related to anxiety and difficulty maintaining relaxation. Identify at least four nursing interventions that you think are important. Explain the physiological rationale.

1.

2.

3.

4.

Identify two anticipated outcomes that would indicate your interventions have been effective.

1.

2.

Shanika complains of tingling and numbness of her hands and feet.

What is the cause?

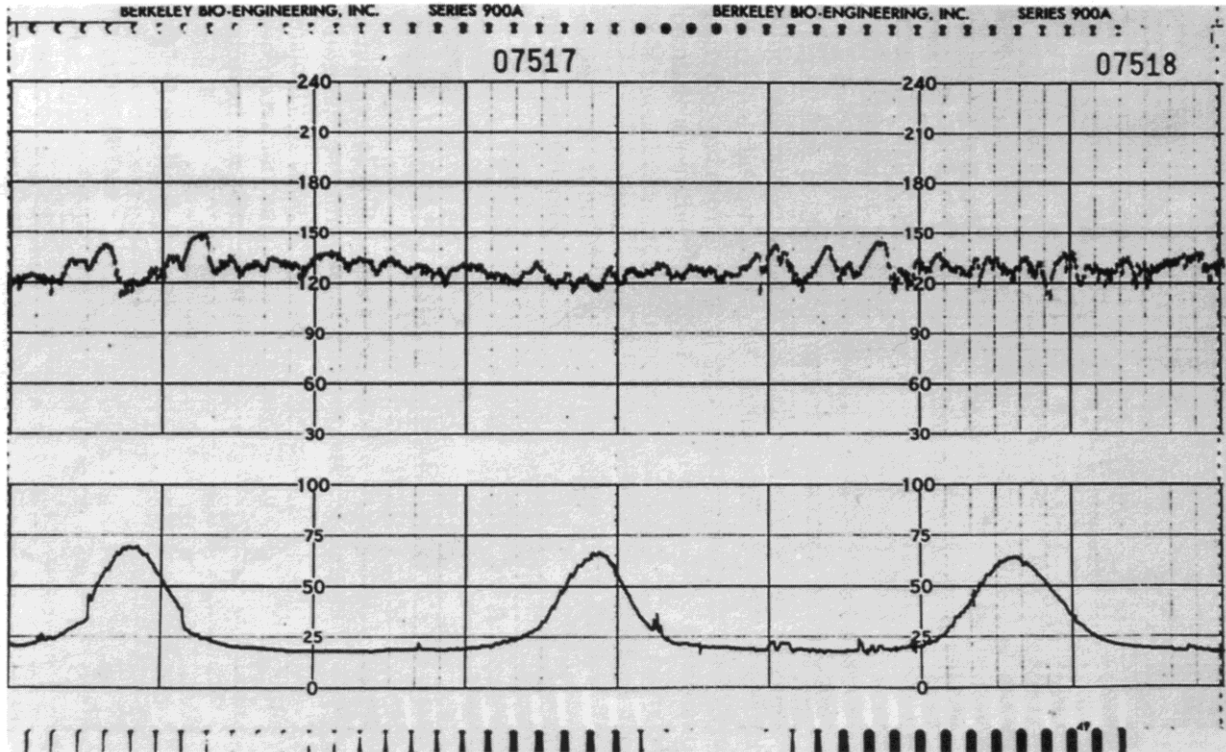
List nursing interventions to assist Shanika.

Shanika reaches full dilatation. Full dilatation is _____ cm. What stage of labor is Shanika in?

List signs that birth is imminent.

You prepare the room for the birth. Describe maternal positions that may be used during labor and birth. Identify the advantages and disadvantages of each.

FETAL MONITORING



FETAL HEART RATE

Baseline:

Variability:

