Labor & Delivery Worksheet

This worksheet is due in the drop box by 2359 CST the night before your assigned labor and delivery clinical day.

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Date: 5/28/2024

Complete the following: (30 points)

Submit in-text citations in APA format

1st Stage of Labor	**Characteristics that could be seen**	**Expected Interventions**
Latent phase Dilation: _0_ to _5_ cm (Durham et al., 2023) Length of stage: The average length for first time mothers is 11.8 hours. The average time for women that have given birth previously is 9.3 hours (Durham et al., 2023). **Contractions** Duration: Contractions increase in duration, with a range of fifteen seconds to one minute (Durham et al., 2023). Frequency: Contractions will increase in frequency (Durham et al., 2023). Strength: Contractions begin to become stronger (Durham et al., 2023).	The cervix is beginning to efface, there may be blood-tinged mucous present, the membranes may be intact or ruptured, some clients may experience cramps and backache, clients may feel excited to start labor and be talkative. The client's water usually breaks during this stage. A client's cardiac output and pulse may increase, gastrointestinal motility decreases, which could cause delayed gastric emptying (Durham et al., 2023).	Interventions for the mother include assisting with positioning and encouraging movement, encouraging avoidance of the supine position, monitoring the fetal response to the change of positions, implementation of pain controlling strategies, and respond to changes in the maternal status. The expected interventions for the fetus include instituting uterine resuscitation-interventions for category II and III fetal heart tracings (Durham et al., 2023).

Active phase	The uterus becomes 80% effaced, the contractions	Interventions for the mother include assisting with

Dilation: _6_ to _7_ cm (Durham et al., 2023) Length of stage: The average rate of dilation of the cervix is 1.2 to 1.5 cm per hour (Durham et al., 2023). **Contractions** Duration: Typically, contractions last between forty-five and sixty seconds (Durham et al., 2023). Frequency: The average is every two to three minutes (Durham et al., 2023). Strength: The strength of contractions is moderate (Durham et al., 2023).	become more intense, there is an increase in blood-tinged mucous, the membranes are intact or ruptured, the client may become more focused on contractions, and they may become more worried or panicked. It is also common for the client to experience decreased energy and fatigue (Durham et al., 2023).	positioning and encouraging movement, encouraging avoidance of the supine position, monitoring the fetal response to the change of positions, implementation of pain controlling strategies, and respond to changes in the maternal status. The expected interventions for the fetus include instituting uterine resuscitation-interventions for category II and III fetal heart tracings (Durham et al., 2023).
Transition Phase Dilation: _8_ to _10_ cm (Durham et al., 2023) Length of stage: This stage usually lasts zero to two hours. The timing depends on the client's status, the urge to push, and their risk factors (Durham et al., 2023). **Contractions** Duration: Contractions usually last for sixty to ninety seconds (Durham et al., 2023. Frequency: The contractions occur typically every two to three minutes (Durham et al., 2023).	Common findings include bloody mucous secretions, ruptured membranes, an urge to push when the fetus reaches the pelvic floor, a completely effaced and dilated cervix, and the client may want to rest (Durham et al., 2023).	Maternal interventions include assisting the client into a comfortable position to rest, changing positions as needed, monitor the fetal response to position changes, avoidance of the supine position, implementing pain control strategies, and responding to changes in maternal status. Fetal interventions include instituting uterine resuscitation-interventions for category II and III fetal heart tracings (Durham et al., 2023).

Strength: The contractions are of moderate strength (Durham et al., 2023).		

2nd Stage of Labor	**Characteristics that could be seen**	**Expected Interventions**
Length of stage: First time mothers will typically deliver within three hours of active pushing whereas mothers with previous birth experience will deliver within three hours (Durham et al., 2023). **Contractions** Duration: These typically last between forty-five and ninety seconds (Durham et al., 2023). Frequency: These usually occur every two to three minutes (Durham et al., 2023). Strength: These contractions are moderate to strong with an urge to bear down (Durham et al., 2023).	Common characteristics include a completely effaced and dilated cervix, bloody mucous discharge, ruptured membranes, an urge to bear down with a desire to push the fetus out, and the perineum flattens and bulges (Durham et al., 2023).	Maternal interventions include assisting the client into comfortable pushing positions, changing as often as needed to assist the fetal descent, monitoring the fetal response to position changes, avoiding the supine position, implementation of pain control measures, and responding to changes in the maternal status. Fetal interventions include instituting uterine resuscitation-interventions for category II and III fetal heart tracings (Durham et al., 2023).

