

Successful completion of the Antepartum Module 2017-2019 will award 20 ACNM approved contact hours, 6 contact hours have been designated towards Pharmacology.

### **ANTEPARTUM AND PRIMARY CARE OF THE PREGNANT WOMAN MODULE 2017-2019**

The AMCB Certificate Maintenance Program (CMP) Modules are designed as self-learning tools to enable Certified-Midwives and Certified Nurse-Midwives to learn new information in a subject area or to review evidence-based care for commonly encountered areas of midwifery practice.

A module consists of:

1. References
2. Objectives
3. Multiple-choice questions based on the references
4. Evaluation of the module

Answers are based on the references and have been chosen to educate you about new content. Therefore, please be aware that answering questions based on prior knowledge or experience may result in an incorrect answer. You are required to read the relevant references on each particular topic, and then complete the questions for that topic.

Choose the one most correct answer. Questions have been written to have a single, best answer. Also, the responses have been organized so that any “pattern” to the correct answers is accidental. Please do not worry if you see a “pattern” in your answers. Patterns are random.

Criteria for successfully passing this module are:

- 75% of module questions answered correctly
- Completion of the module evaluation section.

**ONLINE GRADING:** Modules are now available to be completed online. This service will allow you to receive your results instantly upon submission of your answers, as well as having the option to print a pass letter instantly. If you have not done so already, please call our office at 410-694-9424 to set up a username and password for this option. **Final deadline for submitting the AP Module online will be 12/15/2019 11:59PM EST.**

**SCANTRON GRADING:** Effective January 1st, 2015, scantron grading will no longer be available. If you are unable to have your Module scored through the AMCB Portal system, please contact our office at 410-694-9424.

## REFERENCES FOR ANTEPARTUM AND PRIMARY CARE OF THE PREGNANT WOMAN MODULE 2017-2019

### Ectopic

- Barash JH, Buchanan EM, Hillson C. Diagnosis and management of ectopic pregnancy. *American Family Physician*, 2014; 90: 34-40.

### Headaches

- Revell K, Morrish P. Headaches in pregnancy. *The Obstetrician & Gynaecologist*, 2015; 16: 179-184.

### Hyperemesis

- Castillo M, Phillippi J. Hyperemesis gravidarum: A holistic overview and approach to clinical assessment and management. *Journal of Perinatology and Neonatal Nursing*. 2015; 29: 12-22.

### Respiratory

- Mehta N, Chen K, Hardy E, Powrie R. Respiratory disease in pregnancy. *Best Practice & Research Clinical Obstetrics and Gynaecology*, 2015;29: 598-611.

### Nutrition

- Groth SW, Simpson AH, Fernandez D. The dietary choices of women who are low-income, pregnant, and African American. *Journal of Midwifery & Women's Health*, 2016; 61 (5): 606-612.

### Prenatal Depression

- Anderson, C. A., Lieser, C. Prenatal depression: Early intervention. *The Nurse Practitioner*, 2015; 40 (7): 38-46.

### Medications

- Chambers C. Over-the-counter medications: Risk and safety in pregnancy. *Seminars in Perinatology*, 2015;39: 541-544.

### IPV/DV

- Alhusen JL, Ray E, Sharps P, Bullock L. Intimate partner violence during pregnancy: Maternal and neonatal outcomes, *Journal of Women's Health*, 2015;24:100-106.

### VBAC

- Cox KJ. Counseling women with a previous cesarean birth: Toward a shared decision-making partnership. *Journal of Midwifery & Women's Health*, 2014; 59: 237-245.

### CAM

- Deligiannidis KM, Freeman MP. Complementary and alternative medicine therapies for perinatal depression, *Best Practice Research Clinical Obstetrics & Gynecology*, 2014; 28 (1): 85-95.

## **MRSA**

- Kriebs J. Staphylococcus infections in pregnancy. *Journal of Perinatal & Neonatal Nursing*, 2016; 30(2):115-23

## **Dermatology**

- Mehta N, Chen K & Kroumpouzou G. Skin Disease in Pregnancy: The approach of the obstetric medicine physician. *Clinics of Dermatology*, 2016; 34: 320-326.

## **Disabilities**

- Byrnes L, Hickey M. Perinatal care for women with disabilities: Clinical considerations. *Journal for Nurse Practitioners*, 2016; 12(8):503-509.

