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Assessment of Nursing Health Care Provided for Preterm Neonates Complaining from Respiratory Distress Syndrome in Southern West Bank

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This thesis was submitted in partial fulfillment of the requirements for the Master's degree in Neonatal Nursing

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Thesis Approval

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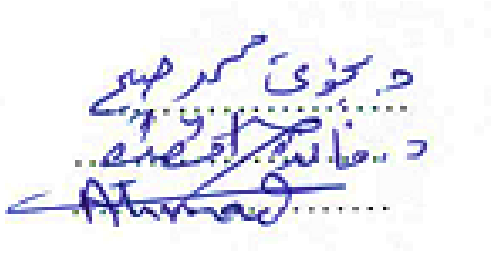

Declaration

I am, Abed Alhameed Dardas, there by declare that dissertation titled Assessment of Nursing Health Care Provided for Preterm Neonates Complaining from Respiratory Distress Syndrome in Southern West Bank. This thesis is my own, except for quotations and summaries which have been duly acknowledged, and that it has not been submitted elsewhere for the award of any degree.

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Dedication

I dedicate my study to my beloved parents who were my continuous source of motivation and inspiration, who gave me the strength and commitment to work with enthusiasm and determination over every task, to my wife, children, and all my family members, to my supervisor, for encouragement, I do dedicate this study.

Acknowledgement

I would like to express here my warm thanks to the Assistant Professor Dr. Najwa Subuh who kindly directed this thesis and gave me the benefit of the most judicious remarks and advice. I also sincerely thank the professors, doctors and members of the journey, who kindly did me the honor of participating. In addition, I would like to thank all the people who contributed directly or indirectly to the development of this work. Through they be assured of my faithful friend ship, love, and since reappreciation.

Abed Alhameed Dardas

Abstract

Background:

"Infants are at risk of developing respiratory distress syndrome. Neonatal respiratory distress syndrome is a major cause of morbidity and death in premature infants. RDS, or hyaline membrane disease, is defined as a syndrome caused by a deficiency in the production of a substance that helps the lungs grow, which leads to structural immaturity in the lungs at birth, which leads to decreased lung function". Aims: The aim of this study is to evaluate the scientific knowledge and practical practice of male and female nurses regarding their care provided to premature infants with respiratory distress syndrome in neonatal intensive care units in governmental and private hospitals in the southern West Bank. Methods: The study was descriptive conducted in neonatal intensive care units in all hospitals in the southern West Bank, the sample included all male and female nurses. The total number of workers in the intensive care unit in hospitals in the southern West Bank was 150. The researcher used a self-administered questionnaire. Results: The results of the current study revealed that the percentages of knowledge were (66.15%) and the percentage of practical care among participants was (82.0%) for children with respiratory distress syndrome. It has been shown also that specialized training in cases of premature infants with respiratory distress syndrome contributes to an acceptable extent to improving the performance of nurses in this field. And that (88.0%) of nurses have high awareness level about the basic method of infection prevention in premature infants with respiratory distress syndrome. On the other hand, it was found that the performance of female nurses was significantly higher than that of male nurses in regarding care of preterm neonate with RDS in NICUs.

Conclusion The study recommended the necessity of having educational and training programs to improve the scientific knowledge and practical practice of male and female nurses about caring for premature infants with RDS in neonatal intensive care departments in hospitals in the southern West Bank.

Key Words: Health Care, Nurses knowledge, Nurses performance, respiratory distress syndrome.

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Abbreviations

ANA	"American Nurses Association"
ATII	"Alveolar type II"
BPD	Broncho Pulmonary Dysplasia
CAP	"Caffeine for Apnea of Prematurity"
CDC	"Centers for Disease Control and Prevention"
CPAP	"Continuous Positive Airway Pressure"
CS	Caesarean section
CNN	Canadian Neonatal Network
ECG	Electo Cardio Gram
ET	"Endotracheal Tube"
FiO2	"Fraction of Inspired Oxygen"
G.S	Gaza Strip
HMD	"Hyaline Membrane Disease"
KMC	"Kangaroo Mother Care"
LISA	"Less Invasive Surfactant Administration"
LS	Lecithin Sphingomyelin
MOH	Ministry of Health
MV	Mechanical Ventilation
NCPAP	"Nasal Continuous Positive Airway Pressure"
NEC	Necrotizing Enterocolitis
NGO	"Non-Governmental Organization"

NICU	"Neonatal Intensive Care Unit"
PCBS	"Palestinian Central Bureau of Statistics"
PDA	"Persistent Ductus Arteriosus"
PHC	"Primary health care"
PHIC	"Palestinian Health Information Center"
RDS	"Respiratory Distress Syndrome"
ROP	"Retinopathy of prematurity"
SPSS	"Statistical Package for Social Sciences"
TTN	"Transient tachypnea of the Newborn"
UNRWA	"United Nations Relief and Work Agency"
USA	"United States of America"
VLBW	"Very Low Birth Weight"
WHO	"World Health Organization"

Chapter One

(Introduction)

1.1. Background

Premature birth is defined fore very pregnancy that ends before 37 weeks of gestation and all new born before this age of weeks are at risk of developing problems, especially the occurrence of respiratory distress syndrome (WHO, 2017).

"Neonatal Respiratory Distress Syndrome is a debilitating condition in which premature infants struggle to fight for every breath they take due to immature lungs". It is most common in infants born earlier 2 than 32 weeks, because their lungs are not yet fully developed due to the lack of surfactant a necessary substance that works to keep the air sacs in the lungs inflated (Niemarkt et al.,2017).

"This condition increases in occurrence and severity for the severely premature and very low birth weight neonates". Yadav et al. (2023) . provide additional details on the prevalence of NRDS, stating that 98% of newborns at 24 weeks had respiratory distress syndrome, compared to 5% at 34 weeks and fewer than 1% at 37 weeks.". ((Dyer, 2019). The condition is the leading cause of mortality for preterm newborns. Even those who survive may still be at risk for a worse quality of life due to their higher vulnerability to neurodevelopmental delays and chronic lung disease.

Neonatal Respiratory Distress Syndrome (NRDS)

is a debilitating condition caused by surfactant deficiency, especially in the context of immature lungs. A lack of surfactant causes the surface tension in the alveoli and tiny airways to rise, which lowers the juvenile lung's compliance. Preterm infants with RDS face many challenges to survive in the extra uterine environment; Because of this, there is a great need for expertise and refinement in nursing knowledge and practice for

neonatal intensive care units (NICUs), to ensure that demand is met. Comprehensive nursing of the newborn (Madeline et *al*., 2017).

Neonatal Intensive Care Unit (NICU): defined by researcher that unit where high -risk neonates including preterm babies are cared for. Nurses play an important role in the care of premature infants with RDS. (American Nurses Association, 2019).

It is necessary to ensure that all premature infants with RDS receive maximum supportive care NICU is an example of specialized care Working in this field requires nurses to acquire specific skills and expertise in infant development, treatment of premature birth, birth defects, breast feeding, and ability to cope with physical and mental problems. Their role entails providing effective support to the families of these children during this time (American Nurses Association, 2019).

1.2. Problem Statement

Between 2015 and 2019, Palestine's under-five-year-old child mortality rate was 14 per 1000 live births; of these, 15 occurred in the West Bank and 14 in the Gaza Strip Palestinian Central Bureau of Statistics, 2022. Database of the Palestinian Multiple Indicator Cluster Survey 2019-2020. Ramallah - Palestine. However, the infant mortality rate in Palestine was 12 per 1000 live births; 13 in the Gaza Strip and 12 in the West Bank. Additionally, data showed that throughout the previous ten years, the child mortality rate has decreased, reaching 15 children for every 1000 live births (Source: Palestinian Central Bureau of Statistics, 2022).

Nurses do not have enough time to upgrade their knowledge and practice of preterm infant care using RDS, which may lead to gaps in integrating knowledge in to practice., there is a great need to assess the level of knowledge and practice of NICU nurses in order to enhance the quality of nursing care, provide continuing education for nurses to stay up to date,

maintain their skills and meet the standards of nursing practice. (Marietteand & Elisabeth, 2015).

In the researcher's experience, there were challenges in caring for premature infants with RDS, including a shortage of medical staff and poorly equipped facilities, compounded by a lack of knowledge. inadequate care for premature neonates due to lack of information and skills to care for premature infants with RDS. Unfortunately, there is little research on the knowledge and practice of nursing care provided to premature infants with RDS in the southern West bank. It is hoped that the present study will illustrate the quality of neonatal nursing care, especially for premature infants with RDS.

1.3. Significance of Study

Between 2015 and 2019, the child death rate in Palestine for children under five was 14 per 1000 live births; of these, 15 were in the West Bank and 14 in the Gaza Strip. However, the infant mortality rate in Palestine was 12 per 1000 live births; 13 in the Gaza Strip and 12 in the West Bank. Additionally, data showed a decrease in the child death rate during the previous ten years, to 15 children per 1000 live births. (**Source: Palestinian Central Bureau of Statistics, 2022**).

The study's objective is to assess the nurse's knowledge and performance provided to preterm new born with respiratory distress syndrome ,improving the health of preterm infants, particularly those with respiratory distress syndrome .At neonatal intensive care units of hospitals in the southern West Bank, and To focus on enhancing knowledge and performance for nurses working in neonatal intensive care units, knowledge and development, growing skills and experience, and building and developing educational and training programs on neonatal care are all priorities.

Preterm neonate with RDS faces numerous challenges in arrange to survive within the extra uterine environment; for that there's an awesome require for the expertise and extraordinary refinement of nursing practice and knowledge for neonatal intensive care unit (NICU), to guarantee that the holistic nursing care needs of the newborn child are met (Madeline et al., 2017).

The results of this study will add significant value to the nursing profession clinically, administratively, research ,and academically , These results may help reveal the extent of weakness in nursing practice and the real need for specialized nursing training programs that will enhance in nursing practice competency Additionally, these results will provide a clear view of the reality of nursing care provided to premature infants with RDS and the need for new policies and strategies that will help improve infants premature birth with RDS Furthermore, the results of this study will explore the knowledge of graduate nurses and the need for curriculum changes in colleges and universities. Finally, the results of the study will detect the gap between nursing knowledge and practice and provide important recommendations for further research. Therefore, the researcher evaluated nurses 'knowledge and practices regarding the care of premature infants with RDS to enhance the quality of nursing care.

1.4. Study Objectives

1.4.1. General Objective

The purpose of this study was to assess the nursing knowledge and practice provided to premature infants with RDS in NICUs at hospitals on the southern West Bank.

1.4.2. Secondary Objectives

1. Evaluate nurses' knowledge of the nursing care given to premature children with RDS in neonatal intensive care units in medical facilities in the southern West Bank.

