Labor & Delivery Worksheet

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

Name: Shelby

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 of the latent phase is 11.8 hours (Durham et al.,2023). Approximately 95% of patients complete the latent phase by 30 hours, and 24.5 hours for multiparas (Durham et al., 2023). **Contractions** Duration: The duration of contractions starts off irregular and regulates more during the latent phase of the laboring process (Durham et al., 2023). Frequency: The contractions increase in regularity and time between them during the latent phase of the laboring process (Durham et al., 2023). Strength: The contractions start as slightly uncomfortable and continue	Characteristics that can be seen in the latent phase include: blood-tinged discharge, cramping, and back aches (Durham et al., 2023). The mother may be talkative, or excited in the beginning, or possibly already requesting pain management medication (Durham et al., 2023). The health care team may also see an increase in the laboring mother's pulse, and pain, a decrease of gastrointestinal motility and a cervical dialation of 0-5cm (Durham et al., 2023).	Expected interventions include: assisting with positioning, encouraging movement, assessing bladder status, and encouraging voiding every 2 hours (Durham et al., 2023). Assessment of vital signs every hour or more frequently if needed, management of pain, monitoring pain levels, encourage family involvement, establish desires for the laboring process(Durham et al., 2023). Provide comfort and education, promote safety, insert an IV for fluids and medications (Durham et al., 2023). Run laboratory tests, perform a sterile vaginal exam only when it is necessary to assess cervical dilation, effacement, membrane status, and vaginal bleeding (Durham et al., 2023). Monitor the laboring mothers mental and emotional status and review the birthing plan (Durham et al., 2023). For the fetus, assess their heart rate, response to labor every 30 minutes, and

to painful as the laboring process increases.		monitor position changes (Durham et al., 2023).

Active phase Dilation: 6 to 10 cm Length of stage: The average rate of dilation is 1.2-1.5cm/hour; however, it can progress more quickly for multiparas (Durham et al., 2023). **Contractions** Duration: A contraction is usually between 45-60 seconds (Durham et al., 2023). Frequency: They usually happen every 2-3 minutes or 2-5 minutes but no more than 5 in a 10 minute period (Durham et al., 2023). Strength: Can be moderate to strong with an increase of intensity (Durham et al., 2023).	Characteristics include blood-tinged mucus membranes may be intact or ruptured (Durham et al., 2023). The laboring mother might become more focused on her contractions, worried, or panicked, request pain meds, have a change of body language, and experience an increase in the frequency of contractions (Durham et al., 2023). She may experience a decrease in comfort and concentration, nausea, backache, trembling, vomiting, exhaustion, and becoming more vocal and feel the urge to push (Durham et al., 2023).	Expected interventions include assessment of the fetus every 15-30 minutes, vital signs every hour, temperature every 2 hours, and performance of necessary vaginal exams to assess cervical dilation, fetal descent, pain assessment, medication administration, offering oral fluids, progression updates, comfort measures, breathing and relaxation techniques (Durham et al., 2023). Monitor fetal heart rate every 30 minutes (Durham et al., 2023).

2nd Stage of Labor	Characteristics that could be seen	Expected Interventions
Length of stage: Most of the second stage of labor is 0-2hours long however can be within 3 hours (Durham et al., 2023). **Contractions**	Intense feeling of bearing down and pushing, burning sensation as the fetus crowns, intense, more frequent contractions, increase of bloody show, flattening and bulging of the peritoneum,	Assess the mother's vitals every hour, their well-being and pain every 5-15 minutes, urge the mother to push after the fetus reaches the pelvic floor (Durham et al., 2023). Perform sterile vaginal exams

Duration: Between 45 and 60seconds (Durham et al., 2023). Frequency: Occur every 2-5 minuts with no more than 5 in 10 minutes (Durham et al., 2023). Strength: Increase with intense urge to push (Durham et al., 2023).	and the 2nd stage can last longer for women with an epidural (Durham et al., 2023).	when necessary, encourage voiding every 2 hours, encourage rest, position changing, and an effective pushing position, prepare and assist the support person to delivery to support the patient during labor and delivery (Durham et al., 2023). Provide comfort, encouragement, and reassurance to the patient (Durham et al., 2023). Be empathetic, attend to perineal hygiene, check resuscitation equipment for the infant, and notify necessary staff for immediate delivery, provide assistance, assess fetal heart rate, their response to position changes and labor pushing (Durham et al., 2023).

