

SUMMARY

Enteral nutrition is support for critically ill neonates. However, advanced in caring for high risk neonates receiving nasogastric tube feeding. It considered to be a life saving for those neonates.

Aim of the study:

The aim of the study is to assess quality of nursing care for high risk neonate receiving nasogastric tube feeding through:

- 1-Assess nurses' knowledge regarding nasogastric tube feeding.
- 2-Assess nurses' performance toward nasogastric tube feeding.

Subjects and Methods:

A) Research Setting:

This study was conducted at Neonatal Intensive Care Units and Surgical Units in both Benha Teaching Hospital and Specialized Pediatric Hospital at Benha city.

Subjects:

The study was included all of pediatric nurses working in the previously mentioned settings (60 nurses), and 150 high risk neonates receiving nasogastric tube.

Tools and technique of data collection:

Data collection through the following tools

1- Questionnaire format:

It was designed by the researcher under the guidance of supervisors, written in an Arabic language and composed of two parts in the form of open ended and closed questions, it includes

Part(1): - Characteristics of the nurses, as age, educational level and years of experience.

- Characteristics of the high risk neonates. It include gestational age, weight on admission, health condition, current weight, and current age.

Part(2): It covers the following items.

- Nurses' knowledge regarding nasogastric tube feeding as concept, advantages, size, types of feeding, and time of change.
- Nurses' knowledge regarding high risk neonates as concept, needs, and clinical manifestation

Scoring system:

A scoring system was followed to obtain the outcome of nurses' knowledge.

- Knowledge contents were divided into (10) questions and each question was assigned a score of (10) and three score level, if the participant obtained 10-<8 it considers good score ,8-<5 considers average knowledge and less than 5 considers as poor knowledge.
- The total score of questionnaire responses was 100, accordingly as more than 75% was considered good knowledge, 60 – <75 was considered average knowledge and less than 60% was considered poor knowledge.

2- Observation check list

It was adapted from *Health workforce Development,(2006)* it modified by the researcher under the guidance of supervisors, It aims at assessing the quality of actual performance of the studied nurses in caring of nasogastric tube feeding. It includes preparation of enteral feeding, insertion of nasogastric tube, feeding process and care after feeding

Scoring system:

The nurse was assigned (2) if performance was done competent and assigned (0) if incompetent. The total scores of nurse's performance was (50). Accordingly 50- 45 was considered competent and less than 45 was considered incompetent

3- Attitude Assessment Sheet:

It was designed by the researcher under the guidance of supervisors aimed at assessing the attitude of the studied nurses toward the nasogastric tube. It was presented in (5) scales according to nurses responses, their attitude were divided into either positive or negative, it include strongly agree, agree, undecided, disagree, and strongly disagree

Attitude Scoring System:

Each scale question was assigned a score (5) if the participant response is strongly agree, score (4) if agree, (3) if undecided, score (2) if disagree, and (1) if strongly disagree. This scale was reversed for questions numbers (2,4,5,7), the total score of the attitude is (60). Accordingly 60-40 was considered positive attitude and less than 40 was considered negative attitude.

Finding of this study can be summarized as follows:

- The mean age for studied nurses was 21.9 ± 3.3 years. the mean years of experience was 4.09 ± 2.7 years. and (80%) of them had nursing secondary school .
- None of the studied nurses reported attending any training program in the field of care to high risk neonates.
- The mean gestational age for high risk neonates was 33.4 ± 2.5 weeks and the mean infant current age was 11.3 ± 10.4 weeks
- As regard diagnosis of high risk neonates, 75.3% of them have respiratory distress syndrome with premature.

- More than one third of the studied nurses (40%) had poor knowledge about concept of high risk neonates and time of change nasogastric tube
- Two third (61.7%) of the studied nurses had good knowledge about size of nasogastric tube feeding.
- About three quarters(71.7%)of the studied nurses had good knowledge about type of feeding through nasogastric tube.
- The majority of nurses (96.6%, 76.7% and 83.4%) had poor knowledge about problems related to nasogastric tube, respiratory problems. and electrolyte alteration respectively.
- As regards nurses' performance (80%) of nurses were incompetent practice about lubrication of nasogastric tube feeding, 66.7% secure tube with tape, 75% placement check. Meanwhile 63.3% of nurses had incompetent level about feeding through gravity.
- As regards nurses' performance 83.3% of nurses had competent practical performance about measure tube for approximate length and 100% of them withdraw tube if neonate cough or cyanotic and irrigate after feeding.
- More than half (56.7%) of nurses had negative attitude about problems of nasogastric tube feeding.
- There was statistical significant relation between nurses' qualification and their knowledge.
- The present study revealed that there was significant relation between nurses' years of experience and their practice.

- There was no statistical relation between nurses' knowledge and their practice.
- There was statistical relation between nurses' practice and their attitude.

CONCLUSION

It can be concluded from the present study that:

1-The majority of nurses had secondary nursing school with years of experience > 5 years, the most of high risk neonates have gestational age between 30-35 week and their condition had preterm with respiratory distress syndrome.

2-More than half of nurses had inadequate knowledge and incompetent performance regarding quality of nursing care for high risk neonate receiving nasogastric tube feeding. and the majority of nurses unaware with complication of nasogastric tube feeding.

Recommendations

the following recommendations can be suggested:

- Periodical educational training program for nurses working at NICU is mandatory.
- Provide procedure book containing all procedure related to feeding of high risk neonate.
- Orientation program for nurses to provide them with learning guide that designed by *Health workforce Development,(2006)*, to improve nurses' performance regarding feeding techniques.
- Orientation program for newly appointed nurses to provide them with the needed information related to quality of feeding to high risk neonates.
- Enhance nurses' performance through continuous training about proper NGT feeding.