2. Evaluate nursing performance in light of the nursing care given to premature children with RDS in neonatal critical care units in medical facilities in the southern West Bank.
3. Understanding and establishing the connection between socio-demographic information in the NICU of hospitals in the southern West Bank and the degree of nursing knowledge and performance provided to preterm infants with RDS.

1.5. Research Questions

1- What is the level of nurse's knowledge regarding care of preterm neonate with RDS in NICUs at Southern West Bank Hospitals?

2- What is the level of nurse's performance regarding care of preterm neonate with RDS in NICUs at Southern West Bank Hospitals?

3- Does knowledge and performance regarding nursing care provided for preterm neonates with RDS in NICUs at hospital in Southern West Bank Hospitals affected by selected demographic variables?

1.6. Context to the study

1.6.1. HealthCare System

The Palestinian health system is complex, unique and heavily influenced by the Israeli occupation. The consequences of closure and separation presented a major challenge to the Ministry of Health, creating barriers to access to health services and affecting the integration of health care. system in all Palestinian governorates (UNRWA, 2016). There are four main providers of health care: The Ministry of Health, UNRWA, non-governmental organizations and the private sector. Because there are so many providers, there are many challenges and conflicts in providing standardized and well-

coordinated health services in normal times. Expected to worsen in crises (WHO, 2014b).

1.6.2. Neonatal Intensive Care Unit in the southern West Bank Hospitals

According to the latest update of the neonatal network in the southern West Bank, there are eight hospitals, there are neonatal intensive care units in the governorates of the southern West Bank (Hebron, Bethlehem). As for the Hebron Governorate hospitals, they are Hebron Governmental Hospital, Yatta Governmental Hospital, Al-Ahli Hospital affiliated with the Patient's Friends Society, the Red Crescent Specialized Hospital for Children, & Al-Mizan Specialized Hospital. As for the Bethlehem Governorate hospitals, they are: Beit Jala Governmental Hospital, Caritas Children's Hospital, & holy family Hospital for Children and Maternity.

1.7. Theoretical Definitions

Knowledge: -Defined as nurses' theoretical understanding of preterm infants as identified by the researcher with the issues of nursing care gained through education, experience, and measurement through questionnaires prepared in this study. (American Nurses Association, 2019).

Performance: It is a set of practical practices and skills for nurses working with premature babies who suffer from respiratory problems and the necessary nursing care that can be gained through experience, guidance, education and measurement, and this is done through the questionnaires that were developed in this study. (AmericanNursesAssociation,2019).

Neonatal Intensive Care Unit (NICU): - defined by researcher that unit where high-risk neonates including preterm babies are cared for. (American Nurses Association, 2019).

1.8. Study Variable

1.8.1. Dependent variable

Knowledge and performance

1.8.2. Independent variable

Independent variables could include:

Demographic variables such as academic degree, ages, gender, current position, type of hospital, years of experience, etc.

Chapter Two

(Literature Review)

2.1. Introduction

This chapter provides an overview of previous literature on respiratory distress syndrome in prematurity, especially with regard to nurses' perceptions of knowledge and performance, and their individual precautionary performance, due to the limited studies and research in Palestine and the absence of any study in the southern West Bank on this topic, I reviewed the literature from other countries. Previous literature on respiratory distress syndrome in premature infants was taken from 2015 to 2023,

2.2. Conceptual framework

Conceptual frame works are a fundamental element of scientific research. It involves and clarifies the relationship between the dependent variable and the independent variable. The study's conceptual frame work, shown in Figure 2- 1, illustrates the variables that inter act and influence the nursing care of premature infants with RDS.

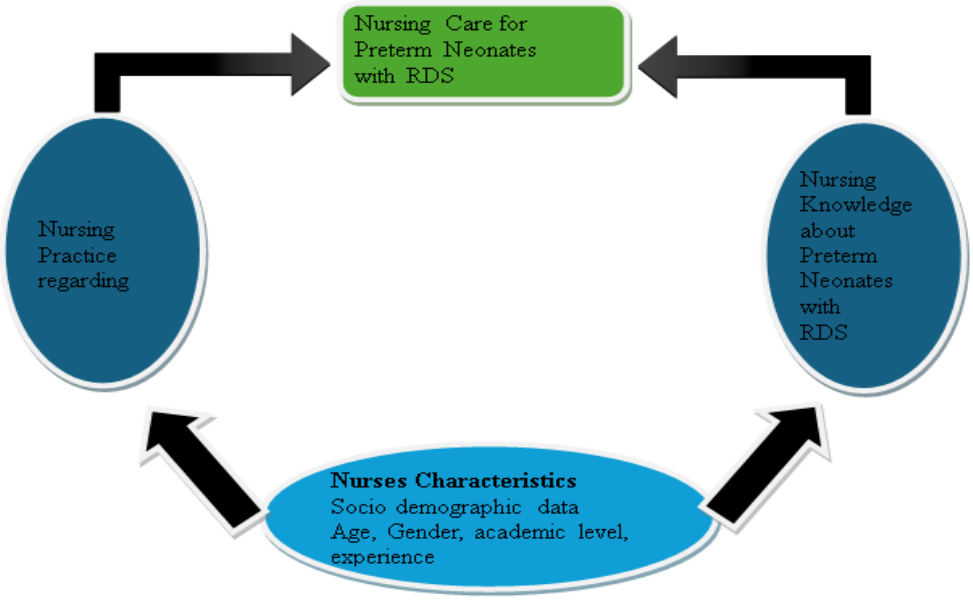

Figure (2.1): Conceptual Framework Diagram

2.3. Background

Prematurity is one of the largest current causes of death of children before the age of five, so global efforts seek to take the necessary and urgent measures to eliminate premature births and the incidence of vulnerable children with in complete lungs (WHO, 2017).

One of the most frequent causes of admission to a neonatal unit (NNU) for both early term and late preterm neonates is neonatal respiratory distress. A significant proportion of these infants have surfactant deficiency. Un like very premature infants, there is no evidence for optimal management of early respiratory failure in these more mature infants (Boyle&Roehr,2022). Because of the very diverse and opinion-based nature of practice, as well as the NNU between and within them, surfactant use in this group is consequently contentious. Clinical opinion is divided: some prefer to treat these babies proactively, early in the disease, others prefer to take a wait-and-see approach. However, many of these more mature babies put significant burden on neonatal services, and severe respiratory disease is likely to result in longer-term maternal and infant separation and long-term hospitalization (Cornette et al., 2020)

Improving the care of infants experiencing respiratory distress may result in quicker healing; fewer days spent in critical care, mechanical ventilation, and non-invasive respiratory assistance; and reduced separation time from mothers and babies, thereby increasing the likelihood of early, successful establishment of breast feeding and fewer long term respiratory complications (Boyle and Roehr, 2022*)*.

2.3.1. Complications

Cerebral palsy, sensory disturbances, learning disabilities and respiratory diseases are more common in premature babies. Morbidity associated with preterm birth (PTB) results in enormous physical, psychological and financial costs later in life. Additionally, PTB

burdens their families socially and financially. It is associated with intensive care costs for extremely premature newborns, prolonged hospital stays and sudden loss of premature babies (Dahman, 2020b)

Preterm survivors more frequently exhibit neurologic and behavioral impairment and low birth weight infants, later have cognitive deficits, poor academic performance, or attention problems then at school age, they are less socially competent and more of ten victimized than their peers, when they reach adolescence age, they are more often socially rejected and less attentive (Charpak et al.,2017).

2.4. Early identification

Any infants delivered before 37 weeks of gestation are considered preterm births according to the World Health Organization. Preterm labor falls into three categories: very early (less than 28 weeks), moderate (28 to 32 weeks), and late (morethan32weeks) (32-37weeks) (WHO, 2017).

Respiratory distress syndrome in newborns poses a serious and life-threatening risk. especially when they are subjected to diseases, loud noises, light, and other major hazards. As all of the aforementioned factors, particularly those that affect the growth and neurological development of these premature babies, can be avoided and prevented, protecting newborns with respiratory distress syndrome and preventing serious complications for them, all of this is dependent on the degree to which neonatal departments providing birth and improving their care are more aware of these issues (El-Ottawa *et al.*, 2019).

2.4.1. Early health issues that are common

Premature babies are now more likely to survive by to advancement in science, technology, development, and technological wealth, but prematurity can also be

accompanied by significant, life- threatening disorders (Green et al.,2016). This study discovered that' some premature babies who survived had long -term health issues such neurological and behavioral symptoms, low weight, cognitive deficiencies, scholastic impairment, and a lack of social skills, particularly in adolescence. Considering students in school (Charpak et al.,2017).

2.4.2. Early hypothermia

Neonatal hypothermia is associated with mortality and morbidity among both low birth weight and normal birth weight infants, even in warm tropical environments. Hypothermia was accompanied by hypoglycemia, metabolic acidosis, hypoxia, respiratory distress syndrome (RDS), chronic lung disease, coagulation disorders, intraventricular hemorrhage, sepsis, and increased unknown water loss causing dehydration, fluid and electrolyte imbalance, and hypotension (Bayih et al., 2019).

2.4.3. Transient Tachypnea of Newborn (TTN)

When a newborn is unable to efficiently expel fetal lung fluid shortly after birth, it can develop transient tachypnea of newborn (TTN). When a term baby experiences respiratory distress, TTN is the most prevalent cause and may necessitate admission to the neonatal critical care unit. transient tachypnea of newborn can lead to mother- infant separation, need for ventilator support, prolonged unnecessary antibiotic exposure, and prolonged hospitalization. Additionally, recent data points to a possible link between TTN and wheezing in later life. The diagnosis of TTN can be aided by new imaging modalities such lung ultrasonography, and respiratory distress may not worsen if treatment is started early enough with continuous positive airway pressure (Alhassen et al., 2021).

2.4.4. Respiratory Distress Syndrome (RDS)\Hyaline Membrane Disease (HMD)

Respiratory distress syndrome (RDS), once called hyaline membrane disease is a respiratory disease commonly found in preterm infants, but can also occur in term infants. Hyaline membrane disease happens as a result of surfactant deficiency due to prematurity. Lung cells contain surfactant granules as early as 20 weeks of gestation, but significant surfactant production does not occur until 34 weeks. Lack of surfactant results in increased alveolar surface tension, with sub sequent resistance to inflation and alveolar collapse eat the end of expiration. In this process, the alveoli become injured, presumably as a result of shear stresses on the alveolar walls (Permana et al., 2022).

