First Stage

Study Group Module

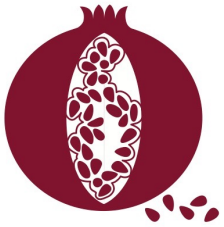
Learning Goals

Review the following Learning Goals as an organized beginning to your study of this module. As you read the Learning Goals, note key words that will aid you in finding the information in the texts. When you complete the module, revisit this list and check for areas that require further investigation.

- Evaluate your own evolving perspective of care in the context of the Midwives Model of Care.
- Review the concepts of labor assessment.
- Review current best practices for monitoring labor outside of the hospital setting.
- Review the conventional cardinal movements of birth (aka the six movements of normal mechanism of labor), and those more specifically described by Anne Frye as Cardinal Spiraling Movements of birth.
- Review Fetal Heart Rate Patterns module.
- Review importance of voiding bladder in labor and the concept of tracking output.
- Review the classic patterns of labor plateaus.
- Review signs and symptoms of uterine rupture.
- Review how emotional changes in labor affect the labor's progress.
- Explore the use of a client's birth plan in the context of the actual labor and birth.
- Identify the maternal physiologic changes during labor.
- Construct models to aid your practice with determining cervical dilation and fetal head position. Build your familiarity with cervical dilation and identifying fetal head position.
- Understand how the baby's position may influence the labor pattern and subsequent plateaus, cervical lip or swollen cervix.
- Identify back labor and support measures to facilitate a change in the baby's position and increased comfort to the laboring person.
- Identify an anterior cervical lip, and determine ways of facilitating complete dilation.
- Identify the concern regarding a swollen cervix, and determine ways of facilitating complete dilation.
- Identify labors that are affected by a baby's head being asynclitic and determine ways of facilitating change.

...continued on next page

• Understand the critical importance of maintaining maternal rest, hydration and nutrition during labor.
• Understand the relationship between maternal exhaustion, ketoacidosis and fetal well-being.
• Identify ways of supporting the mother/birthing person's well-being during a long and arduous labor.
• Explore methods of relaxation and non-medicated pain relief during labor.
• Identify how labor may differ for first-time mothers/birthing people and for those who have previously given birth.
• Identify ways that water may be used during support of first stage labor.
• Identify herbs and homeopathic remedies for supporting progress in labor.
• Identify when the progression of labor is no longer within the realm of what is considered normal, and determine the parameters of safety based on your own experience and knowledge base.
• Understand the factors contributing to puerperal infections and potentially resulting from midwifery care during first stage labor.
• Identify medical interventions appropriate to certain first stage labors including electronic fetal monitoring, labor augmentation, IV therapy, and pain relief management.
• Identify the clinical practices commonly applied to labor management in the hospital setting.
• Create practice guidelines for initial labor assessment and first stage labor.
• Begin drafting forms for use in labor charting; consider the availability and impact of Electronic Health Records (EHR and EMR).
• Demonstrate primary care during first stage labor.
• Identify a book and online resources you will recommend to clients to help prepare them for labor.
• Identify community resources for childbirth preparation classes.
• Participate in a childbirth preparation class.



Study Sources

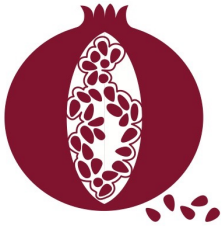
The following texts are recommended for completion of this module. Use them to cross reference and build a more comprehensive understanding.
Using key words from the Learning Objectives, search the index. Read those pages listed, and read the chapter in which they are found. Establish a context for the information so that you understand how other topics are related. In addition, read the chapter headings in the Table of Contents, and flip through each text to familiarize yourself with the content of chapters. As you work through Study Group modules, you will eventually read each text in its entirety.

...continued on next page

Oral Tradition and Living Knowledge are critical to understanding the dilating phase of labor and its accompanying variations, and key to the integration of supporting the mother/birthing person's comfort and stability, and facilitating change in baby's position, station and in maternal cervical dilation.

- Human Labor and Birth, Oxorne-Foote
- Varney's Midwifery
- Myles Textbook for Midwives
- Best Practices in Midwifery: Using the Evidence to Implement Change, Anderson, Stone
- Holistic Midwifery, Vol. II, Frye
- Homeopathic Medicines for Pregnancy and Childbirth, Moskowitz
- Herbal for the Childbearing Year, Weed
- Heart and Hands, Davis
- The Accoucheur's Emergency Manual, Yingling (can be hard to find in print: see NMI website First Stage Labor module web resources for online version)

- See NMI website First Stage module web resources for additional information and up-to-date sources.



