INTER AMERICAN UNIVERSITY OF PUERTO RICO  
METROPOLITAN CAMPUS  
SCIENCE AND TECHNOLOGY FACULTY  
CARMEN TORRES DE TIBURCIO SCHOOL OF NURSING

SYLLABUS

COURSE TITLE : FUNDAMENTALS OF MATERNAL-NEONATAL CARE  
Code and Number : NURS 2141  
Credits : Three (3)

DESCRIPTION

Description of the evolution of maternal-neonatal nursing. Integration of conceptual framework principals. Discussion of changes in Anatomy, Biochemistry, Physiology, and pathology that affect the integral functioning of the client, before, during, and after delivery. Includes the normal newborn, during the primary neonatal stages. Utilization of the nursing process in the study of changes in the stages and health dysfunctions. Prerequisite NURS 1221 y 1231. Concurrent with NURS 2142 y 2233.

TERMINAL AND LEARNING OBJECTIVES

1. Demonstrate knowledge of concepts and principles that give the foundation for maternal-neonatal nursing practice.
   1.1 Describe the most important aspects of maternal-neonatal nursing evolution.
   1.2 Recognize trends and controversies that affect maternal-neonatal practice.
   1.3 Distinguish conceptual framework and principles in the fundamentals of maternal-neonatal nursing practice.
   1.4 Identify nursing roles that are related to maternal-neonatal practice.

2. Demonstrate knowledge related to the human sexuality and reproductive process.
   2.1 Describe the anatomy and physiology of the female reproductive system.
   2.2 Summarize the human growth and development process from conception to early normal neonatal stage.
   2.3 Describe the anatomy and physio-psychological changes that occur during pregnancy, labor process and postpartum.

3. Demonstrate knowledge of therapeutic interventions that apply for the prevention of dysfunctions or complications, promotion, maintenance and restoration of maternal/fetal-neonatal before, during and after birth.
   3.1 Discuss the elements that are considered in maternal-neonatal assessment.
   3.2 Relate the nursing diagnoses that apply to the assessment findings.
   3.3 Distinguish the expected outcomes of the therapeutic interventions that apply to the problems identified.
   3.4 Describe the therapeutic interventions that are recommended for the prevention of dysfunction or complications, promotion, maintenance and restoration of maternal/fetal and neonatal health before, during and after birth.
   3.5 Indicate the evaluation findings that demonstrate the level of achievement of care for decision making.
Maternal – Neonatal Nursing

1. Evolution
   a. Historic view

2. Trends / Controversies
   a. Health care system
   b. Health indicators
   c. Ethical-legal
   d. Social-cultural
   e. Reproductive technology management
   f. Family support system
   g. Health goals

3. Maternal care conceptual framework
   a. Nursing process
      1) Evidence based practice
      2) Research
      3) Standards
         (a) Rights of the pregnant woman
         (b) Rights of the neonate
         (c) Other laws

4. Nursing roles

Nursing Process in the integral functioning during pregnancy

1. Prenatal Stage
   a. Female Reproductive System
      1) Structure and Function
      2) Menstrual Cycle
      3) Birth Control
   b. Fetal Development
      1) Conception
      2) Embryo – Fetal Development
   c. Pregnancy Indicators
      1) Gravidity and parity
      2) Pregnancy Test
      3) Sign of Pregnancy
      4) Assessment of probable date of birth
   d. Management of care
      1) Initial visit
      2) Follow-up visits
   e. Assessment
      1) Health history
      2) Diagnostic tests
         a) Maternal wellbeing
         b) Fetal wellbeing
      3) Factors that affect sexuality / reproduction
         a) Changes of pregnancy
         b) Discomforts related to pregnancy
         c) Potential complications
            (1) Sexually transmitted infections
            (2) Premature contractions
      4) Factors that affect nutrition/ metabolism
         a) Changes of pregnancy
b) Nutritional requirements
c) Discomforts related to pregnancy
d) Potential complications
   (1) Hyperemesis gravidarum
   (2) Diabetes Mellitus
   (3) Thyroid Disorder
   (4) Maternal phenylketonuria

5) Factors that affect elimination
   a) Changes of pregnancy
   b) Discomforts related to pregnancy
   c) Potential complications
      (1) Infection / urinary retention
      (2) Gastrointestinal disorders

6) Factors that affect activity / exercise
   a) Changes of pregnancy
      (1) Cardiovascular
      (2) Respiratory
      (3) Muscular- skeletal
   b) Discomforts related to pregnancy
   c) Potential complications
      (1) Hypertensive disorder
      (2) Antepartal hemorrhagic disorders
      (3) Cardio-vascular disorders
      (4) Anemia
      (5) Respiratory disorder
      (6) Trauma during pregnancy

7) Factors that affect perception
   a) Changes caused by pregnancy
   b) Discomforts related to pregnancy
   c) Potential complications
      (1) Neurological disorders

8) Factors that affect role and relations
   a) Structure and family function
      (1) Adaptation
   b) Changes during pregnancy

9) Factors that affect self-concept / self-perception
   a) Changes during pregnancy