It is a very frequent respiratory pathology in preterm newborns (RDS), the same that has its etiology by the deficit of pulmonary surfactant, a substance responsible for producing or providing distal alveolar stability especially when the lung experiences low levels of volumes. (Kim et al., 2018). It is characterized by abnormal breathing with alteration of gas exchange, oxygenation and elimination of carbon dioxide or, in other words, what is known as tachypnea (more than 60 breaths per minute), chest retractions, progressive cyanosis in the first 48 to 96 hours, which is confirmed by chest X-ray. respiratory system problems account for the majority of these clinical presentations; nevertheless, they can also occasionally be related to cardiac, neurological, metabolic, or even muscle disorders. (Jackson et al., 2020)

2.4.5. Symptoms of RDS

Babies with RDS may breathe quickly and shallowly, groan when exhaling, tug on their chest below the ribs with each inhale, and nostrils flare as they breathe. As a result, premature infants with RDS required visits of care from their care givers.

It is estimated that over 50% of babies born with exceptionally low birth weights—and even more if preterm is taken into account—may have a respiratory condition at some point. Studies on this cohort indicate that RDS is the most common diagnosis (51%), with transient tachypnea of the newborn (TTRN; 4%), pneumonia/sepsis (2%) and other conditions following closely behind (Gleason & Juul, 2019).

2.4.6. Management of RDS

Due to medical and technological advances over the past decades, including the use of non-invasive assisted ventilation, e.g. nasal continuous positive air way pressure (NCPAP) and early management of Clinical manifestations of RDS, the survival rate of premature infants with RDS has improved significantly in developed countries (Owen et al., 2017).

Of note, respiratory care is provided by NICU nurses to premature newborns, such as resuscitation support, suctioning, oxygen administration and monitoring of oxygen saturation and temperature regulation, requiring specialized knowledge and skills (Lista *et al*., 2013).

In adequate nursing knowledge about the appropriate care of premature infants using ventilation devices such as NCPAP may have placed them at higher risk of complications. Newborns with signs of RDS were quickly transferred to the NICU to receive treatment from health care professionals who specialize in treating premature babies.

Management of RDS ranges from supplemental oxygen to relieve RDS symptoms, to continuous positive airway pressure (CPAP) which can keep the airway open, or can be extended to mechanical ventilation and medical therapy surfactant, especially for premature infants with respiratory distress acidosis. Nursing plays an important role in the care of premature infants with RDS.

It is necessary to ensure that all premature infants with RDS receive maximum supportive care, including gentle handling, which is important for maintaining body temperature and careful fluid management, physical examination to note any early signs of RDS, count breaths and assess the level of discomfort to assess the severity of RDS.

Linked to this during respiration (whether spontaneous or assisted) forces are produced in the alveoli and terminal bronchioles due to repetitive reopening of collapsed alveoli and hyper-distension of open alveoli. These pressures have the potential to quickly deteriorate the delicate lung structure, causing proteinaceous debris (i.e., hyaline membranes) to flow into the airways. These particles have the potential to reduce the effectiveness of the limited surfactant that is still there, starting a vicious cycle that, if left unchecked, can result in respiratory failure and even death.

2.4.7. Risk factors for premature RDS in Palestine

A study of the Gaza Strip carried out by Abu Hamad identified important risk factors premature birth. These risk factors include: maternal age, lived as a refugee increases the risk of premature care, inadequate prenatal care, inadequate weight during pregnancy and previous premature birth with RDS. Other celebrities the mother's risk factors are: short stature, short time between the last two pregnancies, presence of congenital gynecological anomalies, previous cesarean section. Delivery and previous history of stillbirth (Abu Hamad, 2007). A study conducted in Palestine identified many risk factors that lead to premature birth in Palestinians ladies Several risk factors were found in this study: social factors such as living a nuclear family, medical factors such as previous prematurity, previous cesarean delivery, multiple pregnancy, congenital gynecological problems in the cervix, uterus and placenta problems, mother's smoking, 25 vaginitis, premature rupture of membranes, vaginal bleeding during pregnancy, a disorder due to pregnancy, mainly

hypertensive disorder with disorder pregnancy, such as urinary tract infection, diabetes and kidney disease. Physiological problems during the current pregnancy (Sarhan and Anini, 2015).

2.5. Epidemiology

Globally:

About 15 million babies are born prematurely every year and the number is growing. This is more than 1 in 10 babies. about a million children die from it every year complications of premature birth (Liu, 2016). RDS remains a major cause of morbidity and premature mortality, which affects approximately 70% of all children born and born; 33 weeks gestational age. Canadian Neonatal Network. (2012).

Palestine:

In Palestine, 10.5 infant deaths were reported for per 1,000 live births in 2016. The proportion of premature babies with RDS and low birth weight was 24.6% on the West Coast and 16.8% in 2018. G.S on child deaths (MOH, 2016). Little research has been done on the treatment in the West Bank For premature newborns with RDS in public hospitals**.**

2.6. Nursing care of a premature infant with RDS

2.6.1. Practical guide lines for the management of RDS in premature infants

Nursing care of a premature infant with RDS includes numerous hands-on skills and interventions, as well as communicative and collaborative measures. The responsibilities of a NICU nurse are used on a case-by-case basis and will not all be performed with every patient. These responsibilities include, but are not limited to: administering medications, drawing labs, monitoring vital signs, giving respiratory support. important goals of nursing include maintenance normothermia, prevention of infections, maintenance of

fluid and electrolyte balance and promotes adequate nutrition through tube feeding, supports and monitors respiratory and cardiovascular system condition, maintaining a developmentally supportive and therapeutic environment, diaper changes, bathing, feeding, comforting the patient and family, a collaborating with the healthcare team.

No respiratory support if the child did not require nutritional supplements oxygen or respiratory distress after CPR. If respiratory support was necessary, child was placed on ventilator and transferred to NICU for continues monitoring and follow-up. CPAP: when the child showed signs of respiratory failure or required supplemental oxygen resuscitation, CPAP was initiated viaa T piece reviver and mask. If the fraction of inspired oxygen (FiO2) requires 0.30 on CPAP, baby was admitted to NICU and put on CPAP pressure 4cm H20 to 6cm H20. If the child's FiO2 requirement increased ≥0.40 vai CPAP, they were selectively intubated with pretreatment and flushed with surfactant tare fill able bag followed by evaluation for extubation based on specific criteria. If the infant had signs of respiratory failure and required FiO2 ≥0.30 on CPAP after resuscitation, they were considered suitable for the insure method. The child was a volunteer intubated without pre-treatment and via T-piece surfactant was administered. Small children who required labor intubation for resuscitation received prophylactic surfactant. Babies were eligible for immediate extubation if they were breathing spontaneously and had an FiO2 requirement of 0.30. **(**Read et al., 2016).

In the process of newborn care that employs the newborn with RDS, the following must be observed by nurses in the NICU: providing appropriate ambient temperature, pulmonary hygiene, newborn body care, proper feeding, prevention of damage to the nasal apertures, protection against infection, handling the anxiety of the child. Nursing care for neonates with respiratory failure treated in neonatal intensive care units requires

extensive knowledge of nursing theory and practical skills. Proper nursing allows one to identify problems quickly and take appropriate measures to eliminate them (White, 2020***).*** In order to assess the heart rate and hemoglobin oxygen saturation, a cardiac monitor or a pulse oximeter is used. The sensor of the device is attached to the arm or leg of the child, after which digital and graphic readings indicate of the child's blood and tissue oxidization, which enables a timely intervention. The sensors should be of disposable type and their placement changed every 4 to 6 hours.

The following elements must be observed in the nursing care of neonates treated with Infant Flow:

- Proper ambient temperature
- Pulmonary hygiene
- Body care
- Proper nourishment
- Preventing from nasal apertures
- Preventing from infections
- Handling the child's anxiety (Thygesen et al., 2018***).***

2.7. Surfactant Therapy

Surfactant therapy plays a key role in the treatment of RDS because it reduces pneumothorax and improve survival. However, intra tracheal administration requires skill and can damaged the new born lung, especially if uncontrolled over pressure is applied to it new born lung. Before 2013, prophylactic surfactant was recommended for the smallest babies because it improved survival in clinical trials in the pre-CPAP era. After 2013 together increased use of prenatal steroids and early initiation of CPAP therapy, the results are best when surfactant is indicated for babies with clinical signs of RDS and the

youngest. Early initiation of CPAP therapy in infants can prevent adverse effects of intubation and mechanical ventilation (MV) in the transition phase. The overall goal is to avoid invasive MV if possible and administer surfactant as early as possible during RDS considered necessary (Aldana et al.,2017).

2.7.1. Methods of administration of surfactants

Surfactant administration requires an experienced physician with intubation skills and we can provide MV if needed. Most clinical studies of surfactants to date have used the trachea intubation, bolus administration, and surfactant delivery with intermittent positive pressure ventilation, either manually or with a ventilator, followed by a weaning cycle MV as lung compliance improves. Special catheters designed for this method, called less invasive surfactant Management (LISA) is commercially available. 2016 randomized trials and meta-analyses comparing these methods. They refer that LISA is better in reducing the need for MV and improving overall outcome such as death or BPD (Aldana *et al.*, 2017).

However, these meta-analyses include some studies that are open to bias and may not be suitable for inclusion in a more rigorous systematic review. On the other hand , higher quality studies, such as those conducted by the German Neonatal Network, all show trends Addition in favor of LISA therefore , it is reasonable to recommend it as an optimal method for surfactant administration to spontaneously breathing infants on stable CPAP. One advantage of LISA is that the bait continues to MV after the surfactant deleted. This complicates the calming effect of the procedure. it is It is considered good practice to avoid discomfort during elective intubation by using sedation or pain reliever such as fentanyl, propofol or midazolam. Low dose sedation beforehand LISA procedure

laryngoscopy is technically possible, which makes the baby smaller uncomfortable but increases the risk of CPAP failure (Dekker *et al.*, 2018).

There is currently no clear answer as to whether LISA therapy should be regularly administered with sedation., individual neonatologists must decide for themselves. The surfactant is delivered by spraying would be truly non-invasive. With the development of vibrating membrane atomizers, this is the case surfactant is sprayed, although only one clinical trial has shown this surfactant reduces the need for MV during CPAP compared to CPAP alone, and this finding was limited to a subgroup of full-term infants aged 32-33 weeks (Minocchieri *et al.*, 2018). More splash tests are on the way. Surfactant was also given into the throat mask airway, and one clinical trial shows that it reduces the need for intubation and MV (Roberts *et al.*, 2018). However, the size of the laryngeal masks currently available limits the use of the method to relatively mature premature babies and smaller ones for routine use children at highest risk for BPD are not recommended (Bansal *et al.*, 2017). Pharynx deposition of surfactant at birth is also currently being tested in clinical trials.

2.7.2. When to treat a premature neonate with RDS with a surfactant?

The severity of RDS can only be determined clinically using the FiO2 composite maintain a normal sense of satiety with assessment of work and respiratory rate lung aeration on chest x-ray, all of which can be affected by CPAP. Lung ultrasound can be a useful adjunct to clinical decision making in experienced hands RDS lungs have a characteristic appearance that can be distinguished from other common lungs respiratory distress in newborns and can reduce exposure to X-rays (Escourrou et De Luca, 2016). Clinical trials are now testing rapid bedside assays that accurately assess the presence or absence of surfactant in stomach aspiration (Verder et al., 2017). The 2013 guide lines recommended surfactant if FiO2 and

>0.30 very immature babies and >0.40 for more mature babies early clinical trials. Observational studies have confirmed that FiO2 exceeds 0.30 in the first few hours after birth are significant predictor for CPAP therapy and experience.