Related Topics

- Fetal Heart Rate Patterns
- Posterior, Brow and Face Presentations
- Pelvimetry
- Checking cervical dilation
- Charting and Practice Guidelines
- Informed Choice/Informed Consent
- Shared Decision Making
- Birth Bag and Set-Up
- Transporting
- Pharmacology for Midwives
- Ruptured Membranes and AROM
- Breech and Twins
- Cesarean and VBAC
- Second Stage Labor

Short Answer Questions

1. Describe the cervical changes that occur during late pregnancy and early first stage labor.

2. Define operculum.

3. Define latent and active labor.

4. Define retraction, in the context of labor and uterine contractions.

5. What are the cardinal movements of labor? (aka the movements of normal mechanism of labor)

6. How are the cardinal movements further described by Anne Frye as Cardinal Spiraling Movements of birth?

7. At what point in labor is aseptic technique used for internal examination?

8. Define caput succedaneum.

9. What does ketoacidosis indicate?

10. Have you attended a waterbirth?

11. Do you plan to include waterbirth in your future practice?

12. Define uterine rupture and dihiscence.

13. What is the rate of uterine rupture for primapara labor?

14.a. What is the rate of uterine rupture for VBAC?
b. What is the rate of uterine rupture for VBA2C?

15. Define iatragenic.

Questions Requiring Longer, Thoughtful Answers & Explanations

16. When the uterus contracts during labor, where does the muscle body begin its contraction and how are the layers of uterine muscle affected?

...continued on next page

17. Describe the concept of "physiologic birth."

18. As a midwife, at what point do you begin to attend a client in labor?

19. What do we know about the importance of hand washing and avoiding the spread of pathogens?

20. Explain your use of a client's birth plan in the context of the actual labor and birth.

21. Give examples of family members' participation in the labor process.

22.a. Have you worked with a client who included a doula in their labor plan?
b. In your own practice, what will be your midwifery plan when a client includes a doula to help during labor?

22. Describe how a midwife may assess the stages and progress of labor.

23. Give an example from your own experience that illustrates how emotional changes or circumstances have affected a labor.

24. Describe how you help a birthing mother/birthing person relax in labor. Give several examples of things you've tried and had positive experience with:
a. During early labor
b. During active labor
c. During transition

25. Are there non-allopathic remedies or specific nutritional or hydration methods that you apply to support labor as it progresses? Examples include reducing stress, promoting relaxation, preventing hemorrhage. List and discuss each remedy or method and indicate how you determine the appropriate applications.

26. Make a list of options for stimulating labor (appropriate for out-of-hospital use), and include when each option is indicated.

27. Are you familiar with the use of herbs during first stage labor? Which herbs? For each herb:
Name of the herb you use for supporting labor
Intended purpose of the herb
Form of preparation and the dosage

28. Are you familiar with using homeopathy in first stage labor?
Which remedies? For each remedy:
Name of remedy and potency used
Intended purpose of the remedy

29. How do you determine that a labor has become "prolonged?"

...continued on next page

30. Describe your plan for supporting a mother/birthing person's well-being during a long and arduous labor, including when this attention begins. What is your progression of reacting to a labor that you perceive could become prolonged?

31. Give two examples of iatragenic effects that could be caused by aspects of well-meaning midwifery care.

32. As a midwife, what details about labor are discussed prenatally, in preparation for the work you will do with the birthing mother/birthing person?

33. During the course of labor, what are the times when previously discussed decisions are reviewed for confirmation?

34.a. Discuss your use of informed choice/informed consent and shared decision making during first stage labor.
b. Which instances include written consent?

35. What are the contributing factors of first stage labor management to puerperal infections?

36. Discuss your perspective on administering vaginal exams during labor. When do you believe a vaginal exam is indicated?

37. Discuss the perspectives expressed in the Midwives Model of Care, the WHO statements regarding eliminating abuse and disrespect during childbirth, the WHO recommendations for reducing perinatal infection, and current best practices for monitoring cervical change during labor.

38. Describe the routine use and sequence of interventions commonly involved in hospital birth.

39. In your area, and in the practice where you are training, what is the general practice outside of the hospital regarding vaginal exams?

40. What is the routine practice in the local hospitals regarding vaginal exams?

41. Share some of your observations of laboring mothers/laboring people and the effect of vaginal exams on their courses of labor?

