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

### 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>Topic Area</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>10.00</td>
<td>Factors Affecting Maternal/Neonatal Outcomes (10%)</td>
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<tr>
<td>10.01</td>
<td>Antenatal Factors</td>
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<tr>
<td>10.02</td>
<td>Intrapartal Factors</td>
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<tr>
<td>11.00</td>
<td>Maternal Assessment and Management in the Postpartum Period (44%)</td>
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<tr>
<td>11.01</td>
<td>Physiologic Changes &amp; Physical Assessment (including Laboratory Values)</td>
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<tr>
<td>11.02</td>
<td>Nursing Care and Education</td>
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<tr>
<td>11.03</td>
<td>Lactation and Newborn Feeding</td>
<td></td>
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<tr>
<td>11.04</td>
<td>Family Dynamics after Childbirth</td>
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<tr>
<td>11.05</td>
<td>Complications</td>
<td></td>
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<tr>
<td>12.00</td>
<td>Newborn Assessment and Management (44%)</td>
<td></td>
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<tr>
<td>12.01</td>
<td>Transition to Extrauterine Life</td>
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</tr>
<tr>
<td>12.02</td>
<td>Physiologic Changes and Physical Assessment (including Laboratory Values)</td>
<td></td>
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<tr>
<td>12.03</td>
<td>Nursing Care and Family Education</td>
<td></td>
</tr>
<tr>
<td>12.04</td>
<td>Complications (Recognition and Stabilization)</td>
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<tr>
<td>13.00</td>
<td>Professional Issues (2%)</td>
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<tr>
<td></td>
<td><strong>including: Evidence Based Practice, Legal/Ethical, Patient Safety</strong></td>
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</tbody>
</table>
EXAMINATION CONTENT

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
STUDY GUIDE

FACTORS AFFECTING MATERNAL/NEONATAL OUTCOMES

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 Placentae
  - Placenta Previa
  - Cord Prolapse
  - Precipitous Delivery
- Methods of Delivery
  - Vaginal
  - Operative Delivery (Forceps, Vacuum, Cesarean)
  - VBAC
- Delayed Cord Clamping
- ABO incompatibility
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
- 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
- Patient Education for the New Mother
  - Postpartum Self Care
  - Contraception
  - Nutrition

Postpartum Self Care
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
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
• Guido, Legal and Ethical Issues in Nursing, Pearson, 2013.
• Ladewig, et al., Contemporary Maternal-Newborn Nursing Care, Pearson, 2017.
• Lomax, A., Examination of the Newborn, Wiley Blackwell, 2015
• Snell, et al., Care of the Well Newborn, Jones & Barlett, Burlington, 2017