More than one dose of surfactant may be required. Clinical studies comparing multiple doses single-dose showed less air flow even though they were made in an era when babies were kept on the MV. Today, many babies receive non-invasive treatments ventilation also when surfactant is required. The need for repeat dosing can be minimized by handling a higher dose of 200 mg/kg poractantalfa (Singh *et al.*, 2015).

2.7.3. Non-invasive respiratory support

Recently, it has been emphasized that premature infants should be treated without MV whenever possible and when ventilation is necessary to minimize endotracheal tube time used. The use of non-invasive respiratory support increased as techniques expanded to achieve this, but there is often little evidence as to which method is best effective CPAP has been used for more than 40 years, and early studies have shown that it is getting better oxygenation, regulates breathing and effectively reduces re intubation following extubation CPAP is now recommended as the optimal first form of respiratory support although other forms of non-invasive birth support are also being tested in clinical trials (Subramaniam *et al.*, 2016).

CPAP ideally involves the delivery of heated and humidified gas to a measurable and adjustable pressure. This pressure is transmitted using an interface such as a short soft nose tips or a mask that is firmly attached to the child's face, creating a seal. pressures entered the naso pharynx is usually kept in 5-9 cm H2O, resulting in several theoretical advantages, including upper airway loading, preservation of lung expansion, and prevents the terminal alveoli from exhalation, higher pressure improves oxygenation, but36 may increase the risk

of air leakage. Using an underwater seal to create pressure or Bubble CPAP produces small fluctuations around the set pressure that some believe provides an additional advantage (Welty, 2016).

Using a flow controller to create CPAP has a theoretical advantage over charging work of exhalation (Coanda phenomenon), although this is not clinically significant differences were noted between the devices used to deliver CPAP, but simplicity Bubble CPAP systems allow them to be used in low-income settings (Mazmanyan *et al.*, 2016). Tests comparing the interfaces showed no differences between nose tips and short nose tips nasopharyngeal tubes for initial use in the delivery room, but for long-term use in the nose masks may be most effective (Say *et al.*, 2016).

All CPAP attachments come with face risks deformities and nasal injuries. Gradual reduction when weaning younger infants from CPAP it is not the sudden cessation of pressure that leads to a greater probability of weaning the first-time company (Jensen *et al.*, 2018).

Neonates in intensive care units require special care and attention from the medical staff. Proper treatment and nursing of those little patients depend upon the technological equipment of the unit, the qualifications of nursing staff and adherence to medical procedures. Connecting a neonate to an Infant Flow device requires monitoring the vital signs, i.e. respiratory rate, blood pressure, heart rate and blood oxygen saturation. The respiratory rate can be measured by means of chest observation or by auscultation with the stethoscope pressed against the sides of the chest (Alridh et al., 2019***)***.

2.7.4. Monitoring and supportive care

Optimal supportive care for preterm infants with RDS for best outcomes monitoring of physiological variables is important. Oxygen mixers should be available in the delivery room and NICU. Pulse oximetry from birth provides information response to stabilization. The NICU should have access to a continuous pulse oximetry, ECG monitoring and PaCO2 level monitoring. Exhaled CO2 canister detection ensure proper placement of endotracheal tubes and continuous end-tidal measurement CO2 also provides useful information about trends in gas exchange. Umbilical artery cannulation is indicated if the need for periodic blood tests is anticipated. Continuous access trend information can also be obtained using transcutaneous oxygen and CO2 monitoring; however, this method can be harmful to the skin, particularly in premature infants (Bruschettini et al., 2016).

Cerebral oxygen monitoring methods are also available and can be evaluated brain saturation, but no clear clinical benefit was observed. Accurate tracking serum electrolytes and hematological values are ideally required by micro sampling techniques Blood pressure should be recorded on internal arterial lines or periodically using approved oscimetric equipment. access to radiology services and portable ultrasounds are also important because they are often used to confirm the diagnosis of RDS, rule out air leaks and ensure proper placement of endotracheal tubes and central tubes. (Hyttel-Sorensen *et al.*,2017).

It is necessary for NICU nurses to provide constant therapeutic communication with the families of their patients. The NICU can be an overwhelming environment for those who are not familiar with it, and neonates with NRDS may be unable to be held or fed for extended periods of time. This can be deeply upsetting for the parents, and nurses must

be prepared to intervene to provide support and advocacy for the parents and neonate. Additionally, they can expect to communicate and collaborate with a variety of healthcare professionals, such as occupational therapists, physical therapists, pharmacists, neonatologists, pediatricians, social workers, and more (Wari et al., 2021).

2.7.5. Regulation of temperature

It is recommended to always keep the body temperature between 36.5-37.5 °C Hypothermia is associated with a worse outcome, although it is not clear whether this is a direct cause and influence (Wilson *et al.*, 2016). Immediately after birth, pack in the polyethylene bag below radiant heater reduces heat loss (McCall *et al.*, 2018).

Incubators with service control a skin temperature of 36.5°C reduces neonatal mortality. After stabilization, babies should be nursed in incubators with high relative humidity to avoid exposure to unfamiliar water losses. For the smallest babies, 60-80% humidity should be used initially and reduced the integrity of the skin is improved. Kangaroo Mother Care (KMC) is an effective remedy maintaining temperature and improving results at lower input conditions and it is increasingly used in the NICU to maximize mother-baby contact, even in a ventilated environment babies who can benefit even after leaving the hospital (Charpak *et al.*, 2017).

2.7.6. Prevention and Treatment of Premature Hypothermia With RDS

Due to the large surface area to volume ratio, small children are at high risk of rapid heat loss leading to hypothermia. Even more concerning is the extremely low birth weight. For babies admitted to the NICU. Long-term heat loss increases consumption calories in the production of heat instead of promoting growth and development introduced by a quality improvement initiative for the treatment of hypothermia in very young infants' heavy babies in the NICU. All premature babies were immediately bagged from the neck

down after birth. These occlusive bags prevented hypothermia. Proof reported that premature (less than 37 weeks) and low birth weight (less than 1.5 kg) are more sensitive to hypothermia in the perioperative period than their mature and normal weight equivalents". Hypothermia showed a downward trend of 23 percent 6% of quality improvement measures such as transport protocol and maintenance and continuous monitoring of rectal temperatures (El-Atawi *et al.*, 2019).

2.7.7. Early Fluid and Nutritional Support

Parenteral feeding should be started immediately, because enteral nutrition is limited at first. Higher parenteral amino acid starts earlier, reduces postnatal growth failure, and improves protein balance outcomes (Osborn et al., 2018). At least 1.5 g/kg intravenous protein and 1-2 g/kg administration of lipids should be started from day 1 and increased to a maximum of 3.5 g/kg of amino acid (Mihatsch *et al.*, 2018).

Enteral feeding for stable babies can be initiated early with 0.5–1 ml/kg/h of breast milk. There are no signs of an increase in NEC feeding stable VLBW infants fairly rapidly up to 30 mL/kg/day (Oddie *et al.*, 2017). However, breast milk is recommended to start feeding if not pasteurized donor breast milk is better than formula at reducing risk NEC, but results in slower postnatal growth (Quigley *et al.*, 2018).

2.7.8. Hand hygiene

Hand hygiene plays an important role in preventing nosocomial infections in the NICU. Infections are easily contracted during daily care in the NICU. Some factors responsible for infections and can be controlled hand hygiene, for example: inserting a central venous catheter, taking blood samples, wound care and dressing Parenteral fluid exchange, drug infusion intravenous route, central line care suction through an endotracheal tube, prolonged contact with the nanny, such as bathing, changing position, physical therapy,

recording of daily vital signs, oral medications, tube feeding, skin contact during diaper changing (Barbosa et al., 2019)

2.7.9. Neonatal Intensive Care Unit

Newborn morbidity and mortality are considered a global public health problem developing countries and the poorest countries have the highest death rates. The first four weeks of a baby's life are its most vulnerable period prone to significant morbidity and mortality. Neonatalatology as a specialty did not emerge until the 1970s, and the NICU did not exist until the early 1960s. These special units were founded shortly after the death of President John F. Kennedy's newborn son, who died due breathing difficulties and immature lungs. He was born prematurely after only thirty-four week of pregnancy His death raised awareness in the United States the number of premature babies who died from immature lung development after his birth. Knowledge and expert care about these babies increased and early. In the 1990s, more than 90 percent of these premature babies survived, including babies born after 24 weeks of pregnancy". Newborn exposure for infections, suffocation and premature birth are considered the most common causes neonatal deaths. These common causes of neonatal mortality neonatal intensive care units are largely preventable (El-Atawi *et al.*, 2019).

2.7.10. Nursing Practice

(NICU) Of all NICU caregivers, nurses spend the most time at a baby's bedside (angel, 2015). Measures needed at birth to clear the airways, start breathing, treatment umbilical cord and eyes and give vitamin K to premature babies as well as to normal weight and adults. Keeping the airway clear requires special care. Other considerations include the need for temperature control and heart rate monitoring and breathing, oxygen therapy, and special attention to the details of fluid requirements and nutrition. Protection against

infections can never be relaxed, routine procedures that their premature termination may cause hypoxia.

The need for regular and active participation of parents in a nursery for premature babies, the need to guide the mother in the home care of premature babies and the question of the prognosis of subsequent growth and development needs special attention (Nelson and Kliegman, 2016).

2.8. Summary

After searching for many previous studies at the international and global level, it became clear that there are many studies and research that show the importance of knowledge and performance in caring for children with respiratory distress syndrome. There were large gaps between knowledge and practice regarding nursing care for premature infants who suffer from respiratory distress syndrome. There is also no previous study conducted in the southern West Bank related to premature infants with respiratory distress syndrome . Nursing care for newborns with RDS assesses the child's response to the respiratory system. therapy Constant and careful monitoring is mandatory because the newborn status can change quickly. A ventilator can save a life, especially for young children with high carbon dioxide, low arterial blood oxygen, and low blood pH (acidity). However, continuous positive airway pressure (CPAP) can maintain the airway open, so it is important that all children with RDS receive excellent supportive care that to contain gentle handling, maintenance of body temperature and careful fluid management.