## **Progesterone**

- Conde-Agudelo A & Romero R. Vaginal progesterone to prevent preterm birth in pregnant women with a sonographic short cervix: clinical and public health implications. *American Journal of Obstetrics & Gynecology*, 2016;214(2):235-242.

## **ITP/GTP**

- Yan M, Malinowski A, and Shehata N. Thrombocytopenic syndromes in pregnancy. *Obstetric Medicine*, 2016; 9(1): 5-10.

## **Genetic Screening**

- Dashe JS. Aneuploidy screening in pregnancy. *Obstetrics & Gynecology*, 2016; 128(1): 181-194.

## **Professional Issues**

- Smith DS. Interprofessional collaboration in perinatal care: The future of midwifery. *Journal of Perinatal & Neonatal Nursing*, 2016;30:167-173.

## **OBJECTIVES FOR ANTEPARTUM AND PRIMARY CARE OF THE PREGNANT WOMAN MODULE 2017-2019**

### **Ectopic**

- Discuss post methotrexate treatment follow-up when using the single dose regimen.
- Describe the mechanism of action of methotrexate in the treatment of ectopic pregnancy.
- Review the use of the beta subunit of human chorionic gonadotropin ( $\beta$ -hCG) levels to distinguish between intrauterine and ectopic pregnancy.

### **Headaches**

- Review common causes of headaches in pregnancy.
- Describe evidence-based prophylactic treatment for migraines in pregnancy.
- Identify the preferred imaging in pregnancy to rule out cerebral venous thrombosis.

### **Hyperemesis**

- Describe the prevalence of hyperemesis gravidarum.
- Summarize the current treatment options for hyperemesis gravidarum.
- Discuss future reproductive consequences for women diagnosed with hyperemesis gravidarum.

### **Respiratory**

- Review the step-wise treatment of asthma in pregnancy.
- Discuss the most effective treatment options for smoking cessation in pregnancy.
- Identify the preferred antibiotic treatment of community-acquired pneumonia in pregnant women.

### **Nutrition**

- Identify the most common reasons for unhealthy food choices among specific groups of low-income pregnant women.
- Describe common barriers to making healthy food choices among specific groups of low-income pregnant women.
- Discuss specific strategies to enhance better food choices for low-income pregnant women.

### **Prenatal Depression**

- Identify potential fetal implications of prenatal depression.
- Review the recommended treatment for adolescent depression.
- Discuss the clinical implications of anti-depressant medications during pregnancy.

## **Medications**

- List the prevalence of over-the-counter (OTC) medication use in pregnancy.
- Identify challenges facing researchers in studying the safety of OTC medication use in pregnancy
- Describe potential neonatal outcomes associated with OTC medications commonly used in pregnancy.

## **IPV/DV**

- Examine access to care patterns for pregnant victims of intimate partner violence (IPV).
- List the mental health consequences for pregnant women who experience IPV.
- Identify the best strategies for addressing the problem of IPV during pregnancy.

## **VBAC**

- Identify the most effective methods for communicating numerical risk in vaginal birth after cesarean (VBAC) counseling.
- Discuss the different philosophical frameworks and decision-making models associated VBAC counseling.

## **CAM**

- Identify potential adverse effects of complementary alternative medicine (CAM) therapies when used in higher doses.
- List commonly used CAM therapies in the treatment of depression and mood disorders in pregnancy.
- Review appropriate uses and dosing of bright light therapy in the treatment of perinatal depression.

## **MRSA**

- Review methicillin-resistant *S. aureus* (MRSA) screening recommendations for health care workers.
- Describe the preferred treatment protocol for MRSA decolonization.
- Identify the preferred antibiotic treatments for confirmed MRSA infections in the perinatal period.

## **Dermatology**

- Describe treatment options for pruritus during pregnancy.
- Discuss the differential diagnosis of various skin disorders in pregnancy.
- Identify possible adverse fetal effects from skin disorders during pregnancy.

## **Disabilities**

- Differentiate between the legal, medical, and social definitions of disability.
- Identify appropriate treatment for life-threatening complications of autonomic dysreflexia (AD).
- Describe the goals of specialty therapists in the care of pregnant women with mobility disorders.

