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A Study to Assess the Effectiveness of Planned Teaching Programme Regarding the Management of Selected Neonatal Health Problems among Mothers of Neonates in a Selected Hospital at Kolar District

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Abstract

Background: From birth to initial four weeks of life is known as Neonate. The term early neonatal phase describes fundamental week of life. While the late neonatal period refers to the time between 7 and 28 days of existence. Minor newborn health problems are the main cause of morbidity in several children. Particularly common in low birth weight and premature babies and these minor problems may be the indication of major underlying diseases.

Methods: The main target of this research is to assess and compare the impact of organised teaching methods on selected minor neonatal health problems among the mother of neonates. The study was carried out at SNR District Hospital, Kolar. There are 60 mothers of neonates admitted in postpartum unit were chosen for the research. The Quantitative Pre experimental study design was employed for the investigation. Mothers of neonates (n=60) were admitted in postnatal ward at SNR district hospital, Kolar were picked up by convenient sampling method. Likelihood of the research clarification of that instrument was evaluated through pilot study. Pre-test was led by utilizing questionnaire method. Treatment then introduced as well as after seven days after testing was performed for the same group. **Results :** In this research, the investigator analyzed that the average mean percentile of the pre-test result was 27.16% with the mean (8.15) and standard deviation (2.18). The post-test average mean percentage was 77.86 % with mean (23.36) and standard deviation, too (2.33).

Interpretation and conclusion: The research found that there is a remarkable advancement in relation to understanding of mothers of neonates after

receiving the organised educational programme on management of neonatal health problems.

Keywords: Neonates; Teaching; Effectiveness; Health problem

Introduction

Neonatal period is for 28 days of creature; this is to be the most critical stretch in the life of an infant. Days 1-28 of life, the newborn stage – is the most perilous duration for a child's persistence. This time frame the neonates are more likely to develop the minor and major health problems. Little one experience the elevated likelihood of expiring during the initial age of entity¹. Globally, 2.4 million children before one month of age. Approximately there are 6,500 newborn deaths occur every day. Within the first day, one third of all newborn deaths occurs and closes to tripartite appears throughout the foremost age of entity².

Present trend shows that greater than 60 countries will miss the Sustainable Development Goals (SDG) mark of lowering neonatal fatality to as low as 12 demises per 1,000 live born, by 2030. By 2050 about 50% of them won't accomplish the goal. Countries of the South Asian continent are carrying about 80 percent portion of the neonatal mortality burden in 2016 and India is one among the countries³. In spite of certainty that the newborn death figure has decreased by 40% globally from 1990 to 2013 and this decrease hasn't occurred in maintaining 56% decrease in lower than five-year fatality rate worldwide for the identical time. 86 million neonatal demise documented globally during 1990 and 2013, more than 65% of them happened in ten nations. Among these nations highest 25% of deaths occurred in India⁴.

India contributes about 20% of births worldwide and highest number of neonatal age deaths with in a country. There are 26 million births occurs in India. Of these, 1.2 million lose one's life prior to completing initial four weeks of creature, throughout the neonatal phase. Two new born deaths occur every minute in

this vast country. India thus contributes nearly 30% to the four million global neonatal deaths. Rate of neonatal death in India is almost one in three babies in the World, who die before they are 4 weeks old⁵. Prime sources of deaths in newborns in India accounts to respiratory disorders, GI disruptions, Asphyxia, severe dehydration Diarrhoea etc., over 1.25 million suspicious cases have been recorded and were belonged to Karnataka, Maharashtra and other impacted states were Andhra Pradesh, Madhya Pradesh, Tamil Nadu and Gujarat⁶.

Even though the giving birth only lasts a few hours but it is most dangerous time of life. Newborns are the most sensitive, delicate, & vulnerable form that is easily damage if not taken care of. So immediate and effective treatment is required to enhance the state of health of a neonate⁷.

Children are more likely to various minor health problems especially it's more common in Neonatal period. Early detection and anticipation of the problems may prevent impairment disability and fatal outcome. The common problems found in health care settings or in community or at home, need immediate care³. Essential Newborn care as per WHO comprises thermal protection, hygiene, initiation of breathing, Exclusive breast feeding, immunization, management of minor illness, cord care and care of LBW¹.

