

**A STUDY ON KNOWLEDGE OF PRIMIGRAVIDAS  
REGARDING MINOR PROBLEMS OF NEWBORNS IN A  
SELECTED HOSPITAL AT MANGALORE TALUK WITH  
A VIEW TO DEVELOP AN INFORMATION BOOKLET**

**Mrs. Sujatha.R\***

**Ms. Reshma\*\***

**ABSTRACT**

A study on knowledge of primigravidas regarding minor problems of newborns in a selected hospital at Mangalore Taluk with a view to develop an information booklet.

Newborn care is immense importance for the development and healthy life of a baby. The newborn care takes place immediately following birth, in the transition period and during the postnatal period. This care must be shared with the parents in the maternity unit of a hospital or in an alternative birth centre which is assumed by parents at the home. In spite of lapses and failures, the mother stood out as the corner stone of the family structure and remained the chief guardian of child welfare". Thus the mother is presented as the custodian of the child's health.

**Objectives:**

- To assess the knowledge of primigravidas regarding minor problems of newborn.
- To find association between the selected demographic variables and knowledge of primigravidas regarding minor problems of newborn.
- To develop an information booklet regarding minor problems of newborn.

\* Professor & Head of the Department of Child Health Nursing

\*\* Lecturer, Nitte Usha Institute Of Nursing Sciences, Constituent College Of Nitte University, Kotekar Beeri Road, Paneer, Deralakatte, Mangalore- 575 018, Karnataka, India

## Methods

An Evaluatory approach and descriptive design was adopted. A non probability sampling technique that is a convenient sampling method was used to select the Hospital and a purposive sampling method was used to select 50 primigravidas. Interview schedule was used to collect the data from the subjects.

## Results:

The data collected from 50 primigravidas) were analyzed using descriptive and inferential statistics.

Distribution of subjects according to Knowledge score shows that majority 60% (30) of primigravidas mothers had average knowledge on minor problems of newborns, 40% (20) had poor knowledge and none of them had good knowledge

## Conclusion:

The study had implications not only in the field of nursing, but also in other discipline. It reveals that all primigravida mothers need to have knowledge about minor problems of new born and its management. Therefore a nurse as an administrator should take initiative in imparting the health information through different methods. Individual and group teaching can be arranged in community or hospital settings.

**Key words:** primigravidas, minor problems of newborns.

**Introduction:**

Each mother has a pivotal role to play in the life of her infant. According to Sir Johnson Spencer, the author of the famous “One-thousand-families-survey,” mother remains as the chief guardian of child welfare.

Every newborn has the right to the best possible conditions for her/his growth and development, and they are assets for the nation’s development. As rightly remarked by W.H.O “A healthy child is nation’s pride” Newborn care is immense importance for the development and healthy life of a baby. The newborn care takes place immediately following birth, in the transition period, and during the postnatal period. This care must be shared with the parents in the maternity unit of a hospital or in an alternative birth centre which is assumed by parents at the home.

The neonatal mortality rate in our country is 5 to 6 times higher as compared to that of the developed nations. The NMR has been forming an increasing proportion of IMR over the years and currently accounts for more than 60% of the infant death. After one or two days of the delivery in the hospital usually the mother gets discharged and then she is mostly responsible for the care of the newborn. At times she also depends on others with the fear of the inadequacy of knowledge in child care.

According to Thairu, Pelto, Gretel (2008) Newborn care mortality accounts for about 1\3<sup>rd</sup> of death in children under five. They conducted a study in Tenzania estimated 32/1000 infants die within first 28 days. This study states that there is poor knowledge of mothers regarding proper newborn care practices, especially primigravida. In India the most important cause of neonatal death in the community is systemic bacterial sepsis presenting as septicemia or pneumonia. This accounts for roughly 50% of neonatal mortality and neonatal tetanus is no more important cause of neonatal death.

According to Ament (2004) for assessing and meeting the needs, teaching must begin early, ideally before the birth not only is the admission time as a briefing (typically 24-48 hrs). Because mothers are in the taking-in phase, where they demonstrate passive and dependent behavior during antenatal period. There fore on the first postpartum day women may not able to

absorb large amount of information. So teaching must be given during antenatal period, especially primigravida mothers, who have very little knowledge regarding newborn care.

