Course Title: Antepartum Complications
Credits: 0.5

Course Description: This course prepares the student midwife to identify and deal with complications of the antepartum period. These complications include hypertensive disorders, low birth weight, polyhydramnios and oligohydramnios, low-lying placenta or placenta previa, fetal demise, abnormal fetal lie and presentation, size/dates discrepancies, hydatidiform mole, multiple gestation, abortion, Rh or ABO incompatibility, ectopic pregnancy, post-dates pregnancy, and the effect of common diseases on pregnancy. This course uses current research in midwifery and obstetrics to broaden the student's understanding of the following NARM skills and MANA core competencies learned under clinical supervision:

NARM Skills
I. Midwifery Counseling, Education and Communication
(1)-I A. Provides interactive support and counseling and/or referral services to the mother regarding her relationships with her significant others and other healthcare providers
(2)-I B. Provides education, support, counseling and/or referral for the possibility of less-than-optimal pregnancy outcomes
(3)-I C. Provides education and counseling based on maternal health/reproductive/family history and on-going risk assessment
(4)-I D. Facilitates the mother's decision of where to give birth
(5)-I E. Educates the mother and her family/support unit to share responsibility for optimal pregnancy outcome
(7)-I G. Applies the principles of informed consent
(8)-I H. Provides individualized care
(9)-I I. Advocates for the mother during pregnancy, birth and postpartum
I J. Provides education, counseling and/or referral, where appropriate for:
(10)-I J 1. Genetic counseling for at-risk mothers
(12)-I J 3. Prenatal testing
(15)-I J 6. Situations requiring an immediate call to the midwife
(16)-I J 7. Sexually transmitted diseases
(17)-I J 8. Complications
II. General Healthcare Skills
(21)-II A. Demonstrates Universal Precautions
(23)-II C. Demonstrates the application of aseptic technique
II D. Demonstrates the use of instruments and equipment including:
(26)-II D 3. Blood pressure cuff
(30)-II D 7. Doppler and/or Fetoscope
(36)-II D 13. Nitrazine paper
(40)-II D 17. Speculum
(41)-II D 18. Stethoscope
(43)-II D 20. Tape measure
(44)-II D 21. Thermometer
(45)-II D 22. Urinalysis strips
(48)-II D 25. Vaginal culture equipment
(50)-II F. Uses alternate healthcare practices (non-allopathic treatments) and modalities
II K. Administers the following pharmacological (prescriptive) agents:
   (61)-II K 6. RhoGam ®
(62)-II L. Refers for performance of ultrasounds
(63)-II M. Uses Doppler
(64)-II N. Refers for performance of biophysical profile

III. Maternal Health Assessment
(71)-III D. Estimates due date based upon a variety of methods
(72)-III E. Assesses fetal weight, size, lie, or lightening
(73)-III F. Assesses correlation of weeks gestation to fundal height’
(75)-III H. Evaluates laboratory and medical records from other practitioners
III L. Recognizes and responds to potential prenatal complications by:
   (80)-III L 1. Identifying pregnancy-induced hypertension
   (81)-III L 2. Assessing, educating and counseling for pregnancy-induced hypertension using a variety of methods
   (82)-III L 3. Identifying preeclampsia and collaborating and managing preeclamptic mothers
   (83)-III L 4. Identifying and turning breech presentations
   (84)-III L 5. Identifying multiple gestation pregnancies
   (85)-III L 6. Identifying and dealing with pre-term labor
   (86)-III L 7. Assessing, evaluating and treating a post date pregnancy
   (87)-III L 8. Identifying and referring tubal (ectopic) pregnancy
   (88)-III L 9. Identifying and referring placenta abruption
   (89)-III L 10. Identifying placenta previa
   (90)-III L 11. Identifying premature rupture of the membranes

Learning Activities:

A. Student reads appropriate sections from the Learning Materials/Resources.

B. Student answers the questions listed in the Learning Objectives by researching the Learning Materials/Resources for the course and correctly cites the sources and page numbers for each of their answers.

C. Student presents answers the questions listed in the Learning Objectives for review by preceptor.

D. Student participates in preceptor elaboration/discussion of Learning Objectives.

E. The student must research, prepare & present a summary of current best midwifery care/practices appropriate to the topic of the course from a current journal article/study, less than 5 years old.

F. Recommended Role-playing and/or Clinical Interactions
Note: The clinical requirement of NARM /Clinical Skills is completed at any time throughout the ASM apprenticeship during actual clinical practice and is NOT a requirement to complete this academic course.

