بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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MONA MAGHRABY

Nurses Knowledge and Performance Regarding Care Giving for Neonates with Hyperbilirubinemia and Different Modalities of Phototherapy

Thesis

Submitted for Partial Fulfillment of the Requirement for

Master Degree in Pediatric Nursing

By

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List of Abbreviations

Abb.	Full term
AAP	*American Academy of Pediatrics*
BL	*Bilirubin Level*
BSA	*Body Surface Area*
CFL	*Compact Fluorescent Lamps*
CB	*Conjugated Bilirubin*
ENC	*Essential Newborn Care*
G-6-PD	*Glucose-6-Phosphate Dehydrogenase*
NANN	*National Association of Neonatal Nurses*
NH	*Neonatal Hyperbilirubinemia*
NICU	*Neonatal Intensive Care Unit*
PT	*Phototherapy*
RBC	*Red Blood Cell*
RBCS	*Red Blood Cells*
SPSS	*Statistical Package for Social Sciences*
TBL	*Transcutaneous Bilirubin Level*
TCB	*Total Serum Bilirubin*
UCIB	*Unconjugated Indirect Bilirubin*
UDPG-T	*Uri Dine Diphosphate Glucuronide Transferase*
UV	*Ultraviolet*
VATM	*Video Assisted Teaching Module*

Abstract

Hyperbilirubinemia occurs in majority of preterm infants. The neurotoxicity or death in newborns from excessive rise of bilirubin, Phototherapy is highly effective for the treatment of high and severely high levels of bilirubin. **Aim:** This study aimed to assess nurses' knowledge and performance regarding care giving for neonates with hyperbilirubinemia and different modalities of phototherapy. **Design:** A descriptive study. **Setting**: This study was conducted at Neonatal Intensive Care Unit (NICU) in Children's Hospital and Obstetric and Gynecological Hospital affiliated to Ain Shams University hospitals in Cairo and Shebin El Kom Hospital in Monufia affiliated to Ministry of Health. **Sampling:** A purposive sample comprised nurses working in NICU during providing care for neonates with hyperbilirubinemia. **Tools of data collection:** Two tools were used; The first, Interview questionnaire sheet to assess characteristics and knowledge of nurses, the second, observational checklists to assess nurses practice during providing care for neonates with hyperbilirubinemia. **Results:** This study revealed that more than half of neonatal jaundice were females and more than one quarters of them age less than 5 days when admitted to NICU and more than three quarters of studied nurses were competent in caring of neonate before, during and after phototherapy. A strong positive correlation was observed between nurses' knowledge and their practices related to care of neonates with hyperbilirubinemia and under phototherapy. **Conclusion**: The findings of the current study concluded that the majority of studied nurses had satisfactory knowledge regarding Hyperbilirubinemia and phototherapy. And have appropriates performance during care for neonates with hyperbilirubinemia and there are many different modalities of phototherapy including conventional, biliblanket, high intensity. **Recommendations:** Continuous health training courses to nurses regarding providing care for neonates with hyperbilirubinemia, its complication, management under phototherapy.

Keywords: Bilirubinemia-Neonatal-Knowledge-Nurses Performance- Phototherapy.

Introduction

The term Neonatal hyperbilirubinemia (NH) refers to an excessive level of accumulated bilirubin in the blood and is characterized by jaundice, a yellowish discoloration of the skin and other organs ***(National institute for health & Care Excellent, 2017).***

Neonatal hyperbilirubinemia is a common condition affecting newborn babies. Two thirds of human neonates develop clinically evident indirect hyperbilirubinemia in the first few days of life making it the most common clinical condition in the newborn requiring evaluation and management, late preterm infants (born between 34 - 36-weeks' gestation) are at increased risk due to extreme hepatic immaturity and feeding difficulties ***(Natarajan & Shankaran, 2016).***

Common risk factors for hyperbilirubinemia include fetal-maternal blood group incompatibility, prematurity and previously affected sibling cephalo-hematomas, bruising and trauma from instrument delivery may increase the risk for serum bilirubin elevation ***(Taheri et al., 2014).*** Delayed meconium passage also increases the risk, infant with risk factors should be monitored closely during the first days to weeks of life ***(Jones et al., 2017).***

Although breast-feeding babies or getting enough nutrition from breast-feeding are at higher risk of jaundice, dehydration or a low-calorie intake may contribute to the onset of jaundice.