Each year over 26 million 2.6 (crore) babies are born in India accounting for 50 births per minute, in that 0.94 million ( 9.4 lakh) neonate die per year (World Rank No.-I) representing almost three deaths per minute. Every 3 second one child dies in India. Neonatal deaths now account for up to two thirds of all infant deaths in developing countries.

According to National Family Health Survey ; SRS: Sample Registration System-statistical report 2008, India contribute about a quarter of global neonatal deaths that is more than 100 neonates die every hour in India. Compared to the 75% NMR of the rest of the world India reports 24% of NMR. In 2005 the status of the neonatal mortality rate is 58 per 1000 live birth. It is lower in urban areas (40 per 1000 live births) and higher in rural areas (64 per 1000 live births).

Kerala has lowest infant mortality rate 14 per 1000 live births. Higher rate is in Madhya Pradesh 76 per 1000 live births are usually associated with higher educational status of mothers and a high standard living index.<sup>7</sup>

Every year 70% of death in children due to diarrhea and other infectious diseases. Diarrheal diseases constitute yet another leading cause of morbidity and mortality. Almost 500 million children suffer from acute diarrhea annually. Of them, 5 million die every year. In India alone nearly 1.5 million children become a casualty due to acute diarrhea every year. In the year 2009 around 20% of all deaths occurred in infants less than one month.

Many studies were conducted regarding knowledge towards neonatal care, but very less was done to find out the knowledge of the mothers on minor problems of newborn. So the researchers felt to assess the knowledge of the mothers on minor problems of newborn

#### **.Materials & Methods:**

A typical descriptive design was adopted. Purposive sampling technique was used to select the 50 samples (50 primigravidas) from the selected hospital, Interview method was used to collect the data from the subjects.

**Results:**

Demographic data containing sample characteristics would be analyzed by using frequency and percentage.

**Table: 1-** Distribution of primigravidas according to demographic characteristics

n=50

Slno:	Sample characteristics	Frequency	Percentage (%)
1.	Age in years		
	a) 21-25	38	76
	b) 26-30	12	24
	c) 31-35	0	0
2.	Type of family		
	a) Nuclear family	16	32
	b) Joint family	29	58
	c) Extended family	5	10
3.	Religion		
	a) Hindu	31	62
	b) Muslim	6	12
	c) Christian	13	26
4.	Education		
	a) Primary education	8	16
	b) Higher primary	25	50
	c) graduate	17	34
5.	Occupation		
	a) Professional	19	38

	b) Non professional	3	6
	c) Home maker	28	56
6.	Monthly family income (in rupees)		
	a) <2500	6	12
	b) 2500-5000	22	44
	c) 5001-7500	15	30
	d) 7501-10000	7	14

The above table depicts that

- ✚ 76% (38) of primigravidas were in the age group of 21-25 years and 24% (12) of them were in the age group of 26-30 years.
- ✚ 58% (29) of primigravidas belongs to joined family, 32% (16) belongs to nuclear family and 10%(5) belongs to extended family.
- ✚ 62% (31) of primi gravidas belongs to Hindu religion, 26% (13) belongs to Christianity, and 12% (6) belongs to Muslim.
- ✚ 50% (25) of primigravidas were educated up to higher primary, 34% (17) were graduates and 16% (8) were studied up to primary school.
- ✚ 56% (28) of primi gravidas were home makers, 38% (19) were professionals and 6%(3) were non professionals.
- ✚ 44% (22) of primigravidas had a monthly income of Rs 2500- 5000, 30% (15) were of Rs 5001-7500, 14% (7) of 7501- 10000 and 12% (6) were having the monthly income of less than Rs 2500.

**Table: 2 .** Description Of Knowledge Of Primigravidas On Minor Problems Of Newborns In Terms Of Frequency And Percentage

n=50

S.No.	Minor problems of newborns	Frequency (f)	Percentage (%)
1	Vomiting	25	50
2	Regurgitation	19.5	39
3	Feedings	14.5	29
4	Transitional stools	7.5	15
5	Jaundice	22.5	45
6	Hiccups	28.5	57
7	Abdominal colic	20	40
8	Oral thrush	11	22
9	Excessive sleepiness	26	52
10	Dehydration fever	9	18
11	Napkin rash	29	58

This table depicts that majority of primigravidas mothers had knowledge on Napkin rash 58% (29) and hiccups 57% (28.5). And the least knowledge was found in the areas of transitional stools 7.5 (15%) and dehydration fever 9 (18%).

