Labor & Delivery Worksheet

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

Name: Jessica Runde

Date: 8/24/2024

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 Length of stage: 11.8 hours primipara, 9.3 hours multipara **Contractions** Duration: more regular, 40-60 seconds Frequency: increasing Strength: stronger (Durham et al., 2023)	The patient is allowed to go home during this phase if they are stable (Durham et al., 2023). The patient may have symptoms of cramps and a backache and may ask for pain medication (Durham et al., 2023). The patient may also show their emotions of excitement for the birth of their baby (Durham et al., 2023). The patient will have blood-tinged mucus vaginal discharge (Durham et al., 2023).	The nurse can administer pain medication that is ordered (Durham et al., 2023). The nurse can also give the patient education to help them out. For example, the nurse should tell the patient to move frequently and avoid the supine position (Durham et al., 2023). The nurse can also help the patient reposition if needed. The nurse should assess the patient every 30 minutes and their vital signs every hour (Durham et al., 2023).

Active phase	The patient may start to get	The nurse should:
Active phase Dilation: 6 to 10 cm Length of stage: 1.2-2.5 cm/hr; faster for multiparas **Contractions** Duration: no more than 5 in a ten-minute period Frequency: every 2-3 minutes	The patient may start to get more anxious due to the more frequent contractions and the birth time getting closer (Durham et al., 2023). The patient possibly will request more pain medication (Durham et al., 2023). The patient will have more blood-tinged mucus vaginal discharge than the latent stage (Durham et al., 2023).	The nurse should: • Assess labor status q 30 minutes • Attain vitals q 30 minutes • Assess patient q 5-15 minutes • Help with positioning • Monitor the fetal response to the new position • Control the patient's pain

Strength: moderate (Durham et al., 2023)		(Durham et al., 2023)

Completing the 2ⁿᵈ Stage of Labor on the active stage

2ⁿᵈ Stage of Labor	Characteristics that could be seen	Expected Interventions
Length of stage: primiparas-3 hours; multiparas-2 hours **Contractions** Duration:45-60 seconds Frequency: every 2-3 minutes Strength: moderate/strong (Durham et al., 2023)	• Cervix is completely dilated and effaced • Bloody mucus vaginal discharge • Ruptured membranes • The patient will feel the need to bear down • The perineum will flatten and bulge (Durham et al., 2023)	• Assess maternal well-being q 5-15 minutes • Vitals hourly (temperature q 2 hours) • Assist with pushing • Prepare the mother and family for delivery • Assist the patient in a comfortable pushing position • Monitor the fetal response to any position changes • Assess the patient's pain level (Durham et al., 2023)

3ʳᵈ Stage of Labor	Characteristics that could be seen	Expected Interventions
Length of stage: 5 minutes, most deliver placenta in 13-15 minutes (cite) (Durham et al., 2023)	The patient will have mild contractions for the delivery of the placenta (Durham et al., 2023). The cervix will be closing (Durham et al., 2023). The patient will have blood flow out of their vagina before delivering the placenta (Durham et al., 2023). The patient will then get to hold their baby with skin-to-skin contact (Durham et al., 2023). This should give the patient a calming effect (Durham et al., 2023).	• Assess patient q 15 min • Assess pulse and blood pressure q 15 minutes • Watch for symptoms of a near delivery of the placenta • Administer uterotonic medication as ordered • Provide skin-to-skin contact with baby and patient if everything is stable (Durham et al., 2023)

Reference (1):

5/13/2024.

Complete the Following: (10 points)

