**Twins & Multiples**

National Midwifery Institute, Inc.

Study Group Coursework

*Syllabus*

Description:

This module explores twins and multiples in midwifery care. It includes recommended reading materials in print and online, and asks students to complete short answer questions for assessment, long answer questions for deeper reflection, and learning activities/projects to deepen your hands-on direct application of key concepts.

Learning Objectives:

* Review embryology and fetal development as it pertains to twins and multiples
* Understand the unique needs of twins and multiples in pregnancy.
* Identify the role of ultrasound to confirm suspected twins or multiples.
* Identify the cultural phenomenon of increased multiple pregnancy.
* Identify support measures for bringing twin pregnancies to term.
* Review the concepts of informed consent.
* Understand twins to be a variation of normal birth.
* Identify the risks of twins birth.’
* Identify specific guidelines for attending twin and multiples births.
* Identify local doctors who are willing to attend twin and multiples births.
* Identify the local doctors who are willing to consult with community midwives on twins and multiples.
* Identify the local community standard among midwives regarding twin and multiples births.
* Identify management of a surprise twin birth.

Learning Activities:

* Research and read appropriate study sources, seeking out additional study sources where needed
* Complete short answer questions in attached module document for assessment
* Complete long answer questions for deeper reflection in attached module document for assessment
* Complete learning activities listed in attached module document for assessment
	+ Draft practice guidelines for taking care of twin and multiple pregnancies
	+ Draft practice guidelines for twin and multiple births in your own practice
	+ Submit a reflection paper on practicing delivering twins
* Submit work to Study Group Course Coordinator
* Reflect on feedback from Study Group Course Coordinator and re-submit work as needed

Study Sources (print):

The following texts are recommended for completion of this module. Use them to cross reference and build a more comprehensive understanding.

Using keywords 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.

* Holistic Midwifery, Vol. I, II, Frye
* Varney’s Midwifery
* Myles Textbook for Midwives
* Human Labor and Birth, Oxorne and Foote
* Birth Emergency Skills Training, Gruenberg

*Optional*

* Midwifery Management of Twin Gestations: An Evidence-Based Approach by B. Maria Cranford
* The Natural Pregnancy Book, Romm
* Homeopathic Medicines for Pregnancy and Childbirth, Moskowitz
* Mothering Multiples, La Leche League
* Twins, Midwifery Today Ebook

Study Sources (online):

See NMI website Twins and Multiples module web resources section for current online study sources for this module.

Related Modules:

* Birth Bag and Setup
* Breastfeeding/Chestfeeding
* Cesarean and VBAC
* Charting and Practice Guidelines
* Embryology and Fetal Development
* Fetal Heart Rate Patterns
* Fetal/Newborn Circulation
* First Stage of Labor
* Breech Birth
* Holistic and Traditional Health and Healing
* Apnea/Hypoxia/Respiratory Distress
* Physical Assessment of the Newborn
* Labwork and other Clinical Assessments
* Second Stage of Labor
* Third Stage of Labor
* Transporting

Submitting Module for Assessment:

Study Group modules are accepted electronically in PDF format *only*. We encourage you to submit modules as you complete them throughout each quarter of enrollment.

Please e-mail your completed Study Group module to:

Study Group Course Work Instructor nmistudygroup@nationalmidwiferyinstitute.com

Once your module has been emailed to us, you will receive an email confirmation that we have received it. Study Group modules are reviewed and returned in digital format as PDF documents. Modules can take up to 1 month from submission to be reviewed and returned to you. We will return your module as an e-mail attachment. Each module includes an Evaluation Sheet at the end of the pdf. The module’s page on the student portal also includes a link to a fillable online module evaluation sheet. Please take the time to fill out the module evaluation sheet and return it to us for each module, it helps us to improve our course work.

