Nurse's of knowledge toward respiratory distress syndrome to have children Maysan Hospital for Child and Childbirth

Mustafa Salim Abdul Alridh [1], Aqeel Azeez Arrar [2], Ghazwan Abdulhussein Al-Abedi [3]

[1] MSc. Assistant Lecturer, Pediatric Nursing Department, College of Nursing/ University of Misan,

[2] MSc. Assistant Lecturer, Adult Nursing Department, College of Nursing/ University of Misan, [3]MSc. Assistant Lecturer, Community Health Nursing Department, College of Nursing/ University of Misan

Abstract

Objective: Assessment Knowledge of nurses in regard to RDS.To identify the kindred among demographic information then nurses knowledge. The sample concerning the study consists of the hospital: A purposive "non-probability" pattern of (100) enjoy were selected. Populations on the lesson have been the staff nurses in pediatric wards concerning misan hospital about infant and childbirth. toughness Convenient model used to be made because of this study; 100 samples gathered representing judgment nursing. The amount period regarding education lasted 4 months started beyond 2017/ 11/15 or ended among 2018 / 5/3. The outcomes regarding that table exhibit up to expectation greater regarding the nurses of youth team in accordance with the discipline sample have been within (20-25) years was once (74.6%). The upon desk also suggests so much the predominance on participants had been girl (84.1%). Also of regarding according to the topics stage regarding education, the outcomes exhibit to that amount extra partially about to them has nursing base permanency graduates (46.0%). In run-on the on table the consequences show so much the dominance of the nurses stability between years concerning journey team in imitation of the study pattern had been within (1-5) was once (85.7%).

Keywords: Respiratory distress syndrom, Knowledge, Nurses.

Introduction

Respiratory misfortune syndrome, RDS, is a multifactorial lung disorder concerning premature infants. It is characterised via capacity about respiratory aborted fetus or poor gas career inside the forward not much hours then start except high-quality therapy is instituted [1]. The important cause involving RDS is a absence over pulmonary surfactant, a lipoprotein mixture then is required among consequence together with decrease ground tension at the air-liquid interface afterward then forestall generalized atelectasis upstairs the alveolar ducts then alveoli. Functional prematurity is the almost vital factor predisposing of consequence with RDS. The misadventure regarding RDS decreases particularly a attribute involving the extent about gestation or RDS fully beside era in accordance with period manifests at term birth. During the Nineteen Nineties the quantity in relation to preterm deliveries, defined namely like delivery of 22 weeks yet 37 whole weeks concerning gestation, accelerated from 5.4% into

1990 since 6.1% of 1999 within Finland [2]. (RDS) is the sound clinical problem confronted by way of preterm infants. It stays a major cause regarding neonatal mortality but illness regardless over advances inside perinatal care. The fall on RDS decreases alongside advancing gestational age, past within regard to 60–80% between kiddies advanced at 26–28 weeks, between imitation including in relation to 15–30% inside this best at 32–36 weeks. The omen is additionally greater permanency favourite among descent toddlers yet babies concerning diabetic mothers. RDS is prompted through developmental shortage regarding surfactant manufacturing yet function, as properly so through structural deficiency regarding the lungs. It can also end result out of surfactant protein genetic disorders. This decrial discusses the pathogenesis concerning RDS between intercourse to fetal lung growth or surfactant metabolism. Risk elements because RDS and preventative tactics intention also stay reviewed [3-5]. The risk concerning RDS rises along with growing

carrying a high vice then mortality burden. Although the recent Berlin definition is probable a great deal better than previous ones, there is still a high variability into both epidemiology and scientific outcomes between various healthcare settings [9]. Finally, respiratory disorder of new child infants, specially premature infants, characterised via reduced quantities on lung surfactant, cyanosis, the construction concerning a glassy membrane upstairs the alveoli on the lungs, or pulmonary collapse. Also referred to as hyaline membrane disease.

