N305 Focus Sheet #2 Summer 2019

Ricci, Kyle, & Carman Ch 13, 14, 21 and ATI Ch 11, 12, 13, 14, 15,16 Focused Reading

1. Fill in the following table with associated s/s of each

	TRUE LABOR	**FALSE LABOR**
Uterine Contractions (Braxton Hicks)	grow longer, stronger, closer together and occur at regular intervals -felt in lower back	-tightening or pulling sensation of top of the uterus, occur in abdomen and groin and gradually spread downward before relaxing
Cervical Dilation & Effacement	cervix changes from an elongated structure to a shortened, thinned segment; ripening and softening of the cervix (allow for dilation and effacement)	cervix is not affected
Bloody show	the mucous plug is expelled as a result of cervical softening and increased pressure; the ruptured capillaries release blood that mixes with mucus resulting in pink-tinged secretions (bloody show)	cervix is not affected
Fetus: Engagement	when infant passes the widest diameter of the pelvic brim; after spontaneous rupture of membrane there is a risk of cord prolapse if engagement doesn’t	cervix is not affected

	occur with the release of fluid and pressure	

2. Define lightening- refers to the level of the baby's head in relation to the mother's pelvic girdle. The baby drops and makes progress by changing position from -5 to +5, with -5 meaning that the baby is still floating above the pelvis and +5 meaning that the head is crowning

3. Describe the Bishop score and the indications for doing it-.The Bishop score or cervix score, is a simple method that helps predict how likely it is a full term pregnant woman will achieve a vaginal birth if induction is necessary. It can also help predict whether induction may be necessary.The Bishop Score gives points to 5 measurements of the pelvic examination dilation, effacement of the cervix, station of the fetus, consistency of the cervix, and position of the cervix.

4. What are Leopold's maneuvers (make sure to understand all 4 maneuvers) and what 4 questions do each maneuver answer?

-Method of determining the presentation,position and a lie of the fetus through the use of 4 specific steps. This method involves inspection and palpation of the maternal abdomen as screening assessment for malpresentation.

1. Maneuver 1: What fetal part (head/ buttocks) is located in the fundus (top of the uterus)
2. Maneuver 2: On which maternal side is the fetal back located? (fetal heart tones are best auscultated though the back of the fetus)
3. Maneuver 3: What is the presenting part?
4. Maneuver 4:Is the fetal head flexed and engaged in the pelvis?
    - refer to table 14.1 for details. P 488 RKC

5. List the "preprocedures" done on admission to labor and delivery.

NURSING CARE INCLUDING THE FF:

- Leopold maneuvers: Abdominal palpation of the number of fetuses, the fetal presenting part, lie, attitude, descent, and the probable location where fetal heart tones can be best auscultated on the woman's abdomen
- External electronic monitoring (tocotransducer): Separate transducer applied to the maternal abdomen over the fundus that measures uterine activity- Displays uterine contraction patterns. Easily applied by the nurse but must be repositioned with maternal movement to ensure proper placement
- External fetal monitoring (EFM): Transducer applied to the abdomen of the client to assess FHR patterns during labor and birth

LABORATORY ANALYSIS IS ALSO DONE PRIOR THE LABOR :

- Group B streptococcus: Culture is obtained if results are not available from screening at 35 to 37 weeks. If positive, intravenous prophylactic

antibiotic is prescribed. (Exceptions are planned cesarean birth and membranes intact.)
● Urinalysis: Clean-catch urine sample obtained to ascertain maternal:
-Hydration status via specific gravity
-Nutritional status via ketones
-Proteinuria, which can be indicative of gestational hypertension or preeclampsia
-Glucosuria which can be indicative of gestational diabetes
-Urinary tract infection (UTI) via bacterial count (UTIs are common in a diabetic pregnancy)
● Blood tests
- CBC level
-ABO typing and Rh-factor if not previously done

6. State the 5 “P’s” of the labor progress and what each P is composed of.
Passenger (fetus & placenta), **passageway** (birth canal), **powers** (contractions), **position**(of the woman) and **Psychological** response