**Table: 3 .** Association Between Knowledge Of Primigravidas And Selected Demographic Variables



VARIABLES	KNOWLEDGE SCORE		$\chi^2$ VALUES	df	LOS
	< MEDIAN	$\geq$ MEDIAN			
Age	20	30	8.059	1	0.005 P<0.05 S
Education	20	30	10.276	1	0.001 p<0.05 S

$\chi^2_{(tab)} = 3.84$

S= SIGNIFICANT; NS= NOT SIGNIFICANT

Table 3 shows that, the P<0.05 for the variables of age ( $\chi^2=8.059$ ) and education ( $\chi^2=10.276$ ).  $\chi^2_{(tab)} = 3.84$  so, there is significant association between the knowledge of primigravida mothers with their age and education. Thus research hypothesis is accepted.

**Discussion :**

Description of sample characteristics

- Most of the primigravidas 76%(38) belongs to the age group of 21-25 years
- Majority of 58% (29) primigravidas were belongs to joint family
- Majority 62%(31) of primi gravidas were from Hindu religioin
- Half of 50% (25) primigravidas were educated 5<sup>th</sup> – PUC
  - Almost similar findings were reported by a study conducted by Elwyn Chomba, Elizabeth M, A Carlo et al,(2004) to determine the association of essential newborn care among the educated primigravida mothers and the less educated primigravida mothers. The findings of the study concluded that essential newborn care practice is associated with more education of mothers and there is poor newborn care practices are existed among less educated mothers.
  - Similar findings were reported by Diflorio 1(1991) conducted a study on mothers ‘knowledge related to care of the newborn. The study reveals that significant differences in mother’s knowledge related to care of the newborn and mothers age and the level of



education. The mothers who were 30 years and mothers who had more than high school education demonstrated adequate knowledge in care of the new born.

- Highest percentage 56%(28) of primi gravidas were home makers Similar findings were reported by a study conducted by Senarath, D. Fernando, et al (2002) to assess the primigravida mothers knowledge on newborn care as well as factors associated with poor knowledge. The study concluded that, 95% of primipara and unemployed women are more likely to have poor knowledge regarding newborn care practices.
- Nearly half of 44% (22) primigravidas had an income of between Rs2500- 5000/-

### Analysis of knowledge score

The Analysis of knowledge score shows that out of 50 primigravidas 60% (30) had average knowledge and 40%(20) had poor knowledge regarding minor problems of new born.

This study results are supported by the following studies

- A supportive study conducted in Tenzania estimated 32/1000 infants die within first 28 days. This study states that there is poor knowledge of mothers regarding proper newborn care practices, especially primigravida.
- Another study was under taken to assess the level of mother's knowledge on certain aspects of new born health care. The mean scores of samples was 25 ( out of 40) and minimum score was 14 and maximum score was 36. Hence the study concluded that mother's knowledge on new borns health related matters is average.
- Vikram et al., conducted a study on mother's knowledge, attitude and practice towards common problems in neonate. The finding revealed that the mother's knowledge towards common problem in neonates was inadequate in the population and there was a big gap between actual and desired practices.<sup>20</sup>
- A cross sectional study in Nepal of 450 primigravida antenatal mothers having newborns were conducted , using structured questionnaires. The findings of the study revealed that the over all knowledge among mothers regarding newborn care practices in study site was poor, the percentage of score being 40%.<sup>21</sup>

- Manju Rahi et al,( 2006), conducted a study on newborn care practices among primigravida mothers in an urban slum of Delhi (India). The results of the study concluded that more than half of mothers were unaware of proper newborn care practices, thus there is an urgent need to reorient health care providers and to educate mothers on early neonatal care.
- Zanta and Elisangela Argenta et al ( 2008) conducted a study on primigravida mothers knowledge and practice in 0-6 months old infant care in Brazil. The study assessed their knowledge and practices regarding health of 0-6 months old infants. The findings of the study revealed the existence of differences between what mothers know and what mothers actually do in infant care.
- A study was carried out among 250 nursing mothers on their knowledge and belief of nutritional management of acute diarrhea in infants in Nigeria concluded that Only 6% had knowledge of nutritional management in diarrhea, while 54.8% and 32.9% had knowledge of ORT and drug therapy respectively, during acute diarrhea.
- A prospective study to assess the knowledge of mothers regarding self medication for infants with colic, was conducted at the vaccination clinics of 20 primary health care centres, each from different Local Government Areas in Lagos, Nigeria. The study concluded Nigerian mothers are deficient in their knowledge of colic and health education is necessary to improve parental management of this self-limiting condition.