Please follow these formatting guidelines when submitting modules:

* Your first initial and last name in title of PDF, along with name of module. Example: “ERyanFirstStage.pdf”
* Title of module on the document’s front page
* Your name on the document’s front page
* Provide the text of each question, followed by a blank line and then your thoughtful answer (without the question, you have commentary without context)
* Blank line between the answer for a question and the next question: question, blank line, answer, blank line, question, blank line, answer…
* Please leave margin space for our comments!
* Don’t use script or cursive writing style text
* Font size not smaller than 12
* Credit sources of direct quotes

Completion Requirements and Feedback:

In order to complete this module for graduation purposes from National Midwifery Institute you must review all resources, complete the attached short answer questions for assessment, long answer questions for deeper reflection, and learning activities/projects, and submit them as detailed above. Upon return to you, your coursework may have feedback or ask for additional information or exploration on certain topics. Your work will be evaluated n the following Rubric (pasted below). You must achieve a minimum score of **7.5** in order to move on to your next module, though we encourage all students to strive for a **10.**

|  | **Level 1** **(0 Points)** **Not Adequate** | **Level 2** **(1 Point) Developing Adequacy** | **Level 3** **(1.5 points)** **Meets Basic Expectations** | **Level 3** **(2 points) Exceeds Expectations** | **Student Score** |
| --- | --- | --- | --- | --- | --- |
| **Completion of module prompts and elements** | -Module not completed  | -Major Elements of module are missing  | -All aspects of module elements present, with some minor questions unanswered or missing | -All aspects of module elements present and answered completely |  |
| **Demonstrates Comprehension of module content and concepts** | - Lack of comprehension | - Responses are unclear and do not reflect basic comprehension of module concepts | - Responses are clear and reflect basic comprehension of module content and concepts | - Responses are clear, well written, and reflect in-depth comprehension of module content and concepts. Added subpoints and additional reflections demonstrate a deeper knowledge and curiosity.  |  |
| **Analysis** | - Key terms not defined | -Inaccurate definitions of key items -Limited connections made between evidence, subtopics and clinical experience  | -Accurate definitions of key items       -Connections made between evidence, subtopics and clinical experience -Incorporation of original ideas and incorporates some clinical experiencein responses where possible | - Accurate definitions of key items       -Strong connections made between evidence, subtopics and clinical experience  |  |
| **Evidence** | - No research evidence used  | -Research not used -Research not clearly connected to questions asked in module  | -Research is present but limited -Research presented is weak or not relevant to communities served by midwives | -Research is abundant -Research is compelling and relevant to communities served by midwives |  |
| **Engagement with Learning Resources** | -Evident study sources were not utilized  | -Evident study sources were partially utilized  | -Evident that study sources were fully utilized | -Evident that study sources were fully utilized and independent research was undertaken -Full incorporation of original ideas, personal analysis and incorporates relevant clinical experience in all areas possible |  |

Skills

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 forms *Form 52 - Assessment of Student’s Midwifery Skills* and *Form 53 - Student Self-Assessment of Midwifery Skills.*

Specific to each module

Introductory and Further Thoughts:

*Specific to each module*

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*Short Answer Questions*

Short Answer Questions:

1. How often do the following occur *spontaneously*?

1. twins
2. triplets
3. quadruplets or more?

2. Does the rate of twin conception vary with different genetic backgrounds, ethnicities, socioeconomic factors, or other reasons?

3. Is the rate of occurrence of multiple pregnancy generally increasing or decreasing in North America? Why? (If you do not live in North America, answer for the region of the world you live in).

4. List the possible configurations of babies, placentas, amnions, and chorions with:

1. twins
2. Triplets
3. when may this cause concern?