7. Define fetal lie and fetal attitude . **Fetal lie** refers to the relationship between the long axis of the fetus w/ respect to the long axis of the mother
Fetal attitude the relationship of the fetal parts to each other

8. What role do the fetal skull suture lines and fontanelles play in identifying fetal position? Palpation of sutures reveals the position of the fetal head and degree of rotation that has occurred. The fontanelles also help in identifying the fetal head position

9. Define the various fetal presentations (RKC p 462-464 & ATI p 74).

Presentation: The part of the fetus that is entering the pelvic inlet first and leads through the birth canal during labor. It can be the back of the head (occiput), chin (mentum), shoulder (scapula), or breech (sacrum or feet).
Lie: The relationship of the maternal longitudinal axis (spine) to the fetal longitudinal axis (spine)
● Transverse: Fetal long axis is horizontal, forms a right
angle to maternal axis, and will not accommodate vaginal birth. The shoulder is the presenting part and can require delivery by cesarean birth if the fetus does not rotate spontaneously.
● Parallel or longitudinal: Fetal long axis is parallel to maternal long axis, either a cephalic or breech presentation. Breech presentation can require a cesarean birth.
Attitude: Relationship of fetal body parts to one another ● Fetal flexion: Chin flexed to chest, extremities flexed
into torso
● Fetal extension: Chin extended away from chest,
extremities extended
Fetopelvic or fetal position: The relationship of the presenting part of the fetus (sacrum, mentum, or occiput), preferably the occiput, in reference to its directional

position as it relates to one of the four maternal pelvic quadrants. It is labeled with three letters.
● Right (R) or left (L): The first letter references either the side of the maternal pelvis.
● Occiput (O), sacrum (S), mentum (M), or scapula (Sc): The second letter references the presenting part of the fetus.
● Anterior (A), posterior (P), or transverse (T): The third letter references the part of the maternal pelvis.

10. What do each of the 3 letters associated with fetal positioning stand for?
- Landmark fetal presenting parts include occipital bones (O) == Vertex presentation
- Chin Mentum (M)== designates breech presentation
- Acrominion process (A) == shoulder presentation

11. Fetal station is assessed in relation to what?

Measurement of fetal descent in centimeters with station 0 being at the level of an imaginary line at the level of the ischial spines, minus stations superior to the ischial spines, and plus stations inferior to the ischial spines.

12. Outline the rationale for and the pros and cons of external cephalic version.
    - External cephalic version is a procedure in which the fetus is rotated from the breech to the cephalic presentation by manipulation through the mother's abdominal wall at or near term.
    - Pros: reduction in breech presentation, reduction in C-section or vaginal breech delivery
    - Cons: the procedure is only successful in approximately 50% of cases, certain conditions--extreme hypertension, placenta previa, etc--don't allow for this procedure, placental abruption, cord accident, fetal bradycardia

13. Describe methods of cervical ripening and the indications for their use?
- **MECHANICAL AND PHYSICAL METHODS**
- A balloon catheter is inserted into the intracervical canal to dilate the cervix.
- Membrane stripping and an amniotomy may be performed.
- Hygroscopic dilators may be inserted to absorb fluid from surrounding tissues and then enlarge. Fresh dilators may be inserted if further dilation is required. Laminaria tents are made from desiccated seaweed. Synthetic dilators contain magnesium sulfate
- **CHEMICAL AGENTS** based on prostaglandins are used to soften and thin the cervix. They can be in the form of oral medication or vaginal suppositories/gels. Misoprostol: prostaglandin E1, Dinoprostone: prostaglandin E2

