

NEONATAL NURSING

Neonate:-A neonate is also called a newborn. The neonatal period is the first 4 weeks of a child's life. It is a time when changes are very rapid.

Neonatal nursing:- is a subspecialty of nursing that involves the care of young infants. The term neonatal originates from the term neo, which means new, and natal, which means birth.

Abstract:-Neonatal nursing is a subspecialty of nursing that works with newborn infants born with a variety of problems ranging from prematurity, birth defects, infection, cardiac malformations, and surgical problems. The neonatal period is defined as the first month of life; however, these newborns are often sick for months. Neonatal nursing generally includes care for those infants who experience problems shortly after birth, but it also includes care for infants who experience long-term problems related to their prematurity or illness after birth. A few neonatal nurses may care for infants up to about 2 years of age.

A neonatal nurse is responsible for the care of the first period of an infant's life, usually the initial 28 days. They care for all infants, including those who are healthy, those who have some complications, and those who are critically ill and require intensive care.

Roles and responsibilities of neonatal nurse:-

A neonatal nurse perform several tasks, including

- Create and implement treatment care plan.
- Monitor signs and respond accordingly.
- Administer vaccine and other medications required.
- Assist with diagnostic testing.
- Operate medical equipment (e.g., ventilators, incubators, radiant warmers and phototherapy)
- Keep record of infant signs and treatment
- Provide advice and support to family Administering special feedings, such as tube feedings
- Career Traits

Qualities of neonatal nurse:-

- Observation skills.
- Empathy and social awareness.
- Strong written and oral communication skills
- Multitasking
- Ability to work with co-ordination with others.
- Confident

Education and Training to be a neonatal nurse:-

As neonatal nursing is a specialization of nursing, it is necessary for a nurse to first undergo the appropriate training with an undergraduate degree in nursing, before beginning the specialization. There are several qualifications that may allow a nurse to specialize in neonatal care including neonatal nurse practitioner (NNP) and neonatal clinical nurse specialist (CNS).

Level of nurseries:-

- Level I- Nurseries are designed for healthy infants born at least 24 weeks gestation without complications.
- Level II- Nurseries are designed for premature or sick infants who require additional care, special feedings, medication or treatment with oxygen.
- Level III- Nurseries are designed for premature or sick infants who require intensive care with high-tech or specialized equipment
- Level IV- Nurseries are designed for infants who have a complex health condition that may require surgery or other advanced treatment techniques.

Equipments used for neonatal nursing:-

The incubator

An incubator is a plastic dome-shaped machine designed as a crib that regulates a newborn infant's body temperature. The incubator is designed to allow the temperature to be adjusted according to the state of the baby's current body heat. A range of five types of incubators all serve different purposes in the neonatal intensive care unit. The double-walled incubator keeps heat inside the box. Servo-controlled incubators are controlled by skin detectors which are designed to recognize the loss or gain of body heat and make adjustments to maintain the correct temperature. The open box incubator produces heat from beneath the baby to keep it warm. Respiratory care

Surfactants

A surfactant allows a substance to get "wet" to help another substance dissolve. In 1910, the first study of the use of surfactants on infants took place in Japan. Surfactant therapy since has improved the infant mortality rate by 50%.
Family involvement

Family involvement

Family involvement in treatment became a major addition to patient treatment plans. This decade allowed for upgrades in visiting hours. Hours were expanded and siblings and fathers were encouraged to assist the mother in physical treatment.

APGAR scoring

The assessment of the neonate's appearance (colour), pulse (heart rate), grimace (in response to unpleasant stimuli such as bulb suctioning the pharynx), activity (muscle tone and/or movement), and respiratory effort via the APGAR scoring system is essential to guide the baby's care . The nurse is often directly responsible for assigning the APGAR scores at 1 and 5 minutes of life. Each of the five assessment areas is given a score of 0, 1, or 2. The maximum score possible is 10. Scores of 7 or above are considered normal for full-term newborns. If the total score is below 7, or any area is scored 0 at 5 minutes of life, resuscitation efforts and scoring should continue every 5 minutes until 20 minutes of life. At 10 minutes neonates with an APGAR score of 3 or lower are at risk of having neurological dysfunctions and cerebral palsy in the future although there is no guarantee.

References:-

<http://www.innerbody.com/careers-in-health/how-to-become-a-neonatal-nurse.html>

<https://www.healthcareers.nhs.uk/explore-roles/nursing/neonatal-nurse>

<https://www.acnn.org.au/neo-nursing/>

<http://nann.org/professional-development/what-is-neonatal-nursing>

Pieron, Petri (2012). "Nursing made incredibly easy!". *Neonatal Nursing Care* 101. 10 (5): 30–36. doi:10.1097/01.NME.0000418034.61512.67.

"Neonatal Nurse". *Nurses for a Healthier Tomorrow*. Nurses for a Healthier Tomorrow. Retrieved October 26, 2010.

Selga, Anna May A. "Hospital Length of Stay and Readmission Rates for Normal Deliveries: a controlled evaluation". Ilocos Training and Regional Medical Center. Manila: Department of Health, Republic of the Philippines. Archived from the original on April 23, 2007. Retrieved October 26, 2010.

Whitfield, Jonathan M.; Peters, Beverly A.; Shoemaker, Craig (July 2004). "Conference summary: a celebration of a century of neonatal care". *Proceedings*. 17 (3): 255–258. doi:10.1080/08998280.2004.11927977. PMC 1200660. PMID 16200108.

"Levels of Neonatal Care". Committee on Fetus and Newborn. American Academy of Pediatrics. 2012. Retrieved June 5, 2013.

"What Are the Functions of an Infant Incubator?". *livestrong.com*. Retrieved 2019-04-15.

"A Brief History of Advances in Neonatal Care". NEONATAL INTENSIVE CARE AWARENESS MONTH. Retrieved 2022-04-04.

"Frequently Asked Questions". Global Unity for Neonatal Nurses. Boston: Council of International Neonatal Nurses. 2009. Archived from the original on August 26, 2010. Retrieved October 26, 2010.

"Neonatal Nurse". *Plotr*. Retrieved 16 May 2016.

"Neonatal Nursing". *ACNN*.

"The Apgar Score - ACOG". *www.acog.org*. Retrieved 2020-03-13.