The present finding reveals that the mean score of knowledge is 7.28 and found average 60%. Thus the present study concluded that primigravidas having average level of knowledge regarding minor problems of newborn.

#### **Description of knowledge of primigravidas on minor problems of newborns.**

The analysis of the mean score reveals that majority of primigravidas mothers had knowledge on Napkin rash 58% (29) and hiccups 57% (28.5). And the least knowledge was found in the areas of transitional stools 7.5 (15%) and dehydration fever 9 (18%).

- A similar study conducted by Chandrashekhar T, Sreerama Reddy et al, on newborn care practices among urban primigravida mothers in western Nepal. A semi-structured

questionnaire was administered to a total of 240 mothers. The study findings revealed that high risk home delivery and poor newborn care practices are common in urban population. High risk traditional newborn care practices like delayed wrapping, bathing, prelacteal feeding and discarding colostrum are still practiced by the population.

### **Conclusion:**

The findings of the study revealed that majority 60% (30) of primigravidas mothers had average knowledge on minor problems of newborns, 40% (20) had poor knowledge and none of them had good knowledge. The study had implications not only in the field of nursing, but also in other disciplines. It reveals that all primigravida mothers need to have knowledge about minor problems of newborn and its management. Therefore a nurse as an administrator should take initiative in imparting the health information through different methods. Individual and group teaching can be arranged in community or hospital settings. Teaching must begin early, ideally before the birth not only is the admission time as a briefing (typically 24-48 hrs). Because mothers are in the taking-in phase, where they demonstrate passive and dependent behavior during antenatal period. Therefore on the first postpartum day women may not be able to absorb large amount of information. So teaching must be given during antenatal period, especially primigravida mothers, who have very little knowledge regarding newborn care.

### **Acknowledgement:**

The authors would like to express their gratitude to all the subject participants for their valuable co-operation in conducting this study.

## **REFERENCES**

- 1) Guha, Dipak K. Neonatology Principles and Practice. 6<sup>th</sup> edition. New Delhi: Jaypee Brothers; 1995.
- 2) Talbot. L. A. Principles and Practices of Nursing Research. 1<sup>st</sup> edition. St. Louis: Mosby; 1995.
- 3) Rollant D Paulette, Hamlin J Joice. Mosby's Review Series\_Pediatric Nursing.1<sup>st</sup> edition. St. Louis: Mosby Publishers; 1996.
- 4) Gary L Zohra Patel. Review of domiciliary newborn care practice in Bangladesh. 2003. Available from: URL: [www.pubmed.com](http://www.pubmed.com)
- 5) Lee H J, Kim M H. A study of prenatal knowledge and confidence in newborn care, Journal of Neonatal Care. 2003; 872-886
- 6) Redding A Barbara, Dorothy R Marlow. Text Book Of Pediatric Nursing. 6<sup>th</sup> edition. Philadelphia: Saunders Publishers; 2005.
- 7) Elwyn Chomba, Elizabeth M. Effect of newborn care-training on neonatal mortality by education. 2006. Available from: URL:  
<http://www.ncbi.nlm.nih.gov/pmc/articles/Dmc2592550>
- 8) Manju Rahi,D K Thanija, Amrita Misra,Suresh Badhan. Newborn care practices in an urban slum of delhi. 2006; volume 1;506-513.
- 9) Desai A B, J Viswanathan. Achar's Text Book Of Paediatrics. 3<sup>rd</sup> edition . New Delhi: Orient Longman Publishers; 2007.
- 10) Thaira, Lucy. Newborn care practice in island and their implication for newborn health and survival . Journal of Caternal and Child Nutrition. 2008: 194-208.
- 11) Suraj Gupte. The Short Text Book Of Pediatrics. 11<sup>th</sup> edition. Jaypee Brothers Publication; 2009.
- 12) Ibrahim H.Ai Ayed. Mothers knowledge on child health matters. Department of Pediatrics . Riyadh Saudi Arabia ;17: Issue 1, p 22-28