**Progesterone**

- Identify the prevalence of sonographic shortened cervix in pregnancy.
- Review the appropriate clinical use and dosing of vaginal progesterone treatment in the prevention of preterm birth.

**ITP/GTP**

- Identify characteristics that differentiate gestational (GT) from immune thrombocytopenia (ITP).
- Review indications for antenatal testing when thrombotic thrombocytopenia (TTP) occurs during pregnancy.
- Discuss clinical responses and treatment implications when ITP requires treatment during pregnancy.

**Genetic Screening**

- Review the recommended management steps for abnormal aneuploidy screening results.
- Identify the most appropriate genetic screening options at various gestational ages.

**Professional Issues**

- Discuss the barriers to the development of collaborative practice.
- Identify the purpose of interprofessional collaboration in perinatal care.
- Review the definitions of collaboration, collaborative practice, and interprofessional care.

## QUESTIONS FOR ANTEPARTUM AND PRIMARY CARE OF THE PREGNANT WOMAN MODULE 2017-2019

*I certify that I have read each of the articles in this module in their entirety.*

**YES**

### **Ectopic**

1. When the beta subunit of human chorionic gonadotropin ( $\beta$ -hCG) is above the discriminatory level and there is no adnexal mass or gestational sac seen on transvaginal ultrasound (TVUS), what is the next step in management?
  - a. Offer methotrexate or surgery
  - b. Repeat  $\beta$ -hCG and TVUS in two days
  - c. Continue expectant management
  
2. Methotrexate as a treatment for ectopic pregnancy is contraindicated in women with:
  - a. Obesity
  - b. Alcoholism
  - c. Hypothyroidism
  
3. When using the single dose regimen of methotrexate for the treatment of an ectopic pregnancy,  $\beta$ -hCG levels should be checked?
  - a. In 48 hours
  - b. On day 4 and 7
  - c. After one week
  
4. Methotrexate as a treatment for ectopic pregnancy is effective because it:
  - a. Inhibits cell replication
  - b. Encourages DNA synthesis
  - c. Promotes cell differentiation

### **Headaches**

5. Which of the following has the best evidence of safety for prophylactic treatment when a pregnant woman is experiencing 3-4 migraine headaches per month?
  - a. Metoclopramide 10 mg every 8 hours
  - b. Acetaminophen 650 mg PO every 4 hours
  - c. Propranolol 10-40 mg PO three times daily
  
6. Why are pregnant women more likely to experience an aura with a migraine headache?
  - a. Decreased levels of progesterone
  - b. Physiologic changes in cerebral blood flow
  - c. Elevated plasma concentrations of estrogen

7. In addition to migraines, which of the following is also considered a primary cause of headache in pregnancy?
- Anemia
  - Tension-type
  - Caffeine withdrawal
8. What is the preferred imaging to rule out Cerebral Venous Thrombosis (CVT) in a pregnant woman?
- Magnetic resonance imaging
  - Non-contrast computerized tomography
  - Middle cerebral artery doppler ultrasound

### **Hyperemesis**

9. The prevalence of hyperemesis gravidarum (HG) in pregnancy is approximately:
- 1.1%
  - 6.9%
  - 13.2%
10. What intravenous treatment should be used to prevent Wernicke's Encephalopathy in pregnant women who experience vomiting for 3 weeks or more?
- Normal saline with thiamine 100 mg
  - Lactated ringers with potassium chloride 40 mEq/L
  - Dextrose 5% in lactated ringers with ondansetron 8 mg
11. The only US Food and Drug Administration approved medication for the treatment of nausea and vomiting in pregnancy is:
- Ondanestran (Zofran)
  - Metoclopramide (Reglan)
  - Pyroxidine/Doxylamine (Diclegis)
12. What percentage of women with a history of hyperemesis gravidarum reported changing their future reproductive plans due to fear of symptom recurrence?
- 17%
  - 43%
  - 76%

### **Respiratory**

13. Which of the following contributes to symptom exacerbation of asthma in pregnant women?
- Increased progesterone
  - Gastroesophageal reflux
  - Limitation of lung expansion



