

# Assess the knowledge about new-born care among the primi mothers at a selected hospital, Vadodara, Gujarat

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## Abstract

**Introduction:** The postnatal period has been termed as fourth stage of labour. It has three distinct but continuous phases.1 postnatal period begins after the third stage of labour and includes first six weeks after delivery. During this time women's reproductive organs gradually returns to the normal size and shape. Postnatal period is a crucial period in woman's life and lot of physiological changes used to occur. They are in need of special care during pregnancy, at the time of labour as well as after delivery of child in order to prove safe motherhood and healthy living. The postnatal period is a critical transitional time for a woman and her new born physiologically, emotionally, and socially.2 postnatal mothers used to have physical and emotional discomforts, lack of sleep due to new born baby, visitors, noise, and discomfort with episiotomy. Due to child birth, mother becomes tired and weak. However, taking care of hygiene is also important for all postnatal mothers. Hygiene includes self care as well menstrual care

**Method:** The Parul Sevashram Hospital in Vadodara served as the study's location. A practical simple random sampling procedure was used to select 60 primi mothers in total. Multiple choice questions and a checklist were included in the questionnaire used to gather the data. Age, religion, degree of education, place of residence, and other socio-demographic characteristics were taken into account when formulating the questions. For this examination, a quantitative descriptive research design was adopted.

**Results:** In this study, the majority of participants, Regarding age of the mother 11(22%) are the age group of 18-25 years, followed by in the age group of 26-30 years 17(34%) and most of them were in the age group of 31-36 years 22(44%), no mother belongs to the age group of 36 and above. The results indicated that age of the mother and educational status are significant at the p0.05 level, socio-demographic variables like the mother's age, residence, employment status, family monthly income, marital status, family type, parity are not significant at that level.

**Conclusion:** It is important to give primi mothers regarding newborn care knowledge and practice after delivering the planned teaching programme.

**Keywords:** Assess, Knowledge, Newborn care, Primi mothers, Hospital.

## INTRODUCTION

The postnatal period has been termed as fourth stage of labour. It has three distinct but continuous phases.1 postnatal period begins after the third stage of labour and includes first six weeks after delivery. During this time women's reproductive organs gradually returns to the normal size and shape. Postnatal period is a crucial period in woman's life and lot of physiological changes used to occur. They are in need of special care during pregnancy, at the time of labour as well as after delivery of child in order to prove safe motherhood and healthy living.

The postnatal period is a critical transitional time for a woman and her new- born physiologically, emotionally, and socially.2 postnatal mothers used to have physical and emotional discomforts, lack of sleep due to new born baby, visitors, noise, and discomfort with episiotomy. Due to child birth, mother becomes tired and weak. However, taking care of hygiene is also important for all post-natal mothers. Hygiene includes self- care as well menstrual care.

At the same time, she needs to take care of her new-born also. Postnatal care includes systematic examination of mother and the baby. Postnatal health services can be provided through various modes like Family, community, outreach and facility-based care. Postnatal care has proved to be more cost-effective care in reducing neonatal mortality than antenatal care and intrapartum care. 3 According to national center for health statistics, there were almost 6.4 million normal deliveries in 2005 among woman of all ages. 4 The number of normal delivery rate being very high 72.30% per thousand births. Following vaginal delivery, the risks of perineal infections ranges from 2.8% to higher than 18%, the risk of infection can be as high as 20%. All the maternal death in Asia is due to high population density, poverty, low female literacy and poor health services (World Health Organization).5

The incidence of maternal death is steadily rising during the last decade there has been 2-to-3-fold rise in the incidence from the initial rate of about 10% of maternal mortality rate. The maternal mortality estimates were developed by WHO and UNICEF.

The very high level of maternal mortality over 500 maternal death per 1, 00,000 live births are generally associated with perineal sepsis.6 Perineal area is conducive to the growth of pathogenic organisms. If much attention is not given to the mothers during her postnatal period, from harmful practices mother may get infection like sepsis which leads to increase in maternal mortality rate.

## Methods

**Study location and time frame:** In 2022, primi para mothers in Vadodara's Parul Sevashram Hospital participated in this study.

**Study design:** In the present study a quantitative descriptive research design was adopted to assess the knowledge of primipara mothers regarding newborn care at Parul Sevashram hospital.

**Population:**

- (a)Source population: primipara mothers in Parul Sevashram Hospital.
- (b) All expectant mothers who were willing to participate in the study made up the study population.

**Sample size:** 50 primipara mothers.

**Inclusion and Exclusion criteria:**

- (a)Inclusion criteria: primipara mothers who are willingly participate in the study at selected hospital, Vadodara.
- (b)Exclusion criteria: primipara mothers who are ill at the time of data collection and those who are unable to participate in study.

**Variables:**

(a)Independent variables: In this study, Independent variables are- Age, Gender, Income, Religion, Educational status, Occupation, Family type, parity, type of delivery etc.

(b)Dependent variable: In this study, Dependent variable is the Knowledge among postnatal mothers regarding essential new born care.

**Data Collection:** Data collection was conducted by structure knowledge Questionnaire and was distributed to the participants and collected back. Each participant finished the tools in between 15 and 20 minutes.

#### Data Quality Control:

- Carefully informed about the purpose of the study to the participant during the collection of data during the Research study.
- Each subject provided informed consent prior to participating in the study.
- Thus, the Research followed the issued by the research committee.
- The ethical aspect of research was followed very strictly in this Research.