14. Use this chart to summarize the Stages & phases of labor. Write it so that it makes sense to you.

Stage of Labor	***What is happening during this Stage/Phase?***	***Expected effacement & dilation of cervix***	***Expected Frequency of Contractions***	***Expected duration of contractions***	***Anticipated Nursing assessments & interventions***
First Stage 1. Latent 2. Active 3. Transition	Latent phase-contractions irregular mild to moderate (5-30 min apart) Active –contractions more regular to moderate to strong Transition-contractions strong to very strong	AT THE END OF TRANSITION COMPLETE DIALATION OCCURS	Latent 5-30 min apart Active-3-5 min Transition-2-3 min	Latent duration-30-45 sec Active-duration 40-70sec Transition duration 45-90 sec.	First stage-Perform Leopold maneuvers, Perform vaginal exam as indicated (if no evidence of progress) to allow the examiner to assess whether client is in true labor &whether membranes have ruptured, Encourage client to take slow deep breaths prior to vaginal exam, monitor cervical dilation & effacement, Monitor station & fetal presentation, Prepare for impending delivery as the presenting part moves into positive stations & begins to push against the pelvic floor (crowning) Complete list see ATI pg 93
Second Stage	Progresses to intense contractions	Full dilation Lasts from the time the cervix is fully dilated to the	Intense Contractions 1-2 min	60-90 seconds	Begins w/complete dilation & effacement B/P, pulse, & respiration measurements every 5 to 30 min, uterine contractions, pushing efforts by the client, increase bloody show

		birth of the fetus			Shaking of extremities, FHR every 15 min & immediately following birth-assessment for perineal lacerations which occur as the fetal head is expulsed (pg 94)
Third Stage	Separation and delivery of the placenta	Lasts from the time of the fetus until the placenta is delivered	N/a	N/a	B/P, pulse, & respirations every 15 min, Clinical findings of placental separation from the uterus as indicated by fundus firmly contracting, swift gush of dark blood from introitus, umbilical cord appears to lengthen as placenta descends, vaginal fullness on exam, assignment of 1-5 min Apgar scores to the neonate (pg 95)
Fourth Stage	1-4 hrs after the birth of the	Begins w/the delivery	N/a	N/a	Maternal vital signs, fundus, Lochia, Urinary output, Baby

	newborn; time of maternal physiologic adjustment	of the placenta & includes at least the first 2 hr after birth			friendly activates of the family, assess B/P & pulse every 15 min for 1st 2hours (pg 95 ATI)

15. How can we confirm rupture of membranes? A sample of fluid is taken from the vagina via a nitrazine yellow dye swab to determine the fluid's pH. Amniotic fluid if alkaline and turns a nitrazine swab blue. If the nitrazine test is inconclusive, a fern test can be used. Here, a sample of vaginal fluid is applied to a microscope and allowed to dry. It is then examined for a characteristic fern pattern that indicates the presence of amniotic fluid.

16. What is our priority nursing intervention after confirmation of rupture of membranes? Assessing fetal heart rate (FHR) to identify a deceleration, which might indicate cord compression secondary to cord prolapse.

17. What information do we want to gather from the mother about rupture of membranes if we did not witness it? We want to ask if she experienced a sudden gush of fluid or slow trickle of fluid, which would support rupture of membranes.

18. Describe when an induction might be warranted and the difference between induction and augmentation?1. ? **Might be warranted due to** Post term pregnancy (greater than 42 weeks, Dystocia(prolonged or difficult labor) due to inadequate uterine contractions, prolonged rupture of membranes predisposes the client & fetus to risk of infection, maternal medical complications, fetal demise, Chorioamnionitis) **Induction** stimulates the uterus to begin labor/ **Augmentation** stimulates the uterus during labor to increase the frequency (duration & strength of contractions)

19. Describe what an amniotomy is, the indications for it to be done, and the considerations.Amniotomy is an artificial rupture of membranes –the procedure by which amniotic sac is deliberately broken or ruptured to cause the release of amniotic fluid –labor typically begins within 12 hours after the membranes rupture & decrease the duration of labor by up to 2 hours (client is at an increased risk for cord prolapsed or infection

20. **Medications:** *What is each medication used for? What does it do? Nursing indications/interventions?*