Methodology

The present learning used to be performed into longevity addressing nurses' advantage over RDS among Missan city. stability which attached a cross-sectional survey plan in conformity with verify nurses' capabilities concerning RDS and its care and management, such as knowledge regarding RDS drugs, foods, disease pathology then manifestations, outweigh and complications. The sample of the study includes the hospital: A purposive "non-probability" sample of (100) nurse were selected. Populations of the study were the staff nurses in pediatric wards of misan hospital of child and childbirth. Convenient sampling was done for this study; 100 samples collected representing staff nursing. The total period of study lasted four months started from 2017/ 11/15 and ended in 2018/5/3. The study instrument consists of two part. The portion some consists of records regarding the participants' demographic traits on sex, age, level concerning learning , years on job experience and training session. In the 2nd part contains of (20) items, which included question regarded respiratory distress syndrome with infants and questions about the introduction, causes, signs and symptom , nursing care and treatment of respiratory distress syndrome. The questionnaire was submitted to each nurse in the hospital, after taking the initial consent of each nurse to participate in the study. The data collected by the investigator and continuation the teaching staff in the hospital, the purpose of the study assess the nurses' knowledge toward RDS. The data collection process has been performed from February 1st until the March 15th 2013. Each children and parent's complete the interview and filling of the questionnaire format.

Results

The results of this table show that the most age groups of nurses according to the sample of the study

prematurity. Babies good in the past than 29 weeks concerning gestation bear a 60 share hazard regarding growing RDS, but infants produced at complete time period infrequently evermore increase it condition. Maternal gamble elements for preterm starting embody previous preterm birth, periodontal disease, mangy maternal body mass, terrible prenatal care, poverty, life uninsured, and existence a feature regarding a minority party [6] had been located for the duration of autopsy of the lungs regarding children whichever died quickly after birth. In the 1920s, Dr. Kurt von Neergaard, postulated the essence about a mass among the heart to that amount reduces surface tension, allowing the heart in conformity with open. In the 1950s, Dr. John Clements, showed that matter used to be surfactant. Finally, in 1959, Drs. Avery and Mead, each cause at Harvard at the time, validated as surfactant used to be missing within the bosom of premature babies, as used to be the degenerated motive about the respiratory failure seen among half concerning it toddlers [7]. Further instruction over toddler respiratory distress indication (RDS) located so much the need of surfactant used to be a final result about both inadequate production with the aid of the immature courage then a genetic mutation among one regarding the surfactant proteins, SP-B. The genetic form may be rare for the disease so that it does not occur in premature births but occurs in children for a full period. Surface material is necessary for small alveoli in the lung to overcome surface tension and stay open. Without sufficient effort for surface tension, the pressure exerted by the patient tries to open these alveoli either by breathing desperately weak to the child or by a mechanical ventilator that leads to rupture of the alveoli, and this leads to the case of swelling, or pneumothorax, if the air out of the lung and trapped in the Chest wall. Preterm infants may suffer from severe bleeding in the brain (intraventricular hemorrhage), septicemia, and other complications of immature systems, including neurological damage and growth. In survivors, pulmonary dysplasia (chronic pulmonary scarring characterized by long-term need for oxygen) may develop due to high toxicity of oxygen and mechanical ventilation. These complications are related within accordance regarding the speed respecting the disease, begin weight, or gestational age in relation to the babies. They are at increased danger on thriving bronchopulmonary dysplasia [8]. Since its preceding story through Ashbaugh et al. between 1967, the sharp respiratory distress sign (ARDS) has been widely acknowledged so a foremost scientific hassle worldwide,

were (20-25 years) were (74.6%). This study also shows that the majority of female participants (84.1%). As for the educational level, the results showed that about half of them received the graduation certificate from the Institute of Nursing (46%). In addition the above table the results show that the majority of the nurses in years of experience group to the study sample were within (1-5) was (85.7%). Finally the results show that the majority of the nurses in The number of training courses to the study sample were within (5-10) was (88.9).

The results of 20 items of the knowledge questionnaire are related to children RDS from his/her point of view. The results of the study confirmed in Table (1) that the most common age group of nurses in the study sample was within the limits of (20-29) years (92.0%).This result agrees with a study conducted by (Al-Hamza and Al-Asadi, 2017), The study aims: To assess the demographic characteristics and quality of nursing care, and to discover their relationship in terms of age, level of nursing education, and nurse experience in intensive care unit) in AL Nasiriya City that show the majority of samples age (21-25) in ratio (61%) from study sample. also shows that the majority of participants were female this (82.0%). %), study agree with study conducted by(Loutfy et al., 2014), The aim of this study was to evaluate the characteristics of prenatal nursing care, including respiratory distress syndrome, in neonatal intensive care units, where the predominant dominance was gender (100%).

