



## Nursing Interventional Programme among Mothers Regarding Newborn Care

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### ABSTRACT

The neonate signifies the beginning of life and provides a foundation for future health of the nation. In India every year 25 million babies are born and about 50 babies are born every minute. Majority of newborn babies enter the world healthy. But sometimes, infants develop conditions that require immediate care. New component of global child survival programme is to develop interventions to reduce neonatal mortality and morbidity. **Aim of the study is** to find out the impact of Nursing Interventional Program among mothers in order to promote optimal newborn care practices. **Methodology:** In this study the **Design:** A quasi experimental one group pre test post test. **Research approach:** Quantitative approach. **Setting:** Postnatal wards of Sri Rampuram Corporation Hospital, Bangalore. **Sample:** 50 mothers with newborn baby were selected using simple random sampling. **Tool:** Structured knowledge questionnaire on newborn care. Data was collected using interview technique and were analyzed using descriptive and inferential statistics. **Results:** There was a statistical significant improvement of knowledge of mothers on newborn care in post test. The paired 't' test score was 27.85 and hence found statistically significant at 0.05 level under study. There was statistical significant association in knowledge score of mothers with their age. The chi square value 9.22 which is statistical significant at (p<0.05). **Conclusion:** Study findings shown that the knowledge of mothers regarding newborn care was improved with Nursing Interventional Program. Thus the investigators concludes that the nursing interventional programme enable and empower the mothers with adequate knowledge on newborn care which in turn contribute to improve the total quality of child's health.

### KEYWORDS

*Newborn, Care, Postnatal*

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## INTRODUCTION

A Study conducted on 'evidence to save newborn life' Suggested that improving women's educational and social status will improve the newborn health. Using of spacing methods by a women to regulate family size will leads to health child wellbeing. Recent data shows that the poorest population groups have significantly higher newborn death rates than the richer groups<sup>1</sup> The NMR is high in most of the states in India. But it is even higher in the problem states of UP, MP, Bihar, At the national level priority was given on preventive essential care for normal newborns. Certain proven cost effective intervention like immunization, promotion of clean deliveries, breast feeding, temperature maintenance, and identification of high risk babies. In short prompt and essential newborn care is given by mothers which is based on sound knowledge and good practices<sup>2</sup>.

### Objectives-

- 1.To assess the pre-interventional knowledge among mothers regarding newborn care.
2. To assess the post- interventional knowledge among mothers regarding newborn care.
3. To assess the effectiveness of nursing interventional program among mothers on newborn care.
- 4.To associate the post test knowledge of mothers on newborn care with selected demographic variables.

## PROBLEM STATEMENT

'A study to assess the effectiveness of Nursing Interventional Programme on Newborn Care among mothers in selected Corporation MaternityHospital, Bangalore.'

**Hypothesis-** H<sub>1</sub> There will be significant improvement in post test knowledge scores as compared with pre test scores..

H<sub>2</sub> There will be significant association in pre test knowledge scores of mothers on new bore care with their selected socio demographic variables.

## NEED FOR THE STUDY

Within the neonatal period, the first week is the most crucial. Two thirds of all newborn deaths occur in first week of their life. This implies over 40% of all infant deaths occur by the end of the



first week. Mother and nurse have an important part to play to decline high neonatal mortality and morbidity rate. Considering the high death rate in newborn period, all efforts should be prompted to educate the health personnel and the public in regard to newborn care.<sup>3</sup>Current Neonatal mortality rate is 44/1000 live births, one third of neonatal deaths in country occurs on first day. It is reported that present neonatal mortality rate in Karnataka is 37.1/1000 live births and CBR is 22.3/1000 live births. Government aimed to decrease the Neonatal mortality rate to 20/1000 live birth in a year and to increase the institutional deliveries from 42 to 80%. Thus it is necessary to increase the knowledge of mothers and public regarding neonatal and Maternal care to reduce mortality and morbidity in Neonatal population.<sup>4</sup> (Report by WHO, NNF and UNICEF 2005)<sup>5</sup>