The nurses play a key role in the care of high-risk and premature babies, while nurses whose working in the NICU must be qualified and trained through a continuing education program. Therefore, there is a need to assess nurses' knowledge of neonatal RDS improve their knowledge and prevent complications of RDS in newborns. Treatment for RDS is

usually started soon after the baby is born, sometimes at delivery a room .Most newborns with signs of RDS are quickly transferred to intensive care in a unit called the NICU, where they receive care from a team of health professionals specialized in the treatment of premature babies. The NICU is designed to limit exertion baby and fulfills basic needs for warmth, nutrition and shelter.

Chapter Three

(Methodology)

3.1. Introduction

This chapter presents the research method used to answer the research questions. that is various key aspects are elaborated including methodology concept as research design, research location, research population, sample size, sampling process, study period, inclusion and exclusion criteria, study tools, reliability, validity, pilot study, data collection, ethical and administrative research consideration.

The aim of the current study is to evaluate the knowledge and practice of nurses working in intensive care units for premature infants with respiratory distress syndrome in hospitals in the southern West Bank.

3.2. Study Design

This is a quantitative descriptive analytical cross-sectional study conducted to evaluate nurses Knowledge and performance provided by nurses regarding the care of premature infants with RDS whom Worked in neonatal intensive care units in hospitals on the Southern West bank and this model suited him. The nature of this research problem is efficient, less time and money consuming.

3.3. Study Population and Setting

The population of this study consists of all nurses (about 150) working in neonatal intensive care units in hospitals in the southern West Bank, namely (Hebron Governmental Hospital, Red Crescent Specialized Hospital for Children, Al-Mizan Hospital, Al-Ahli Hospital, Yatta Governmental Hospital, Beit Jala Governmental Hospital, Caritas Children's Hospital, Holy Family hospital).

3.4. Sample of the Study

All nurses working in neonatal intensive care units in hospitals in the Southern West Bank that contain an intensive care department for preterm infants, and these hospitals are in the Hebron Governorate (Hebron Governmental Hospital, Al-Ahli Hospital, Red Crescent Hospital, Al-Mizan Specialized Hospital, Yatta Governmental Hospital). Bethlehem Governorate: (Beit Jala Governmental Hospital, Caritas Children's Hospital, and Holy Family hospital). The number of nurses is 150 male and female nurses. the sample is convenience sample.

The total number of nurses working in the prematurity intensive care departments in hospitals in the southern West Bank was 175 nurses. Only 167 nurses participated in the study. A pilot study was conducted with 17 nurses, and the total number of participants in the study was 150 participants, as 8 of the nurses did not participate due to refusal, and some of them were annual leave.

3.5. Study Period

The study period was 6 months; from October 2023 to may 2024.

3.6. Inclusion Criteria

All nurses working in neonatal intensive care units in hospitals in the southern West Bank during study period and who are willing to participate in the study.

3.7. Exclusion Criteria

Other nurses at the selected hospitals who do not work in neonatal intensive care units . also excluded, Nursing students, volunteers working in neonatal intensive care units, and nurses who declined to participate were included the study. maternity leave nurses, annual leave, sick leave, refused participant

3.8. Study instruments and tools

A self-administered questionnaire based on literature review of researcher assessment and previous experience in evaluating nurses' knowledge and practices regarded to the treatment of premature babies with RDS in the hospitals of the South West Bank. The validity of the survey was checked by distributing the questionnaire to a panel of experts. Has three experts. The first part of the survey included the socio-demographic information of the respondent These included: age, gender, academic level, job title and work experience in neonatal intensive care unit. In addition, the courses were obtained while working in the NICU where the course was located and the duration of the courses. In addition to special training in the care of premature babies with RDS, the place special training, special training period for premature babies related to RDS treatment. Finally, education and on-site training programs. The second part of the survey, which the researcher prepares to evaluate the Participants information of preterm neonates receiving RDS treatment. It consisted of 24 multiple choice questions, each item in the information section of the questionnaire, they had two possible answers, right or wrong. You get one point for each correct answer, otherwise, zero. Total scores ranged from 0 to 24 and were then converted percentage. Higher scores indicate a higher level of knowledge. The third part of the survey prepared by the researcher to evaluate work practices Participants of preterm neonates receiving RDS treatment. Every item practically. The questionnaire contains three answer options, which are never = zero, sometimes = one and yes always = two. Possible scores ranged from 0 to 48. These Scores were then converted to percentages. Higher scores indicate higher levels practically.

3.9. Reliability of the study scales

Cronbach's Alpha of the all scales were above 0.70, indicating acceptable internal consistency or homogeneity for the questionnaire, as seen in table (3.1).

Table (3.1). Cronbach's Alpha of the scales

Scale	Item	Cronbach's Alpha
Knowledge	24questions	0.74
Practice	24 questions	0.92

3.10. Question scoring

Data part: (1) points for a correct answer and (0) for an incorrect answer. By dividing the respondents' scores by the possible maximum scores and multiplying the result by 100, the knowledge scores were translated into percentage scores. The total score of each result was calculated using Bloom's cutoff point (Blooms, 1956). The degree of knowledge was categorized into three categories based on the aggregate scores: low level knowledge (less than 60%), moderate level knowledge (60-79%), and high-level knowledge (80-100%). Practical part: (2) score always, (1) score sometimes, (0) never. The practice scores were converted into percentage scores by dividing the respondents' results by the potential maximum scores and multiplying by 100. The total score of each result was calculated using Bloom's cutoff point (Blooms, 1956). The degree of practice was categorized into three categories based on the aggregate scores: poor practice (less than 60%), fair level (60-79%), and good level (80-100%).

3.11. Data Collection and Procedure/Data Record

Self-administered questionnaires were used to gather data, and the knowledge and procedures of local nurses on the management of premature newborns with RDS in neonatal intensive care units were assessed. The purpose of the questionnaires was to

evaluate the knowledge and practices of nurses who work in neonatal intensive care units at hospitals in southern West Bank with regard to the management of preterm neonates with RDS. The researcher distributed questionnaires for participants during working hours of all shifts and then receiving them afterwards complete. The questionnaire took an average of twenty minutes to complete. The cover the questionnaire letter explains the title, purpose, and identity of the study researcher.

3.12. Validity of Check List Form

The prepared questionnaires were sent to four experts to confirm the questions and that in relation to the fields describing the research. The comments of the experts were taken into account and the change was made accordingly.

The checklist form was established by the researcher to accomplish the study objectives, the investigator ensured the face validity twice. The first time was through experts who give their suggestions for improvement and judgment about the adequacy and accuracy of the checklist form. The second, by pilot study Content validity was done before data collection, by sending the checklist form with covering letter concerning study and study proposal to experts who are expert in the field, they were asked to estimate and revised the items in the checklist in terms of sufficiency in relation to study, accuracy, and its relevancy. Feedback was obtained from experts and modification accordingly was done by the researcher and supervisor; their opinion was taken into consideration.

3.13. Ethical Consideration

Ethical and administrative considerations and procedures are very important requirements in implementing research. The researcher must maintain all ethical and administrative requirement .

To conduct this study, approval was obtained before conducting the study from the College of Graduate Studies at the Arab American University in Palestine (AAUP) and the administration of the targeted hospitals (Appendix) before starting data collection. Consent provided information related to the purpose of the study, stating that there were no risks or threats to participation, a brief explanation of the objectives of the study, and a description of how the confidentiality of the data would be maintained." Topics under study included ensuring privacy and knowledge of voluntary participation.

3.14. Pilot Study

"A pilot study was conducted to test the reliability of 17 questionnaires to Identify the clarity or ambiguity of survey items to reduce ambiguity and Problems that may occur during data collection. Identify all areas and their components. The tool was used to determine the specific time needed to complete the questionnaires, and a total of 17 questionnaires were included in the study without modification".

3.15. Data Analysis

"The collected data were entered into the computer software and Statistics package of the social sphere Sciences, SPSS program after coding the questions and cleaning the input data. The collected data were analyzed using SPSS software. After entering the information and data cleaning, the frequency distribution of all variables in the questionnaires was done and then the continuous variables are recoded. Simple statistics including frequencies averages and percentages used. One-way ANOVA test and (t) test were also used". and Pearson correlation.

3.15.1. Participants' characteristics

The study included 150 nurses as participants. The analysis revealed that the mean age of the participants was 29.2 ± 6.3 years old, with 89 (59.3%) of them being females. Additionally,

114 (76.0%) held a bachelor's degree in nursing. Furthermore, 143 (95.3%) of the participants were currently employed as nurses in a position, as indicated in Table (3.2).

Table (3.2). Demographic Characteristics of the Participants (N=150)

Variable		**N (%)**	**M (SD)**
Age			29.2 (6.3)
Gender	Male	61 (40.7)	
	Female	89 (59.3)	
Educational level	Diploma	26 (17.3)	
	Bachelor	114 (76.0)	
	Master and above	10 (6.7)	
Position	Nurse	143 (95.3)	
	Head nurse	7 (4.7)	

According to hospitals, the analysis revealed that 26 (17.33%) of the participants were from both AlMezan Hospital in AlKhaleel and Caritas in Bethlehem, followed by AlAhli Hospital and AlKaheleel Hospital, with 22 (16.0%) participants each, as seen in Figure (3.1).

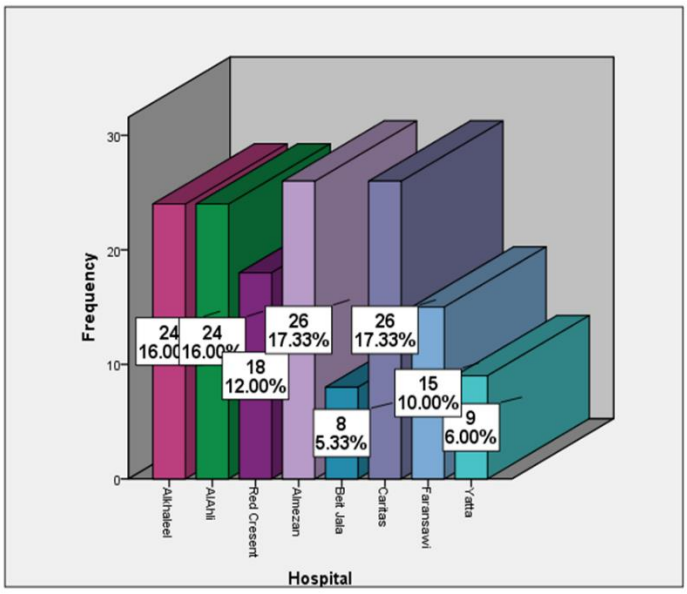

Figure (3.1). Distribution of the participants according to the hospital (N=150)

The analysis revealed that 76 (50.7%) of the participants, had less than 5 years of experience working in the neonate unit. Additionally, 91 (60.7%) of them reported

receiving training during their work in the neonate unit, with the majority of this training, 64 (70.3%), lasting less than a month.

Regarding specialized training for premature infants with RDS, only 58 (38.7%) of the participants had participated in such training. Among those who had this training, 48 (82.8%) reported that it lasted less than one month.