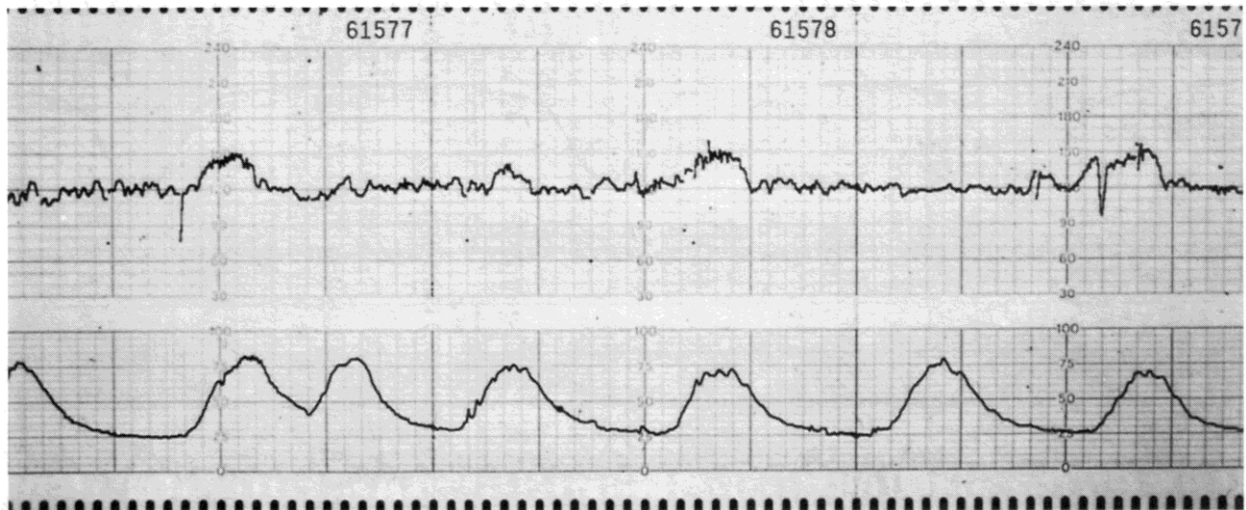
Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:

Duration:

Strength:

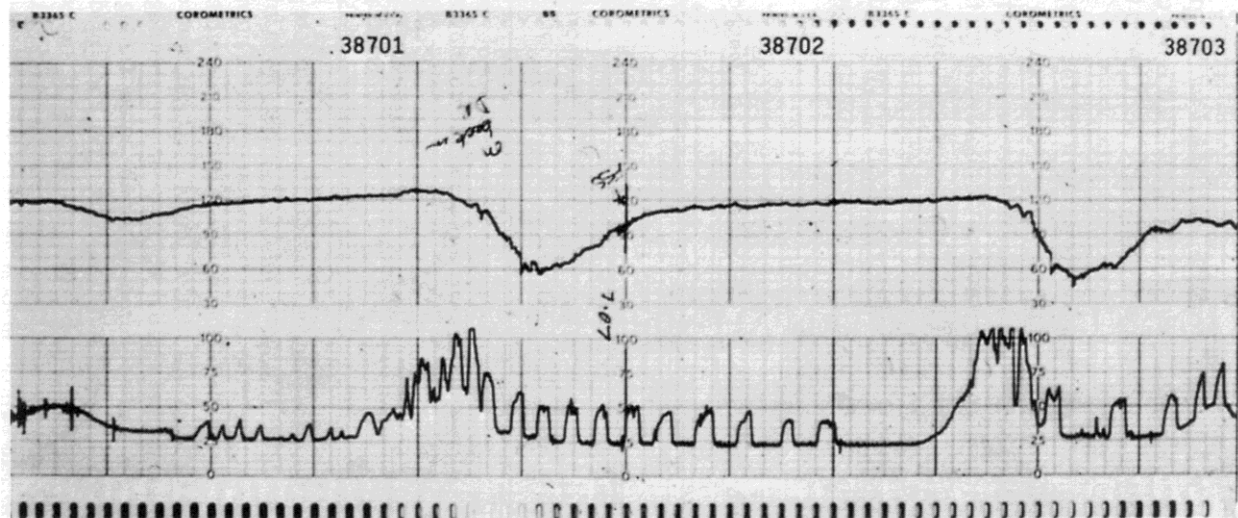


FETAL HEART RATE

Baseline:
 Variability:
 Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:
 Duration:
 Strength:

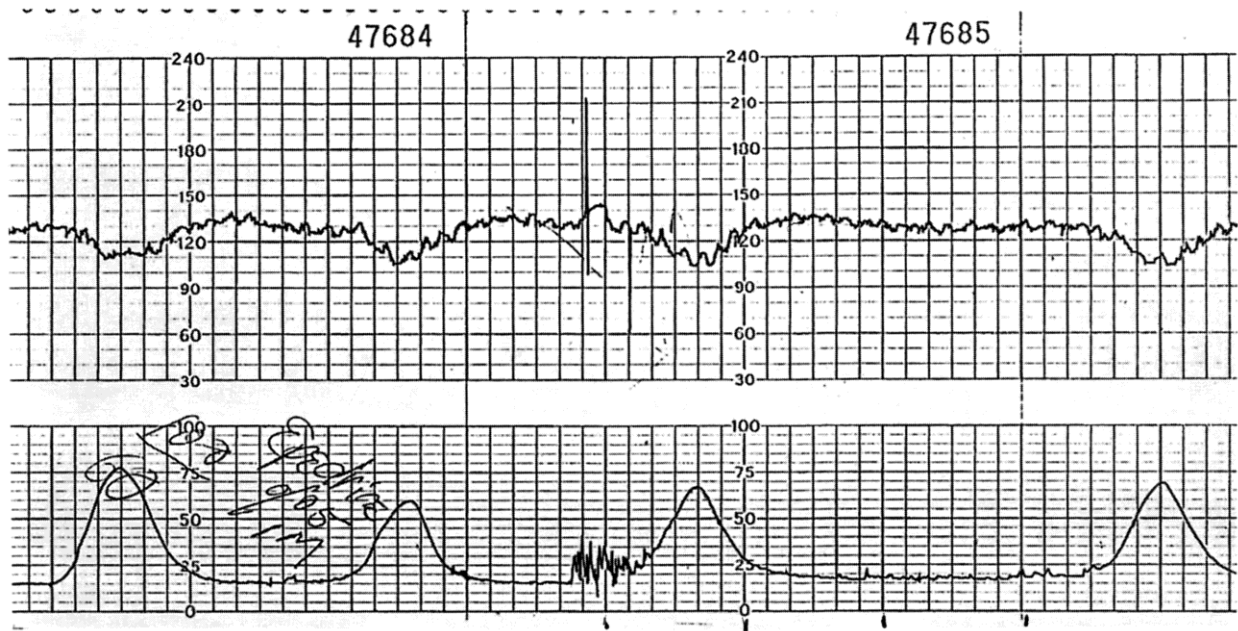


FETAL HEART RATE

Baseline:
 Variability:
 Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:
 Duration:
 Strength:



FETAL HEART RATE

Baseline:

Variability:

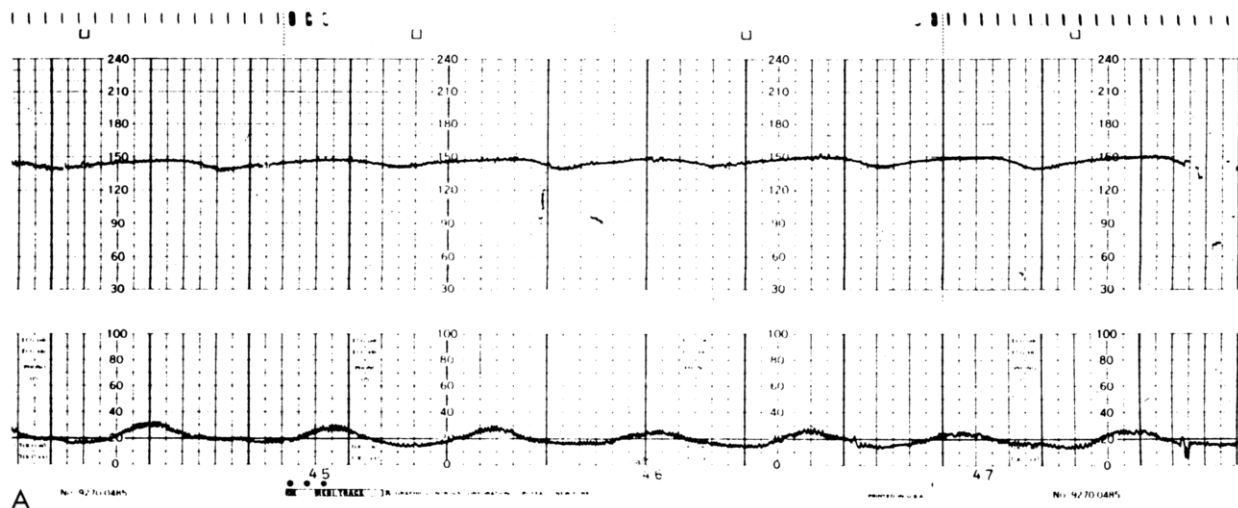
Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:

Duration:

Strength:



FETAL HEART RATE

Baseline:

Variability:

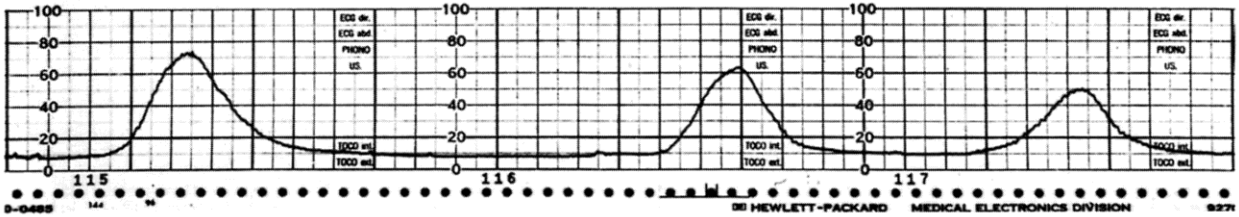
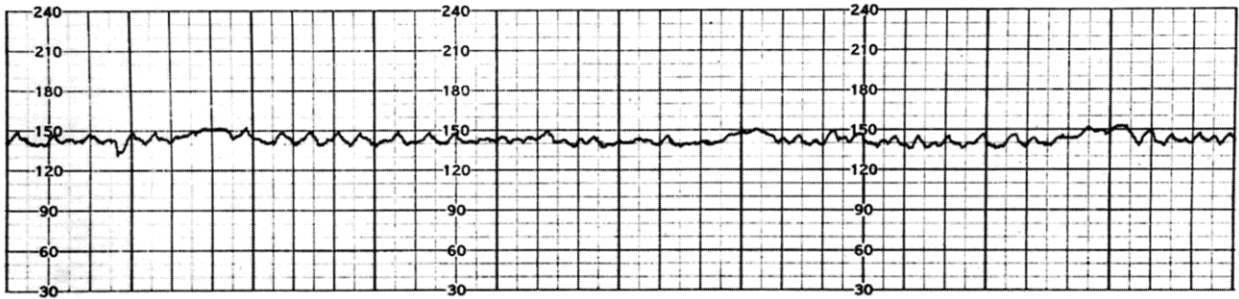
Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:

Duration:

Strength:



FETAL HEART RATE

Baseline:

Variability:

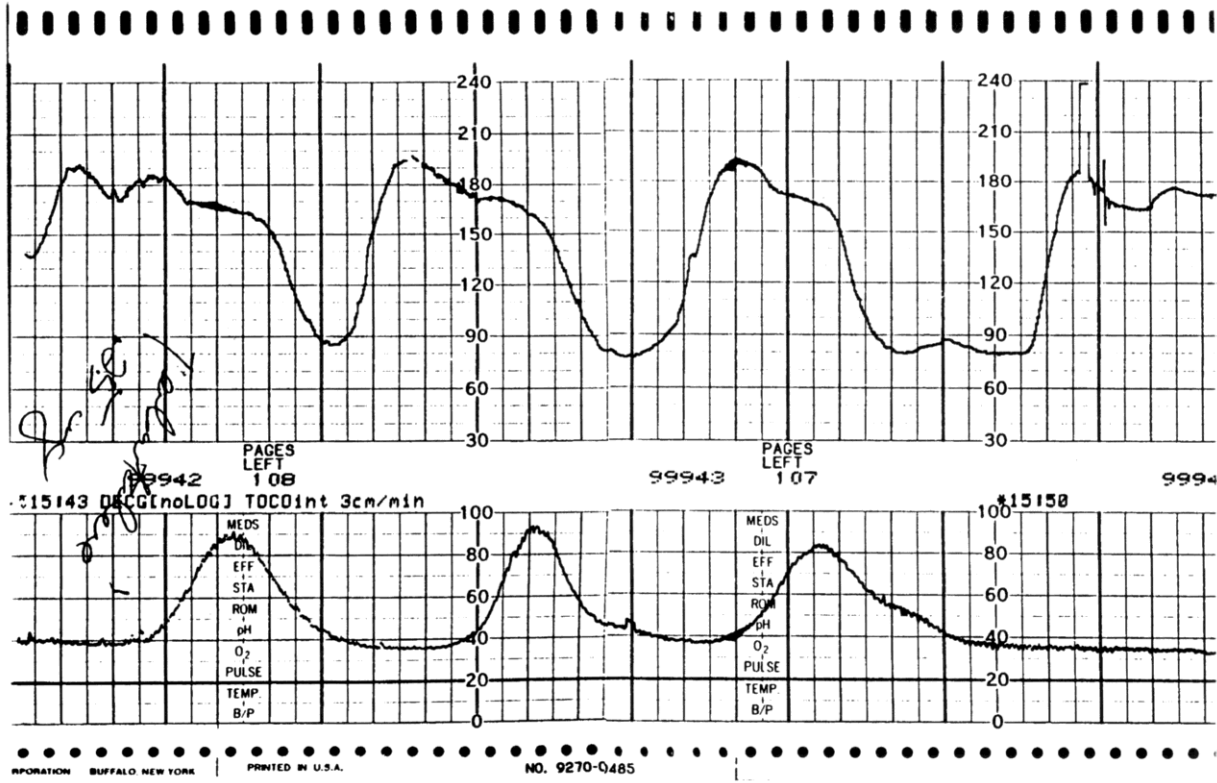
Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:

Duration:

Strength:



FETAL HEART RATE

Baseline:
 Variability:
 Periodic/Episodic Changes:

UTERINE ACTIVITY

Frequency:
 Duration:
 Strength:

CASE SCENARIO—POSTPARTUM

Debbie Vanelli is a G2P1011 who has delivered an 8lb baby girl. Her information reads as follows: SVD @ 5:30 PM. No episiotomy, 2nd degree perineal laceration.

Identify nine areas that should be examined and assessed during the initial postpartum physical assessment.

1.

2.

3.

4.

5.

6.

7.

8.

9.

Soon Ye is a 21 year old primipara who gave birth 4 hours ago. Immediately following birth her fundus was midway between the symphysis and umbilicus. Where would you expect it to be now?

What characteristics should you note in assessing Soon Ye's lochia?

How do you record your findings about her lochia?

In preparation for assessing Soon Ye's perineum, which position should she be in?

What observations about the condition of the client's anal area should be made during the assessment of the perineum?

Why is it important to include an evaluation of your client's lower extremities as part of your assessment?

CASE SCENARIO—DIABETES

Patricia Lewis is pregnant for the second time. Her first child weighed 9lb 11oz. Her doctors perform a glucose tolerance test and discover elevated blood glucose levels. Because Patricia shows no signs of diabetes when she is not pregnant, she is best classified as having:

_____.

Patricia will be first managed in what way?

Barbara Kaye is IDDM primigravida who has been on insulin for the past year. She has been told that her insulin needs will increase during pregnancy. What fact is this statement based on?

Following birth, Barbara's baby is at greatest risk for the development of: _____

You assess Barbara's anxiety about the possible effects of diabetes on pregnancy. What is the most important factor you can convey to Barbara to achieve a successful pregnancy with minimal complications?

Identify three ways in which pregnancy can affect diabetes.

- 1.
- 2.
- 3.

Identify four maternal and/or fetal complications that may occur during pregnancy as a result of diabetes mellitus.

1.

2.

3.

4.

A friend of yours is diagnosed as having gestational diabetes. She tells you that her grandmother takes tolbutamide (Orinase) for diabetes. Your friend asks why she can't simply take tolbutamide too. What would you tell her?

Your friend also asks why infants of diabetic mothers are often large at birth. How do you explain this phenomenon?

List three tests that might be performed to assess fetal status in a pregnant woman with diabetes.

1.

2.

3.

CASE SCENARIO—PREECLAMPSIA

Tamara Green is a 22 year old G1P0 African-American woman who is admitted with a blood pressure of 148/96. At her last two prenatal visits her readings were 130/80 and 140/90. Her pre-pregnancy blood pressure was 100/60. She has been on bedrest for 1 week, maintaining a lateral position. Her weight gain in the past 2 weeks has been 7 lbs. and 8 lbs. each week. She has pedal edema and is spilling +3 protein in her urine. Tamara is given a 4 gram loading dose of magnesium sulfate followed by a 2 gram/hour maintenance dose. Her laboratory reports remain within normal limits, with the exception of elevated urine protein. The decision is made to continue with lateral bedrest. Orders are written for blood pressure checks every 30 minutes, I&O, daily weight, assessment of deep tendon reflexes, and a protein check with every voiding. Fetal surveillance with serial ultrasonography and nonstress tests is instituted.