<mark>**Submit in-text citations in APA format**</mark>

Diagnostic Test	Description and Rationale	Clinical findings
Non-stress test (NST)	A non-stress test for the fetus is a screening test that monitors the fetus's heart rate during activity to assess their well-being (Durham et al., 2023). The FHR is monitored for 20-40 minutes with a transducer (Durham et al., 2023). The FHR contraction strip that is being run at the time will help interpret results (Durham et al., 2023).	Reactive: • FHR increases 15 bpm for 15 seconds at least twice within the 20 minutes • Fetus <32 weeks, FHR 10 bpm for 10 seconds within the 20 minutes Nonreactive: • No accelerations of the FHR within 40 minutes • Presence of variable decelerations for over 30 seconds • Further testing is indicated
Biophysical profile (BPP)	A biophysical profile is a non-stress test combined with 30 extra minutes of ultrasound for certain features the fetus is presenting (Durham et al., 2023). These features include "FHR reactivity, fetal breathing movements, fetal movements, fetal movement, fetal tone, and measurement of amniotic fluid" (Durham et al., 2023, p. 150). This is used to evaluate any chronic or acute hypoxia that the fetus may have (Durham et al., 2023).	Each of the five indicators are scored. If the component is present, then that is 2 points (Durham et al., 2023). If the component is absent, then that is 0 points (Durham et al., 2023). A score of 10/10 or 8/10 is good (Durham et al., 2023). A score of 6/10 should require further testing to reassure the result (Durham et al., 2023). A score of 4/10 or less, is concerning and the caregivers should consider delivery of the fetus (Durham et al., 2023).
Ultrasound (US) • 1st Trimester • 2nd Trimester	1st Trimester: Ultrasounds are done to "confirm pregnancy and calculate gestational stage" (Durham et al., 2023, p. 137). 2nd Trimester: Ultrasounds in this trimester	The normal findings of an ultrasound consist of "appropriate gestational age, size, viability, position, and functional capacities" (Durham et al., 2023, p. 139). For the placenta, the ultrasound should show an

5/13/2024.

	are completed for "evaluation of fetal presentation, quantification of amniotic fluid volume, documentation of the presence or absence of cardiac activity, placental position in relationship to the cervix, appropriate fetal biometric measurements, and determination of fetal number (Durham et al., 2023, p. 138). Description: The nurse can do an ultrasound on a patient on the abdomen or vaginally (Durham et al., 2023). If the abdomen does not give them the clear image that they want, then they can resort to vaginal ultrasound (Durham et al., 2023). The nurse will move a transducer over the patient's abdomen to provide an image of the fetus (Durham et al., 2023). The patient is encouraged to have a full bladder, so the uterus is raised and easier to see (Durham et al., 2023).	"expected size, normal position and structure, and an adequate amniotic fluid volume" (Durham et al., 2023, p. 139). If there are any abnormal results, those should be further investigated.

Reference (1):

==**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)**

   Both cervical dilation and effacement happen in the first stage of labor and are caused by uterine contractions (Durham et al., 2023). Dilation is when the cervix opens from close to 10 cm (Durham et al., 2023). This is measured in centimeters (Durham et al., 2023). Once the patient reaches 10 cm, the cervix is dilated all the way. "Effacement is the softening, shortening, and thinning of the cervix" (Durham et al., 2023, p. 246). The cervix is 2-3 cm long before labor (Durham et al., 2023). The cervix will then become super thin (Durham et al., 2023). The effacement is measured in percentage from 0%-100% (Durham et al., 2023).

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

- **Relaxation and breathing techniques (Durham et al., 2023)**
- **Massage (Durham et al., 2023)**
- **Warm or cold ice packs (Durham et al., 2023)**
- **Guided imagery (Durham et al., 2023)**
- **Different positioning (Durham et al., 2023)**

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

Variability in fetal monitoring is the "fluctuations in the baseline FHR that are irregular in amplitude and frequency" (Durham et al., 2023, p. 312). This can help monitor the fetal oxygen status during labor (Durham et al., 2023).

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

Group B streptococcus is a major influence in labor and delivery. GBS "is the leading cause of newborn infection" (Durham et al., 2023, p. 266). Women can give this to their babies after ROM occurs (Durham et al., 2023). If GBS is not properly attained, the newborn can receive GBS early-onset disease which is more severe (Durham et al., 2023). Group B streptococcus is tested by a vaginal and rectal swab (Durham et al., 2023). This is completed between weeks 35 and 37 (Durham et al., 2023). If a patient has GBS, the nurse should start an intrapartum IV antibiotic prophylaxis (Durham et al., 2023). This can help reduce the "incident of early-onset neonatal sepsis due to GBS (Durham et al., 2023, p. 267).

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

On admission, the labs that are indicated are a "complete blood count (CBC); a hold clot or a type-and-screen, depending on risk profile; urinalysis, including protein and glucose; and possible drug screening" (Durham et al., 2023, p. 235). A full systems assessment on the patient and a fetus assessment will be completed on admission (Durham et al., 2023). The prenatal and medical history of the patient are also obtained (Durham et al., 2023). The nurse should also assess the patient's vital signs, dilation and effacement of the cervix, the position of the fetus, and 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 from the start of the contraction to the end of the contraction (Durham et al., 2023). The frequency of contractions is also measured in seconds (Durham et al., 2023). Frequency is from the beginning of a contraction to the beginning of the next contraction (Durham et al., 2023).