Oxytocin	hormone that caused increased contraction of the uterus during labor & stimulates the ejection of milk into the ducts of the breasts
Misoprostol	causes contractions of uterus & expulsion of the uterine content
Penicillin G	Prevention of Group B Streptococcal Disease in the Newborn
Methylergonovine	used after child birth to stop bleeding works by increasing the rate & strength of contractions & the stiffness of the uterus muscles
Betamethasone	(antenatal betamethasone can be used to speed up lung development in preterm fetuses)
Terbutaline Sulfate	drug used to try and stop or delay preterm labor /it helps prevent & slow contractions of the uterus
Methotrexate	could end pregnancy or cause severe birth defects
Indomethacin	used for preterm labor (effective in the second & early 3rd trimesters

Magnesium Sulfate	to prevent seizures due to worsening preeclampsia, to slow or stop preterm labor, and to prevent injuries to a preterm baby's brain
Naloxone	To reverse respiratory depression in the narcotic-exposed newborn whose mothers received morphine or meperidine hydrochloride during labor
Calcium Gluconate	Antidote for magnesium sulfate, hypocalcaemia Nursing Implications: Observe IV site closely for tissue irritation and necrosis, monitor calcium, phosphorous, and magnesium levels, monitor ECG during IV administration to detect hypocalcemia, with moderate fall in blood pressure
Narcan	To reverse respiratory depression in the narcotic-exposed newborn whose mothers received morphine or meperidine hydrochloride during labor

21. List procedures done during labor (“intra partum”).

Assess maternal vital signs per agency protocol. Check maternal temperature every 1 to 2 hr if membranes are ruptured.

● Assess FHR to determine fetal well-being. This can be performed by use of EFM or spiral electrode that is applied to the fetal scalp. Prior to electrode placement, cervical dilation and rupture of membranes must occur.

● Assess uterine labor contraction characteristics by palpation (placing a hand over the fundus to assess contraction frequency, duration, and intensity) or by the use of external or internal monitoring.

-Frequency: Established from the beginning of one contraction to the beginning of the next

-Duration: Time between the beginning of a contraction to the end of that same contraction

-Intensity: Strength of the contraction at its peak, described as mild (slightly tense, like pressing finger to tip of nose), moderate (firm, like pressing finger to chin), or strong (rigid, like pressing finger to forehead)

-Resting tone of uterine contractions: Tone of the uterine muscle in between contractions. A prolonged contraction duration (greater than 90 seconds) or too frequent contractions (more than five in a 10-min period) without sufficient time for uterine relaxation (less than 30 seconds) in between can reduce blood flow to the placenta. This can result in fetal hypoxia and decreased FHR.

● Intrauterine pressure catheter: Insert a solid, sterile, water-filled intrauterine pressure catheter inside the uterus to measure intrauterine pressure.

-Displays uterine contraction patterns on monitor

-Requires the membranes to be ruptured and the cervix to be sufficiently dilated

● Vaginal examination: Performed digitally by the provider or qualified nurse to assess for the following:

-Cervical dilation (stretching of cervical os adequate to allow fetal passage) and effacement (cervical thinning and shortening)

-Descent of the fetus through the birth canal as measured by fetal station in centimeters

-Fetal position, presenting part, and lie

-Membranes that are intact or ruptured

● Mechanism of labor in vertex presentation: The adaptations the fetus makes as it progresses through the birth canal during the birthing process

22. Define each of the 6 cardinal movements of labor (Mechanisms of labor).

- Engagement: Occurs when the presenting part, usually biparietal (largest) diameter of the fetal head passes the pelvic inlet at the level of the ischial spines, referred to as station 0.
- Descent: The progress of the presenting part (preferably the occiput) through the pelvis. Measured by station during a vaginal examination as either negative (-) station measured in centimeters if superior to station 0 and not yet engaged, or positive (+) station measured in centimeters if inferior to station 0.
- Flexion: When the fetal head meets resistance of the cervix, pelvic wall, or pelvic floor. The head flexes, bringing the chin close to the chest, presenting a smaller diameter to pass through the pelvis.
- Internal rotation: The fetal occiput ideally rotates to a lateral anterior position as it progresses from the ischial spines to the lower pelvis in a corkscrew motion to pass through the pelvis.
- Extension: The fetal occiput passes under the symphysis pubis, and then the head is deflected anteriorly and is born by extension of the chin away from the fetal chest.