In India large number of parents is not conscious of handling minor problems of newborn (vomiting, constipation, diarrhoea, physiological jaundice, umbilical cord infection, and rashes). Predominance of the new born issues are exclusive to postpartum period, due to inadequate maternity care, poor mother health during pregnancy, inappropriate management and uncleanliness while delivery, missing newborn care and discriminatory care. Few teaching programmes

like planned health education, instruction teaching programme and structured instruction programme are conducted for postnatal mothers⁸⁻¹⁰. The common health problems include napkin rash, abdominal colic, hiccups, regurgitation, neonatal hypoglycaemia, constipation. Mothers play a starring role in recognizing small advancing abnormalities and primary signs of infectious activity. Therefore, caregiver needs fundamental expertise in basic realization and competency in concerning to essential newborn care .

Material and Methods

Pre-experimental one group pre-test and post-test research design was employed for investigation. Inquiry was carried out at postnatal ward, SNR Hospital at Kolar. The total bed strength of the hospital is with 80 to 100 beds in postnatal ward. Total 60 mothers of neonates were chosen using convenient sampling method who met the criteria for inclusion.

Rationality of the instrument content was confirmed by 10 specialists, composed of seven Nurse Educators, department of Pediatric Nursing, two Pediatricians and one analyst. Professionals were seeking to display their judgement proposal and advice with respect to the pertinence of that tool for advance qualification to enhance the objectivity and content fulfillment of elements. In order to confirm trustworthiness of tool, the reliability was generated by operating Split-Half method. Spearman-Brown Prophecy procedure was then applied to determine the reliability coefficient for whole test and it was noted to be $r=0.86$ which meant very trustworthy. Tool was organised based on the goals of the investigation. An organised comprehensive questioner was prepared to evaluate the awareness of the care givers of the neonate. Two parts make up the tool: Part A: Demographic data and Part B: Constructed learning questionnaire regarding management of neonatal health problems with 30 questions. The accurate response was attained 01 marks and inaccurate reply gained 0 marks. Lawful permission was taken from institute's legal committee. Permission was obtained from Hospital authority before conducting the study. Patient information sheet and obtained permission from the mothers of neonates before conducting the investigation. Preliminary test was done by utilising an organised awareness questions by arranged discussion plan on (day one) accompanied by on the identical day, the organised education strategy was given to the mothers of neonate with respect "the management of selected neonatal health problems", subsequently terminal test was carried out by operating the same understanding questions by planned meeting agenda following seven days of the administration of the organised education scheme.

Scoring of knowledge was categorized into inadequate knowledge (0-15), moderately adequate (16 to 22) and adequate knowledge (23 -30) to describe the extent of

consciousness related neonatal health problems among the caregivers of neonate at initial test and final test level. Data obtained were utilized in the research was analyzed to ascertain the outcome of shaped awareness initiative in relation to newborn health problems among the parents of neonate. Paired t test was employed to check the hypotheses whether degree of knowledge is increased significantly from preliminary test to end test. Relationship among after-test knowledge levels with their chosen demographic variable was analyzed by adopting 'Chi-square' test. SPSS was used for the analyses.

Results

Section 1: Explanation of demographic variables of mothers of neonates

The majority (40 %) of mothers of neonates were in age range of 21 to 25 years with below 10th STD (31.66%), having two children (50%). The majority of mothers of neonates were house wives (50%) with Hindu religion (50%) and residing in a remote setting (40%).

Table 1. Distribution of mother's pre-test and knowledge level following the test

Knowledge scores	Pre test f (%)	Post test f (%)
Inadequate knowledge	60 (100%)	00
Moderate knowledge	00	20 (33.34)
Adequate knowledge	00	40(66.66)

Table 1 Reveals all the mothers' pre-test knowledge ratings were inadequate (100%) compared to post test, the majority of mothers (66.66) scored sufficient knowledge and few (33.34) scored with limited knowledge and none of them scored inadequate knowledge.

The above Table 2 and Figure 1 explains that the pre-test average mean percentage is 27.16% with mean (8.15) and standard deviation (2.18) and post-test average mean percentage is 77.86% with mean (23.36) and standard deviation (2.33), thus it shows that the neonatal mothers have risen in the understanding and handling of specific neonatal health problems compared to that of pre-test and paired 't' assessment value is remarkable at $P<0.001$. ($t_{cal}=37.09$, $t_{tab}=3.46$, $df=60$, $P<0.001$). Hence, after-test assessment is sufficiently raised and thus hypothesis (H_1) is accepted.