14. Using the recommended step-wise approach to asthma treatment in pregnancy, which of the following is characteristic of a Step 2 (mild persistent) therapy?
- Continuous oral steroids
  - Steroid “preventer” inhaler
  - Short acting “reliever” inhaler
15. What is the most common cause of fatal non-obstetric infection in the pregnant woman?
- Pneumonia
  - Asthmatic respiratory failure
  - Pyelonephritis
16. Which treatment for community-acquired bacterial pneumonia is most appropriate in the pregnant woman?
- Oseltamivir
  - Cephalosporin
  - Fluoroquinolone
17. According to the authors, what smoking cessation therapy is the mainstay of helping pregnant women stop smoking during their pregnancy?
- Cognitive behavior therapy (CBT)
  - Nicotine replacement therapy (NRT)
  - Medical therapy with Bupropion (Welbutrin)

### **Nutrition**

18. What percent of women gain weight that is higher than the Institute of Medicine’s recommended weight gain guidelines for pregnancy?
- 33%
  - 52%
  - 82%
19. In this study, what percent of women reported food cravings as the driving factor for their food choices?
- 13%
  - 38%
  - 64%
20. Of the 25 women who completed this study, the most frequently cited barrier to adopting a healthy diet in pregnancy was reported by the authors as
- Knowledge deficit
  - Lack of money
  - Not enough rest

21. The authors recommend which of the following as a basic first step in insuring eligible low-income pregnant women adopt a healthy diet in pregnancy?
- Daily exercise
  - Time management strategies
  - Supplemental nutrition program (WIC)

### **Prenatal Depression**

22. Which of the following is considered first line treatment for adolescent depression?
- Psychotherapy
  - Pharmacotherapy
  - Electroconvulsive therapy
23. What percentage of women will have a recurrence of symptoms during pregnancy if medications are discontinued close to the time of conception?
- 22%
  - 54%
  - 68%
24. Which of the following antidepressant medications has been associated with an increased incidence of neural tube defects and should be avoided during pregnancy?
- Paroxetine
  - Citalopram
  - Venlafaxine
25. Prenatal depression (PND) is thought to affect the fetus due to elevation of which maternal hormone?
- TSH
  - Cortisol
  - Progesterone

### **Medications**

26. Which of the following over-the-counter (OTC) medications may be associated with an increased risk of gastroschisis?
- Retinoic acid
  - Acetaminophen
  - Pseudoephedrine
27. Doxylamine is most commonly used “off label” in pregnancy to treat:
- Headaches
  - Sleep disorders
  - Nausea and vomiting
28. What is the prevalence of acetaminophen use in pregnancy?
- 50%
  - 75%
  - 90%

29. One of the biggest challenges in conducting studies of OTC medication safety in pregnancy is:

- a. Obtaining IRB approval
- b. Finding appropriate funding
- c. Maternal recall of exposure timing

### **IPV/DV**

30. According to these authors, what is the leading cause of death in pregnancy?

- a. Preeclampsia
- b. Physical trauma
- c. Gestational diabetes

31. How likely are women abused in pregnancy to have inadequate or late entry to care when compared to their non-abused counterparts?

- a. Less likely
- b. Twice as likely
- c. There is no difference

32. What is the most common mental health consequence of intimate partner violence?

- a. Suicide
- b. Anxiety
- c. Depression

33. What is the necessary first step in addressing the problem of IPV during pregnancy?

- a. Educating first-responders
- b. Enhancing protective services
- c. Improving provider screening

### **VBAC**

34. The first step in the VBAC counseling process is to:

- a. Provide visual aids to outline the likelihood of VBAC success.
- b. Determine if the woman is an appropriate candidate for a trial of labor.
- c. Review the risks associated with a trial of labor, such as uterine rupture.

35. When women pursue their birth choice with a perspective that prioritizes the baby over the mother, they are subscribing to which of the following philosophies?