- External rotation (restitution): After the head is born, it rotates to the position it occupied as it entered the pelvic inlet (restitution) in alignment with the fetal body and completes a quarter turn to face transverse as the anterior shoulder passes under the symphysis.
- Birth by expulsion: After birth of the head and shoulders, the trunk of the neonate is born by flexing it toward the symphysis pubis.

23. Describe the benefits for a woman to change position while in labor. Include what suggestions the nurse can give the laboring woman about position changes?

- The position of the pregnant woman also might affect blood pressure. In the supine position, blood pressure might appear to be lower due to the weight and pressure of the gravid uterus on the vena cava, which decreases venous blood flow to the heart. Maternal hypotension and fetal hypoxia might occur. Encourage the client to engage in maternal positioning on the left- lateral side, semi-Fowler's position, or, if supine, with a wedge placed under one hip to alleviate pressure to the vena cava.

24. What are the 4 techniques used to assess ongoing data during labor and birth?
    - Maternal vital signs (temp, BP, pulse, respiration, pain)
    - Reviewing prenatal records to identify risk factors that may contribute to a decrease in uteroplacental circulation during labor
    - Vaginal exam to assess cervical dilation
    - Maternal pain and effectiveness of pain management

25. What is a vaginal exam (SVE-sterile vaginal exam)? How often should it be done according to WHO (World Health Organization)? An exam of the vagina, cervix, adnexa, and fetus during labor. It is used to determine the progress of labor. It should be done at intervals of 4 hours for routine assessment and identification of a delay in active labor.

26. Why is important to assess frequency, duration and intensity of contractions? To determine stage of labor, how the labor is progressing(cervical dilation) and how close a person is to a delivery

27. What 2 ways can you assess uterine contractions? By palpation (placing a hand over the fundus to assess contraction frequency, duration, and intensity) or by the use of external or internal monitoring.

28. To palpate uterine contraction intensity, a mild contraction feels like your tip of nose , a moderate contraction feels like your chin, and strong contraction feels like your headache.

29. List the sources of pain during labor. Cervical stretching, hypoxia of the uterine muscle, pressure on the urethra, bladder, and rectum, and distention of the muscles of the pelvic floor

30. List how pain assessment is done during labor. A pain assessment tool named the Coping with Labor Algorithm uses the FOCUS format “Plan, Do, Check, and Act” cycle in laboring women.

31. List 3 non pharmacologic pain intervention methods.
    - Continuous labor support (sustained presence to the laboring woman by providing emotional support, comfort measures, advocacy, etc.)
    - Hydrotherapy (showering or soaking in a regular or whirlpool bath)
    - Ambulation and maternal position changes (q30min; sitting, walking, kneeling, standing, lying down, getting on hands and knees, using a birthing ball)

32. Describe how epidural analgesia is administered, what are the implications, and what is the difference between this and a spinal epidural? There is an injection of a local anesthetic agent and an opioid analgesic agent into the lumbar epidural space. A small catheter is then passed through the epidural needle to provide continuous access to the epidural space for maintenance of analgesia throughout labor and delivery. With a spinal epidural, there is no local anesthetic, simply an opioid analgesic agent. Ambulation is not encouraged with a spinal epidural due to risk for injury

33. What added considerations are there for the nurse caring for a woman who has undergone general anesthesia? Prior to anesthesia, ensure woman is NPO and has a patent IV line. RN may administer an antacid or PPI to reduce gastric acidity. Post anesthesia, provide continuous assessment.

COMPLETE Q32 & Q33 after you review R,K,C p 492-498 and ATI p86-89 for understanding of fetal monitoring and you complete the Online Fetal monitoring program

34. Where in the contraction do the increment, acme and decrement happen? A contraction occurs in a wave-like pattern, where the increment is the beginning, acme is the peak, and decrement is the later portion of the wave.