42. Have you had experience with the practice of providing prenatal vaginal exams?

43. What is your impression of the usefulness of a prenatal vaginal exam?

44. Describe the physiologic changes that occur during labor and contribute to maternal dehydration.

45. What might you observe during labor that indicates a laboring mother/laboring person is becoming dehydrated?

...continued on next page

46. How does maternal renal function change during labor?

47. Discuss the ways that water may be used during support of first stage labor.

48. Describe when labor plateaus most often happen.

49. How might a baby's persistent asynclitic head position influence the labor pattern and dilation?

50. What are your recommendations to a laboring mother/laboring person to help ease a shift of a baby's asynclitic head?

51.a. Are you familiar with rebozo methods for encouraging a baby's position to shift?
b. When have you used a rebozo method?
c. Are there other methods that you have used that accomplish what is intended by use of the rebozo?

52. What are the symptoms of maternal exhaustion?

53. How may ketoacidosis be corrected?

54. What are the risks of stimulating labor?

55. What are the conditions that seem to increase the risk for uterine rupture?

56. Outline your practice of monitoring fetal heart rate patterns and maternal vitals signs and well-being during labor. Be specific for changes that are indicated during the course of labor and to findings that require increased critical awareness.

Practical Scenarios

Note that in the following Projects section there are instructions for creating and practicing with models for evaluating cervical dilation and fetal head position. You may want to work with those exercises before completing some of these Practical Scenario questions.

57. Your client Barbara is pregnant for the first time. The baby's due date was 3 days ago. Barbara calls you at 9 pm to report feeling contractions. What is your response? Give details.

...continued on next page

58. Your client Suze is 39 weeks pregnant. You receive a phone call from Suze's sister, who begins the conversation by saying that the family has friends visiting. They all spent the day at the beach with Suze, swimming and walking along the coastline. She reports that everyone is looking forward to this baby! Suze's sister explains that Suze asked her to call you and that Suze may be having contractions and seems to be in pain. Suze is in the bathroom and when you ask to speak with Suze, the sister describes being waved away and asked to leave the room, with Suze turning away from the phone when it was offered. You can hear Suze's breathing and moaning through contractions. What is your response? Give details.

59. Your client Rita has been having contractions since early this morning. You have been with her since 11 am when her labor began to get stronger and more regular, and she asked you to come. Upon arrival, you observed that her labor pattern was not yet established, with contractions every 7-10 minutes and of varying intensity. Her labor became regular during the mid afternoon. She dilated to 4 cm by 8 pm. Her membranes are intact, FHR and all vitals are normal, and she is well hydrated. It is now 9:30 pm and she is feeling tired and anxious. What do you suggest, and what is your plan?

60. Your client Maggie has been in a slow but persistent labor pattern since last night. She has been resting between contractions and over the past 2 hours the intensity has increased considerably. She is feeling more energetic and likes being upright, rocking with contractions. What do you think is happening?

61. Your client Sheila is 40+2 (40 weeks and 2 days gestation). Irregular contractions have been occurring for over 24 hours. When she tried being in the bathtub, she had tightness in her low back and felt trapped, as soon as the contraction ended, she climbed out of the tub. Nothing that has been offered has seemed to help to calm her. Sheila has been up all night and has not been able to rest or relax very well with contractions that do not last long and do not palpate as very strong. She has not been able to eat since contractions began; drinking fluid initially caused vomiting. She has been trying to sip fluids, but her lips are chapped and her urine is concentrated. She has begun to wince with the onset of contractions, bending forward slightly and holding her body very tightly. Her eyes are tearing and she appears anxious. What do you recommend?

62. Your client Allie has been having strong contractions every 3-5 minutes for three hours. They were 3 cm dilated 4 hours ago. Allie begins feeling pressure and is heading for the bathroom when there is a popping gush of fluid. What is your response? Give details.

63. Your client is having a prolonged labor, and together you have decided to transport. Explain the medical options available at the hospital that may be appropriate to prolonged labor.

64. At the date of completing this module, how familiar are you with performing vaginal exams during labor?

...continued on next page

58. Your client Suze is 39 weeks pregnant. You receive a phone call from Suze's sister, who begins the conversation by saying that the family has friends visiting. They all spent the day at the beach with Suze, swimming and walking along the coastline. She reports that everyone is looking forward to this baby! Suze's sister explains that Suze asked her to call you and that Suze may be having contractions and seems to be in pain. Suze is in the bathroom and when you ask to speak with Suze, the sister describes being waved away and asked to leave the room, with Suze turning away from the phone when it was offered. You can hear Suze's breathing and moaning through contractions. What is your response? Give details.

59. Your client Rita has been having contractions since early this morning. You have been with her since 11 am when her labor began to get stronger and more regular, and she asked you to come. Upon arrival, you observed that her labor pattern was not yet established, with contractions every 7-10 minutes and of varying intensity. Her labor became regular during the mid afternoon. She dilated to 4 cm by 8 pm. Her membranes are intact, FHR and all vitals are normal, and she is well hydrated. It is now 9:30 pm and she is feeling tired and anxious. What do you suggest, and what is your plan?

