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Knowledge on Facility Based Newborn Care (FBNC) among Staff Nurses of Pediatric Hospitals

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Abstract

Neonatal Mortality Rate Is Substantially High In India. Every year nearly 45% of all under 5 child deaths are among Newborn infants, babies in their first 28 days of life or the neonatal period. The main causes of newborn deaths are prematurity and low-birth-weight, infections, asphyxia (lack of oxygen at birth) and birth trauma. Under NRHM scheme GOI has introduced training for all health professionals of facility based newborn care in 2012. To support this training session present research work is thought of to be introduced among Staff nurses of newborn care unit. "A Study to Assess the Knowledge of Staff Nurses on FBNC (facility based new born care) by The Standardized Tool in selected hospitals of Gwalior, with a view to develop information booklet." The Objectives of The study are To assess the knowledge of Staff nurses on certain selected aspects of FBNC (facility based new born care), To find out the association between demographic variables of staff nurses such as work experience in paediatricunit, age of staff nurse, educational qualification, training attended of FBNC, type of working institute, workshops attended, additional diploma in newborn care and their knowledge score in certain selected aspects of FBNC (facility based new born care), To compare the knowledge score of participants on FBNC during child birth and just after child birth. A descriptive research approach was used in the current study. The population compromised of StaffNurses working in governmental and non govt. Paediatric hospitals in Gwalior city of M.P. Purposive sampling technique was used to select a sample of 60 Staff Nurses. the findings of the study revealed that the Mean knowledge of participants about Newborn care during birth is found to be less than mean knowledge score of participants about Newborn care just after birth which is 6.867 and 8.983 resp. with a standard deviation of 1.589 and 1.01. Calculated Median of knowledge score 7 and 9. The information booklet is also provided to all selected participants after the assessment of knowledge deficit areas.

Keywords: FBNC: Facility Based Newborn Care; SNCU: Sick Newborn Care Unit.

Introduction

The trained nurse has become one of the great blessings of humanity, taking a place beside the physician and the priest"-William Osler.

In India 26 million babies are born every year, and 940,000 babies die before one month of life. The neonatal period is only 28 days, and yet at 35/1000 lives births SRS 2008), neonatal mortality contributes about two-thirds of all infant deaths (IMR 50, SRS 2009) and about half of all deaths (U5MR 69, SRS 2008) in children younger than age 5 years. Preventable morbidities such as hypothermia, asphyxia, infections and respiratory distress continue to be the main causes of mortality in the neonatal period. Infant mortality rate in India has steadily declined from 58 per thousand live births

in 2004 to 50 per thousand live births in 2009. However, there is slow progress in reducing neonatal mortality which declined from 37 in 2004 to 35 in 2008. Deaths in the first week of life have shown the least progress. There is a growing rec ognition that in order to mee t the national and Millennium Development Goals (MDGs), a substantial reduction in Neonatal Mortality Rate is needed, and reducing deaths in the first week of life is essential to make progress. Rapidly increasing numbers of newborns are being delivered inhospitals after the launch of JSY scheme. The roll out of IMNCI also leads to increased contact ofnewborns at their households and improved detection and referral of sick newborns to health facilities. Bringing these two together has resulted in an increased number of sick newborns presenting in referral hospitals. Provision and delivery of services for both essential newborn care and care of sick newborns inthe existing health facilities at the district and sub-district level has been found lacking. Facility-basednewborn care has a significant potential for improving newborn survival. It has been estimated that health-facility based interventions can reduce neonatal mortality by as much as 25-30%. Newborn care is strongly influenced by women's social and health status and by home care and practices for mother and newborn, as well as by maternal and newborn cares services (Rodolfo et al. 2000). Traditional care practices at home and in the community inevitably affect maternal and newborn health. In the countries of South Asia women often have many children who are closely spaced; women maintain their full workload during pregnancy and restrict their diet due to fear of delivering a big baby. Women are valued less than men. This attitude may manifest through female infanticide, limited access to food, lack of educational opportunities, restricted mobility, lack of participation in decision-making, early marriage, dominance of mothers in law, expectation to bear many children, heavy workloads, physical and emotional abuse and inadequate access to health services. Lack of understanding of the urgency attached to newborn illnesses or obstetric emergencies, traditions of seclusion of mother and newborn, fatalistic outlook, belief in evil sprits, and lack of family finances to pay for care and transport also cause delay in deciding to seek care.