In related to the topics level of education, the outcomes show as approximately half of them has College of nursing graduates (53.0%). this study agree with study conducted by (Babeker, 2015), The purpose about that study used to be To determine

nurse's knowledge related to frequent or events nursing method such as much (hand washing ,nasogastric tube inserting, gavage feeding, oxygen administration, care of baby in incubator, care of baby under photo therapy and teaching of breast feeding) and to assess nurse's practice regarding frequent and routine nursing process such as (hand washing ,nasogastric tube inserting, gavage feeding, oxygen administration, care of baby in incubator, care of baby under photo therapy and teaching of breast feeding). Also in regarding the results of this table show that the majority of nurses in years of experience group to the study sample were within (1¬-5 years) was (86.0%), This finding is consistent with the study conducted by Minsi (2015), which aims to verify the seriousness of nursing or the discovery of association with respect to nursing care (age, nursing education and nurses' experience in intensive care unit) that show the majority of samples in years of experience group to the study sample were within(under 2 years) in ratio (50%)and (2-5 years) in ratio (40%). The results show that the majority of the nurses in The number of training courses to the study sample were within (5-10) was (90.0), This result dieagrees with a study conducted by (Al Asadi, 2017), the study aims: Nurses' knowledge of neonatal care units on the management of respiratory distress syndrome was assessed to determine the effectiveness of the educational program by comparing the talents of nurses in an educational program before or during deployment. According to the discovery of the link between nurse knowledge and demographic information in Diwaniyah City Hospital. AIn addition, the results of Table (3) showed that there is a significant relationship within (age and years of experience in pediatric wardrobes and neonatal intensive care units) and nurses' knowledge of neonatal respiratory distress

Table (1): Distribution of the Study Sample by their Demographic characteristics for nurses. (n= 100 nurses)

-No.	Variables	Characteristics	Frequency	Percent
1-	Age (year)	20-29	92	92.0
		30-39	2	2.0
		40-49	6	6.0
		Total	100	100.0
2-	Gender	Male	18	18.0
		Female	82	82.0
		Total	100	100.0

Cont... **Table (1): Distribution of the Study Sample by their Demographic characteristics for nurses. (n= 100 nurses)**

3-	Level of education	Preparatory graduate	1	1.0
		Nursing institute graduate	39	39.0
		College of nursing graduates	53	53.0
		Graduate studies graduate	7	7.0
		Total	100	100.0
4-	Experience of years	1-5	86	86.0
		6-10	9	9.0
		11-15	2	2.0
		16-20	3	3.0
		Total	100	100.0
5-	The number of training courses	5-10	90	90.0
		11-15	7	7.0
		16-20	1	1.0
		26-30	2	2.0
		Total	100	100.0

No. = number of Variable , n = number of sample, ≥ = more than and equal .

Table (2): Distribution of the participants' level of Knowledge through the Mean of questions related to nurses knowledge toward the Respiratory distress syndrome

List	knowledge	Frequency	Percent
1	Poor	3	3.0
2	Average	29	29.0
3	High	68	68.0
	Total	100	100.0

Table (3): Correlation of the study between demographic characteristics for nurses and total knowledge toward respiratory distress syndrom to have children.

Total Knowledge Demographic characteristics	Correlation		
	No.	Pearson Correlation	P-value
Age	100	1**,*	.000
Gender	100	.034	.737
Level Education	100	1	-------
Years' Experience	100	.159**,*	.057
Training Sessions	100	.117	.246

Conclusion

The study shows that the nurses in the age group (20-29) years they (92.0%) more knowledge about the respiratory distress syndrome. The study shows the nurses is have more knowledge is Female in ratio (84.1%) about the respiratory distress syndrome. The study show the nurses in Nursing institute graduate have more knowledge about the respiratory distress syndrome in ratio (46.0%). The study show the nurses have (1-5) years of experience have more knowledge about the respiratory distress syndrome in ratio (85.7%). The study show the nurses which have (5-10) training courses have more knowledge about the respiratory distress syndrome in ratio (88.9%). The study show the nurses have high level of Knowledge through the Mean of questions related to nurses knowledge toward the Respiratory distress syndrome in average mean of scores (2.34). The study shows that there is a relationship strong between the Demographic characteristics for nurses and knowledge about the respiratory distress syndrome.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the College of Nursing/ University of Misan and all experiments were carried out in accordance with approved guidelines.

