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 Maternal and Newborn Assessment and Management sections with both these areas having the most emphasis. Lesser emphasis is on Factors that affect Maternal and Neonatal Outcomes and Professional Issues having the least number of questions assigned to this content category.
**EXAMINATION CONTENT**

**FOR TESTS TAKEN BEFORE APRIL 1, 2020**

**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>Section</th>
<th>Percentage</th>
<th>Content Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00 Factors Affecting Maternal/Neonatal Outcomes (10%)</td>
<td></td>
<td>• Antenatal Factors</td>
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<tr>
<td></td>
<td></td>
<td>• Intrapartal Factors</td>
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<tr>
<td>11.00 Maternal Assessment and Management in the Postpartum Period (44%)</td>
<td></td>
<td>• Physiologic Changes &amp; Physical Assessment (including Laboratory Values)</td>
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<td></td>
<td></td>
<td>• Nursing Care and Education</td>
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<td></td>
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<td>• Lactation and Newborn Feeding</td>
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<td></td>
<td>• Family Dynamics after Childbirth</td>
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<td></td>
<td></td>
<td>• Complications</td>
</tr>
<tr>
<td>12.00 Newborn Assessment and Management (44%)</td>
<td></td>
<td>• Transition to Extrauterine Life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Physiologic Changes and Physical Assessment (including Laboratory Values)</td>
</tr>
<tr>
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<td></td>
<td>• Nursing Care and Family Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Complications (Recognition and Stabilization)</td>
</tr>
<tr>
<td>13.00 Professional Issues (2%)</td>
<td></td>
<td><em>including: Evidence Based Practice, Legal/Ethical, Patient Safety</em></td>
</tr>
</tbody>
</table>
EXAMINATION CONTENT
FOR TESTS TAKEN BEFORE APRIL 1, 2020

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 postpartal/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
- Domestic Violence/Family Dynamics

II. Intrapartal 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
  - Oxytocics
- Complications of Labor
  - Breech and Other Malpresentations
  - Meconium
  - Shoulder Dystocia
  - PROM and Chorioamnionitis
  - Prolonged Labor
  - Abruptio Placenta
  - Cord Prolapse
  - Precipitous Delivery
- Methods of Delivery
  - Vaginal
  - Operative Delivery (Forceps, Vacuum, Cesarean)
  - VBAC
- Delayed Cord Clamping
- ABO incompatibility
STUDY GUIDE
FOR TESTS TAKEN BEFORE APRIL 1, 2020

MATERNAL ASSESSMENT AND MANAGEMENT IN THE POSTPARTUM PERIOD
(DELIVERY THROUGH SIX WEEKS)

I. Physiologic Changes & Physical Assessment
- Reproductive
- Cardiopulmonary
- Genitourinary
- Gastrointestinal
- Hematological
- Endocrine

II. Nursing Care and Education
- 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)
  - Nicotine Patches
  - Antiretroviral
  - Methadone (subutex) SSI’s
  - Psychotropic Drugs
- Patient Education for the New Mother
  - Postpartum Self Care
  - Contraception
  - Nutrition
- Common Problems and Complications
  - Bladder Distention & Urinary Retention
  - Hemorrhoids
  - Afterpains
  - Perineal Edema and Pain
  - Breast Engorgement
  - Constipation
  - Fatigue and Sleep Disturbances
  - Postpartum Blues/Depression
  - Spinal Headaches
  - Vaginal Lacerations

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III. Lactation & Newborn Feeding
*(Management and Patient Teaching)*

- 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
  - Breast Engorgement
  - Insufficient Milk Supply
  - Therapeutic Medications
  - Infection/Mastitis
  - Maternal Illness
  - Perinatal Substance Abuse
- Maternal/Newborn Separation
- Bottle Feeding
  - Nutritional Needs
  - Formulas
  - Techniques and Equipment
- Newborn Complications
  - Hyperbilirubinemia
  - Hypoglycemia
  - Multiple Birth
  - Patient Education

IV. Family Dynamics after Childbirth

- 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
- Adoption
- Perinatal Grief

V. Maternal Complications

- Hemorrhage
- Thrombophlebitis
- Infections
- Hematoma
- Diabetes
- Postpartum Depression/Psychosis
- Chronic Hypertension, gestational/Eclampsia
- DIC/HELLP
NEWBORN ASSESSMENT AND MANAGEMENT

I. Transition to Extrauterine Life  (Birth to 4 Hours)
• Initial Physiologic Adaptations
• Neonatal Resuscitation and Stabilization
• Thermoregulation
• Associated Laboratory Findings