5. Describe the difference between identical and fraternal twins.

6. Does ultrasound reliably identify twin and multiple pregnancies?

7. During pregnancy, what may tip you off during palpation that a client has a multiple pregnancy?

8. What factors in a client’s health history or life may increase their chances of conceiving twins or multiples?

9. When carrying a multiple pregnancy, what obstetrical risks *increase*?

10. How commonly do twin or multiple pregnancies continue with both (all) fetuses living? What is a “fetus papyraceus?”

11. What is twin-to-twin transfusion syndrome?

12. What specific nutritional needs do clients carrying twins or multiple pregnancies need to take into account?

13. Do twins and multiple pregnancies usually carry to term? What supports can you offer to encourage carrying to term?

***Even in jurisdictions where attending home twin/multiple births is out of legal scope for licensed homebirth midwives, some midwives may find themself attending a surprise or emergency twin/multiple birth, or may find themselves working in a different jurisdiction with a different explicit scope of practice in the future. Therefore, we find it critical for all students to demonstrate knowledge on the facilitation of breech birth as primary care providers as a part of their education.***

14. What are the possibilities for twins to present, in relationship to each other and to the pelvis?

15. What are locking twins? How often does it happen and what are the categories of locking twins?

16. What are the risks associated with vaginal twin birth?

17. What are signs that all is going well during a twin birth?

18. During a twin or multiple birth, how common is it for at least one baby to be breech?

19. What signs may lead you to discover surprise twins at a birth?

20. In the case of surprise twins, what steps should you take for delivery of each infant and what special considerations must you take into account?

21. Describe special considerations for all twin and multiple births.

22. What is tandem feeding?

23. Describe at least three possible positions for breastfeeding/chestfeeding twins or multiples.

24. What advice do you have for parents of multiples when one baby latches and breastfeeds/chestfeeds very well, and the other(s) are struggling?

25. Your client, Saskia, age 32, G1P1, had twins six days ago. She is really struggling with breastfeeding her babies and finds she has little time for anything else at all with two mouths to feed. She is wondering how/when/if she can put her babies on a feeding schedule. What advice do you have for Saskia?

25. Your client, Agatha, age 41, G2P1, had twins two weeks ago. One or both twins is/are “fussy” at seemingly all hours of the day. She feels really frazzled and overwhelmed. What advice do you have for Agatha?

26. When noting gravity and parity via a GTPAL system, how are twins and multiples factored in?

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*Long Answer Questions for Deeper Reflection*

Questions Requiring Longer, More Thoughtful Answers:

(number continued from previous section).

27. Describe, step-by-step, your primary attendance at a birth of twins. Include instructions for your assistant, if you have one.

28. Describe how you can continue to serve your client when twin or multiple birth is planned for in the hospital. Take into account many twin hospital births involve cesarean section and/or a NICU stay for babies.

29. What experience have you had detecting or confirming twins prenatally?

30. Have you been present at a twin or multiple birth? What were your observations?

31. Compile a list of local doctors who are willing to attend vaginal twin births. Additionally, what are their requirements for participation (for example: baby A must be head down, parent must be a multip, etc….)

32. Compile a list of local doctors who are willing to consult with community midwives regarding twins and multiple pregnancies.

33. What is the local community standard among midwives regarding detection of twins and multiples? (What is done by midwives in your community who suspect a client is carrying twins?)

34. What is the local community standard among midwives regarding twin and multiple births?

35. Choose a book about twins to recommend to your clients. Write a review about your recommendation, include title, author, publisher and date of publication.

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*Projects/Learning Activities*

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

(number continued from previous section).

36. Draft practice guidelines for taking care of twin and multiple pregnancies in your own practice. Include reference to nutritional advice, any additional screening, labwork, or clinical assessments, and any other special considerations for prenatal care and preparing for the birth/infant feeding. Submit this draft and include it later in your Practice Guidelines projects (in the Charting and Practice Guidelines Module.)

37. Draft practice guidelines for twin and multiple births in your own practice. Include reference to your consultation and referral plan, instructions for clients, informed consent, transport plan in response to cord prolapse, surprise twins and multiples in labor, postpartum care, and newborn resuscitation guidelines, especially in the case of small/early newborns. Submit this draft and include it later in your Practice Guidelines projects (in the Charting and Practice Guidelines Module.)

38. Using two dolls and pelvis, practice twin birth maneuvers for midwives over and over and over to develop confidence and muscle memory. Practice these in at least two different client positions, and with multiple configurations of twins in relation to each other and to the pelvis. Reflect on how this practice prepares you for a multiple birth.