3rd Stage of Labor	**Characteristics that could be seen**	**Expected Interventions**
Length of stage: Starts after the delivery of the fetus, average time being within 5 minutes but can last up to 15 minutes (Durham et al., 2023).	There will be a gush of blood, followed by the umbilical cord increasing in length (Durham et al., 2023).	The placenta should be checked for complete deliverance, perform uterine massage if needed, and uterotonic medications can be administered as needed (Durham et al., 2023). Perform vital signs every 15 minutes for the first 2 hours, assess mother's wellbeing, pain levels, and respond quickly to status changes (Durham et al., 2023). Fetal inventions include APGAR scoring, vitals, skin-to-skin as long as the baby is stable, keeping the baby warm, and resuscitation measures as needed (Durham et al., 2023).

Reference (1):

Complete the Following: (10 points)

Submit in-text citations in APA format

Diagnostic Test	**Description and Rationale**	**Clinical findings**
Non-stress test (NST)	A screening tool that uses fetal heart rate patterns and accelerations for monitoring fetal well-being (Durham et al., 2023). The FHR and fetal activity is monitored by external transducers for 20-40 minutes (Durham et al., 2023).	There should be an increase of 15 beats above baseline for 15 seconds twice or more in 20 minutes (Durham et al., 2023). Two accelerations peaking at least 10 bpm above baseline and lasting 10 seconds in a 20-minute period for fetuses less than 32 weeks is reactive (Durham et al., 2023). Nonreactive NST is when there is insufficient FHR accelerations in 40 minutes which is then followed up with further testing such as an ultrasound or biophysical profile, a repetitive variable present that lasts longer than 30 seconds should have an assessment of the amniotic fluid (Durham et al., 2023).
Biophysical profile (BPP)	An ultrasound assessment of fetal status that uses an APGAR core in response to high proportion or false-positive NSTs and CSTs (Durham et al., 2023). Assesses fetal movement, tone, breathing, and amniotic fluid volume to account for changes in fetal NST, breathing, flexion, and extension, oxygenation, and other changes influenced over time (Durham et al., 2023).	This test is used with an NAT and 30 30-minute ultrasound observations (Durham et al., 2023). Findinds include NST reactivity, fetal breathing of one or more episodes of rhythmic breathing movements for 30 seconds, fetal movement of 3 or more body or limb movements in 30 minutes, fetal tone of one or more extremity extension and flexion within 30 minutes and amniotic fluid measurement of a minimum of 2cm in two planes perpendicular to each other

		(Durham et al., 2023). A score of 2 or 0 is administered, a total score of 8/10 or more is appropriate, 6/10 can indicate possible fetal asphyxia, a 4/10 indicates probable fetal asphyxia, and a 2/10 or lower is certain fetal asphyxia and prompts immediate delivery of the fetus (Durham et al., 2023).
Ultrasound (US) • 1st Trimester • 2nd Trimester	1st trimester ultrasounds: Used to confirm intrauterine pregnancy, fetal cardiac activity, detect multiple gestation, and assess amnioticity and chorionicity of multiple (Durham et al., 2023). They are also used to estimate gestational age, uterine structures, detect a missed abortion, a tubal pregnancy, or ectopic pregnancy, or a hydrtidiform mole (Durham et al., 2023). Also used to detect how many fetuses there are, and risk factors of the fetus (Durham et al., 2023). 2nd trimester ultrasound: Performed to confirm gestational age, due date, fetal weight, placenta location, fetal abnormalities, vaginal bleeding, fetal cardiac activity, size, position, and amount of amniotic fluid, (Durham et al., 2023).	1st trimester ultrasound: Clinical findings show the presence of gestational sac(s), gestational age, fetal growth, anatomy, cardiac activity, and presence of an intrauterine pregnancy or ultrasound-guided procedures (Durham et al., 2023). 2nd trimester ultrasound: Clinical findings include the number of fetuses, the location of the fetus, fetal cardiac activity, position, activity, growth, age, viability, cervical length/ measurement, placenta location, amount of amniotic fluid, visual assistance for procedures, fetal tone, and breathing (Durham et al., 2023).

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)**

Cervical dilation is the estimation of the dilation of the cervical opening that ranges from 0-10cm and is done by a finger examination from one side of the cervical opening to the other (Durham et al., 2023). Cervical effacement is the estimation of the shortening of the cervix from 2cm to paper-thin and is measured with the fingertips to determine the length of the cervix (Durham et al., 2023).

