

Course Title: MOD3-MW300-AP Complications**Credits:** 0.50

Course Description: Prepares the student midwife to identify and deal with complications of the antepartum period, including 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, including tuberculosis, hepatitis, rubella, TORCH diseases, and gonorrhea.

Learning Objectives:

A: Students will be able to answer the Study Questions (below).

B: Student will be able to demonstrate thorough knowledge of the Clinical Skills required for this course (below).

C: Student will demonstrate thorough knowledge of the MANA Core Competencies for Midwives required for this course (below).

D: Students will be able to demonstrate knowledge of any new information in the area of study.

Learning Activities:

I. Student Reads required texts.

II. Student Completes study questions.

III. Preceptor elaborates on study questions.

IV. Clinical Skills and Core Competencies training consists of the following (may take place at clinical visits or at childbirth education classes):

1. Preceptor Explanation of	Safe, evidence-based midwifery care for the individual Clinical Skills and Core Competencies including etiology, sequelae, appropriate management and follow-up for the individual patient, appropriate times and reasons for consult and referral, access to relevant resources and information, complete, thorough and timely record keeping, appropriate, professional, and compassionate management of every task involved, receptiveness and responsiveness to patient's concerns. The Explanation will include a discussion of midwifery decisions and actions as they relate to possible outcomes and their wider impact, based on the Midwives Model of Care®.
2. Preceptor Demonstration of	
3. Student Practice of	
4. Student Demonstration of	

V. Student researches and presents to the preceptor relevant latest developments in academic and clinical midwifery as relevant to the subject.

VI. Student/Preceptor discussion.

VII. Role-playing and Clinical Interactions: practice clinical interactions, assist with actual clinicals.

Learning Materials / Resources:

(Please use textbooks less than 5 years old, or most recent edition)

1. F. Cunningham, Kenneth Leveno, Steven Bloom, and John Hauth. William's Obstetrics. 23rd edition. McGraw-Hill Professional. 2009.

2. Frye, Anne. Holistic Midwifery: A comprehensive Textbook for Midwives and Home Birth Practice, Vol I, Care During Pregnancy. Labrys Press. 1998.
3. Weaver, Pam and Evans, Sharon K. Practical Skills Guide for Midwifery, 4th Edition. Morningstar Publishing Co. Wasilla. 2007
4. MEAC Abbreviated NARM Skills Form.
5. MANA Core Competencies for Midwives
6. Midwives Model of Care®.
7. Internet links as needed for latest developments in midwifery care:
 - [The Cochrane Collaboration](#)
 - [EBSCO](#)
 - [National Library of Medicine](#)
 - [PubMed](#)
 - [Medline](#)
 - [SCIRUS](#)
 - [Medscape](#)
 - [World Health Organization](#)

Evaluation Tools / Methods:

1. Answers to study questions: Student must achieve at least 80% correct to pass. The preceptor evaluates each answer for correctness and explains the questions that were incorrect. This counts for 85% of the final grade.
2. Clinical Skills: Student must demonstrate thorough knowledge of each skill. This counts for 5% of the final grade. *Academic courses CAN be completed without the student achieving "mastery" of each skill*, however the skills on the MEAC Abbreviated NARM Skills Form (which is a separate requirement) are not filled in until the student achieves Mastery* of the skill.
3. MANA Core Competencies: Student's ability to apply MANA Core Competencies for Midwives in discussion to simulated and real-life situations. This counts for 5% of the final grade.

Evaluation of NARM Skills and MANA Core Competencies: The student demonstrates thorough knowledge to the satisfaction of the preceptor in the following areas:

The student will be able to, in accordance with safe, evidence-based midwifery care, explain the condition, verbalize etiology and sequelae, verbalize appropriate management for the individual patient, follow up appropriately, consult and refer appropriately, access resources and information, accomplish complete, thorough and timely record keeping, appropriately manage every task involved correctly, professionally, and compassionately, while being receptive and responsive to patient's concerns. She/he will be able to explain her decisions and actions as they relate to possible outcomes and their wider impact.

4. Student presentation of new information in area of study. The preceptor evaluates the correctness of the information presented. This counts for 5% of the grade.

