The above chart shows the percentage distribution of questions on the Maternal Newborn Nursing exam across the major content categories covered on the examination. The major focus of the examination is on the Maternal Postpartum Assessment, Management and Education, Maternal Postpartum Complications and Newborn Complications sections with these three areas having the most emphasis. Lesser emphasis is on Newborn Assessment and Management, with Pregnancy, Birth Risk Factors and Complications having the least number of questions assigned to this content category.
EXAMINATION CONTENT

EXAM OUTLINE

Focus of the examination will primarily be on the childbearing family from birth to six weeks and will encompass hospital and community settings.

Percentages identified for the topic areas represent a range of the number of test questions assigned to each content area and therefore might total more or less than 100 percent. These ranges do not necessarily reflect the content of future exams.

<table>
<thead>
<tr>
<th>10.00</th>
<th>Pregnancy, Birth Risk Factors and Complications (7%)</th>
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<tbody>
<tr>
<td></td>
<td>Antenatal Factors</td>
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<tr>
<td></td>
<td>Intrapartum Factors</td>
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<thead>
<tr>
<th>11.00</th>
<th>Maternal Postpartum Assessment, Management and Education (26%)</th>
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<tbody>
<tr>
<td></td>
<td>Physiologic Changes and Physical Assessment <em>(including Laboratory Values)</em></td>
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<tr>
<td></td>
<td>Nursing Care</td>
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<tr>
<td></td>
<td>Lactation</td>
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<tr>
<td></td>
<td>Psychosocial and Ethical Issues</td>
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<td></td>
<td>Newborn Feeding and Nutrition</td>
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<thead>
<tr>
<th>12.00</th>
<th>Newborn Assessment and Management (19%)</th>
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<tbody>
<tr>
<td></td>
<td>Transition to Extrauterine Life</td>
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<tr>
<td></td>
<td>Physical Assessment and Gestational Age Assessment <em>(including Laboratory Values)</em></td>
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<tr>
<td></td>
<td>Newborn Care and Family Education</td>
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<td></td>
<td>Resuscitation and Stabilization</td>
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<tr>
<th>14.00</th>
<th>Maternal Postpartum Complications (24%)</th>
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<tbody>
<tr>
<td></td>
<td>Hematologic</td>
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<tr>
<td></td>
<td>Cardiovascular</td>
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<td></td>
<td>Infection</td>
</tr>
<tr>
<td></td>
<td>Diabetes</td>
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<td></td>
<td>Mood and substance use disorders</td>
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<thead>
<tr>
<th>15.00</th>
<th>Newborn Complications (24%)</th>
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<tbody>
<tr>
<td></td>
<td>Cardiovascular and Respiratory</td>
</tr>
<tr>
<td></td>
<td>Neurological and Gastrointestinal</td>
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<tr>
<td></td>
<td>Hematologic</td>
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<tr>
<td></td>
<td>Infectious disease</td>
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<tr>
<td></td>
<td>Genetic, Metabolic and Endocrine</td>
</tr>
</tbody>
</table>
ASSOCIATED COMPETENCIES

- Demonstrate knowledge of physiological, psychological and sociocultural factors that affect the childbearing family with emphasis on the postpartal/neonatal period (birth to six weeks)
- Recognize antepartal and intrapartal factors affecting the family in the postpartum/neonatal period
- Assess the physical status of the mother and neonate
- Assess the psychological and sociocultural status of the childbearing family
- Analyze data to identify nursing and educational needs of the childbearing family
- Develop and implement an individualized plan for the childbearing family
- Evaluate outcomes and modify the plan as necessary
- Incorporate knowledge of current standards of practice, research and professional issues into the nursing management of the childbearing family
I. Antenatal Factors
• Maternal Health Status
• Age
• Nutrition
• Obstetrical history
• Psychosocial/Cultural Issues
• Infertility
• Physiologic Changes and Associated Lab Values
• Antepartum Risk Factors and Complications
  - Diabetes
  - Hypertension (Chronic, gestational)
  - Common Bacterial and Viral Infections
  - Hematologic (Anemias)
  - Cardiac Disease
  - Substance Abuse, (e.g. Smoking, Drugs, Alcohol, marijuana)
  - Preterm Labor/Post term Pregnancy
  - Multiple Gestation
  - Intrauterine Growth Restriction
  - Oligohydramnios
  - Polyhydramnios
• Fetal Assessment
  - Biophysical Profile
  - Nonstress Test
  - Diagnostic Ultrasound
  - Amniocentesis
  - Quad Screen/Cell Free DNA Testing
• Obesity/Bariatric Surgery

II. Intrapartum Factors
• Significance of Fetal Heart Rate Patterns and Blood Gases
• Fetal Heart Rate Abnormalities (Tachycardia, Bradycardia, Altered Variability, Decelerations)
• Cord Gases
• Medications Used in Labor
  - Tocolytics
  - Analgesics
  - Anesthesia
• Complications of Labor
  - Breech and Other Malpresentations
  - Meconium
  - Shoulder Dystocia
  - PROM and Chorioamnionitis
  - Prolonged Labor
  - Abruptio
  - Placenta Previa
  - Cord Prolapse
  - Precipitous Delivery
• Methods of Delivery
  - Vaginal
  - Operative Delivery (Forceps, Vacuum, Cesarean)
  - VBAC
• Delayed Cord Clamping
I. Physiologic Changes and Physical Assessment
• Reproductive
• Cardiopulmonary
• Genitourinary
• Gastrointestinal
• Hematological
• Endocrine