- a. Childbirth
- b. Motherbirth
- c. Familybirth

36. Which of the following describes a consumerist model of medical decision-making?

- a. The woman deliberates and decides alone
- b. The provider and the woman arrive at a consensus
- c. The provider selects the best options for the woman

37. When presenting numerical information regarding risks and benefits, which of the following strategies has been shown to improve comprehension?
- Using percentages or probabilities
  - Using terms such as rare or unlikely
  - Using visual aids such as icon arrays

### **CAM**

38. Which complementary alternative medicine (CAM) is an efficacious first line treatment for seasonal and non-seasonal major depressive disorder (MDD) in pregnancy?
- Acupuncture
  - St. Johns Wort
  - Bright light therapy
39. What is the mechanism of action of antenatal massage therapy in reducing symptoms of mild depression?
- Decreased salivary and urinary cortisol levels
  - Inhibition of N-methyl-D-aspartic acid (NMDA) receptors
  - Improvement and restoration of the body's vital energy flow
40. Women with mood disorders who are consuming more than 3 grams daily of eicosapentaenoic acid (EPA) plus docosahexaenoic acid (DHA) should be monitored for an increase in:
- bleeding
  - tinnitus
  - diarrhea
41. How much folic acid should women treated with antiepileptic medications take before and during pregnancy?
- 0.4 mg
  - 1.0 mg
  - 5.0 mg
42. What is the recommended initial dosing of bright light therapy for treating seasonal and non-seasonal MDD?
- 60 minutes each evening
  - 30 minutes before each meal
  - 30 minutes shortly after awakening

### **MRSA**

43. When treating a confirmed methicillin-resistant *S. aureus* (MRSA) mastitis infection, what is the preferred medication for outpatient therapy?
- Clindamycin
  - Dicloxicillin
  - Trimethoprim-sulfamethoxazole (TMP-SMX)

44. When should hospital or clinic staff undergo screening for nasal carriage of MRSA?
- Annually as a routine practice
  - After caring for a patient with confirmed MRSA
  - Only if associated with a suspected outbreak
45. What is the first-line antibiotic therapy for MRSA decolonization?
- Linezolid 600 mg PO every 12 hours for 10 days
  - Clindamycin 300 mg PO every 8 hours for 7 days
  - Mupirocin ointment in both nares every 12 hours for 5 days
46. Which of the following antepartum maternal conditions is strongly associated with early post-partum MRSA infections?
- Thyroid disease
  - Chronic hypertension
  - Pregestational diabetes

### **Dermatology**

47. When evaluating a pregnant woman's report of pruritus in pregnancy, the first step in Mehta et al.'s algorithm is to determine:
- Serum bile acid results
  - The gestational age/trimester
  - The presence or absence of eruptions
48. Which of the following pruritic disorders in pregnancy is associated with an increased risk of adverse fetal outcomes?
- Atopic eruptions of pregnancy (AEP)
  - Intrahepatic cholestasis of pregnancy (ICP)
  - Polymorphic eruptions of pregnancy (PEP)
49. Drug eruptions in pregnant women are more commonly seen with which of the following antibiotics?
- Ampicillin
  - Azithromycin
  - Clindamycin
50. What is the mainstay pharmacologic therapy for pruritus with eruption during pregnancy?
- Topical steroids
  - H<sub>2</sub> receptor antagonist
  - Ursodeoxycholic Acid (UDCA)

### **Disabilities**

51. Which definition of disability is based on attitudinal construct?
- Legal definition
  - Social definition
  - Medical definition

52. The primary goal of an occupational therapy consult for a pregnant woman with a mobility disability is to

- a. Evaluate mobility status for impending birth
- b. Screen for intimate partner violence in the home (IPV)
- c. Provide recommendations for assistive self-care devices

53. When a pregnant woman who has a spinal cord injury is experiencing hypertension associated with autonomic dysreflexia (AD), she should be treated immediately with

- a. nifedipine
- b. lorazepam
- c. magnesium sulfate

54. What percent of women age 15-44 in the US have a disability that affects their activities of daily living and quality of life?

- a. 2%
- b. 6%
- c. 11%

### **Progesterone**

55. According to the authors of this article, in order to prevent one preterm birth prior to 33 weeks gestation, the number needed to treat (NNT) with vaginal progesterone varied from

- a. 1-5 women
- b. 10-19 women
- c. 20-27 women

56. Among women with singleton pregnancies, what is the prevalence of a transvaginal ultrasound cervical length (CL) measurement of  $\leq 25$  mm during the midtrimester?