2. List five possible non-pharmacological interventions assisting in relieving pain during labor. **(5 points)**

1.) Relaxation and breathing techniques (Durham et al., 2023).

2.) Massage (Durham et al., 2023).

3.) Sacral counter pressure **(**Durham et al., 2023).

4.) Positioning (Durham et al., 2023).

5.) Warm or cold packs (Durham et al., 2023).

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

Fetal heart rate (FHR) variability is the fluctuation in the baseline FHR that is irregular (Durham et al., 2023). The cycles show the peak and trough of the FHR within a baseline range over 60 seconds (Durham et al., 2023). It is used to see if the fetus is getting enough oxygen during he labor process (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)**

Approximately 50% of women with colonized GBS will transmit GBS to the neonate, which is the leading cause of infection in newborns (Durham et al., 2023). The way they test for GBS is through a vaginal swab, which is collected and cultured between 35 and 37 weeks of gestation (Durham et al., 2023). If there is a positive result and a vaginal birth, they gan give intrapartum prophylactic antibiotics. If there are intact membranes and a C-section, antibiotics aren't needed (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)**

* Labs: CBC, Urinalysis, possible drug screening, preeclampsia, or other pregnancy complication tests (Durham et al., 2023).

* Assessments: baseline for vitals, FHR, contractions, prenatal history review, health history, birthing plan review, labor characteristics, ROMs if applicable, sterile vaginal assessment, palpation of the abdomen (Leopold maneuver), Deep tendon reflexes, edema, heart and lung sounds, pain level, and emotional status (Durham et al., 2023).

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

The frequency is the time (in minutes) from the beginning of one to the beginning of the next contraction, (Durham et al., 2023). The duration is from the beginning to the end of the same contraction and id recorded in seconds (Durham et al., 2023).

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

This is a visually apparent decrease in FHR from the baseline to nadir that takes more than 30 seconds (Durham et al., 2023). Nadir occurs at the same time as the peak of a contraction (Durham et al., 2023). This is a response to the fetal head being under pressure during a contraction (Durham et al., 2023). This increases intracranial pressure, decreases cerebral blood flow, and decreases PO2 (Durham et al., 2023).

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

This is a visually apparent decrease in FHR from the baseline to nadir that takes more than 30 seconds (Durham et al., 2023). Nadir occurs at the same time as the peak of a contraction (Durham et al., 2023). It is periodic and caused by a lack of oxygen and fetal intolerance to labor (Durham et al., 2023). Interventions include position changes, discontinuing oxytocin, IV bolus, administer oxygen, notify the provider and prepare for delivery (Durham et al., 2023).

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

The decrease in FHR is greater than or equal to 15 bpm and less than 2-minute duration, they are periodic or intermittent and are caused by umbilical cord compression (Durham et al., 2023). Interventions include positional changes, sterile vaginal exam, administration of oxygen, decrease or discontinue oxytocin, modification of pushing, decrease pain and anxiety levels, notify the provider, and prepare for delivery (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 contractions and increase the tonicity of the uterus (Durham et al., 2023). Side effects include hypotension, tachycardia, and water retention (Durham et al., 2023). Nursing assessments and interventions include patient education, assessment, vital signs, monitoring FHR, used to help prevent PPH, uterus is to be firm and midline, moderate but not heavy lochia, minimal clots, uterine massage as needed, and monitor the patient (Durham et al., 2023).

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

Is used as a tocolytic, primarily used for fetal neuroprotection, and relaxation of smooth muscles (Durham et al., 2023). Side effects include lethargy, drowsiness, diaphoresis, nausea and vomiting, headache, pulmonary edema, DTRs, respiratory depression, chest pain, hypotension, cardiac arrest, and maternal death (Durham et al., 2023). Nursing assessments and interventions include bedside monitoring for initial dosage, assess vital signs, DTRs, and respiratory status, monitor serum magnesium levels, have calcium gluconate available, strict intake and output (Durham et al., 2023).

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

1. Risk for acute pain related to contractions of the uterus, stretching of the cervix, and birth canal as evidenced by the progression of labor (Durham et al., 2023).

2. Knowledge deficit related to the birthing process as evidenced by ineffective pushing (Durham et al., 2023).

3. Risk for anxiety related to fear of the unknown, such as fear of the birthing process (Durham et al., 2023).

Attach References

Durham, R. F., Chapman, L. & Miller, C. (2023). *Davis Advantage for Maternal-Newborn Nursing: Critical Components of Nursing Care* (4th ed., p. 481-573). F. A. Davis Company.