Activities specific to NARM skills learned in this section:

1. Role play with your preceptor the first trimester bleeding and/or pain phone call from a client. What questions to you ask to determine if the woman is experiencing a tubal pregnancy, a normal miscarriage, or a molar pregnancy?
2. Role play with your preceptor a phone call during third trimester when a client is experiencing bleeding? What questions do you ask to determine the appropriate course of action?
3. Role play with your preceptor a phone call from a woman who is 28 weeks pregnant and experiencing cramping and back pain? What questions do you ask to determine what is the appropriate course of action.
4. Create a hand-out on signs and symptoms of preterm labor. Practice educating a client or student on signs and symptoms of preterm labor.
5. Use tomato juice or liquid red jello on menstrual pads and underpads to practice approximating blood loss.
6. Role-play with your preceptor how you would determine whether a client has pre-eclampsia.
7. Role-play with your preceptor how you would determine whether a client has premature rupture of membranes. Practice a sterile speculum exam and if possible, looking under the microscope for signs of amniotic fluid.
8. Test nitrazine paper on various liquids to determine which is most like amniotic fluid in pH factor.
9. Role-play with your preceptor how you would evaluate a client for post-dates pregnancy, and what the appropriate course of action would be.
10. Role-play with your preceptor how you would identify and counsel a client who has signs of fetal growth restriction.
11. Practice palpating a doll under a blanket for breech presentation. Role-play with your preceptor how you would identify a client with breech presentation and what the appropriate actions would be.
12. If possible, observe an external version for breech presentation by a skilled practitioner.
13. Create a hand-out for pregnant women on prevention or alternative strategies and techniques for turning a breech presentation.
14. Role-play with your preceptor how you would identify a client with a multiple gestation.
15. Role-play with your preceptor how you would make the appropriate phone calls to an obstetrician for any of the above complications.

Learning Materials / Resources:
Please use textbooks less than 5 years old or most recent edition.


9. Students must find 1 article/study less than 5 years old. Recommended internet links as needed for latest developments in midwifery care: https://www.midwiferycollege.edu/resources-national-college-of-midw

**Evaluation Tools / Methods:**

*Minimum passing grade for each course is a cumulative 80% / B-. Students and preceptors are encouraged to work together until the student masters the information.*

Final grade for the course is based on preceptor evaluation of the following:

A. Learning Objectives count for 50% of the final grade.

The preceptor evaluates each answer based on three elements:

1. Answers should reflect a thorough review of current literature regarding best current practices in midwifery care.
2. Each answer should be formed in the student’s own words or paraphrased from the text. The answer should be minimal, not a re-write of the entire text, but enough to show appropriate comprehension of the learning objective.
3. Student identification of sources and page numbers for each of the Learning Objectives. (Preceptor should do a random check to determine that sources cited are correctly identified.)

B. Enrichment Activities, including research essays and summaries of articles: 20%
C. Discussions: 15%
D. Tests and Exams: 15%

Course credit:
One Academic credit equals approximately 15 hours of formal time plus 30 hours of additional study or homework. Formal time is defined as the amount of time taken to answer the Learning Objectives to the level of 80% and to complete any learning activities to the preceptor’s satisfaction, including any time spent face to face with the preceptor. Informal time includes any time spent actively reading relevant sources and textbook/s, researching Learning Objectives, and studying for examinations.

Learning Objectives:

A. The student must research, prepare & present a summary of an aspect of current best midwifery care/practices appropriate to the topic of the course from a current journal article/study.

A-2: Read the following, and write a summary of your recommendation for clients in your care on breastfeeding while HIV positive:
https://www.cdc.gov/hiv/group/gender/pregnantwomen/emct.html
https://www.avert.org/learn-share/hiv-fact-sheets/breastfeeding

A-3: Read and discuss the section of this pdf entitled “Disclosure of risks related to: Cardiac Disease” https://www.dhp.virginia.gov/medicine/guidelines/85-10.pdf

A-4: ADD: Read the General Discussion Section of this page https://rarediseases.org/rare-diseases/congenital-varicella-syndrome/ Discuss what recommendations you might make in preconception counseling vs recommendations antenatally.

A-5: Read: http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression Explain which screening tool you will use in your practice and why. Optional additional reading: http://americanpregnancy.org/pregnancy-health/depression-during-pregnancy/

B. Student answers the questions below and cites the sources and page numbers.

1. List five signs and symptoms of complications that require an immediate call by the mother to the midwife and explain the significance of each.

2. Discuss the findings that are suggestive of inappropriate fetal weight for dates
and how this can be confirmed during the prenatal period. Include:
   a. Four causes of size/dates discrepancy and describe how they should be managed.
   b. List five fetal conditions that are correlated with low birth weight whether from intrauterine growth retardation or small for gestational age.
   c. Name five things that should be ruled out in confirmed LGA during the third trimester.