Discussion

The important aim of the research was to create awareness among mothers of neonates relating to management of selected neonatal health problems. On assessment all mothers initial test understanding scores were to be inadequate. Similar studies by Bala K et al⁹ and Castalino F et al¹¹ found that mothers having limited realization on necessary newborn

Table 2. Differentiation between before as well as after-test knowledge ratings of mothers of neonates in relation to the management of selected neonatal health problems

Knowledge	No of items	Mean	Standard deviation	Median	Mean %	Statistical inference
Pre-test	30	8.15	2.18	8.5	27.16	$t_{cal}=37.09$ $t_{tab}=3.46$
Post-test	30	23.36	2.33	24	77.86	$df=60$ $P<0.001$ (SS)*

Table 3. Area wise knowledge difference between pre - test mean and post - test mean knowledge of mothers of neonates

Sl. No	Areas	No. of items	Max Marks	Pre Test			Post Test		
				Mean	SD	Mean%	Mean	SD	Mean%
1	Common information	2	2	0.56	0.52	28	1.78	0.42	89
2	Napkin rash	4	4	1.28	0.95	32	3.26	0.81	81.5
3	Abdominal colic	5	5	1.48	0.80	29.6	3.76	2.51	75.2
4	Regurgitation	3	3	0.74	0.87	24.66	2.5	0.61	83
5	Neonatal Hypoglycemia	9	9	2.28	1.18	25.33	6.96	1.14	77.33
6	Hiccups	3	3	0.66	0.69	22	2.35	0.68	78.33
7	Constipation	4	4	1.11	0.91	27.75	2.73	0.67	68.25

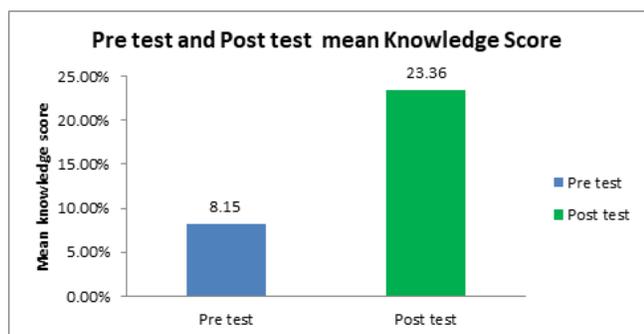


Fig 1. Bar diagram representing the mean value of before test and after test knowledge score of Mothers

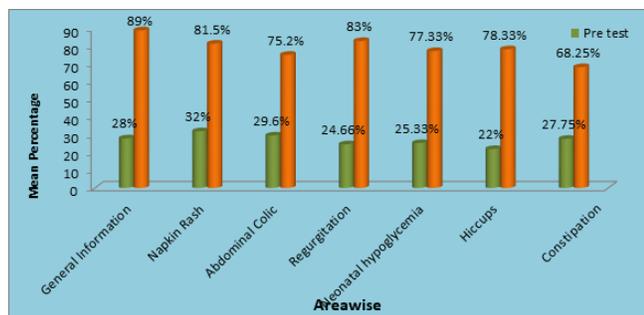


Fig 2. Area wise knowledge difference between pre-test mean and post-test mean knowledge of mothers of neonates

care.

Post-test knowledge of mothers of neonates revealed that, 40(66.66%) mothers of neonates had adequate knowledge, 20(33.34%) mothers of neonates had medium recognition and no one had insufficient consciousness. So it was evident that mother’s knowledge regard to control of chosen health issues was increased after structured teaching programme. A similar finding was reported by other studies^{12,13}.

Study findings shows that there is a remarkable relation between after-test knowledge level with their designated demographic characteristics like age, number of children, schooling, religion, job, income, weight of the baby, type of feed, and origin of information regarding management of selected health problems at ($P>0.05$).

Conclusion of the study

Mothers of neonates had deficient pre-existing knowledge regarding control of chosen health difficulties. The structured instructional programme in relation to the handling of selected health problems within the mothers of neonates have improved as there was an increase in the level recognition of problems after the education programme. Thus, it is important for the nurses to plan teaching programme on minor neonatal health problems to the mothers before discharging from the hospital so that the mothers seek health care immediately.

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