## **LITERATURE REVIEW**

**Literature review for the current study was organized as per the following orders:**

**Literature related to knowledge and practice on newborn care.**

**Literature related to maintenance of temperature and prevention of hypothermia.**

**Literature related to knowledge on promotion of breast feeding.**

**Literature related to knowledge on care of skin.**

**Literature related to knowledge on umbilical cord care.**

**Literature related to knowledge on eye care.**

**Literature related to knowledge on immunization**

## **MATERIALS AND METHODS**

**Research methodology:**

**Research approach:** Quantitative

**Research design:** Quasi experimental one group pre test-post test design.

**Variables:**

**Independent variable:** Nursing Interventional programme on newborn care.

**Dependant variable:** Knowledge among mothers regarding newborn care.

**Setting:** samples were selected from corporation maternity Hospital Bangaluru. It was a 300 bedded maternity hospital with 80-90 percentage bed occupancy

**Population:** Mothers admitted in the postnatal wards of Corporation Maternity Hospital, Bangalore

**Sampling criteria**



**Sample size: 50**

**Sampling Technique:** Simple Random sampling

**Sample:** Postnatal mothers.

**Inclusive criteria:**

- Mothers who are having newborn baby between the ages 0 to 28 days.
- Mothers who can able to understand and speak Kannada or English.
- Mothers who are interested to participate in study.

**Exclusive criteria:**

- Mothers who are having critically ill newborn babies.
- Mothers who are ill during the study.
- Mothers who are having any illness.

## **MATERIAL OR TOOLS USED IN RESEARCH STUDY**

**Tool I :Demographic variables:**Comprised of socio demographic data of mothers (11 items) which includes items regarding age,religion, educational status, occupational status, Residence, marriage age, type of family, family income, number of children and source of information

**Tool II:** Knowledge Questionnaire: Comprised of structured knowledge questionnaire regarding newborn care (50 items) which includes items regarding definition and thermoregulation, promotion of breast feeding, prevention of infection and immunization.

## **RESULTS AND DISCUSSION**

### **Section –I: Findings of demographic Characteristics of Respondents (Table no- 1)**

Data reveals that majority 21(42%) respondents are in between 22-24years and only 11(22%) belongs to 25-27years. 25(50%) had high school education and least 4(8%) had PUC and Degree education. 46(92%) respondents are house wife and 2(4%) are coolie and private employee. 46(92%) samples were Hindu and 4(8%) were Muslim. With regard to place of residence majority 39(78%) belongs to urban community and only 11(22%) from rural community. With regard to type of family majority 30(60%) belong to joint family whereas 20(40%) are from nuclear family. The status of the family income reveals that majority 27(54%) of respondents had Rs 3001-5000/month where at least 10(20%) had above 5000 Rs/month

**Section II- to assess the pre and post interventional knowledge among mothers regarding newborn care. (Table no-2)**

**Table 1** Frequency and % wise distribution of Respondents by Demographic characteristics

Characteristics	Category	Respondents	
		Frequency	%
Age group (years)	19-21	18	36.0
	22-24	21	42.0
	25-27	11	22.0
Educational level	Primary	8	16.0
	Middle	9	18.0
	High school	25	50.0
	PUC	4	8.0
	Degree	4	8.0
Occupational status	House wife	46	92.0
	Coolie	2	4.0
	Private Employee	2	4.0
Religion	Hindu	46	92.0
	Muslim	4	8.0
Residence	Urban	39	78.0
	Rural	11	22.0
Type of Family	Nuclear	20	40.0
	Joint	30	60.0
Family Income/month	Below Rs.3,000	13	26.0
	Rs.3,001-5,000	27	54.0
	Above Rs.5,000	10	20.0
Total		50	100.0

The highest mean knowledge noticed in the aspect of care of skin (46.5%) followed by care of eyes (42.7%) and least knowledge observed in the aspect of immunization (23.3%). Out of 50 mothers, 34(68%) had inadequate knowledge and 16(32%) mothers had moderate knowledge. Thus the investigator assumes the need for imparting knowledge to all mothers.

The highest mean knowledge observed in the aspect of thermoregulation (89.6%) and less knowledge noticed in promoting breast feeding (76%). However out of 50 mothers 33(66%) mothers had adequate knowledge and 17(34%) of them had moderate knowledge in post test. This shows that majority of the respondents gained adequate knowledge on newborn care after the intervention.