60. Your client Maggie has been in a slow but persistent labor pattern since last night. She has been resting between contractions and over the past 2 hours the intensity has increased considerably. She is feeling more energetic and likes being upright, rocking with contractions. What do you think is happening?

61. Your client Sheila is 40+2 (40 weeks and 2 days gestation). Irregular contractions have been occurring for over 24 hours. When she tried being in the bathtub, she had tightness in her low back and felt trapped, as soon as the contraction ended, she climbed out of the tub. Nothing that has been offered has seemed to help to calm her. Sheila has been up all night and has not been able to rest or relax very well with contractions that do not last long and do not palpate as very strong. She has not been able to eat since contractions began; drinking fluid initially caused vomiting. She has been trying to sip fluids, but her lips are chapped and her urine is concentrated. She has begun to wince with the onset of contractions, bending forward slightly and holding her body very tightly. Her eyes are tearing and she appears anxious. What do you recommend?

62. Your client Allie has been having strong contractions every 3-5 minutes for three hours. They were 3 cm dilated 4 hours ago. Allie begins feeling pressure and is heading for the bathroom when there is a popping gush of fluid. What is your response? Give details.

63. Your client is having a prolonged labor, and together you have decided to transport. Explain the medical options available at the hospital that may be appropriate to prolonged labor.

64. At the date of completing this module, how familiar are you with performing vaginal exams during labor?

...continued on next page

65. How confident are you with your evaluation of cervical dilation?

66. How confident are you of determining the position of the baby's head through an open cervix?

67. Your client's baby has rotated position from occiput posterior to left occiput anterior and the labor continues. Upon exam you determine the cervix to be almost completely dilated with an anterior cervical lip. What do you think caused the anterior cervical lip to form?

68. If your client has an anterior cervical lip and begins to feel enough pressure that pushing becomes difficult to avoid, what would be your concern?
How do you determine if there is actual cause for concern?

69. If there is actual cause for concern, what do you have to offer for the above scenario?

Vaginal exams and evaluation of cervical dilation, position of a baby's head, and estimation of the descent of a baby are part of midwifery care during labor. This module includes focus on vaginal examination details, but the frequency of questions about vaginal examination should not be confused with the actual frequency of providing vaginal exams during midwifery care. MMOC indicates minimizing intervention. A vaginal examination can be experienced by a laboring mother/laboring person as an intervention. Vaginal examination is also an invasive procedure, and can be experienced as unwelcome and an interruption. These are reasons that a midwife wants to be familiar and accurate with the process of assessment through vaginal examination.
Consider the following evaluations that have resulted from "your" examination of a client. These descriptions are provided as examples of the variety of findings that may occur during a vaginal exam with a client. After each scenario, give an example of what you would chart as documentation of the vaginal exam. You can add details of your own to each scenario to further explain how you reached your findings.

70. Shawn is preparing for the birth of their third baby. A very quick labor with their second baby has initiated curiosity and a little nervousness about the upcoming labor and birth. During a prenatal at 36 weeks and 5 days Shawn requests that you provide a vaginal exam to determine the condition of their cervix.
Upon exam, you feel the baby's head is not well flexed and the sagittal suture and edge of the anterior fontenelle can be felt just above the ischial spines. Cervix is soft, not very effaced but extremely stretchy to about five centimeters.

71. Maria is in strong labor and is handling contractions that are about 5 minutes apart. She likes being upright and moving during each contraction. When you determine that a vaginal exam is appropriate, you feel a cervix that is so completely effaced and so firmly in contact with the baby's head that you can feel the posterior fontanelle clearly. The texture of the surface beneath your fingertips is rubbery, like the inside of your cheek, and this helps you be sure that you're not

...continued on next page

feeling the smooth surface of the amniotic bag. The baby's head is about even with the ischial spines. It is difficult to find the cervical opening. You have to follow the curve of the baby's head back toward her sacrum before you can feel an opening in the surface, just big enough for your fingertip to make contact with the surface of the baby's head. The membranes are flat against the baby's scalp. She lets you know that a contraction is going to start, and you carefully move out of her way so she can return to her standing and swaying position.