35. Briefly describe what Category I, Category II and Category III fetal heart rate tracings look like.
    - Category I: 110-160 bpm, baseline variability is moderate, present or absent accelerations, present or absent early decelerations, no late or variable decelerations
    - Category II: fetal tachycardia (>160) or bradycardia (<110), prolonged decelerations >2min but <10 min

- Category III: fetal bradycardia, recurrent late decelerations, recurrent variable decelerations-declining or absent, sinusoidal pattern (smooth, undulating baseline)

36. Why is support so vital for laboring women? What is a doula?? A doula is a nonmedical birth companion who provide continuous and emotional, physical, and educational support to the woman and family during childbirth and postpartum period. What is a CNM?

37. What is “crowning”? when the baby’s head starts to emerge during contraction

38. List a summary of assessments during second , third and fourth stages of labor.
    - Second: Vital signs q5-15 min, FHR q5-15 min by Doppler or continuously by EFM, palpate every contraction, assist with every effort during the bearing down/pushing phase, observe for signs of descent-bulging of perineum, crowning, and observe behavior q15 min (cooperative, focus is on work pushing newborn out)
    - Third: Vital signs q15 min, FHR: Apgar scoring at 1 and 5 min, observe for placental separation, assess bleeding after expulsion, and observe behavior q15 min (often feelings of relief after hearing newborn crying, calmer)
    - Fourth: Vital signs q15 min until stable, FHR: complete head-to-toe assessment,palpate for firmness and position q15 min for first hour, assess vaginal discharge q15 min with fundus firmness, and observe behavior q15 min (usually excited, talkative, awake, needs to gold newborn, be close, and inspect body)

39. What are the signs of placental separation and how long can it take for the placenta to be expelled? Firmly contracting uterus, change in uterine shape from discoid to globular ovoid, sudden gush of dark blood from vaginal opening. It usually takes 5-10 minutes, but can take up to 30 minutes.

40. What is the difference between a laceration and an episiotomy? Laceration is a tear & episiotomy is a surgical incision (performed during second stage of labor to quickly enlarge the opening for the baby to pass through)

41. What are the normal blood loss amounts for a vaginal and a cesarean delivery? Vaginal- about 500 mL. Cesarean- about 1,000 mL

42. List “post procedures” done during the fourth stage of labor.

Assess the ff : Maternal vital signs, Fundus, Lochia, Perineum, Urinary output, Maternal/newborn baby-friendly activities

- American Academy of Pediatrics and American Congress of Obstetricians and Gynecologists recommend

that blood pressure and pulse be assessed at least
every 15 min for the first 2 hr after birth, and that temperature be assessed every 4 hr for the first 8 hr after birth and then at least every 8 hr.
● Assess fundus and lochia every 15 min for the first hour and then according to facility protocol.
● Massage the uterine fundus and/or administer oxytocics as prescribed to maintain uterine tone to
prevent hemorrhage.
● Assess the client's perineum, and provide comfort measures as indicated.
● Encourage voiding to prevent bladder distention.
● Promote an opportunity for maternal/newborn bonding.

43. What are important interventions for the newborn at birth? Why is skin to skin time with mom so important? Skin-to-skin further augments maternal oxytocin levels, strengthening the uterine contractions that will help the placenta to separate and the uterus to contract to prevent hemorrhage.

44. What does Apgar stand for? What 5 parameters does it assess? How often is it assessed?
Apgar stands for Appearance, Pulse, Grimace, Activity. Respiration (Each is scored 0-2 (2) being the best score –60 sec after birth and repeated 5 minutes after

45. What important assessments as the nurse are you continuing to make, in relation to mom, during the third stage of labor? Monitor for placental separation, assess for any perineal trauma, inspect the perineum for condition of episiotomy-- if performed, assess for perineal lacerations and ensure repair by birth attendant