**Table 2** Over all Pre and Post test Mean Knowledge on New born care

Aspects	Max. Score	Respondents Knowledge			Paired 't' Test
		Mean	Mean (%)	SD (%)	
Pre test	35	13.78	39.4	11.9	27.85*
Post test	35	29.34	83.8	7.9	
Enhancement	35	15.56	44.5	11.3	

\* Significant at 5% level



### Section III: Effectiveness of nursing interventional program among mothers on newborn care. (Table No- 3)

The mean pre interventional knowledge is 13.78 and 39.4 mean percentage with standard deviation of 11.9%. Post test mean knowledge found to be 29.34 and 83.8 mean percentage with standard deviation of 7.9%, which shows the mean difference 15.56 and 44.5 mean percentage with standard deviation of 11.3. The statistical paired t-test indicates that the enhancement knowledge found significant ( $t = 27.85^*$ ) suggesting that the nursing interventional programme was effective on new born care. However this study reveals that the nursing interventional programme was effective as per aspect wise.

Thus the analyses reveal that there exists significant difference in pre and post interventional knowledge of mothers on newborn care. Hence the stated hypothesis  $H_1$  is accepted.

**Table 3** Aspect wise Knowledge scores on New born care

No.	Knowledge Aspects	Respondents Knowledge (%)						Paired 't' Test
		Pre test		Post test		Enhancement		
		Mean	SD	Mean	SD	Mean	SD	
I	Definition & Thermoregulation	42.4	21.1	89.6	12.2	47.3	20.6	16.24*
II	Promotion of breast feeding	38.0	17.0	76.0	11.5	38.0	17.3	15.53*
III	Care of Skin	46.5	22.6	78.5	16.8	32.0	26.7	8.47*
IV	Care of Umbilical cord	37.2	21.8	84.4	16.3	47.2	25.2	13.24*
V	Care of eyes	42.7	16.6	89.3	18.4	46.7	21.3	15.50*
VI	Immunization	23.3	26.3	86.7	19.0	63.3	31.8	14.08*
	Combined	39.4	11.9	83.8	7.9	44.5	11.3	27.85*

\* Significant at 5% level

### Section V: to associate the pretest interventional knowledge of mothers on newborn care with their selected demographic variables. (Table No. 4)

Results shown that there is a significant association in pre test knowledge of mothers with their age group at 0.05 df. Further no association was found in pre test knowledge of mothers with selected demographic variables like educational status, community, age at marriage, type of family and family income. Hence  $H_2$  was accepted for the association in knowledge level of mothers on newborn care with age and rejected for the other selected demographic variables.

**Table 4** Association between Demographic variables and Pre test Knowledge level on Nursing Interventional programme regarding Newborn care

Demographic Variables	Category	Sam ple	Respondents Knowledge				$X^2$ value	p Value
			Inadequate		Moderate			
			f	%	f	%		



Age Group (years)	19-21	18	15	83.3	3	16.7	7.12*	< 0.05
	22-24	21	15	71.4	6	28.6		
	25-27	11	4	36.4	7	63.6		
Educational Status	Up to Middle school	17	12	70.6	5	29.4	1.43	> 0.05
	High school	25	18	72.0	7	28.0		
	PUC & above	8	4	50.0	4	50.0		
Community	Urban	39	26	66.7	13	33.3	0.15	> 0.05
	Rural	11	8	72.7	3	27.3		
Age at marriage (years)	17-19	23	16	69.6	7	30.4	0.81	> 0.05
	20-22	18	13	72.2	5	27.8		
	23-25	9	5	55.6	4	44.4		
Type of Family	Nuclear	20	14	70.0	6	30.0	0.06	> 0.05
	Joint	30	20	66.7	10	33.3		
Family Income/month	Below Rs.3,000	13	9	69.2	4	30.8	4.80	> 0.05
	Rs.3,001-5,000	27	21	77.8	6	22.2		
	Above Rs.5,000	10	4	40.0	6	60.0		
Total		50	34	68.0	16	32.0		

\* Significant at 5% Level,

NS : Non-significant

## CONCLUSION

The study reveals that the nursing interventional program was effective as evident from improved post test knowledge scores (83.8%) as compared to pre test (39.4%). Thus the study concludes that the nursing interventional program on newborn care was effective.



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