72. Ashley is periodically feeling her labor in her back. From palpating her baby's position through her belly you believe the baby is resting on the mother's right side, with arms and legs facing the front of her belly.
A vaginal exam reveals that her cervix is open enough for you to make contact with the baby's head using your index and middle fingers; the edges of the cervical opening make contact with the edges of your fingers when they are positioned side by side. You also notice that the left side of her cervix is thicker than the right side of her cervix, and you can feel that the baby's head is making better contact against the right side of the cervix. The membranes are not noticeable between your fingers and the baby's head but there has been no indication that her amniotic fluid has been leaking.

73. Tina is having her second baby. Her labor pattern has been progressing well, with strong regular contractions for a few hours. For the past 45 minutes or so the contractions have spread out. Together you decide to that the timing feels right for a vaginal exam. The baby's head is lower than the ischial spines. The first thing you feel is the smooth surface of the amniotic bag, and beneath the surface of the membranes you can feel the baby's hair against the scalp. There is so much open surface against your fingers that at first you think she's completely dilated. You keep this impression to yourself as you continue to notice the sensations beneath your fingers. The thought crosses your mind that you "know" second babies come faster than the first baby. You move your fingers slowly across the baby's head and notice the posterior fontanelle and slightly raised edge of the sagittal suture. You follow the sagital suture line back toward her left side and then you feel a slight change in surface. You've reached the edge of her cervix, it is extremely effaced. Along the back edge of her cervix on her left side you can feel that there is about 2 cm of cervical surface remaining. As you trace your fingers along the edge toward the front, the cervical surface gets narrower. By the time you get to the edge of her cervix that is just beneath her pubic bone, you can only feel about 1 cm of cervical surface remaining.

74.a. Toby is in early labor. There have been a few stronger contractions but then the contractions resume irregular activity. It's starting to get dark outside. Feeling tired and frustrated, she has started to feel pressure in her pelvis like she needs to have a bowel movement. She isn't pushing but she is uncomfortable. Toby says that if she could just know what's going on, she could stop trying to guess what's happening. Together you decide to provide a vaginal exam.
You feel the amniotic bag, loose but extending through her cervix about one cm. Her baby's head is not easily within reach and you are cautious about not wanting to stress the membranes by pressing on them too much. Her cervix is open enough that you can spread your fingers apart slightly.

...continued on next page

74.b. Toby took a warm bath and her contractions allowed her to fall asleep for two hours. Feeling refreshed and hungry, she ate. Her baby was active and she walked at a relaxed pace for about 20 minutes. Contractions returned. Her labor pattern slowly increased in strength and frequency. Toby alternated resting on her side and walking. During the next vaginal exam you feel the smooth pillowy surface of the amniotic membrane, surrounded by the thick edge of her cervix. You can spread your fingers across the membranes to span the opening of her cervix. You estimate the distance from the open edge of her cervix to the top of the vaginal wall to be about four cm. As you conclude the exam, the surface of the membrane becomes tense as the next contraction builds. Toby shifts to her side and breathes through the contraction.

Projects

(send completed projects with the rest of your course work for this module)

75. Practice with a homemade model for familiarizing yourself with the tactile awareness and evaluation of a "dilated cervix." Email a photo of your completed project when you submit this module.

Materials needed to construct:
-Scunci brand or similar elastic bands for hair (hair-ties for ponytails), small and large circumferences with no metal parts
-Pilsbury or similar brand refrigerated tube of dough for rolls or biscuits
-Plastic wrap
-Nonsterile glove that fits your dominant hand
-Ruler or measuring tape with centimeter markings

Instructions:
Allow the tube of dough to warm to room temperature. It may rise and become slightly fluffy or mushy. For a model of cervical dilation under 4 or 5 cm: Press one or two fingertips into the center area of each pre-sliced piece of biscuit dough and create openings that represent one centimeter, two centimeters, three centimeters. As the openings get larger, the biscuit dough will need to flatten at the edges of the opening. Place the dough on a small plate and cover closely with plastic wrap, tucking the wrap slightly beneath the edges of the opening in the dough. With your gloved hand, feel the size and texture of the opening. Use the ruler to measure the opening and compare that size to the expanse of your examining fingers. This same exercise may be done with the hair-ties. If the dough is too soft and stretchy to hold its form during your simulated exam, a hair-tie may be pressed into the dough to add resistance.
Beyond 5 or 6 centimeters of dilation, the examination depends on estimating how much cervix remains undilated. An evaluation of 7 cm dilation would be felt as a remaining expanse of cervix 3 cm wide, from the edge of the dilated cervix to the upper vaginal wall. To model cervical effacement and the remaining cervix at 7-10 cm dilation: Flatten a slice of the biscuit dough to represent more ...