- a. 3-5%
- b. 8-9%
- c. 12-15%

57. Administration of higher doses (400 mg) of vaginal progesterone were found to be associated with:

- a. Fetal growth restriction
- b. Gestational hypertension
- c. Intrahepatic cholestasis of pregnancy

58. According to the algorithm presented in this article, the management of a pregnant woman with a history of previous preterm birth on 17-OHPC with a TVCL of 28 mm would be to

- a. Continue the 17 OHPC
- b. Add vaginal progesterone
- c. Recommend cervical cerclage

### **ITP/GTP**

59. Which of the following is a characteristic typically found only in cases of gestational thrombocytopenia (GT)?
- It can occur in any trimester
  - Symptoms can resolve postpartum
  - There are no fetal or neonatal effects
60. If a pregnant woman with immune thrombocytopenia (ITP) is treated during labor with intravenous immune globulin (IVIG), which of the following procedures should be avoided?
- Low transverse cesarean delivery
  - Application of a fetal scalp electrode
  - Administration of intravenous oxytocin
61. Serial ultrasounds beginning in the late second trimester are recommended for pregnant women with thrombotic thrombocytopenia (TTP) due to the risk of:
- Macrosomia
  - Oligohydramnios
  - Intrauterine fetal demise
62. If corticosteroids are used to treat ITP in pregnancy, when does an increment rise in the platelet count typically occur?
- Immediately
  - In 48 hours
  - After 3-7 days

### **Genetic Screening**

63. What is the optimal gestational age to perform first trimester screening to maximize Trisomy 21 detection and decrease false positives?
- 9 weeks
  - 11 weeks
  - 13 weeks
64. In which of the following clinical circumstances is a second trimester quad screen generally used?
- Bicornate uterus
  - Multiple gestation
  - Late entry to prenatal care
65. At which maternal age does cell free DNA have a higher false positive rate?
- 25
  - 35
  - 45

66. If a cystic hygroma is identified during a first trimester ultrasound, what should be offered next?

- a. Cell-free DNA test
- b. Maternal serum AFP
- c. Referral for prenatal diagnosis

67. When a cell-free DNA test reports a low fetal fraction or a “no call” result, in addition to genetic counseling, which of the following should be offered first?

- a. Amniocentesis
- b. Repeat screening
- c. Targeted ultrasound

### **Professional Issues**

68. According to the author, the purpose of interprofessional collaboration in practice is to:

- a. Improve access to safe, high-quality care for women
- b. Improve the work-life balance of health care providers
- c. Ensure that midwives can find work in a physician dominated system

69. A major barrier to the development of interprofessional practice is:

- a. Midwives refusing to work with physicians
- b. Unwillingness of physicians to share financial profits
- c. Legal/regulatory restrictions that limit midwifery practice

70. A working partnership between professions with individuals, families, groups, and communities is defined as:

- a. Collaboration
- b. Interprofessional care
- c. Collaborative practice

71. Which of the following is an example of the relational aspects of collaboration?

- a. Coordination of services
- b. Shared vision and common goals
- c. Communication, trust, and respect

**FAILURE TO COMPLETE THE FOLLOWING MODULE EVALUATION  
WILL RESULT IN YOUR MODULE NOT BEING SCORED.**



**PROGRAM EVALUATION FOR ANTEPARTUM AND PRIMARY CARE  
OF THE PREGNANT WOMAN MODULE 2017-2019**

Please evaluate this module in relation to the following:

A <b>Strongly Agree</b>	B <b>Agree</b>	C <b>Disagree</b>	D <b>Strongly Disagree</b>
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1. The articles for this module were relevant to my practice.
2. This information will affect my clinical practice.
3. The articles provided me with new information.
4. The objectives were clearly stated.
5. The questions assessed my comprehension of the articles.
6. I was able to find the answers within the articles.
7. The articles are easy to obtain without purchasing them from AMCB.
8. I purchased the printed article packet from AMCB.
9. I am satisfied with the time it took to receive my article packet. (Use “E” if Not Applicable)
10. The articles were legible. (Use “E” if Not Applicable)
11. I think the cost of the article packet is appropriate.
12. I think the website was user friendly.
13. I think the cost of CMP fees is appropriate for the service I receive.
14. I received a timely notice about my upcoming recertification deadline (if re-certifying within one year or use “E” if not applicable).
15. I received the appropriate number of reminders before my recertification deadline (if re-certifying within one year or use “E” if not applicable).
16. I would be interested in joining the CMP committee to assist with constructing new future modules.
17. If you have any other comments, concerns, or suggestions for future article topics, please email them to our office. Thank you.