References

1. Loutfy A, Mohamed A, Abed N. quality of nursing care provided for preterm infants. Portsaid Scientific Journal of Nursing, 2014; 2(1): 267–282.

2. Mansi Q, Aziz A. Assessment Nursing Care in Neonatal Respiratory Distress. International Journal of Science and Research (IJSR). 2015: 6.391.

3. Aziz A. Assessment Quality of Nursing Care Provided to Neonates with Respiratory Distress Syndrome at Intensive Care Unit in AL- Nasiriyah City Hospitals. KUFA JOURNAL FOR NURSING SCIENCES. 2017; 94-107.

4. Al-Hamza A, Al-Asadi K. Effectiveness of an Educational Program on Nurse's Knowledge about Managing of Respiratory Distress Syndrome on Pediatric Units at Al-Diwaniyah City Hospital. International Journal of Scientific and Research Publications. 2017; 7(9).

5. Ventolini G, Neiger R, Mathews L. incidence of respiratory disorders in neonates born between 34 and 36 weeks of gestation following exposure to antenatal corticosteroids. 2017.

6. Lawless MR., McElderry DH. Nocturnal enuresis: current concepts. Pediatr Rev. 2001;22(12):399-407.

7. Elsayed L, El-Nagger N, Aly S. Nursing care provided for neonates with respiratory distress syndrome in the neonatal intensive care units at Makkah.Life Science Journal,2013;10 (1): 8-11.

8. Robertson PA, Sniderman SH, Laros RK J, Cowan R, Heilbron D, Goldenberg RL, Iams JD, Creasy RK. Neonatal morbidity according to gestational age and birth weight from five tertiary care centers in the United States, 1983 through 1986. Am J Obstet Gynecol. 1992; 166: 1629–1641.

9. Angus DC, Linde-Zwirble WT, Clermont G, Griffin MF, Clark RH. Epidemiology of neonatal respiratory failure in the United States: projections from California and New York. Am J Respir Crit Care Med 2001; 164: 1154–1160.

10. Rodriguez RJ, Martin RJ, Fanaroff AA. Respiratory distress syndrome and its management. In: Fanaroff AA, Martin RJ, eds. Fanaroff and Martin's Neonatal-Perinatal Medicine: Diseases of the Fetus and Infant. 7th ed. St. Louis, MO: Mosby; 2002: 1001–1011.

11. Nkadi PO, Merritt TA, Pillers DA. An overview of pulmonary surfactant in the neonate: genetics, metabolism, and the role of surfactant in health and disease. Mol. Genet Metab. 2009; 97: 95–101.

12. Stoelhorst GM, Rijken M, Martens SE. Changes in neonatology: comparison of two cohorts of very preterm infants (gestational age less than 32 weeks): the Project On Preterm and Small for Gestational Age Infants 1983 and the Leiden Follow-Up Project on Prematurity 1996–1997. Pediatrics. 2005; 115: 396–405.

13. Goldenberg RL, Culhane JF, Iams JD, Romero R. Epidemiology and causes of preterm birth. Lancet 2008; 371: 75–84.

14. Halliday HL. Surfactants: past, present and future. J Perinatol 2008; 28: 47–56.

15. Aziz A., Abdul-Hamza M. Effectiveness of an Educational Program upon nurses ' knowledge toward The Continuous Positive Airway Pressure (CPAP) Machine in Neonatal Intensive Care Unit at Al-Diwanyia City Hospitals. International Journal of Scientific and Research Publications. 2017; 7.

16. Babeker Z. Assessment of Nurse's Knowledge and Practice Regardingcare of Premature Baby in Neonatal Intensive Care unitAt Omdurman Maternity Hospital and Alribat University Hospital. 2015; 18(4): 259-273.

17. Gissler M, Vuori ER, Ritvanen A. Finnish Reproduction Statistics 2000. National Research and Development Centre for Welfare and Health (STAKES). 2002; 1–136.