...continued on next page

effacement of a cervix, setting the edge to a curve against the surface of a plate, and cover with plastic wrap. Measure expanses of the dough from the effaced edge to model one centimeter, two centimeters, three centimeters of effaced cervix. Bunch up the remaining dough so that you bump into it after evaluating each centimeter increment. The bunched up dough represents the juncture of the upper vaginal wall with the cervix.
Practice estimating dilation with your examining hand. Once familiar with the dilation sizes, create a "tube" with the fingers, thumb and palm of your non-dominant hand. Reach the examining fingers of your dominant hand through this limited space and repeat your practice of cervical evaluations.

76. Memorize the formation of both fontanelles and the suture lines that are felt at the edges of the skull bones that meet to form the fontanelles:
Posterior fontanelle is triangular, formed by the **occiputal bone** (surface of the back of the head), and right and left **parietal bones**. The two **lambdoidal suture** lines extend along the occiputal bone, and the **sagittal suture** extends from the anterior point of the triangle. You can remember "lambdoidal" because they are the sutures farthest back on the skull and "lambs follow."
Anterior fontanelle (**bregma**) is four-sided and diamond-shaped. A short **frontal suture** line extends from the point of the fontanelle toward the forehead (actually two **frontal bones**, also called sinciput). The **coronal suture** lines extend from the points toward right and left **parietal bones** and the ears. The **sagittal suture** extends from the posterior point of the anterior fontanelle and continues all the way across the top of the skull (**vertex**) to the posterior fontanelle. You can remember "coronal" because that's the area of the head involved in a military salute and "colonel" is a military rank. Or because "corona" is also part of the sun and you shade your eyes by putting your hand to you forehead, and that's pretty close to the coronal suture.
Make notes about your process of study and the sources you referenced.

77. Practice with a homemade model for familiarizing yourself with the tactile awareness and evaluation of fetal skull landmarks. Email a photo of your completed project when you submit this module.

Materials needed to construct:
-Clean Styrofoam tray (like used under meat in the supermarket)
-Dull pencil for creating indentations in Styrofoam
-Line drawing of fetal skull suture lines, posterior and anterior fontanelles
-Nonsterile glove that fits your dominant hand
-Plastic wrap
-Chart indicating the position of fetal skull landmarks as identified in various positions, through the open cervix. (reference texts listed)

Instructions: Keep in mind that the opening of the cervix allows limited access to the surface of the baby's head. The small cervical opening overlays the curve of the fetal skull, but the limited surface area can feel almost flat against your examining fingers. The shallow indentations in the Styrofoam tray represent fetal skull landmarks, and the plastic wrap provides a smooth covering that softens

...continued on next page

the edges of the indentations on the model. Actual fetal skull landmarks are softened by the baby's scalp and further obscured if there is caput. The baby's hair may also be felt. The amniotic membrane may remain in close contact to the head or may fill slightly with amniotic fluid and can also require pressure of your fingertips to feel through the surface to make contact with the baby's head. Consult illustrations of the positional relationship of the fetal skull in various **occiput anterior** cephalic presentations ROA, OA, LOA, LOT, LOP, OP, ROP, RT.

In occiput anterior presentations, the posterior fontanelle is the only fontanelle accessible during a vaginal exam.

The posterior fontanelle is triangular, three-sided, with the broadest side tracing the edge of the occiput and being the most posterior side of the fontanelle. Once you have transferred the indentations of the posterior fontanelle and suture lines, you can rotate the model from OA to OP to practice evaluation of each presentation. Practice identifying the baby's position based on evaluating the direction of the fetal landmarks with your examining hand. Once familiar with the various presentations, create a "tube" with the fingers, thumb and palm of your non-dominant hand. Reach the examining fingers of your dominant hand through this limited space and repeat your practice of evaluating fetal skull landmarks and determining the position of the baby within the pelvis.

78. In addition to learning the positions and identification of the posterior fontanelle, practicing with a model of the anterior fontanelle is also critical. The posterior fontanelle is triangular. The **anterior fontanelle** is larger and diamond-shaped, four-sided, with points reaching directly toward the anterior and posterior of the baby's head, and toward each ear. Suture lines extend from each point of the anterior fontanelle. One of the most notable features of the anterior fontanelle is the area of softness that does not cover bone, and through which the baby's pulse may be felt. Most of the time the anterior fontanelle is out of reach, so when you identify that area of the baby's head you will know that the head is posterior or is unflexed.

79. Choose a book to recommend to your clients that will help prepare mothers/birthing people for labor. Write a review about your recommendation: include title, author, publisher and date of publication.