Need for the Study

The neonatal mortality rate in India is amongst the highest in the world and skewed towards Rural Areas. No availability of trained manpower one of the major hurdles in ensuring quality neonatal care. Low and middle income countries documented alternative strategies that have proved to be favorable in improving neonatal health. Recruiting and retaining trained manpower in rural areas by all means is essential to improve the quality of neonatal care services. Robin, L. (2012) the transition from fetus to newborn requires intervention by a skilled individual or team in approximately 10% of all deliveries. Perinatal asphyxia and extreme prematurity are the 2 complications of pregnancy that most frequently necessitate complex resuscitation by skilled personnel. Approximately 80% of low birth-weight infants require resuscitation and stabilization at delivery. For the surviving infants, effective management of asphyxia in the first few minutes of life may influence long-term outcome. *For this reason, all personnel involved in delivery room care of the newborn should be trained adequately in all aspects newborn care,* Thukral, A, .et al. (2012) .online training and teaching in essential newborn care is feasible and acceptable for in-service nursing professionals and serves as a useful tool for professional development of their practical skills and knowledge to improve the nursing practice and to prevent newborn mortality rate in developing countries. Kangaroo mother care may help growth and development in premature infants. Premature are prone to get medical problems. Kangaroo mother care based on skin to skin contact between mother and infant. It improves the nurturing of premature infants. With the growing complexity of health science, the health professional require knowledge and skills on essential newborn care and to assess newborn to prevent future complications in the newborns life. The investigator's personal experience of working in hospital felt that nurses need training module on essential newborn care according to current guidelines which will help nurses to perform newborn care, so that early neonatal complications can be prevented. Statement of The Problem-A descriptive Study to Assess the Knowledge of Staff Nurses on FBNC (facility based new born care) in selected hospitals of Gwalior, with a view to develop an information booklet.

Objectives

1. To assess the knowledge of Staff nurses on certain selected aspects of FBNC (facility based new born care).
2. To find out the association between

demographic variables of staff nurses and their knowledge score in certain selected aspects of FBNC (facility based new born care).

3. To compare the knowledge score of participants on FBNC during child birth and just after child birth.
4. To develop information booklet for Staff nurses for up gradation of their knowledge and skills for new born care.

Assumptions

1. Staff nurses will have basic knowledge about newborn care.
2. Demographic variables like educational status, workingarea, age, training attended, source of knowledge will influence the knowledge on FBNC (facility based new born care).

Conceptual frame Work

The conceptual framework for this study is based on Ida jean Orlando's dynamic nurse–patient relationship.

Research Methodology

A Quantitative research approach selected to present the study.

Research Design:

The Research Design Selected For The Present Study Is Non Experimental Descriptive Design**.**

Settings of the Study:

Selected Governmental And Non Governmental Paediatric Hospital, Gwalior, M.P.

Population:

Staff Nurses

Target Population:

Staff nurses working in pediatric hospital

Sample Size:

60 staff nurses working in pediatric hospital.

Sampling Technique:

Subjects Are Selected Through Non Probability Purposive Sampling.

Criteria for Sample Selection:

Inclusion Criteria

1. Staff Nurses who were willing to participate in the study.
2. Staff nurses who are working in Newborn care unit.

Exclusion Criteria

1. Staff Nurses who are not willing to participate in the study.
2. Those who did not read or understand either English.

Data Collection Method:

Self-administered –structured questionnaire

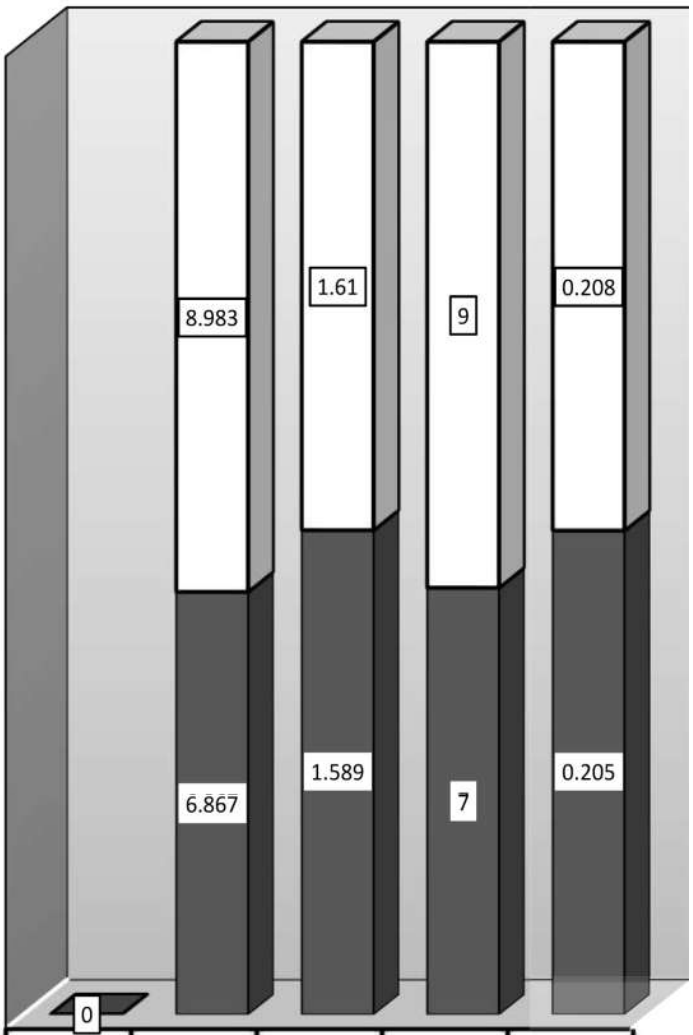
Results

1. Respondents Between The Age Group of 31-40 Show Major Proportion of 28.30%. Among Age Group Respondents Between the Age Group Of 41-50 Years Show Significance With Knowledge Score in Both Areas i.e During And just after child birth.
2. Respondents were majorly belonging to Hindu category and having proportion of 75%.
3. Respondents in the present study were majorly diploma holder Staff Nurses of GNM and having proportion of 51.6%. This variable does not show any significance with knowledge score obtained by staffnurses.
4. Respondents in this study majorly were in the category of 1-2 years of experience in newborn care unit and were holding 41.6%. In these study respondents who were having 5-10 years of experience show a significant co-relation with knowledge score obtained.
5. In the present study mostly respondents were married and having a percentage of 83.3%.
6. 73.3% respondents were belonging to nuclear family and this variable has no significance with the knowledge of staffnurses.
7. 50% respondents were having only 1 child and those who were having 3 or more than 3 children they showed a significant relationship with the obtained knowledge score.

8. Major respondents were working in the hospital where admission was more than 50 patients monthly.
9. 43.3% respondents were having attended more than 3 workshops and CNE and those who have attended more than 6 workshops were significantly more knowledge.

Table 1: Knowledge Score of Participants- Descriptive Statistics

Aspects	Mean	Standard Deviation	Median	Standard Error
Knowledge of Staff nurses on newborn care during birth	6.867	1.589	7	0.205
Knowledge of Staff nurses on newborn care after birth	8.983	1.610	9	0.208



		MEAN	STANDARD DEVIATION	MEDIAN	STANDARD ERROR
KNOWLEDGE ON NEWBORN CARE JUST AFTER BIRTH	0	8.983	1.61	9	0.208
KNOWLEDGE ON NEWBORN CARE DURING BIRTH	0	6.867	1.589	7	0.205

Fig. 1:

Mean knowledge of participants about Newborn care during birth is found to be less than mean knowledge score of participants about Newborn care just after birth which is 6.867 and 8.983 resp. with a standard deviation of 1.589 and 1.01. Calculated Median of knowledge score 7 and 9.standard error observed in the study is negligible with a value of 0.205 and 0.208.

Implications of The Study

Findings of the study have implications in following areas-

Nursing Education

1. Guidelines given by neonatology forum can formulated in nursing curriculum.
2. Evidence based practice can be generated through more researches.
3. Competency based approach for teaching the students can be utilized for integration of newborn care knowledge and practices.
4. Nursing students should impart the knowledge on facility based newborn care to trained dais, skilled birth attendants.

Maternity and Child Care Nursing

- Competency based knowledge development of caregiver.
- Training on FBNC can be a major step towards decreasing MMR, IMR.
- Economic loss during hospital emergency can be overcome by FBNC workshop, seminar etc.
- Adequate scientific knowledge can be disseminated.

Nursing Research

1. Extensive research studies can be undertaken in different fields to quantify the magnitude of deficiency of knowledge on FBNC.
2. Participative research regarding FBNC will ensure direct involvement in MCH program.
3. Research can address the 'at risk' issues causes and management of sick newborns.
4. Evidence based practices can be identified while research on FBNC.

Nursing Administration

a. Set up of NICU can be managed by keeping in mind FBNC.
b. Equipment supply and material management can be extensively improved in newborn care units.
c. Simulation lab. Can be setup in hospital and educational institutes.

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