شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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HANAA ALY

Assessment of Nurses' Performance Related to Neonatal Pain in Different Nursing Procedures

Thesis

Submitted for Partial Fulfillment of the Requirements of Master Degree **in Pediatric Nursing**

By

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2021

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Nourhan Mohamed Abd El-Moniem

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List of Abbreviations

Abb.		Full term
BPD	:	Broncho Pulmonary Dysplasia
CNS	:	Central Nervous System
ETT	:	Endotracheal Tube
FLACC	:	Face, Leg, Activity, Cry, Conselability
IASP	:	International Association for the Study of Pain
ICP	:	Intra-Cranial Pressure
IV	:	Intravenous
IVH	:	Intraventricular Hemorrhage
MPAT	:	The Modified Pain Assessment Tool
NNS	:	Non-Nutritive Sucking
NICUs	:	Neonatal Intensive Care Units (NICUs
NIPS	:	Neonatal Infant Pain Scale
NCA	:	Nurse Controlled Analgesia
NCM	:	Nursing Comfort Measures
PAT	:	Pain Assessment Tool
PICC	:	Percutaneous Inserted Central line
ROP	:	Retinopathy of Prematurity
SSC	:	Skin-to-Skin Care
SPA	:	Supra Pubic Aspirate

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Review of Literature

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Abstract

Background: Neonates at greatest risk of neurodevelopmental impairment as a result of preterm birth and they most likely to be exposed to the greatest number of painful stimuli in the NICU. **Aim**: The study aimed to assess nurses performance related to neonatal pain in different nursing procedures. **Design:** A descriptive analytical study**. Sampling:** A purposive sample comprised of all nurses (100) working at NICU affiliated to Benha Children Hospital affiliated to Specialized Medical Centers. **Setting:** This study was conducted at NICU affiliated to Benha Children Hospital affiliated to Specialized Medical Centers. **Tools of data collection:** included 2 tools predesigned questionnaire sheet to assess nurses performance regarding pain management and observational checklist that include 20 practices that the nurse can perform as non pharmacological pain management. **Results:** This study revealed that the mean age of studied nurses was 32, 12+_ 1, 65, and majority of them had mild knowledge about pain management and majority of them had incompetent practices regarding non pharmacological pain management. **Conclusion**: The current study concluded that The majority of nurses has lack of knowledge and practice regarding pain management in NCUs. Generally, there was a limited use by nurses to relieve neonatal pain. But, Gentle skin to skin touch and modification of environment were the most common non pharmacological measures they already know and actually done **Recommendations:** The study recommended that periodical in service training programs for nurses working in NICUs about neonatal pain management should be conducted to improve their knowledge and practices in the area, guidelines for neonatal pain management should be followed. So, Pain flow sheet should be included in the neonate's nursing documentation, and the nurses should use appropriate non pharmacological interventions to reduce, or eliminate pain of neonates. So, further research is needed too understand the detail of who and when to best apply these interventions.

Keywords: Pain, Neonatal Pain, Pain Management, Nurses Performance.

Operational Definitions

MPAT – Modified Pain Assessment Tool; an updated and modified multidimensional observational scale used to assess or measure pain.

PAT – Pain Assessment Tool; a multidimensional observational scale used to assess or measure pain .

Fleeting desaturation – occurs when oxygen saturations drop to low levels (between the 60's to 80's percent) but then quickly increases again to normal levels. They are usually self-resolving, or self-limiting and require no intervention. Considered normal in premature neonates and occurs due to their immaturity.

Muscle Relaxant – a medication given to neonates to paralyses and stop all muscle movement. It is usually used in the NICU to reduce metabolic demand or to stop neonatal movement to protect an airway.

Inotropic support – a medication given as a continuous infusion, which alters the force or energy of systolic myocardial contraction to support the patient's blood pressure.

Sedated – the neonate is kept calm and put to sleep using a sedative drug, such as midazolam.

Introduction

A standard of care for preterm/term newborns effective pain management may improve their clinical and neurodevelopmental outcomes. Neonatal pain is assessed using context-specific, validated, and objective pain methods, despite the limitations of currently available tools. Therapeutic approaches reducing invasive procedures and using pharmacologic, behavioral, or environmental measures are used to manage neonatal pain. Non pharmacologic approaches like kangaroo care, facilitated tucking, non-nutritive sucking, sucrose, and others can be used for procedural pain or adjunctive therapy. Local/topical anesthetics, opioids, NSAIDs/acetaminophen and other sedative/anesthetic agents can be incorporated into Neonatal Intensive Care Unit protocols for managing moderate/severe pain or distress in all newborn's ***(Morton et al., 2016).***

Pain management among neonates presents a challenge to clinical practice. Although neonates are able to process nociceptive stimuli, painful procedures are commonly performed in neonatal care units without adequate treatment. Repeated and untreated pain experiences during hospitalization at such early stages of life might lead to neurodevelopmental and behavioral damage, with

detrimental consequences over both the short and long term ***(Taha, 2014).***

Avoiding painful procedures should be the best strategy to manage neonatal pain. However, numerous diagnostic and therapeutic procedures are needed in Neonatal Intensive Care units (NICUs) because promote the stability and clinical recovery of the neonate; thus, this environment is hostile to the neonate and family. In addition, frequent handling and excessive light and noise increase the amplitude of the initial painful stimulus, which can negatively affect the clinical outcome. Thus, neonates must be spared from interventions whose benefits not outweigh the harmful effect inherent to the procedure ***(Walter-Nicolet et al., 2017).***

The multidisciplinary team, especially the nursing team, is responsible for the use of neonatal pain-relief strategies. Thus, assessing, preventing, and managing pain are important actions and should be considered during care through the adoption of pharmacological and non-pharmacological strategies. Despite evidence of the deleterious effects of pain among neonates and the efficacy of pharmacological and non-pharmacological pain-relief strategies, Given that the management of neonatal pain remains a challenge for healthcare practitioners, the present study aimed to describe and quantify assessment of nurses