80. What online resources do you recommend to clients to help them prepare for labor?

81. Identify a recent research study that you will use to help inform clients about decisions during labor.

82.a.What are the currently popular philosophies and perspectives regarding childbirth education and preparing for birth? Discuss the specifics of each approach.

b. What is popular among birthing families in your area?

c. Identify community resources for childbirth preparation classes and make a referral list.

...continued on next page

83.a. Participate in a childbirth preparation class and write about your experience.
b. Did you learn anything?
c. What seemed to work well in the group?
d. Do you think you could teach such a class?
e. How would you do it differently?

84.a. If utilizing paper charting: Collect samples of labor charting forms. Using these examples and your own labor charting preferences, begin drafting your own forms for use in labor charting. Keep this draft and submit it with your Charting and Practice Guidelines module.
b. If utilizing electronic charting: Discuss the benefits and limitations of the particular electronic charting company with whom you are familiar.
c. What steps does your practice undertake to prepare charting information for use while on call for a client, in labor, and in the event of a transport to the hospital.
d. What are the challenges that you notice related to charting in actual practice?

85. Draft practice guidelines for first stage labor in your own practice. Include your care plan for maintaining and monitoring well being of mother/gestational parent and baby, reference to your transport plan in response to need for labor augmentation, maternal exhaustion, cord prolapse, fetal distress, worrisome FHT patterns, and signs of chorioamnionitis. Submit this draft and include the final version later in your Practice Guidelines projects (in the Charting and Practice Guidelines Module.)

Skills Review

Following are excerpts from the NMI forms for assessment of midwifery skills, which include all skills identified and required by NARM. Review the following skills and consider how they each relate to the content of this module. If you are currently working with a preceptor, take this opportunity to focus on these areas. During Supervised Primary Care you will formally evaluate these skills together using the NMI form Preceptor Evaluation/Student Self-Assessment of Midwifery Skills.

1. Midwifery Counseling, Education and Communication:
   A. Provides interactive support and counseling and/or referral services to the mother regarding her relationships with her significant others and other health care providers
   C. Provides education and counseling based on maternal health/ reproductive/family history and on-going risk assessment

...continued on next page

1. Midwifery Counseling, Education and Communication:
    A. Provides interactive support and counseling and/or referral services to the mother regarding her relationships with her significant others and other health care providers
    C. Provides education and counseling based on maternal health/ reproductive/family history and on-going risk assessment
    D. Facilitates the mother's decision of where to give birth
        1. The advantages and the risks of different birth sites
        2. The requirements of the birth site
        3. How to prepare, equip and supply birth site
    E. Educates the mother and her family/support unit to share responsibility for optimal pregnancy outcome
    F. Educates the mother concerning the natural physical and emotional processes of pregnancy, labor, birth and post partum
    G. Applies the principles of informed consent
    H. Provides individualized care
    I. Advocates for the mother during pregnancy, birth and postpartum
    J. Provides education, counseling and/or referral, where appropriate for:
        4. Diet, nutrition and supplements
    J. Provides education, counseling and/or referral, where appropriate for:
        8. Complications
    D. Demonstrates the use of instruments and equipment including:
        8. Doppler
        9. Fetoscope
    D. Demonstrates the use of instruments and equipment including:
        24. Urinalysis strips
    F. Uses alternate health care practices (non-allopathic treatments) and modalities
        1. Herbs
        2. Hydrotherapy (baths, compresses, showers, etc.)
2. General Health care Skills:
    K. Administers the following pharmacologic (prescriptive) agents:
        5. Pitocin ®
    M. Uses doppler
3. Maternal Health Assessment:
    D. Assesses fetal weight, size, lie, or lightening
    K. Recognizes and responds to potential prenatal complications by
        15. Managing premature rupture of the membranes in a full-term pregnancy by:
            a) monitoring fetal movement,
            b) monitoring vital signs for signs of infection,
            c) encouraging increased fluid intake,
            d) inducing labor, e)consult after 24 hours without labor progression
        16.Consulting and referring premature rupture of the membranes in pre-term labor
4. Labor, Birth and Immediate Postpartum
    A. Facilitates maternal relaxation and provides comfort measures throughout labor by administering/encouraging:

...continued on next page

1) massage,
2) hydrotherapy,
3) warmth for physical and emotional comfort (e.g., compresses, moist warm towels, heating pads, hot water bottles, friction heat),
4) communicating in a calming tone of voice, using kind encouraging words,
5) the use of music and/or silence,
6) continued mobility throughout labor,

B. Evaluates and supports a laboring mother during the first stage of labor by assessing :

1. Maternal physical and emotional condition based upon assessment of:

a) vital signs,
b) food and fluid intake/output,
c) dipstick urinalysis for ketones,
d) status of membranes,
e) uterine contractions for frequency, duration and intensity with a basic intrapartum examination,
f) fetal heart tones,