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

An early deceleration is a decrease in the fetal heart rate due to a uterine contraction (Durham et al., 2023). The lowest part of the deceleration will occur at the peak of the contraction, then it will recover (Durham et al., 2023). This is normal and benign so there are no interventions to complete (Durham et al., 2023). The cause of this is from the fetal head compressing due to the contraction (Durham et al., 2023). When this happens, it "results in increased intracranial pressure" which then causes a decrease in the cerebral blood flow (Durham et al., 2023).

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

A late deceleration is a "gradual decrease of fetal heart rate associated with UCs" (Durham et al., 2023, p. 317). The lowest point of the deceleration will happen after the peak of the contraction, unlike the early deceleration (Durham et al., 2023). When the deceleration is at its lowest point, it will be around 10-20 bpm decreased (Durham et al., 2023). This is caused by the placenta not receiving enough blood flow, which causes the fetus to have a decreased supply of oxygen (Durham et al., 2023). The nurse can consider giving the patient tocolytics or consider delivering the baby (Durham et al., 2023). The nurse can also "discontinue oxytocin to reduce uterine activity" (Durham et al., 2023, p. 318). The nurse should talk to the patient and family to help relieve some anxiety and nerves they may be experiencing. The nurse should also notify the physician of the late deceleration.

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

A variable deceleration is a decrease in the fetal heart rate due to umbilical cord compression (Durham et al., 2023). These decelerations are very common to see when the patient is going into labor (Durham et al., 2023). This occurs in "less than 30 seconds from baseline to nadir" (Durham et al., 2023, p. 314). The cause of this is an umbilical cord occlusion (Durham et al., 2023). There are many interventions that a nurse can implement when this occurs. Medically, the nurse can consider administering amnioinfusion and tocolytics per doctor's orders, or delivery of the fetus (Durham et al., 2023). The nurse can also help the mother reposition, perform a sterile vaginal examination, give oxygen to the patient, support the patient and other family members to help alleviate anxiety, and notify the physician (Durham et al., 2023).

5/13/2024.

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

Oxytocin is a medication that is used to help provide labor induction (Durham et al., 2023). The "uterine response to oxytocin usually occurs within 3 to 5 minutes after IV administration begins, with a half-life of 10 minutes" (Durham et al., 2023, p. 336). The side effects include tachysystole, failure of contractions at a regular pace, fetal heart rate deceleration, and possibly water intoxication (Durham et al., 2023). Before administration, the nurse needs to make sure that the patient has informed consent for the oxytocin and that they know the process and risks of the medication (Durham et al., 2023). The nurse needs to document intake and output every 8 hours, vital signs every 2 hours, and the patient's self and pain assessment every 3o minutes (Durham et al., 2023). The nurse needs to monitor the patient and their uterine contractions to assess how well the oxytocin is doing (Durham et al., 2023). The nurse needs to also be aware of decreasing or discontinuing the oxytocin in case of a severe emergency or reaction (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 a medication used for women who have preeclampsia (Durham et al., 2023). There are many side effects that can come with magnesium sulfate. These include nausea, flushing, diaphoresis, blurred vision, lethargy, hypocalcemia, respiratory depression, decreased reflexes, circulatory collapse, and cardiac dysrhythmias (Durham et al., 2023). The patient needs to be educated on the medication's process and possible side effects. The nurse should assess the patient's vitals, DTR's, neuro status, and urine output before administering the medication (Durham et al., 2023). All those assessments should be monitored every 5-15 minutes during administration and every 30-60 minutes afterwards (Durham et al., 2023). The nurse needs to also monitor the patient's magnesium levels and look for symptoms of magnesium toxicity (Durham et al., 2023). The nurse also should have calcium gluconate ready incase of hypocalcemia symptoms occur (Durham et al., 2023). Any abnormal findings should be reported to the physician.

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

1. Risk for anxiety related to the approaching labor as evidenced by the patient being restless, sweating, and tachycardic.

2. Risk for acute pain related to uterine contractions during labor as evidenced by the patient moaning, grimacing, and yelling.

5/13/2024.

3. Risk of respiratory depression related to the patient taking an opioid and analgesic as evidenced by the presence of bradypnea.

References

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