What is the most common warning sign of preeclampsia?

The nurse would suspect the diagnosis of preeclampsia if she found which of the following in her assessment?

- A. ankle edema and glucosuria
- B. proteinuria and glucosuria
- C. proteinuria and hypertension
- D. hypertension and hyporeflexia

Why is magnesium sulfate used in patients with preeclampsia?

What are some of the potential side effects to the fetus of a mother receiving magnesium sulfate?

Tamara's condition has worsened to severe preeclampsia. What signs might you expect?

What characteristics about Tamara make her more prone to develop preeclampsia?

MERCER COUNTY COMMUNITY COLLEGE
SCIENCE & HEALTH PROFESSIONS

NURSING PROGRAM

MATERNITY OBJECTIVES

Clinical Experience Objectives

1. **Orientation** to obstetrical unit.
2. **Utilize** the nursing process to formulate a plan of care for the client during the antepartal, intrapartal and postpartal period with special consideration of various socioeconomic and cultural factors.
3. **Observe** proper procedure in caring for a client in labor and delivery; including admission procedure, physical preparation, monitoring vital signs, timing of contractions and monitoring fetal heart beats as performed by staff nurse. **Perform** hygienic and basic comfort measures, provide psychological support in the different stages, assist with limited teaching or coaching of breathing exercises. **Review** methods of recording utilized by staff nurses.
4. **Demonstrate** proper procedure in caring for the post-partum client; perineal care and inspection, examination of breast; breast care; observation of lochia, monitoring involution of the uterus, client teaching, psychological support, administering medication, charting.
5. **Demonstrate** proper procedure in caring for newborn in newborn nursery; feeding, bathing, diapering, dressing, measuring, weighing, taking vital signs, observing stool and skin color, transporting baby to mother and assessment of mother's need for guidance with feeding; charting pertinent information. **Complete** newborn assessment guide as outlined and required by Mercer County Community College.
6. **Interact** appropriately with the various members of the health care team.

COMMON PHARMALOGICAL AGENTS USED IN MATERNITY NEWBORN CARE

Since you will all be rotating from area to area, it is helpful to complete drug cards on the following medications.

FOR LABOR AND DELIVERY

PITOCIN	NUBAIN (NALBUPHINE)
DEMEROL (MEPERIDINE)	NARCAN (NALOXONE)
MAGNESIUM SULFATE	MARCAIN/BUPIVACAINE/LIDOCAINE
CALCIUM GLUCONATE	
TERBUTALINE (BRETHINE)	
BENADRYL (DIPHENHYDRAMINE)	
BICITRA	
NEDPHIDIPINE	

FOR POST PARTUM

DERMOPLAST/BENZOCAINE/PROCTOFOAM/CETACAINE GEL/TOPICALS	
PERCOCET	TYLENOL
SUBLIMAZE (FENTANYL)	METHERGINE
FeSO ₄	ERGOTRATERHOGAM
DULCOLAX/COLACE/SENOKOT/SURFAK/AGORAL	
HEMABATE	TUCKS
SIMETHICONE	IBRUPROFIN

FOR NURSERY

OPHTHALMIC ILOTYCIN	AQUAMEPHYTON (VIT K)
NEOSPORIN OINTMENT	
ENGERIX -B (HEPATITIS B VACCINE INACTIVATED)	

MATERNITY ASSESSMENT GUIDE

1. History of Current Pregnancy:

- a. LMP _____ EDB _____ Baseline: BP _____ WT _____
- b. Any health problems noted during this pregnancy?
Weight gain _____ Hypertension _____ Bleeding _____ Headaches _____
Edema _____ Nausea/vomiting _____ Varicosities _____ Hemorrhoids _____ Other _____
- c. Any medical complications? Describe pathology related to the mother-infant dyad.
- d. Medications taken during pregnancy. List and give actions.
- e. Substance use/abuse (i.e. smoking, alcohol, etc.)
- f. Prenatal preparation/education.
- g. Medication allergy/sensitivity _____ (identify) _____ None

2. Admission Assessment:

- a. Client's reason for hospitalization.
- b. Admission date _____ Time _____ In Labor? _____
- c. Admission diagnosis
- d. Evaluation of Parturition stage:
Membranes _____ Dilation _____ Effacement _____ Contractions began _____
Frequency _____ Duration _____ BP _____ TPR _____ FHR _____ Position _____
Show _____ Bleeding _____ Amniotic fluid color _____
- e. Admission procedures ordered: Peri Prep _____
- f.

