

Evidence-Based Guidelines for Care of Neonates with Respiratory Distress

Thesis
Submitted for Partial fulfillment of the
Requirements of the Doctorate Degree
in Nursing Science
(Pediatric Nursing)

By

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List of Abbreviations

A/C	<i>Assist/controlled ventilation</i>
AARC	<i>American Association of Respiratory Care.</i>
ABGs	<i>Arterial Blood Gases.</i>
BpD	<i>Bronchopulmonary Dysplasia.</i>
C O₂	<i>Carbon Dioxide.</i>
CBGs	<i>Capillary Blood Gases.</i>
CLD	<i>Chronic Lung Diseases.</i>
CMV	<i>Controlled Mechanical Ventilation.</i>
CPAP	<i>Continuous Positive airway pressure.</i>
CPT	<i>Chest Physiotherapy.</i>
CRP	<i>C-Reactive Protein.</i>
DIC	<i>Disseminated intravascular coagulopathy.</i>
EBN	<i>Evidence Based Nursing.</i>
ECMO	<i>Extracorporeal Membrane Oxygenation.</i>
FIO₂	<i>Fractional Inspiratory Oxygen.</i>
FRC	<i>Functional Residual Capacity.</i>
HFFI	<i>High frequency flow interruption</i>
HFJV	<i>High frequency jet ventilation</i>
HFOV	<i>High frequency oscillatory ventilation</i>
HFPPV	<i>High frequency positive pressure ventilation</i>
HFV	<i>High Frequency Ventilation.</i>
HMD	<i>Hyaline Membrane Disease.</i>
IDM	<i>Infant of Diabetic Mother.</i>
IMV	<i>Intermittent Mandatory Ventilation.</i>
MAS	<i>Meconium Aspiration Syndrome.</i>
mmHg	<i>Millimeter Mercury.</i>
MOH	<i>Ministry of Health.</i>
NANN	<i>National Association of Neonatal Nurses.</i>
N.CPAP	<i>Nasal Continuous Airway Pressure</i>

List of Abbreviations (Cont.)^{vii}

NEC	<i>Necrotizing Enterocolitis.</i>
NICUs	<i>Neonatal Intensive Care Units.</i>
O₂	<i>Oxygen.</i>
Pa C O₂	<i>Partial Carbon Dioxide Tension.</i>
Pa O₂	<i>Partial Oxygen Tension.</i>
PDA	<i>Patent Ductus Arteriosus.</i>
PEEP	<i>Post End Expiratory Pressure.</i>
PIP	<i>Peak Inspiratory Pressure.</i>
PPHN	<i>Persistent Pulmonary Hypertension.</i>
PSV	<i>Pressure Support Ventilation.</i>
RCTs	<i>Randomized Controlled Trials.</i>
RDS	<i>Respiratory Distress Syndrome.</i>
SaO₂	<i>Oxygen Saturation.</i>
SIMV	<i>Synchronized Intermittent Mandatory Ventilation.</i>
TTN	<i>Transient Tachypnea of the Newborn.</i>
SPSS	<i>Statistical Package for Social Science</i>
TPN	<i>Total Parenteral Nutrition.</i>
WHO	<i>World Health Organization.</i>

ABSTRACT

This is a quasi experimental study aimed to implement the evidence-based guidelines for care of neonates with respiratory distress through: assessing nurses' knowledge and performance regarding care of neonates with respiratory distress, designing, implementing and evaluating the evidence-based clinical guidelines for care of neonates with respiratory distress. A convenient sample of one hundred nurses, and one hundred and fifty eight neonates were taken from Neonatal Intensive Care Units (NICUs) at Maternity & Gynecological Hospital, Children's Hospital Ain Shams University, Children's hospital in El-Monira Cairo University, El Galaa Teaching Hospital and Ahmed Maher Teaching hospital. A questionnaire format, observation checklists and evidence based guidelines were the study tools used in collecting data which designed by the researcher to assess nurses' knowledge, and performance. The researcher collected the required data before implementation of guidelines, immediately after and at follow-up. The results of the study revealed that implementation of the evidence based guidelines had a positive effect on the improvement of nurses' knowledge and performance regarding care of neonates with respiratory distress. All of nurses improved in their knowledge immediately after implementation of the guidelines while, more than two thirds of them (69.2%) still improved in their knowledge at follow-up. In addition, more than half of nurses (55%) were competent in their performance immediately after implementation of the guidelines while, more than one fifth of them (23.1%) still competent in their performance at follow-up. Accordingly, the study recommended a continuous educational training program for neonatal nurses about the evidence based guidelines and the desired hospital standards. The provision of on job training concerning care of neonates with respiratory distress is highly recommended. Developing the national standards neonatal nursing protocol to be applied for all Neonatal Intensive Care Units.

Key words: Evidence-Based guidelines, Respiratory distress.



Appendix VI