3. List three things that can interfere with the genetic design for fetal growth and development.

4. Discuss the findings that are suggestive of polyhydramnios and oligohydramnios and how these can be confirmed.
   a. Discuss some causes and risks of polyhydramnios.
   b. Discuss some causes and risks of oligohydramnios

5. Name the symptoms that are suggestive of low-lying placenta or placenta previa and how this can be confirmed. Describe the management of a hemorrhaging placenta previa during third trimester.

6. Discuss the findings that are suggestive of fetal demise and how this can be confirmed.

7. Discuss the findings that are suggestive of abnormal fetal lie and presentation:
   a. How this can be confirmed.
   b. What measures can be taken to correct fetal positioning?
      i. By a mother
      ii. By a midwife
      iii. By a doctor or hospital-based clinician

8. Name some symptoms of hydatidiform mole and how it can be confirmed.
9. Discuss multiple gestation. Include in your discussion:
   a. The prenatal findings that are suggestive of MG
   b. Discuss the antepartum risks associated with MG
   c. A management plan for caring for a women with MG that is follows the guidelines where you intend to practice

10. Discuss the symptoms of spontaneous abortion:
   a. Explain what steps the midwife should take to evaluate the mother's well-being and the progress of the abortion.
   b. Discuss when the mother should be referred and why.

11. Discuss the diagnosis of incompetent cervix and explain the usual treatment.

12. Name possible dangers of hydatidiform mole and discuss the treatment and follow-up.

13. Explain ectopic pregnancy and the possible complications that can arise depending on the site of implantation if not referred immediately.


15. Explain how tuberculosis affects a pregnant woman and why she is high risk.

16. Discuss three types of hepatitis:
   a. How is each transmitted
   b. What are the associated risk to the mother
   c. What are the associated risks to the fetus

17. Discuss Rubella. Explain why the mother should be counseled to avoid getting
this infection during pregnancy and the rationale for immunization following pregnancy.

18. Name the TORCH diseases and explain how each can affect the fetus.

19. Explain the effect of maternal infection on the fetus for each of the following:
   a. Gonorrhea
   b. Chlamydia
   c. Group B strep
   d. Trichomoniasis
   e. HIV
   f. Herpes
   g. Bacterial Vaginosis
   h. Syphilis

20. Discuss the difficulty of detecting syphilis without a blood test.

21. Explain the difference between condylomata lata and condylomata acuminata and discuss how you would counsel for each.

22. Discuss Urinary Tract Infections:
   a. What are the signs and symptoms.
   b. Explain why pregnant women are susceptible to UTI
   c. How you would counsel a woman who wishes to prevent a UTI
   d. What tools can be used to identify asymptomatic UTIs
   e. Name the dangers of asymptomatic bacteriuria

23. Define acute pyelonephritis and discuss two possible complications. Explain the usual treatment and discuss why this woman is high risk.

25. Explain why some women can become diabetic in pregnancy and discuss the risk to the fetus. Explain how gestational diabetes is confirmed.

26. Discuss the previous history that might indicate Rh or ABO incompatibility.

27. Explain the danger to the fetus if the mother is Rh sensitized. Name this syndrome.

28. Explain the risks to the mother of fetal demise and define DIC. Discuss the special support that should be given to women with a fetal death.

29. Discuss PIH:
   a. Signs and symptoms
   b. A comprehensive care plan for mothers showing early signs
   c. Risks to the mother
   d. Risks to the fetus

30. Discuss Preeclampsia:
   a. Signs and symptoms
   b. Predisposing factors for the development of preeclampsia
   c. A comprehensive care plan for mothers showing early signs
   d. Risks to the mother
   e. Risks to the fetus

31. Discuss post dates pregnancy:
   a. How is postdatism defined?
   b. How amniotic fluid volume play a role in post-dates management
   c. What measures can be taken to monitor fetal well-being
   d. Management techniques used by midwives
e. Management techniques used in the hospital

32. Discuss premature rupture of membranes (PPROM) before term:
   a. Risk factors for PPROM
   b. How it can be confirmed
   c. Risks to the fetus
   d. A comprehensive care plan of care

33. Discuss pre-term labor:
   a. Signs and symptoms
   b. Under-lying causes
   c. Risks to mother and fetus
   d. Non-allopathic treatments
   e. Allopathic treatments

34. Discuss AP placental abruption. Include:
   a. Signs
   b. Actions taken if abruption is suspected
   c. Risks to mother and fetus