2. Knows a variety of treatments for anterior/swollen lip:

a) position change,
b) light pressure or massage to cervical lip,
c) warm bath, d)pushing the lip over the baby's head while the mother pushes,
e) deep breathing and relaxation between contractions,
f) non-allopathic treatments

4. Labor, Birth and Immediate Postpartum

C. Demonstrates the ability to evaluate and support a laboring woman during the second stage of labor by:

11. Demonstrating the ability to recognize and respond to labor and birth complications such as:

e) Management of maternal exhaustion by:

1) providing nutritional support,
2) ensuring adequate hydration,
3) providing non-allopathic treatments,
4) evaluating the mother's psychological condition,
5) encouraging rest,
6) monitoring vital signs,
7) monitoring fetal well-being,
8) evaluating urine for ketones,
9) evaluating for consultation and/or referral

F. Assesses general condition of mother and newborn by:

1. Assessing bladder distention
2. Encouraging urination
3. Performing catheterization

3. Maternal Health Assessment:

E. Assesses correlation of weeks gestation to fundal height
K. Recognizes and responds to potential prenatal complications by:

...continued on next page

10. Treating a post-date pregnancy by:
    a) Stimulating the onset of labor by encouraging:
        1) Sexual/nipple stimulation,
        2) Assessment of emotional blockage,
        3) Stripping the membranes,
        4) Cervical massage,
        5) Castor oil induction,
        6) Non-allopathic therapies,
        7) Physical activity

4. Labor, Birth and Immediate Postpartum

A. Facilitates maternal relaxation and provides comfort measures throughout labor by administering/encouraging:

7) response for pain with:
    a) differentiation between normal and abnormal pain,
    b) validation of the woman's experience/fears,
    c) counter-pressure on back,
    d) relaxation/breathing techniques,
    e) non-allopathic treatments,
    f) position changes

B. Evaluates and supports a laboring mother during the first stage of labor by assessing :

1. Maternal physical and emotional condition based upon assessment of:
    g) fetal lie, presentation, position and descent with:
        1) visual observation,
        2) abdominal palpation,
        3) vaginal examination,
    h) effacement, dilation of cervix and station of presenting part,
    i) maternal hydration and/or vomiting by administering
        1) fluids by mouth,
        2) ice chips,
        3) oral herbal/homeopathic remedies,
        4) deep immersion in warm water

3. Posterior, asynclitic position by encouraging/supporting:
    a) the mother's choice of positions,
    b) the use of various laboring positions such as:
        1) on side, with top leg up, bottom leg back,
        2) on hands and knees,
        3) knee/chest,
        4) mother pulling up lower segment of uterus during contraction, while of hands and knees,
        5) standing, leaning forward with legs spread and knees bent (mother supported),
    c) physical activities (pelvic rocking, stair climbing, walking, etc.),
    d) non-allopathic treatments,
    f) rest and relaxation

4. Pendulous bell inhibiting descent by:
    a) positioning semi-reclining on back,
    b) assisting the position of the uterus over the pelvis

...continued on next page

5.Labor progress by providing:
a) psychological support measures,
b) nutritional support,
c) non-allopathic treatments,
d) physical activity,
e) position change,
f) perineal massage,
g) rest,
h) nipple stimulation

C. Demonstrates the ability to evaluate and support a laboring woman during the second stage of labor by:
1) waiting for the natural urge to push,
2) encouraging aggressive pushing in emergency situations,
3) allowing the mother to choose the birthing position,
4) recommending position change as needed,
5) massaging the perineum,
6) supporting the perineum,
7) encouraging the mother to touch the newborn head during crowning,
8) assisting in normal spontaneous vaginal birth with hand maneuvers (ritgen maneuver) to assist delivery,
9) providing an appropriate atmosphere for the moment of emergence,
10) documenting labor and birth

Study Group Module Evaluation Sheet

We'd like to know what you think of the course work we ask you to complete. Please comment on as many modules as you can, and return this form to NMI. Thank you!

Name of Module: First Stage

Your Name: _____

1. What did you like about this module?

2. Were there any surprises for you in this module?

3. Was there anything in this module that was particularly challenging for you?

4. What will completing this module bring to your midwifery practice?

5. Do you feel you met this module's states learning objectives?

6. Did the learning activities enable you to meet the learning objectives?

7. Were the suggested learning resources (books and materials) adequate to meet the learning objectives?

8. Did you utilize additional resources?

9. Any comments/Suggestions for improving this module?

Thank you!