Furthermore, only 88 (58.7%) of the participants reported that their hospitals offer educational or training courses for caring for premature infants in neonatal units, as depicted in Table (3.3).

Table (3.3). Distribution of the Participants regarding work characteristics (N=150)

Variable		**N**	**(%)**
Experience	Less than 5 years	76	50.7
	5-10 years	47	31.3
	More than 10 years	27	18.0
Training courses during working in neonate unit	Yes	91	60.7
	No	59	39.3
Period of training	Less than one month	64	70.3
	1-6 months	15	16.5
	More than 6 months	12	13.2
Specialized training for premature with RDS	Yes	58	38.7
	No	92	61.3
Period of specialized training for premature with RDS	Less than one month	48	82.8
	1 -6 months	6	10.3
	More than 6 months	4	6.9
Hospital educational or training courses for care with premature in neonatal units	Yes	88	58.7
	No	62	41.3

3.15.2. Demographic and medical characteristics of the neonate

Additionally, one hundred and fifty neonates were cared for by eligible study nurses in selected hospitals as part of the study. The analysis revealed that the mean age of the neonates was 20.0 ± 46.2 days old, with 87 (58.0%) of them being females. Furthermore, 59 (39.3%) of the neonates had a gestational age of less than 30 weeks. Their current average weight was 1.8 ± 0.78 kg, with 50 (33.3%) of them weighing less than one kg at delivery.

Moreover, more than half of the neonates 76 (50.0%) were born via normal delivery, while 65 (43.3%) required resuscitation after delivery through suction of their air passages. Additionally, 73 (48.7%) of the neonates were diagnosed as premature, as detailed in Table (3.4).

Table (3.4). Demographic and Medical Characteristics of the Neonate (N=150)

Variable		**N (%)**	**M (SD)**
Age			20.0 (46.2)
Gender	Male	87 (58.0)	
	Female	63 (42.0)	
Gestational age	Less than 30 weeks	59 (39.3)	
	30 weeks to 31 weeks	36 (24)	
	32 -33 weeks	21 (14)	
	34 -36 weeks	21 (14)	
	More than 36 weeks	13 (8.7)	
Current weight /kg			1.8 (0.78)
Weight at delivery	Less than 1000 gm.	50 (33.3)	
	1000-1499	34 (22.7)	
	1500-1999 gm.	37 (24.7)	
	2000-2499 gm.	14 (9.3)	
	2500 -3000 gm.	8 (5.3)	
	More than 3000 gm.	7 (4.7)	
Type of delivery	Normal	76 (50.7)	

Variable		N (%)	M (SD)
	Caesarian section	74 (49.3)	
Resuscitation method after delivery	Suction air passages	65 (43.3)	
	Administer oxygen	30 (20)	
	Administer emergency medication	9 (6)	
	Suction from trachea	35 (23.3)	
	Ambo bag suction	11 (7.3)	
Diagnosis	Premature	73 (48.7)	
	RDS	50 (33.3)	
	TTN	17 (11.3)	
	H.M.D.	7 (4.7)	
	Other	3 (2)	

According to congenital anomalies, the analysis revealed that the majority of babies, 144 (96.0%), were born without any congenital anomalies, as seen in figure (3.2).

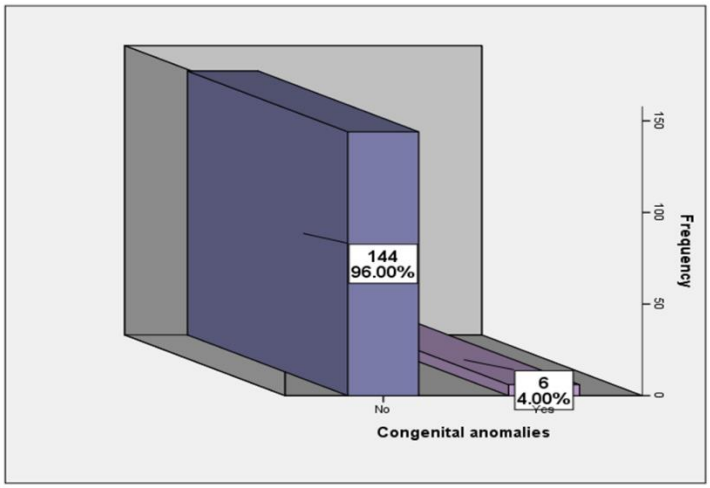

Figure (3.2). Distribution of the participants according to the congenital anomalies of the babies in the neonate units (N=150).

Chapter Four

(Results)

4.1. Introduction

The data that was gathered for analysis is covered in this chapter. The statistical method allowed the investigator to deduce, analyze, coordinate, measure, evaluate and convey the numerical information. The purpose of data analysis is to address inquiries regarding the research. The questions, the design, the procedure for gathering the data, and the degree of measurement of the data all directly influence the data analysis plan. The data is edited, tabulated, analyzed, and interpreted in this chapter**.**

4.1.1. Research question one

What is the level of nurses' knowledge regarding care of preterm neonate with RDS in NICUs at Southern West Bank Hospitals?

Theanalysisofthenurses'knowledgeregardingcareofpretermneonatewithRDSinNICUsrevealedthathalfoftheparticipants75(50.0%) have moderate level, as seen in Table (4.1).

Table (4.1). Description of the nurses' knowledge regarding care of preterm neonate with RDS in NICUs (N=150)

Variable		**N**	**(%)**
Knowledge	Low knowledge level	53	35.3
	Moderate knowledge level	75	50.0
	High knowledge level	22	14.7

N=sample; %=percentage

According to the nurses who have attended specialized training for premature with RDS, the analysis of the nurses' knowledge regarding care of preterm neonate with RDS in NICUs revealed that 28 (48.3%) have moderate level, as seen in Table (4.2).

Table (4.2). Description of the professional' Knowledge level who had specialized training for premature with RDS (N=58)

Variable		**N**	**(%)**
Knowledge	Low knowledge level	24	41.4
	Moderate knowledge level	28	48.3
	High knowledge level	6	10.3

According to participants' answers regarding knowledge of Premature Infants with Respiratory Distress Syndrome, the analysis revealed varying levels of accuracy. The questions most frequently answered correctly were" The single most important cause of morbidity in preterm neonate sis, "with 138 (92.0%) responses correct, followed by" Respiratory failure characterized by," with 133 (88.7%) correct responses, and" The primary route of preventing infection in preterm infants with RDS is, "with 132(88.0%) correct responses. Conversely, the questions with the lowest correct responses were" Respiratory ventilator is responsible for, "with only 15(10.0%) correct responses, "Characteristics of a preterm baby with RDS are, "with 21(14.0%) correct responses, and "Non- respiratory management of RDS includes all of the following except, "with41(27.3%) correct responses. These findings are summarized in Table (4.3).

Table (4.3). Distribution of the answers regarding knowledge of Premature Infants with Respiratory Distress Syndrome (N=150)

Question	**Correct N (%)**	**Incorrect N (%)**
1. Respiratory distress syndrome is……	113 (75.3)	37 (24.7)
2. Respiratory distress syndrome (RDS) also known as	100 (66.7)	50 (33.3)
3. Respiratory distress syndrome results from insufficient levels of pulmonary	98 (65.3)	52 (34.7)
4. Respiratory failure characterized by	133 (88.7)	17 (11.3)
5. Preterm birth is	120 (80.0)	30 (20.0)
6. The single most important cause of morbidity in preterm neonates is	138 (92.0)	12 (8.0)

Question	Correct N (%)	Incorrect N (%)
7. All of the following symptoms of RDS usually appear within minutes after births except	125 (83.3)	25 (16.7)
8. Nursing care of infant with RDS is demanding crucial part requiring	112 (74.7)	38 (25.3)
9. Neonatal Intensive Care Unit (NICU) is	102 (68.0)	48 (32.0)
10. Fetal lung maturity can be accelerated before delivery by maternal administration of	125 (83.3)	25 (16.7)
11. Care and management of preterm neonates with severe RDS in	106 (70.7)	44 (29.3)
12. Nurses play an important role in caring for neonates with RDS including	119 (79.3)	31 (20.7)
13. Risk Factors of Respiratory Distress Syndrome includes	127 (84.7)	23 (15.3)
14. Nurse instructs the pregnant mother to reduce risk for having a neonate with RDS, she should to	109 (72.7)	41 (27.3)
15. Characteristics of preterm baby with RDS are	21 (14.0)	129 (86.0)
16. The primary route of preventing infection in preterm infant with RDS is	132 (88.0)	18 (12.0)
17. The first-choice treatment after surfactant replacement is.	70 (46.7)	80 (53.3)
18. Non-respiratory management of RDS include all of the following except	41 (27.3)	109 (72.7)
19. Apnea in RDS infant is	114 (76.0)	36 (24.0)
20. Respiratory ventilator is responsible for	15 (10.0)	135 (90.0)
21. If an infant does not breathe immediately after birth, what do you do first?	115 (76.7)	35 (23.3)
22. Why oxygen is provided to RDS infant is humidified?	94 (62.7)	56 (37.3)
23. Arterial Blood gases indicate the need for using mechanical ventilation.	82 (54.7)	68 (45.3)
24. Care of baby with ETT include all EXCEPT	70 (46.7)	80 (53.3)

4.1.2. Research question two

What is the level of nurses 'performance regarding care of preterm neonate with RDS in NICUs at Governmental Southern West Bank Hospitals?

The analysis of the nurses' performance regarding care of preterm neonate with RDS in NICUs revealed that 99(66.0%) have good level ,as seen in Table (4.4).

Table (4.4). Description of the nurses' performance regarding care of preterm neonate with RDS in NICUs (N=150)

Variable		**N**	**(%)**
Performance	Poor performance level	10	6.7
	Fair performance level	41	27.3
	Good performance level	99	66.0

N=sample;%=percentage

According to the nurses who have specialized training for premature with RDS ,the analysis of the nurses' performance regarding care of preterm neonate with RDS in NICUs revealed that most of the participants37(63.8%)have good practice level ,as seen in Table (4.5).

Table (4.5). Description of the professional' performance level who had specialized training for premature with RDS (N=58)

Variable		**N**	**(%)**
Performance	Poor performance level	4	6.9
	Fair performance level	17	29.3
	Good performance level	37	63.8

N= sample; %= percentage

4.1.3. Research question three

Does knowledge and practice regarding nursing care provided for preterm neonates with RDS in NICUs at hospitals in Southern West Bank Hospitals affected by selected demographic variables?

An independent t-test, ANOVA test, and Pearson correlation test were used to assess differences between variables.

An independent test was conducted to evaluate the variances between nurses' knowledge and performance concerning the care of preterm neonates with RDS in NICUs, considering gender as a factor. The analysis indicated that only performance exhibited significance (P≤0.05). Specifically ,the mean scores for practice among male nurses (79.3±14.3) were lower compared to female nurses (84.7±12.3), as seen in Table (4.6).