Study Questions

1. List four reasons why a midwife needs to be able to identify the signs and symptoms of common complications.
2. List five signs and symptoms of complications that require an immediate call by the mother to the midwife and explain the significance of each.
3. List five fetal conditions that are correlated with low birth weight whether from intrauterine growth retardation or small for gestational age.
4. List three things that can interfere with the genetic design for fetal growth and development.
5. List four results of excessive maternal weight gain.
6. Discuss the findings that are suggestive of polyhydramnios and oligohydramnios and how these can be confirmed.
7. Name the symptoms that are suggestive of low-lying placenta or placenta previa and how this can be confirmed.
8. Discuss the findings that are suggestive of fetal demise and how this can be confirmed.
9. Discuss the findings that are suggestive of inappropriate fetal weight for dates and how this can be confirmed.
10. Discuss the findings that are suggestive of abnormal fetal lie and presentation and how this can be confirmed.
11. Name some symptoms of hydatidiform mole and how it can be confirmed.
12. Discuss the prenatal findings that are suggestive of multiple gestation and how this can be confirmed.
13. Explain habitual abortion.
14. In the presence of the symptoms of threatened abortion explain what steps the midwife should take to evaluate the mother's well-being and the progress of the abortion. Discuss when the mother should be referred and why.
15. Discuss some possible complications of incomplete abortion.
16. Discuss the diagnosis of incompetent cervix and explain the usual treatment.

17. Name possible dangers of hydatidiform mole and discuss the treatment and follow-up.
18. Explain ectopic pregnancy and the possible complications that can arise depending on the site of implantation if not referred immediately.
19. Explain how hyperemesis gravidarum affects the mother's metabolism and the growth of the fetus. Describe options for its treatment.
20. Name the microorganisms that can infect a mother during pregnancy, which ones are known to have a negative effect on the fetus and why.
21. Explain how tuberculosis affects a pregnant woman and why she is high risk.
22. Discuss hepatitis and how it is transmitted.
23. Explain why Hepatitis B in the mother is dangerous to the health care provider as well as to the mother, her baby, and her family.
24. Name the titer which indicates lack of immunity to Rubella. Explain why the mother should be counseled to avoid getting this infection during pregnancy and to get immunized following pregnancy.
25. Name the TORCH diseases and explain how each can affect the fetus.
26. Explain the effect of maternal infection with gonorrhea on the fetus.
27. Discuss the difficulty of detecting syphilis without a blood test.
28. Explain the difference between condylomata lata and condylomata acuminata and discuss how you would counsel for each.
29. Explain why pregnant women are susceptible to UTI and how you would counsel a woman who wishes to prevent it.
30. Discuss the dangers of asymptomatic bacteriuria and explain the actions that should be taken for a woman who has it.
31. Discuss some symptoms of cystitis and when treatment is usually initiated.
32. Define acute pyelonephritis and discuss two possible complications. Explain the usual treatment and discuss why this woman is high risk.
33. Define anemia and its symptoms. Discuss the treatment.
34. List three symptoms of heart disease and why the woman is high risk.

35. Explain why some women can become diabetic in pregnancy and discuss the risk to the fetus. Explain how diabetes is confirmed.
36. Discuss the risks of multiple pregnancy and give your rationale.
37. Discuss the previous history that might indicate Rh or ABO incompatibility.
38. Explain the danger to the fetus if the mother is Rh sensitized. Name this syndrome.
39. Explain how Rhogam prevents sensitization.
40. Discuss some causes and risks of polyhydramnios.
41. Discuss some causes of oligohydramnios and explain why this woman is high risk.
42. Explain the risks to the mother of fetal demise and define DIC.
43. Discuss the special support that should be given to women with a fetal death.
44. Describe three hypertensive disorders of pregnancy and explain how they put the mother at risk.
45. Name four causes of antepartal bleeding and the steps that should be taken for each.
46. Describe the management of a hemorrhaging placenta previa during third trimester.
47. Name four causes of size/dates discrepancy and describe how they should be managed.
48. Explain how IUGR or SGA can be confirmed prenatally and how they should be managed.
49. Name five things that should be ruled out in confirmed LGA during the third trimester. Discuss some possible risks to fetus and mother.
50. Define post dates pregnancy and discuss how it should be managed.

Clinical Skills (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
- (6)-I F. Educates the mother concerning the natural physical and emotional processes of pregnancy, labor, birth and postpartum
- (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
 - (11)-I J 2. Abuse issues: emotional, physical and sexual
 - (12)-I J 3. Prenatal testing
 - (13)-I J 4. Diet, nutrition and supplements
 - (14)-I J 5. Effects of smoking, drugs and alcohol use
 - (15)-I J 6. Situations requiring an immediate call to the midwife
 - (16)-I J 7. Sexually transmitted diseases
 - (17)-I J 8. Complications
 - (18)-I J 9. Environmental risk factors