3rd Stage of Labor	**Characteristics that could be seen**	**Expected Interventions**
Length of stage: The average length is five minutes, with most delivering the placenta within thirteen to fifteen minutes (Durham et al., 2023).	Common characteristics include a closing cervix, mild contractions to deliver the placenta, a gush of blood before the placenta is delivered, the cord lengthens,	Maternal interventions include administration of uterotonic medications per the order and response to changes in maternal status. Fetal interventions include

	and many mothers feel relieved and want skin-to-skin time with their infant (Durham et al., 2023).	skin-to-skin time if stable, an immediate start of resuscitation is needed, and maintenance of fetal warmth (Durham et al., 2023).

Reference (1):

Durham, R. F., Chapman, L., & Miller, C. S. (2023). *Davis advantage for maternal-newborn nursing: Critical components of nursing care* (4th ed.). F.A. Davis Company.

Complete the Following: (10 points)

Submit in-text citations in APA format

Diagnostic Test	Description and Rationale	Clinical findings
Non-stress test (NST)	This test is a screening tool that measures the fetal heart rate pattern and accelerations. This is done to assess for fetal well-being. The non-stress test is the most accepted method of testing the status of the fetus. This is especially true for women that are considered high-risk due to complications such as hypertension, diabetes, trauma, and bleeding. It is also commonly used when women report a lack of fetal movement and when there are abnormalities with the placenta (Durham et al., 2023).	A non-stress test is considered reactive if the baby's heart rate increases to fifteen beats above their baseline for fifteen seconds at least two times in twenty minutes. If the gestational age is less than thirty-two weeks, an increase of ten beats above baseline for ten seconds twice in twenty minutes is considered reactive. If the fetal heart rate does not meet these expectations, the test is considered nonreactive and further testing may be required (Durham et al., 2023).
Biophysical profile (BPP)	A biophysical profile is a test that is done in conjunction with a non-stress test. Together, these tests monitor fetal status. The biophysical profile is an ultrasound that uses electronic fetal monitoring to measure the following five parameters: non-stress test reactive, fetal movement, tone, breathing, and amniotic fluid volume. This test is done to assess the likelihood a child has or will	Each parameter is scored as present or absent, with present earning a score of two and absent a score of zero. If the results show a score of eight out of ten or higher, the prognosis is reassuring. Any score below an eight out of ten may mean the fetus is suffering from fetal asphyxia (Durham et al., 2023).

	develop certain ailments (Durham et al., 2023).	
Ultrasound (US) • 1st Trimester • 2nd Trimester	An ultrasound uses high-frequency sound waves to create an image on internal tissues or organs. It can also show a growing fetus. In the first trimester, ultrasounds are typically done to confirm pregnancy and to determine gestational age. It can also be used to detect a fetal heartbeat and evaluate the structures of the uterus. Second trimester ultrasounds commonly measure fetal position, amniotic fluid volume, the presence or lack of a fetal heartbeat, the position of the placenta, and the number of fetuses present. They can also determine if the baby's anatomy is forming correctly and in the correct position.	The measurement of gestational age through ultrasound is done by determining the length the fetal-crown rump length, the biparietal diameter, and the femur length. Expected findings include a fetus that is of an appropriate gestational age, size, viability, and position. The placenta should have a normal size, normal position and structure, and appropriate levels of amniotic fluid (Durham et al., 2023).

Reference (1):

Durham, R. F., Chapman, L., & Miller, C. S. (2023). *Davis advantage for maternal-newborn nursing: Critical components of nursing care* (4th ed.). F.A. Davis Company.

For the remainder of this assignment, submit in-text citations in APA format. Attach Reference page.

1. What is cervical dilation and effacement? How are each of these measured? **(5 points)**

Cervical dilation is the enlargement of the cervical opening. This is measured by sweeping the examining finger from one side of the opening to the other, then estimating the distance felt. Effacement is the shortening or thinning of the cervix. This is measured by palpating the cervical length (Durham et al., 2023).

2. List five non-pharmacological methods that can relieve pain during labor. **(5 points)**

Five non-pharmacological methods of pain relief during labor are massage and effleurage, guided imagery, aromatherapy, hydrotherapy, and counterpressure (Durham et al., 2023).

3. What is variability in fetal monitoring? **(2 points)**

Variability in fetal monitoring is the measurement of fluctuation in a fetal heart rate from their baseline. It is measured over ten minutes. The results can be defined as absent, no fluctuation from the baseline, mild, a fluctuation of less than five beats per minute, moderate, a difference of six to twenty-five beats per minute, and marked, greater than twenty-five beats per minute (Kauffmann & Silberman, 2023).

4. How can GBS influence care in labor and delivery? When and how is this tested? What treatments/ interventions are completed? **(5 points)**

Standard precautions should be taken for clients with GBS. If a client is GBS positive, they will need to undergo antibiotic treatment. This is because the fetus is at risk of developing GBS early-onset disease, a potentially fatal disease for newborns. If antibiotics cannot be given, a cesarean birth can be conducted before labor begins. A vaginal and rectal swab is done at thirty-five to thirty-seven weeks gestation to determine the presence of GBS (Durham et al., 2023).