Table (4.6). Differences between nurses ’knowledge and performance regarding care of preterm neonate with RDS in NICUs due to gender(N=150)

Variable	**Gender**		**Statistical test**	
	Male	**Female**	**t-test**	**P-value**
	M (SD)	**M (SD)**		
Knowledge	65.0 (15.1)	66.9 (16.4)	0.720	0.480
Performance	79.3 (14.3)	84.7 (12.3)	2.381	0.019*

**Significantatthe0.05level.*

Also, an independent test was used to assess differences between nurses' knowledge and performance concerning the care of preterm neonates with RDS in NICUs, considering their educational level. The analysis revealed that there are no significant differences(P>0.05),as seen in Table (4.7).

Table (4.7). Differences between nurses ’knowledge and performance regarding care of preterm neonate with RDS in NICUs due to educational level (N=150)

Variable	**Educational level**			**Statistical test**	
	Diploma	**Bachelor**	**Master and above**	**F-test**	**P-value**
	M (SD)	**M (SD)**	**M (SD)**		
Knowledge	62.5 (15.0)	67.4 (15.8)	60.8 (18.0)	1.634	0.199
Performance	83.4 (12.6)	82.7 (13.1)	77.8 (17.8)	0.694	0.501

**Significant at the 0.05 level.*

ANOVA test was utilized to examine differences between nurses' knowledge and performance regarding the care of preterm neonates with RDS in NICUs, taking in to account their experience levels. The analysis revealed no significant differences(P≤0.05),as seen in Table (4.8).

Table (4.8). Differences between nurses' knowledge and performance regarding care of preterm neonate with RDS in NICUs due to experience (N=150)

Variable	**Experience**			**Statistical test**	
	Lessthan5years	**5-10years**	**Morethan10years**	**ANOVA test**	**P-value**
	M (SD)	**M (SD)**	M (SD)		
Knowledge	65.2 (17.0)	67.2 (15.1)	66.8 (14.4)	0.248	0.780
Performance	81.5 (13.6)	82.4 (13.3)	85.3 (12.8)	0.812	0.446

**Significant at the 0.05 level.*

An independent test was used to assess differences between nurses' knowledge and performance regarding care of preterm neonate with RDS in NICUs and training courses during working in neonate unit. The analysis revealed no significant differences (P≤0.05),as shown in Table (4.9).

Table (4.9). Differences between nurses 'knowledge and performance regarding care of preterm neonate with RDS in NICUs due to training courses during working in neonate unit (N=150)

Variable	**Training courses during working in neonate unit**		**Statistical test**	
	Yes	**No**	**Ttest**	**Pvalue**
	M (SD)	**M (SD)**		
Knowledge	65.2 (15.4)	67.6 (16.7)	0.881	0.380
Performance	81.9 (13.4)	83.4 (13.3)	0.651	0.516

**Significant at the 0.05 level.*

Also, an independent test was employed to evaluate differences between nurses' knowledge and performance regarding the care of preterm neonates with RDS in NICUs

,considering their specialized training for premature with RDS. The analysis revealed no significant differences (P≤0.05),as shown in Table (4.10).

Table (4.10). Differences between nurses 'knowledge and performance regarding care of preterm neonate with RDS in NICUs due to specialized training for premature with RDS (N=150)

Variable	**Specialized training for premature with RDS**		**Statistical test**	
	Yes	**No**	**T test**	**P value**
	M (SD)	**M (SD)**		
Knowledge	63.7 (16.2)	67.7 (15.6)	1.486	0.139
Performance	81.3 (14.0)	83.3 (13.0)	0.875	0.383

**Significant at the 0.05 level.*

The Pearson correlation test was utilized to examine the relationship between nurses' knowledge and performance regarding the care of preterm neonates with RDS in NICUs and their age .The analysis revealed no significant relationship between the knowledge and practice scores and age variables(P≤0.05), as shown in Table (4.11).

Table (4.11). Relationship between nurses 'knowledge and performance regarding care of preterm neonate with RDS in NICUs and age (N=150)

Variable	**Age** **r (P-value)**
Knowledge	0.062 (0.453)
Performance	0.088 (0.285)

**Correlationissignificantatthe0.05level(2-tailed).*

***Correlationissignificantatthe0.01level(2-tailed).*

Chapter Five

(Discussion and Recommendations and Conclusion)

5.1. Discussion

This chapter provide the main conclusion and recommendations for the decision makers to focus on improving nurses care provided for preterm neonates with RDS in the southern west bank hospitals.

The results revealed that half of the participants (50.0%) of nurses have moderate level of knowledge regarding care of preterm neonate with RDS in NICUs. Which indicated that the reality of nurses' knowledge regarding care of preterm neonate with RDS in NICUs was not at the required level. After referring to many previous studies, there was agreement in the results regarding the knowledge of nurses working in intensive care units for prematurity, the results of the studies regarding knowledge were not as required.

According to researcher Hani Awad's survey, the average percentage of knowledge in the Gaza Strip was 76.96%. For newborns with RDS, the standard of care was 84%. Additionally, this investigation found no statistical significance variations in nurses' experience, job titles, age, gender, and levels of knowledge about the care of neonates with RDS. Hospitals and nurses' knowledge levels did not differ statistically significantly, but there were variations in nurses' levels of practice when it came to newborn care Redeeze. (awad, 2020).

There is agreement with the study conducted by Elsayed in Makkah Al-Mukarramah at Al-Noor Specialized Hospital regarding the level of knowledge among nurses working in intensive care departments. There is also agreement with my study of a study conducted in the Gaza Strip by Hani Awad in 2020 regarding the level of knowledge among nurses.

In the intensive care units for preterm infants, in addition to there being a consensus in their level of experience and skills.

The results revealed that (48.3%) of the nurses who have attended specialized training for premature with RDS having knowledge regarding care of preterm neonate with RDS in NICUs with moderate level. After referring to many previous studies, there was agreement in the results regarding the practice and skills of nurses working in intensive care units for prematurity, the results of the studies regarding practice and skills were not as required.

Regarding knowledge of Premature Infants with Respiratory Distress Syndrome, the results showed varying levels of accuracy. The most frequently answered correctly items were "The single most important cause of morbidity in preterm neonates is," followed by "Respiratory failure characterized by,", and "The primary route of preventing infection in preterm infants with RDS is,". Conversely, the items with the lowest correct responses were "Respiratory ventilator is responsible for,", and "Characteristics of a preterm baby with RDS are,", and "Non-respiratory management of RDS includes all of the following except,".

The study was conducted at the Neonatal Intensive Care Unit of Al-Noor Specialist Hospital and the Heraa General Hospital in Makkah Al-Mukramah. A handy sample of fifty nurses who worked in the NICU. A study conducted on newborns with RDS revealed that while most nurses at Makkah Al-Mukarrama's Heraa General Hospital and AL Noor Specialist Hospital performed competently in the care of newborns with RDS, their knowledge of the condition was inadequate (Elsayed et al., 2013).

The results revealed that (66.0%) of nurses have good level performance regarding care of preterm neonate with RDS in NICUs.

The results showed that most of the nurses (63.8%) who have specialized training for premature with RDS, having a good practice level performance regarding care of preterm neonate with RDS in NICUs.

An independent t-test, ANOVA test, and Pearson correlation test were used to assess differences between variables.

The results showed that there were no statistically significant differences at ($P \leq 0.05$) between males and females in their knowledge level regarding care of preterm neonate with RDS in NICUs. While the results showed that there were statistically significant differences in performance level regarding care of preterm neonate with RDS in NICUs between male nurses and females in favor of females. Which indicates that the performance level of female nurses is substantially higher than that of males.

The researcher attributes the previous result to the fact that female nurses have more interest than males in caring for of preterm neonate with RDS in NICUs. This is due to the nature of women, their affection towards infants and kids, and their experience in caring for them.

The results showed that there were no statistically significant differences at ($P \leq 0.05$) between nurses in their knowledge and performance level regarding care of preterm neonate with RDS in NICUs due to the change in their educational levels.

Also, the results showed that there were no statistically significant differences at ($P \leq 0.05$) between nurses in their knowledge and performance level regarding care of preterm neonate with RDS in NICUs taking into account their experience levels.

The results revealed no significant differences ($P \leq 0.05$) between nurses' knowledge and performance regarding care of preterm neonate with RDS in NICUs and training courses during working in neonate unit.

Also, the results revealed no significant differences (P≤0.05) between nurses' knowledge and performance regarding the care of preterm neonates with RDS in NICUs, considering their specialized training for premature with RDS.

The results revealed no significant relationship (P≤0.05) between the nurses' knowledge and practice scores and between their age regarding the care of preterm neonates with RDS in NICUs.

Regarding practical practice among nurses, there was agreement with the study that was conducted in the Gaza Strip by researcher Hani Awad in 2020, as it agreed that there were statistical indications between male and female, as it was shown that female is more careful in their practices towards premature infants with respiratory distress syndrome. There is also agreement in It relates to the level of education, level of experience, and ages, as there is no statistical significance, while there is a difference regarding practice in the direction of nurses who have taken training courses, as there was a difference between the two studies, and the reason for this is that most of the nurses are in the intensive care departments for preterm infants in the study areas in the Gaza Strip. They had received courses and training, unlike those nurses in intensive care departments in the southern West Bank hospitals. Most of them had not received training and courses regarding premature infants.

5.2. Recommendations and Future Work

Based on findings of the current study, the researcher would emphasize many useful recommendations that may help in promoting and improving nursing care provided for preterm neonates with RDS as following:

1. Nurses working in the NICUs need periodical training program to improve their knowledge and performance about care of neonates with RDS.
2. Standardized nursing procedures and guidelines should be available to guide the nurses in dealing with high-risk neonates in the NICUs.
3. Periodic educational programs are needed to update the knowledge and practices for nurses working in NICUs.
4. Developing effective orientation program before starting work in NICU.
5. Further studies should be conducted to improve nurses' knowledge and performance regarding care of neonates with RDS in the NICUs.

5.3. Conclusion

Based on findings of the current study and the previous studies ,it can be concluded that:

It revealed that (66.0%) of nurses have a good level of performance regarding care of preterm neonate with RDS in NICUs. In contrast, half of the participants (50.0%) nurses have moderate level of the knowledge regarding care of preterm neonate with RDS in NICUs.

It has been shown that specialized training in cases of premature infants with RDS contributes to an acceptable extent to improving the performance of nurses in caring for children with RDS.

Nesting revealed that nurses' awareness level about the basic method of infection prevention in premature infants with RDS was high (88.0%).

There were no significant differences between nurses' knowledge regarding care of preterm neonate with RDS in NICUs according to their gender, educational level, experience training courses during working in neonate unit, specialized training for premature with RDS, and age.

