Performance of Nurses Caring for Neonates with Persistent Pulmonary Hypertension: An Assessment Study

Thesis

Submitted for Fulfillment of the Requirent for Master Degree in Pediatric Nursing (Neonatal Nursing)

By

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(B.Sc. In Nursing 2015)
Demonstrator of Pediatric Nursing
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SUMMARY

Persistent pulmonary hypertension of the newborn (PPHN) is a syndrome of failed circulatory adaptation at birth due to delay or impairment in the normal fall in pulmonary vascular resistance (PVR) that occurs following birth. PPHN is one of the main causes of neonatal morbidity and mortality. It is characterized by sustained elevation of PVR. PPHN is often secondary to parenchymal lung disease (such as meconium aspiration syndrome, pneumonia or respiratory distress syndrome) or lung hypoplasia, but can also be idiopathic. Persistent pulmonary hypertension of the newborn (PPHN) is a relatively common condition which results in a mortality of up to 33%. Up to 40% of neonates treated with nitric oxide (iNO) (Afif et al., 2018).

This study aimed at assessing nurses performance regarding caring for neonates with persistent pulmonary hypertension.

This study was conducted at the Neonatal Intensive Care Unit (NICU) at Children’s Hospital and Obstetric Gynecological Hospital affiliated to Ain Shams University in Cairo and Fayoum General Hospital affiliated Ministry of Health in Fayoum Governorate, the study subjects included in this study were all staff nurses who were working in aforementioned two hospitals and their total number was (100).

Tools were used in data collection are three tools, Pre-designed questionnaire It consists of part 1: characteristics of nurses and characteristics of neonates, part 2: assess nurses knowledge, observation check list to assess their practices and likert scale to assess behavior of nurses. A panel of experts in pediatric nursing validated the tool, and it was pilot tested. Data collection was carried in beginning of November (2019) to the end of April (2020).

The main study findings were as following:
1- More than half 55% of nurses age ranged between 20 < 25 years old, while 9 % of the studied staff nurses their age were 30 or more years old with mean 28.45±5.31. and 86% of them were female. 43% of them had nursing institute and 43% of them their years of experience ranged between 1-<5 years.

2- Overall, the majority of studied neonates 86%- 88% chronological ages is from 1 to less than 10 days and are borne with Cesarean section, the most of studied neonates 95% gestational age is from 37 to 42 weeks, less than two third of studied neonate 62% are male gender and three quarter of them 75% Birth weight from 2.500 to less than 3.500 Kg.

3- In total knowledge about PPHN, about more than half 57% of study subjects were had good knowledge, one quarter 24% of study subjects had average knowledge and 19% of study subjects had poor knowledge about PPHN.

4- Staff nurses had the highest percentage 82% had positive attitude behavior during caring of neonates with PPHN, on the other hand only 18 % of study subjects had negative attitude behavior during caring of neonates with PPHN

5- As regard nurses performance during caring of neonates with PPHN there was more than three quarter 76% of them had competent performance, on another hand less than one quarter 24% of them had incompetent practice.

6- Concerning the relation between total knowledge and staff nurses characteristics, there was statistically significant different with Age, Educational Qualification, Years of Experience and training courses.

7- As regard the relation between total practice and staff nurses characteristics, there was statistically significant different with Educational Qualification and Years of Experience.
8- As regard the relation between total attitude and staff nurses characteristics, there was statistically significant different with Educational Qualification and Years of Experience.

In conclusion, there was high statistically significant positive correlation between total knowledge with total attitude and total practice and was high statistically significant positive correlation between total practice and total attitude.

The study recommends:

1- In-services educational program must be developed for nurses to improve their knowledge about caring for neonates with persistent pulmonary hypertension with emphasizing follow up.

2- Continuous supervision and evaluation of nurses' performance should be performed regarding developmental care during caring for neonates with persistent pulmonary hypertension in hospitals to achieve and maintain the quality of care.

3- Standardized nursing procedure booklets and guidelines for the nurses should be available to guide them for giving the adequate care for neonates with persistent pulmonary hypertension.

4- Nurses should be trained well on the competent level of practice regarding care given to neonates with persistent pulmonary hypertension.