5. What labs are completed on every woman on admission to labor and delivery? What assessment would be completed? **(2 points)**

There are three labs that will be collected from every client upon admission to the labor and delivery unit. These are the AmniSure, the Actim PROM, and the ROM Plus. The assessment that is completed is the assessment of rupture of the membranes (Durham et al., 2023).

6. How is duration and frequency of contractions measured? **(5 points)**

The duration of contractions is measured in seconds, while the frequency of contractions is measured in minutes. The duration begins at the start of the contraction and continues until the contraction has ended. The frequency is the amount of time between the beginning of one contraction until the beginning of another (Durham et al., 2023).

7. Define an early deceleration, identify causes and interventions? **(2 points)**

An early deceleration is a drop of the fetal heart rate during the contraction. This is caused because contractions put pressure on the baby’s head, stimulating the vagal nerve. This stimulation causes the heart rate to drop. This type of deceleration is not harmful and there is no intervention needed (Durham et al., 2023).

8. Define a late deceleration, identify causes and interventions? **(2 points)**

A late deceleration is the gradual drop in a fetal heart rate the occurs after a contraction has ended. This can be cause by uteroplacental insufficiency, suppression of the fetal myocardium, maternal hypotension, maternal hypertension, decreased maternal hemoglobin, or uterine tachysystole. Tocolytics or delivery may be necessary. The nurse can assist the client into a position that promoted fetal oxygenation, discontinue oxytocin, administer an IV bolus to promote oxygenation, perform fetal scalp stimulation, administer oxygen, and notify the provider (Durham et al., 2023).

9. Define variable decelerations, identify causes and interventions? **(2 points)**

A variable deceleration is the abrupt drop of the heart rate from baseline that lasts less than thirty seconds. These occur infrequently and may be different every time they occur. This can be caused by compression of the umbilical cord, compression of the umbilical vein and arteries, a decrease in Po2 levels, and head compression. Some interventions to treat variable decelerations are having the mother change positions into some that promote fetal oxygenation, performing an examination to assess the cord and stimulate the fetal scalp, performing an amnioinfusion, administering oxygen, decreasing or stopping oxytocin, and modification of pushing (Durham et al., 2023).

10. Oxytocin: what is this medication used for in labor and delivery? Identify side effects, nursing assessments, and interventions. **(10 points)**

Oxytocin is used to induce labor and strengthen contractions. Some common side effects include tachysystole, a failed induction, and fetal heart rate decelerations. The nurse needs to monitor the strength, frequency, and duration of contractions to assess the effectiveness of the oxytocin. Fetal heart rate, amount of quality of amniotic fluid, and amount and quality of bloody show needs to be monitored as well. The nurse needs to also assess vital signs and intake and output as determined by their facility. If tachysystole occurs or the status of the fetus is undeterminable, the oxytocin needs to be decreased or discontinued (Durham et al., 2023).

11. Magnesium Sulfate: What is this medication used for in labor and delivery? Identify side effects, nursing interventions, and nursing assessments. **(10 points)**

Magnesium sulfate is given to women when they show severe signs of preeclampsia. Some common maternal side effects include nausea, flushing, sweating, burred vision, lethargy, hypocalcemia, depressed reflexes, respiratory depression and arrest, cardiac dysrhythmias, decreased clotting, and circulatory collapse. Side effects for the fetus include decreased fetal heart rate variability, respiratory depression, hypotonia, decreased suck reflex, and signs and

symptoms of magnesium toxicity. The nurse needs to assess the baseline vitals, deep tendon reflexes, urine output, and neurological status before administering magnesium sulfate. After this, deep tendon reflexes need to be monitored every two hours, and strict monitoring of intake and output needs to occur. The nurse should monitor for side effects of the medication. If magnesium toxicity is suspected, the medication needs to be discontinued and the provider must be notified. It is important to keep calcium gluconate available at all times, as this is the antidote for magnesium sulfate (Durham et al., 2023).

12. What are 3 nursing diagnoses that can be identified in labor and delivery? **(10 points)**

1. Risk for fatigue related to the child birthing process (Durham et al., 2023).

2. Risk for acute pain related to the birthing process (Durham et al., 2023).

3. Deficient knowledge related to the birthing process (Durham et al., 2023).

Attach References

References

Durham, R. F., Chapman, L., & Miller, C. S. (2023). *Davis advantage for maternal-newborn nursing: Critical components of nursing care* (4th ed.). F.A. Davis Company.

Kauffmann, T., & Silberman, M. (2023). Fetal monitoring. *StatPearls*. https://www.ncbi.nlm.nih.gov/books/NBK589699/