10) Nursing diagnostic
11) Nursing outcomes
12) Therapeutic interventions
   a) Prenatal care (6960)
   b) High – risk pregnancy care (6800)
   c) Electronic fetal monitoring: antepartum(6771)
   d) Bleeding reduction: antepartum uterus(4021)
   e) Pregnancy termination care (6950)
   f) Surveillance late pregnancy (6656)
   g) Attachment promotion (6710)
   h) Risk identification: Childbearing family (6612)

13) Evaluation

Labor Stage
 a. Assessment
   1) Factors that affects labor
   2) Indicators of true labor
   3) Labor stages
4) Labor process  
5) Maternal/neonatal adaptation  
6) Potential Complications  
   (a) Pre-term labor  
   (b) Premature rupture of membranes  
   (c) Dysfunctional labor  
   (d) Cephalo-pelvic disproportion  
   (e) Abnormal labor pattern  
   (f) Umbilical cord prolapsed  
   (g) Uterine rupture  
   (h) Amniotic fluid embolism  
   (i) Fetal distress  

d. Therapeutic interventions  
   1) Amnioinfusion (6700)  
   2) Intrapartal care (6830)  
   3) Intrapartal care: High-risk delivery (6834)  
   4) Cesarean section care (6750)  
   5) Labor induction (6850)  
   6) Pain management (1400)  
   7) Childbirth preparation (6760)  
   8) Birthing (6720)  
   9) Resuscitation: fetus (6972)  
  10) Labor suppression (6860)  
  11) Attachment promotion (6710)  
  12) Electronic fetal monitoring: intrapartum (6772)  

e. Evaluation  

Postpartum Stage  
  a. Assessment  
      1) Physiological psychological adaptation  
      2) Lactation process  
      3) Discomforts  
      4) Potential complications  
          (a) Hemorrhage  
          (b) Thromboembolic disease  
          (c) Infections  
              (1) Puerperal  
              (2) Incision  
              (3) UTI  
              (4) Mastitis  

b. Nursing diagnosis  

c. Nursing outcomes  

d. Therapeutic interventions  
   1) Postpartal care (6930)  
   2) Breastfeeding assistance (1054)  
   3) Lactation suppression (6870)  
   4) Family planning: contraception (6784)  
   5) Environmental management: attachment process (6481)  
   6) Family integrity promotion: childbearing family (7104)  
   7) Attachment promotion (6710)  
   8) Risk identification: childbearing family (6612)  
   9) Infant care (6820)  
  10) Lactation counseling (5244)
11) Bleeding reduction: postpartum uterus (4026)

e. Evaluation

**Early Neonatal Stage**

a. Assessment

1) Neonatal characteristics
   (a) Physical characteristics
   (b) Systemic changes
   (c) Reflexes

2) Factors that affect activity / exercise
   (a) Airway obstruction

3) Nutritional requirements

4) Factors that affect nutrition
   (a) Maternal Situation
   (b) Neonatal situation

5) Thermoregulation

6) Anthropometric measures

7) Diagnostic tests
   (a) Apgar
   (b) Gestational age
   (c) Maturation
   (d) PKU
   (e) Other

8) Potential complications
   (a) Birth trauma
   (b) Respiratory distress syndrome
   (c) Hypoglycemia
   (d) Hemolytic disease
      (1) Hyperbilirubinemia
      (2) Rh incompatibility
      (3) Kernicterus
   (e) Congenital anomalies
   (f) Controlled substance abuse

b. Nursing diagnosis

c. Nursing outcomes

d. Therapeutic interventions

1) Newborn care (6880)
2) Resuscitation: neonate (6974)
3) Nonnutritive sucking (6900)
4) Phototherapy: neonate (6924)
5) Bottle feeding (1052)
6) Circumcision care (3000)
7) Newborn monitoring (6890)
8) Temperature regulation (3900)

e. Evaluation

**ACTIVITIES**

A. Assigned lectures
B. Group discussion
C. News reports
D. Assignments

**EVALUATION**
A. Test I – Basic concepts, contraceptives methods, conception and fetal development – 25%
B. Test II – Prenatal: Normal and Complications – 30%
C. Written News Report – 15%
D. Final Test – Intrapartum, Postpartum and Neonatal Care -30%

RESOURCES

TEXT


AUDIOVISUALS

Anatomic Models
Childbirth Graphics Charts
Videos:

- The Miracle of Life
- Pregnancy and Birth
- V2267 Leopold’s Maneuvers
- V1076 Fetal Assessment Visit
- V2432 AIDS Precautions in the Delivery Room and Nursery
- V2171 Birth: Eight Women’s Stories
- V3004 Postpartum Nursing Assessment: The Twelve Point Check
- V2062 Postnatal Exercise
- V2019 Gestational Age Assessment
- V1173 Physical Assessment of the Normal Newborn
- V1172, 2235 Perinatal Assessment of Maturity
- V2230 The Newborn
- V2355, 2268 Techniques in Newborn Screening and Specimen Collection

BIBLIOGRAPHY


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