II. Physiologic Changes and Physical 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

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

IV. Complications  (Recognition and Stabilization)
• Cardiac
  -Cyanotic Heart Disease
  -Acyanotic Heart Disease
• Respiratory
  -Apnea
  -Transient Tachypnea of the Newborn
  -Pneumothorax
  -Meconium Aspiration
• Gastrointestinal
  -Obstructions
  -Anomalies
• Musculoskeletal
  -Congenital Hip Dislocation
  -Skeletal Anomalies
  -Birth Injuries (Fractured Clavicle)
• Head, Ears, Eyes, Nose and Throat
• Hematopoietic
  -Anemia
  -Vitamin K Deficiency
  -ABO Incompatibility
  -Hemolytic Disease
  -Polycythemia/Hyperviscosity
  -Thrombocytopenia
  -Jaundice
  -G6PD
• Neurological
  -Seizures
  -Jitteriness
  -Intracranial Hemorrhage
  -Neural Tube Defects
• Genitourinary
  -Structural Defects/Anomalies
• Infectious Diseases
  -Neonatal Sepsis/Neonatal I:T/Lumbar Puncture
  -Viral Infections
  -Bacterial Infections
  -Sexually Transmitted Infections
• Endocrine/Metabolic/Genetic
  -Hypoglycemia
  -Inborn Errors of Metabolism
  -Patterns of Inheritance
  -Infant of a Diabetic Mother
  -Substance Abused Neonate
STUDY GUIDE
FOR TESTS TAKEN BEFORE APRIL 1, 2020

PROFESSIONAL ISSUES

Ethical Principles
• Autonomy
• Beneficence
• Non-maleficence
• Justice

Professional/Legal Issues
• Professional
  - Regulation
  - Practice
• Staffing issues
• Legal liability
  - Consent
  - Documentation/medical records
  - Negligence/malpractice

Evidence based practice
• Terminology
  - Reliability
  - Validity
  - Significance
  - Levels of Evidence
• Quality Improvement
• Research utilization

Patient Safety
• Communication
• Interprofessional practice
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 Maternal and Newborn Assessment and Management sections with both these areas having the most emphasis. Lesser emphasis is on Factors that affect Maternal and Neonatal Outcomes and Professional Issues having the least number of questions assigned to this content category.
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10.00 Pregnancy, Birth Risk Factors and Complications (7%)
   Antenatal Factors
   Intrapartum Factors

11.00 Maternal Postpartum Assessment, Management and Education (26%)
   Physiologic Changes and Physical Assessment (including Laboratory Values)
   Nursing Care
   Lactation
   Psychosocial and Ethical Issues
   Newborn Feeding and Nutrition

12.00 Newborn Assessment and Management (19%)
   Transition to Extrauterine Life
   Physical Assessment and Gestational Age Assessment (including Laboratory Values)
   Newborn Care and Family Education
   Resuscitation and Stabilization

14.00 Maternal Postpartum Complications (24%)
   Hematologic
   Cardiovascular
   Infection
   Diabetes
   Mood and substance use disorders

15.00 Newborn Complications (24%)
   Cardiovascular and Respiratory
   Neurological and Gastrointestinal
   Hematologic
   Infectious disease
   Genetic, Metabolic and Endocrine
EXAMINATION CONTENT
FOR TESTS TAKEN ON/AFTER APRIL 1, 2020

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)
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  - Hematologic (Anemias)
  - Cardiac Disease
  - Substance Abuse, (e.g. Smoking, Drugs, Alcohol, marijuana)
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  - Abruptio
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- Methods of Delivery
  - Vaginal
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- Delayed Cord Clamping
STUDY GUIDE
FOR TESTS TAKEN ON/AFTER APRIL 1, 2020
MATERNAL POSTPARTUM ASSESSMENT, MANAGEMENT AND EDUCATION

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• Gastrointestinal
• Hematological
• Endocrine

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• Patient Education
  -Postpartum Self Care
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• Lactation
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  -Hyperbilirubinemia
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• Maternal Role Transition
• Sibling Response
• Barriers and Alterations to Parent/Infant Interactions
• Cultural/Life-Style Factors Affecting Family Integration
• Domestic 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 Extraterine 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
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  - Respiratory
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  - Integumentary
  - Musculoskeletal
  - Head, Ears, Eyes, Nose and Throat
  - Endocrine
  - Genitourinary
  - Screening (CHD/Car Seat/NBGS)

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- Cord Care
- Elimination
- Circumcision
- Comfort Measures
- Screening (CHD/Car Seat)
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- 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
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

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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

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

- Snell, et al., Care of the Well Newborn, Jones & Bartlett, Burlington, 2017.