Iran University of Medical Sciences

Course Plan

Faculty: Nursing and Midwifery
Educational Level and Major: Master's Degree in Neonatal Intensive Care Nursing
Course Name: Principles of Neonatal Nursing Care 2
Credits: 2 units
Unit Type: Theoretical
Prerequisite: Introduction to Neonatal Intensive Care Nursing and Principles of Neonatal Nursing Care 1
Class Schedule:

Number of Students: 5
Course Coordinator: Dr. Shoghi
Instructors (alphabetical order): Dr. Mahnaz Shoghi, Dr. Mena Ali Nejad Naeini, DrJafari

Course Description:
Preparing students for comprehensive neonatal care aimed at promoting neonatal health, understanding care principles such as temperature regulation, water and electrolyte balance, acid-base balance in neonates, familiarity with metabolism and glucose regulation in neonates, nutritional monitoring, acquaintance with the ACoRN program, and neonatal admission and discharge.

Main Goal:
Prepare students to provide care for neonates in neonatal intensive care units.

Objectives:

- Prepare students for comprehensive neonatal care aimed at improving neonatal health
- Understand care principles including temperature regulation
- Water and electrolyte balance, acid-base balance in neonates
- Familiarity with metabolism and glucose regulation in neonates
- Familiarity with nutritional monitoring and the ACoRN program
- Neonatal admission and discharge

Teaching Methods:

- Lectures, Planned lectures, Question and answer sessions, Group discussion
- Problem-Based Learning (PBL), Team-Based Learning (TBL)

Student Duties and Assignments:

- Regular attendance and active participation in scientific discussions and exercises
- Presentation of one assigned topic per student during one session

Educational Aids:

- Whiteboard, chalkboard, Slide projector

Evaluation and Grading Percentages (from total score):

- Timely attendance, no absence, active participation: 1 point
- Presentation of assigned topic: 6 points
- Final exam: 13 points

Exam Types:

- Descriptive, Short answer, Multiple choice, Matching, True/False

Recommended Study Resources:

- Verklan, M.T., Walden, M. and Forest, S. eds., 2024. Core Curriculum for Neonatal Intensive Care Nursing e-book. Elsevier Health Sciences.
- Fanaroff, A.A. and Fanaroff, J.M., 2015. Klaus and Fanaroff's Care of the High-Risk Neonate E-Book. Elsevier Health Sciences.
- Goldsmith, J.P. and Karotkin, E.H., 2003. Introduction to Assisted Ventilation. Assisted Ventilation of the Neonate, 4th ed., pp.1-14.
- Hockenberry, M.J. and Wilson, D., 2024. Wong's Nursing Care of Infants and Children E-book. Elsevier Health Sciences.
- McGurk, V., 2009. Neonatal Care - A Textbook for Student Midwives and Nurses. Nursing Standard (through 2013), 23(20), p.30.
- MacDonald MG, Ramasethu J. Atlas of Procedures in Neonatology, 7th Ed., Lippincott Williams & Wilkins, 2013.

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Course Outline: Principles of Neonatal Nursing Care 2

Session	Topic	Instructor
1	Course introduction and overview related to Principles of Neonatal Nursing Care 2; common problems and specific considerations of premature neonates	Dr. Shoghi
2	Principles of continuation of breastfeeding; types of infant formulas suitable for critically ill neonates (special formula); nutritional monitoring	Dr. Ali Nejad
3	Care of extremely low birth weight (ELBW) neonates and specific considerations	Dr. Ali Nejad
4	Nutritional management and monitoring of premature neonates	Dr. Ali Nejad
5	Identification of critically ill neonates based on the ACoRN program (Acute Care of at-Risk Neonate)	Dr. Shoghi
6	Glucose metabolism, blood sugar balance in neonates; hyperglycemia and hypoglycemia: causes, symptoms, and management	Dr. Shoghi
7	Importance of temperature regulation; temperature control in neonates; hypothermia, hyperthermia, and care of neonates with hypothermia	Dr. Shoghi
8	Principles of fluid therapy and water-electrolyte balance in neonates	Dr. Ali Nejad
9	Principles of parenteral nutrition, types of total parenteral nutrition (TPN), monitoring, necessary care, and interventions	Dr. Ali Nejad
10	Principles of kangaroo care in neonatal units; implementation, evaluation, and monitoring of mother and neonate	Dr. Shoghi
11	Family lifestyle changes, safe sleep practices, and home readiness following neonatal discharge	Dr. Ali Nejad
12	Developmental care of premature neonates and designing supportive and developmental care; parent education with ASQ tool	Dr.Jafari
13	Planning for discharge, parent education for neonatal discharge, and neonatal transfer process	Dr. Shoghi
14	Care of premature and critically ill neonates as a team; nurse’s considerations and responsibilities in the care team	Dr. Ali Nejad
15	Post-discharge follow-up program for premature neonates; home care education; tele-nursing and telemedicine in neonatal discharge	Dr.Shoghi
16	Care of end-stage neonates and principles of palliative care for neonates and families in neonatal units	Dr.Jafari

Sessions Distribution:

- Dr. Shoghi: 7 sessions
- Dr. Ali Nejad: 7 sessions
- Dr. Jafari: 2 sessions