II. General Healthcare Skills

- (21)-II A. Demonstrates Universal Precautions
- (22)-II B. Demonstrates the application of OSHA regulations as they relate to midwifery workplace
- (23)-II C. Demonstrates the application of aseptic technique
- II D. Demonstrates the use of instruments and equipment including:
 - (25)-II D 2. Bag and mask resuscitator
 - (26)-II D 3. Blood pressure cuff
 - (30)-II D 7. Doppler and/or Fetoscope
 - (31)-II D 8. Gestation calculation wheel/calendar
 - (34)-II D 11. Lancets
 - (35)-II D 12. Newborn and adult scale
 - (36)-II D 13. Nitrazine paper
 - (39)-II D 16. Single dose ampule
 - (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
 - (46)-II D 23. Urinary catheter
 - (47)-II D 24. Vacutainer/blood collection tube
 - (48)-II D 25. Vaginal culture equipment
- (49)-II E. Is trained in adult/infant CPR/neonatal resuscitation
- (50)-II F. Uses alternate healthcare practices (non-allopathic treatments) and modalities

(51)-II G. Refers to alternate healthcare practitioners for non-allopathic treatments

II H. Treats for shock by:

(52)-II H 1. Recognizing the signs and symptoms of shock, or impending shock

(53)-II H 2. Assessing the cause of shock and providing treatment for shock

(54)-II I. Administers Oxygen

(55)-II J. Recommends the use of vitamin and mineral supplements

II K. Administers the following pharmacological (prescriptive) agents:

(56)-II K 1. Lidocaine

(57)-II K 2. Medical oxygen

(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

(65)-III A. Obtains and maintains records of health, reproductive and family medical history

(66)-III *B. Performs an initial history and physical examination including vital signs

III C. Knows pelvic exam, including assessing:

(67)-III C 1. The condition of the uterus, ovaries and cervix (by speculum)

(68)-III C 1 a) Performs a Papanicolaou (Pap) test

(69)-III C 1 b) Obtains gynecological cultures

(70)-III C 2. The size of the uterus and fetal age (by bimanual exam), the condition of the vulva, vagina, cervix, perineum and anus

(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'

(74)-III *G. Performs routine prenatal physical exams

(75)-III H. Evaluates laboratory and medical records from other practitioners

(76)-III I. Obtains assistance evaluating laboratory and medical records from other practitioners

(77)-III J. Records results of the examination in the prenatal records

III K. Provides prenatal education and counseling for:

(78)-III K 1. Nutritional, and non-allopathic dietary supplement support

(79)-III K 2. Common complaints of pregnancy

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
- (91)-III L 12. Managing premature rupture of the membranes in a full-term pregnancy and/or consulting and referring appropriately:

Core Competencies (MANA Core Competencies for Midwives)

I. Guiding Principles of Practice.

The midwife provides care according to the following principles:

- 1 C. Midwives work as autonomous practitioners, collaborating with other health and social service providers when necessary.
- 1 E. Midwives understand that female physiology and childbearing are normal processes, and work to optimize the well-being of mothers and their developing babies as the foundation of care giving
- 1 H. Midwives recognize the empowerment inherent in the childbearing experience and strive to support women to make informed decisions and take responsibility for their own well-being.
- 1 J. Midwives synthesize clinical observations, theoretical knowledge, intuitive assessment and spiritual awareness as components of a competent decision making process.
- 1 K. Midwives value continuity of care throughout the childbearing cycle and strive to maintain continuous care within realistic limits.
- 1 L. Midwives understand that the parameters of “normal” vary widely and recognize that each pregnancy and birth is unique.

II. General Knowledge and Skills

The midwife provides care incorporating certain concepts, skills and knowledge from a variety of health and social sciences including, but not limited to:

- 2 C. Community standards of care for women and their developing infants during the childbearing cycle, including midwifery and bio-technical medical standards and the rationale for and limitations of such standards
- 2 J. The grieving process.
- 2 M. The ability to develop, implement and evaluate an individualized plan for midwifery care.
- 2 N. Woman-centered care, including the relationship between the mother, infant and their larger support community.
- 2 O. Knowledge and application of various health care modalities as they apply to the childbearing cycle

III. Care During Pregnancy

The midwife provides health care, support, and information to women throughout pregnancy. She determines the need for consultation or referral as appropriate. The midwife uses a foundation of knowledge and/or skill which includes the following:

- 3 A. Identification, evaluation, and support of maternal and fetal well-being throughout the process of pregnancy

3 E. Changes in emotional, psychosocial and sexual variations that may occur during pregnancy.

3 F. Environmental and occupational hazards for pregnant women.

3 H. Basic understanding of genetic factors, which may indicate the need for counseling, testing, or referral.

3 M. The causes, assessment and treatment of the common discomforts of pregnancy.

3 O. Special needs of the RH-negative woman.

IV. Care During Labor, Birth and Immediately Thereafter

The midwife provides health care, support, and information to women throughout labor, birth and the hours immediately thereafter. She determines the need for consultation or referral as appropriate. The midwife uses a foundation of knowledge and/or skill which includes the following:

4 M. Familiarity with current bio-technical interventions and technologies, which may be commonly used in a medical setting.