II. Nursing Care
• Comprehensive Postpartum Health Assessment
• Postoperative Care
• Common Medications (Indications, Administration, Drug Interactions, Patient Teaching)
  -Insulin
  -Analgesics (Tylenol)
  -Antimicrobials
  -Antihypertensives
  -Diuretics
  -Oxytocics
  -GI Motility Drugs
  -Vaccines
  -Rh Immune Globulin (RhoGAM) (Rhophillac)
• Breast/Nipple Care
  -Use of Supplementary/Complementary Feedings
  -Use of Breastfeeding Devices
  -Expressing and Storing Breast Milk
• Contraindications to Breast Feeding
  -Maternal Complications
  -Latch on Problems
  -Nipple Problems
  -Breast Engorgement
  -Insufficient Milk Supply
• Mammary Gland Care
  -Maternal/Illness
  -Perinatal Substance Abuse

III. Lactation
• Lactation
  -Anatomy and Physiology of Lactation
  -Composition of Breast Milk
  -Maternal Nutritional Needs
• Normal Breastfeeding Process/Hand Expression
  -Positioning
  -Latch On
  -Suck/Swallow/Sequence
  -Timing (Frequency and Duration)
  -Feeding Cues
• Breast/Nipple Care
  -Use of Supplementary/Complementary Feedings
  -Use of Breastfeeding Devices
  -Expressing and Storing Breast Milk
• Contraindications to Breast Feeding
  -Maternal Complications
  -Latch on Problems
  -Nipple Problems
  -Insufficient Milk Supply
  -Therapeutic Medications
  -Infection/Mastitis
  -Maternal/Illness
  -Perinatal Substance Abuse

• Maternal/Newborn Separation
• Newborn Complications
  -Hyperbilirubinemia
  -Hypoglycemia
  -Multiple Birth

• Patient Education
  -Postpartum Self Care
  -Contraception
  -Nutrition
IV. Psychosocial and Ethical Issues
- Normal Characteristics of Parent/Infant Interactions
- Maternal Role Transition
- Sibling Response
- Barriers and Alterations to Parent/Infant Interactions
- Cultural/Life-Style Factors Affecting Family Integration
- Abuse/Intimate Partner Violence
- Family Dynamics
- Adoption
- Perinatal Grief
- Ethical Principles
  - Autonomy
  - Beneficence
  - Non-maleficence
  - Justice

V. Newborn feeding and nutrition
- Bottle Feeding
  - Nutritional Needs
  - Formulas
  - Techniques and Equipment
I. Transition to Extrauterine Life (Birth to 4 Hours)
- Initial Physiologic Adaptations
- Thermoregulation
- Associated Laboratory Findings

II. Physical Assessment and Gestational Age Assessment (to Include Laboratory Values)
- Gestational Age Assessment
- Neurobehavioral and Sensory Assessment
- Systems Review (Including Common Variations)
  - Cardiac
  - Respiratory
  - Gastrointestinal
  - Integumentary
  - Musculoskeletal
  - Head, Ears, Eyes, Nose and Throat
  - Endocrine
  - Genitourinary
  - Screening (CHD/Car Seat/NBGS)

III. Newborn Care and Family Education
- Cord Care
- Elimination
- Circumcision
- Comfort Measures
- Screening (CHD/Car Seat)
- Skin Care
- Safety
  - Safe Sleep/Tummy Time
- Commonly Used Medications
  - Oral Sucrose
  - Vitamin K
  - Vaccines/Immunoglobulins (HBIG, Hep B)
  - Eye Prophylaxis
  - Analgesics

IV. Resuscitation and Stabilization
- General assessment of status and need for resuscitation
- Management of resuscitation
  - Airway
  - Breathing
  - Circulation
- Drug Therapy
- Evaluation of effectiveness of interventions
- Apgar scores
STUDY GUIDE

MATERNAL POSTPARTUM COMPLICATIONS

I. Hematologic
• Hemorrhage
• Thrombophlebitis
• Pulmonary embolus
• DIC/HELLP
• Hematoma

II. Cardiovascular
• Chronic Hypertension, gestational/Eclampsia
• Shock

III. Infection
• Endometritis
• Wound infection
• Septic Pelvic thrombophlebitis
• Urinary tract infections

IV. Diabetes

V. Mood and Substance Use Disorders
• Sleep disturbances
• Postpartum depression/psychosis
• Substance abuse
Newborn Complications

I. Cardiovascular and Respiratory
   • Cyanotic Heart Disease
   • Acyanotic Heart Disease
   • Apnea
   • Transient Tachypnea of the Newborn
   • Pneumothorax
   • Meconium Aspiration

II. Neurological and Gastrointestinal
   • Seizures
   • Jitteriness
   • Intracranial Hemorrhage
   • Neural Tube Defects
   • Substance Abused Neonate
   • Intestinal Obstructions and Anomalies

III. Hematologic
   • Anemia
   • Vitamin K Deficiency
   • Hyperbilirubinemia
   • ABO Incompatibility
   • Hemolytic Disease
   • G6PD
   • Polycythemia/Hyperviscosity
   • Thrombocytopenia

IV. Infectious Disease
   • Neonatal Sepsis
   • Neonatal CBC and differential
   • Lumbar Puncture
   • Viral Infections
   • Bacterial Infections
   • Sexually Transmitted Infections
   • Anti-infectives

V. Genetic, Metabolic and Endocrine
   • Hypoglycemia
   • Inborn Errors of Metabolism
   • Patterns of Inheritance
   • Infant of a Diabetic Mother
STUDY RESOURCES

- Lowdermilk, et al., Maternity and Women's Health Care 12th ed, Mosby, 2020