G	T	P	A	L
---	---	---	---	---

3. Student Contact With, and Observation of Client

- a. Date of care _____ Unit area _____
- b. Obstetric phase _____ Delivery type _____

4. Labor Progress:

- a. Initial onset date _____ Time _____ First sign _____
- b. Contractions became regular
- c. Length of first stage (dilatation)
- d. Any fetal or maternal problems noted? V.S., FHT, Meconium, etc.
- e. Medications administered? Analgesic? Oxytocic? Other? I.V.? Describe actions, side effects, etc.
- f. Describe maternal psychological status during labor.
- g. Length of second stage (expulsion)
- h. Delivery time _____ Placental delivery time _____

5. Delivery Profile:

- a. Type of delivery
- b. Anesthesia used: Local (area, agent, action time), Regional (area, agent, action time), or General.
- c. Surgical intervention--describe procedure(s)
- d. Tissue repair needed? Estimated amount of blood loss.
- e. Completion of third stage of labor (placental delivery)
- f. Any problems noted with condition of mother or infant?
- g. Infant Apgar _____ Weight _____ Sex _____
- h. Nuchal cord? _____ Placental presentation Schulz _____ Duncan _____

6. Recovery/Involutional Period (Post Partum):

a. Recovery V.S. _____ Fundus height _____ Lochia color _____ Amount _____

Clots _____ Anesthesia level _____ Dressing? _____

b. Therapeutic/restorative interventions ordered

Peri care _____ Sitz bath _____ Ice (area) _____ Dressing _____

Binder _____ Other _____

c. Involutional/Physiological Status:

Fundus quality _____ Height _____ Location _____ Lochia color _____

Amount _____ Clots _____ Spontaneous voiding _____ BM _____

Breasts _____ Condition episiotomy or incision _____

d. Involutional Psychological Status:

Describe and identify psychological status observed in client? (i.e., exhaustion/euphoria, etc.) Any signs of impending depression/withdrawal? Bonding process/progress. Identify date of observation and post-partum day.

e. Any problems noted during the post-partum hospital stay?

f. Is client breastfeeding infant? _____ Temperature _____

Breasts: _____ Soft _____ Filling _____ Engorged _____

Nipples: _____ Intact _____ Flat/Inverted _____ Cracked _____

g. Medications ordered (give actions, side effects and need) during puerperal period, i.e., oxytocics, analgesics, laxatives, antibiotics.

SKILL	STUDENT
1. SAFETY CONSIDERATIONS FOR INFANT	
2. CORD CARE, CIRCUMCISION CARE	
3. IDENTIFICATION AND SECURITY MEASURES FOR INFANT	
4. BATHING DEMONSTRATION	
5. TEMPERATURE, APICAL & PERIPHERAL PULSES, RESPIRATION	
6. HEIGHT, WEIGHT, HEAD & CHEST MEASUREMENT	
7. BOTTLE FEEDING	
8. BREAST FEEDING POSITIONS, LATCH SCORING	
9. ENGORGEMENT BREAST & BOTTLE FEEDING MOTHERS	
10. BREAST CARE-- SORE, CRACKED, INVERTED NIPPLES	
11. DIAPERING, DRESSING, HOLDING SWADDLING, & SLEEP POSITIONS	
12. INBORN ERROR OF METABOLISM SCREENING	
13. USE OF BULB SYRINGE	
14. POST PARTUM CARE & COMFORT MEASURES	
15. WHEN TO CALL HCP-- POSTPARTUM	
16. VITAMIN K INJECTION	
17. PROPHYLACTIC EYE TREATMENT	
18. WHEN TO CALL HCP FOR INFANT	
19. NEWBORN PHYSIOLOGICAL JAUNDICE	
20. SCREENING FOR POSTPARTUM DEPRESSION	