It was found that the performance of female nurses was significantly higher than that of male nurses in regarding care of preterm neonate with RDS in NICUs.

Whereas, there were no significant differences between nurses' performance regarding care of preterm neonate with RDS in NICUs according to their educational level, experience training courses during working in neonate unit, specialized training for premature with RDS, and age.

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Appendices

Appendix A/Study tool template (Questionnaire)

Arab American University

Faculty of Graduate Studies

An Evaluation of The Nursing Care Given to Premature Infants with Respiratory Distress Syndrome in The Southern West Bank

عزيزي/ عزيزتي المشارك/ة

أنا الباحث الطالب/عبد الحميد حسن عبد الحميد عواودة طالب ماجستير في الجامعة العربية الأمريكية كلية الدراسات العليا تخصص تمريض الخداج أقوم بإجراء هذا البحث كمتطلب رئيسي من متطلبات الحصول على شهادة الماجستير. إن الهدف الرئيسي لهذه الدراسة هو تقييم الرعاية التمريضية المقدمة للأطفال الخدج الذين يعانون من متلازمة الضائقة التنفسية من وجهة نظر الممرضين والممرضات العاملين داخل أقسام العناية المركزة لحديثي الولادة في مستشفيات جنوب الضفة الغربية (الخليل، بيت لحم). أقدر مشاركتكم الهامة في هذه الدراسة والتي من الممكن ان تستغرق حوالي 20 دقيقة، مع العلم إن المشاركة اختيارية ولك حق الانسحاب متى تشاء مع ضمان سرية المعلومات المقدمة، وان هذا البحث لن يستخدم إلا لأغراض البحث العلمي فقط

يرجى إجابة جميع الأسئلة الواردة في الاستبانة وفقا بما لديك من معرفة وممارسة عملية

ولكم جزيل الشكر والتقدير

الباحث / عبد الحميد العواودة

أنا ..... (اسم المشارك / اختياري) أوافق بموجبه على المشاركة في البحث السريري (الدراسة السريرية / دراسة الاستبيان / تجربة الأدوية) المحددة أدناه:

تقييم الرعاية التمريضية المقدمة للخدج الذين يعانون من متلازمة الضائقة التنفسية في جنوب الضفة الغربية لتحقيق درجة: الماجستير، في برنامج: الدراسات العليا. تمريض الخداج. في الجامعة العربية الامريكية.

تم شرح وتفسير طبيعة الدراسة وهدفها عن طريق الباحث: عبد الحميد حسن العواودة.

لقد تم إخباري عن طبيعة البحث من حيث المنهجية والآثار السلبية المحتملة والمضاعفات (حسب ورقة معلومات المشارك).

بعد معرفة وفهم جميع المزايا والعيوب المحتملة لهذا البحث، أوافق طواعية بمحض إرادتي على المشاركة في البحث السريري المحدد أعلاه.

أفهم أنه يمكنني الانسحاب من هذا البحث في أي وقت دون إبداء أي سبب على الإطلاق.

التاريخ: ..... إمضاء المشارك:.....

في حضور: -

اسم: .....

التسمية/ اللقب: ..... إمضاء: .....

(شاهد على توقيع المشارك)

أؤكد أنني أوضحت للمشارك طبيعة وهدف البحث المذكور أعلاه.

التاريخ: ..... إمضاء: .....

(الباحث)

Appendix B/ Ethical Approval

Arab American University
Institutional Review Board - Ramallah

الجامعة العربية الأمريكية
مجلس اخلاقيات البحث العلمي – رام الله

IRB Approval Letter

Study Title: "Assessment of Nursing Health Care Provided for Preterm Neonates Complaining from Respiratory Distress Syndrome in Southern West Bank"

Submitted by: Abed Alhameed Hassan Abed Alhameed Awawdeh

Date received: 5th December 2023

Date reviewed: 3rd January 2024

Date approved: 3rd January 2024

Your Study titled **"Assessment of Nursing Health Care Provided for Preterm Neonates Complaining from Respiratory Distress Syndrome in Southern West Bank"** with archived number R-2024/A/5/N was reviewed by the Arab American University IRB committee and was approved on the 3rd January 2024.

Sajed Ghawadra, PhD
IRB-R Chairman
Arab American University of Palestine

الجامعة العربية الأمريكية - فلسطين
مجلس اخلاقيات البحث العلمي - رام الله
IRB-R
ARAB AMERICAN UNIVERSITY-PALESTINE
INSTITUTIONAL REVIEW BOARD - RAMALLAH

General Conditions:

1. Valid for 6 months from the date of approval.
2. It is important to inform the IRB-R with any modification of the approved study protocol.
3. The Bord appreciates a copy of the research when accomplished.

رام الله – فلسطين
Tel: 02-294-1999 **E-Email:** IRB-R@aaup.edu **Website:** www.aaup.edu

Appendix C/ Letter for facilitate task

Arab American University
Faculty of Graduate Studies

الجامعة العربية الأمريكية
كلية الدراسات العليا

2024/1/9

الى من يهمه الامر

تسهيل مهمة بحثية

تحية طيبة وبعد،

تُهديكم كلية الدراسات العُليا في الجامعة العربية الأمريكية أطيب التحيات، وبالإشارة الى الموضوع أعلاه، تشهد كلية الدراسات العُليا في الجامعة أن الطالب **عبد الحميد حسن عبد الحميد دردس** والذي يحمل الرقم الجامعي 202113142 هو طالب ماجستير في برنامج تمريض حديثي الولادة ويعمل على رسالة الماجستير الخاصة به بعنوان:

" تقييم الرعاية التمريضية المقدمة للخدج الذين يعانون من متلازمة الضائقة التنفسية في جنوب الضفة الغربية"، تحت إشراف الدكتورة نجوى صبح. نأمل من حضرتكم الإيعاز لمن يلزم لمساعدته للحصول على المعلومات اللازمة للدراسة، علماً أن المعلومات ستستخدم لغاية البحث فقط وسيتم التعامل معها بغاية السرية، وقد أُعطي هذه الرسالة بناءً على طلبه.

وتفضلوا بقبول فائق الاحترام

عميد كلية الدراسات العليا

د. نوار قطب

كلية الدراسات العليا
FACULTY OF GRADUATE STU

الملخص

العنوان:

تقييم الرعاية التمريضية المقدمة للأطفال الخدج الذين يعانون من متلازمة الضائقة التنفسية في مستشفيات جنوب الضفة الغربية

مقدمة:

الأطفال الرضع معرضون لخطر الإصابة بمتلازمة الضائقة التنفسية، متلازمة الضائقة التنفسية الوليدية هي سبب رئيسي للمرض والوفاة عند الخدج. يتم تعريف متلازمة الضائقة التنفسية أو مرض غشاء الهيالين على أنه متلازمة ناجمة عن قصور في انتاج المادة التي تساعد على نمو الرئتين مما يؤدي الى عدم النضج الهيكلي في الرئتين عند الولادة مما يؤدي الى انخفاض وظيفة الرئة.

الهدف:

الهدف من هذه الدراسة هو تقييم المعرفة العلمية والممارسة العملية للممرضين والممرضات فيما يتعلق برعايتهم المقدمة للأطفال الخدج المصابين بمتلازمة الضائقة التنفسية في وحدات العناية المركزة لحديثي الولادة في مستشفيات جنوب الضفة الغريبة الحكومية والخاصة

المنهجية:

لقد كانت الدراسة وصفية اجريت في وحدات العناية المركزة لحديثي الولادة في جميع مستشفيات جنوب الضفة الغربية وهي مستشفى الخليل الحكومي ومستشفى الاهلي ومستشفى الميزان ومستشفى الهلال الاحمر التخصصي للأطفال ومستشفى يطا الحكومي ومستشفى الكاريتاس ومستشفى ماريوسف (الفرنساوي) ومستشفى بيت جالا الحكومي, وتضمنت العينة جميع الممرضين والممرضات العاملين في وحدة العناية المركزة في مستشفيات جنوب الضفة الغربية, وكان العدد الاجمالي **150**،

استخدم الباحث استبيانا ذاتيا لجمع البيانات من المشاركين في الدراسة لتقييم المعرفة للممرضين والممرضات فيما يتعلق بالرعاية التمريضية المقدمة للأطفال الخدج الذين يعانون من متلازمة الضائقة التنفسية.

النتائج:

كشفت نتائج الدراسة الحالية أن النسب المئوية للمعرفة كانت (**66.15**%) ونسبة الرعاية العملية لدى المشاركين كانت (**82.0**%) للأطفال المصابين بمتلازمة الضائقة التنفسية. وتبين أيضًا أن التدريب المتخصص في حالات الأطفال المبسترين المصابين بمتلازمة الضائقة التنفسية يساهم إلى حد مقبول في تحسين أداء الممرضين في هذا المجال. وأن (88.0%) من الممرضين لديهم مستوى وعي مرتفع حول الطريقة الأساسية للوقاية من العدوى عند الأطفال الخدج المصابين بمتلازمة الضائقة التنفسية. كشفت النتائج عدم وجود فروق دالة إحصائياً بين معرفة الممرضات فيما يتعلق برعاية الأطفال الخدج المصابين بمتلازمة الضائقة التنفسية في وحدات العناية المركزة لحديثي الولادة وفقًا لمتغيرات الجنس، والمستوى التعليمي، وخبرة الدورات التدريبية أثناء العمل في وحدة حديثي الولادة، والتدريب المتخصص للأطفال الخدج المصابين بمتلازمة الضائقة التنفسية، والعمر. من ناحية أخرى، وجد أن أداء الممرضات الإناث كان أعلى بكثير من أداء الممرضين الذكور فيما يتعلق برعاية الأطفال الخدج المصابين بمتلازمة الضائقة التنفسية في وحدات العناية المركزة لحديثي الولادة. في حين لم تكن هناك فروق ذات دلالة إحصائية بين أداء الممرضات تعزى إلى المستوى التعليمي، وخبرة الدورات التدريبية أثناء العمل في وحدة حديثي الولادة، والتدريب المتخصص للأطفال المبسترين المصابين بمتلازمة الضائقة التنفسية، والعمر.

الخلاصة:

خلصت الدراسة الحالية الى انه لم يكن هناك اي علاقة ذات دلالة احصائية بين العمر والجنس والمسمى الوظيفي وخبرة الممرضين ومستويات المعرفة لرعاية حديثي الولادة للأطفال المصابين بمتلازمة الضائقة التنفسية. حيث اوصت الدراسة بضرورة وجود برامج تعليمية وتدريبية لتحسين المعرفة العلمية والممارسة العملية للممرضين والممرضات حول الرعاية بالأطفال الخدج المصابين بمتلازمة الضائقة التنفسية في اقسام العناية المركزة لحديثي الولادة في مستشفيات جنوب الضفة الغربية.