Data Collection: Both descriptive and inferential statistics will be used to collect the data. Inferential analysis will be performed using the frequency and percentage distribution of prenatal mothers' socio-demographic data as well as the frequency and percentage distribution of their knowledge among postnatal mothers regarding essential new born care.

Ethical Considerations: Parul University's ethical committee provided the ethical considerations. The respondents were given a brief explanation of the study's objectives before verbal consent was acquired. Additionally, they were informed that the data collected from them would be kept private. (PUIECHR/PIMSR/00/081734/4309 is the approval number.

## RESULTS

Socio-demographic characteristics: In this study, a total of 60 antenatal mothers were chosen who were present at the time of study. Table 1; reveals distribution of demographic variables of post-natal mothers.

Regarding age of the mother 11(22%) are the age group of 18-25 years, followed by in the age group of 26-30 years 17(34%) and most of them were in the age group of 31-36 years 22(44%), no mother belongs to the age group of 36 and above.

With regards to education of the mother 14 (28%) are illiterate, 22 (44%) of mothers were having education up to 10th standard, followed by higher secondary education 9 (18%), graduation and above are 5 (10%).

Regarding religion that most of the post-natal mothers are belongs to Hindu 33 (66%), followed by Muslim 9(18%), Christians are 8(16%).

With regard to parity is concerned, 1st delivery mothers are 18 (36%), almost 29 (58%) are 2nd delivery, followed by 3rd delivery are 3(6%), fourth delivery and above are not present.

Regarding the type of delivery is taken into consideration, most the postnatal mothers got normal delivery 24 (48%), lower segment cesarian section 22(44%), instrumental delivery 4 (8%).

Regarding family income 14 (28%) was less than ` . 5000, 22 (44%) were 5001-10000, 9 (18) were ` . 10001 -15000, 5 (10%) were 15001 and above.

Regarding the age of the child 22 (44%) are in the first 6 days, 14(28%) are 7th ± 14th day, 9(18%) are 15th ± 21st day baby, 5(10%) are belongs to 22nd± 28th day.

With to sex of the baby 30(60%) are male, 20 (40%) are female child.

With regard to weight of the baby 10(20%) babies are 2-2.5kg, 16(32%) are 2.5-3 kg, 19 (38%) are 3-3.5 kg, 5 (10%) weigh above 3.5.(Table-1).

Table:1: Socio-demographic characteristics of respondents

S.No.	Demographic Variables	Frequency (f)	Percentage (%)
1.	<b>Age of the mother</b>		
	a) 18-25 years	11	22%
	b) 26-30 years	17	34%
	c) 31-36years	22	44%
	d) 36 and above	0	0
2.	<b>Education</b>		
	a) Illiterate	14	28%
	b) 1 <sup>st</sup> -10 <sup>th</sup> standard	22	44%
	c) Higher secondary	9	18%
	d) Graduation and above	5	10%
3.	<b>Religion</b>		
	a) Hindu	33	66%
	b) Christian	9	18%
	c) Muslim	8	16%
4.	<b>Parity</b>		
	a) First delivery	18	36%
	b) Second delivery	29	58%
	c) Third delivery	3	6%
	d) Fourth delivery and above	0	0
5.	<b>Type of delivery</b>		
	a) Vaginal delivery	24	48%
	b) Instrumental delivery	4	8%
	c) Lower segment cesarean section	22	44%

6.	<b>Family Income</b>		
	a) Less than ` . 5, 000/- per month	14	28%
	b) ` . 5001/- to 10, 000/- per month	22	44%
	c) ` . 10, 001/- to 15, 000/- per month	9	18%
	d) More than ` . 15, 001/- per month	5	10%
7.	<b>Age of the child</b>		
	a) 1st day ± 6th day	22	44%
	b) 7th day - 14th day	14	28%
	c) 15th day - 21st day	9	18%
	d) 22nd day - 28th day	5	10%

Table 3: Association between knowledge regarding Essential New Born Care Among primipara mothers with their selected socio-demographic variables

Reveals that the association between level of knowledge regarding Essential New Born Care of primipara mothers with their selected socio-demographic variables. Result showed that The data shows the associations of demographic variables with knowledge regarding essential newborn care. The obtained F2 values of age of the mother is (14.67), education (12.36), parity (11.18) was significant at 0.05 level. It reveals that there was a significant relationship between posttest knowledge score with age, education, parity. The other demographic variables are not associated with knowledge (Table 3).

Table 3: Association between knowledge regarding high risk status of antenatal mothers with their selected socio-demographic variables

Variables	Above Mean	Below Mean	F <sup>2</sup>
<b>Age of the mother</b>			
a) 18 - 25 years	8	3	14.67*
b) 26 - 30 years		5	
c) 31 - 36 years	12	9	
d) 36 and above	13	0	
	0		
<b>Education</b>			
a) Illiterate	9	5	12.36*
b) 1 <sup>st</sup> -10 <sup>th</sup> standard	12	10	
c) Higher secondary	4	5	
d) Graduation and above	4	1	

<b>Religion</b>			
a) Hindu	13	20	3.98
b) Christian	5	4	
c) Muslim	4	4	
<b>Parity</b>			
a) First delivery	12	6	11.18*
b) Second delivery	19	10	
c) Third delivery	2	1	
d) Fourth delivery and above	0	0	
<b>Type of delivery</b>			
a) Vaginal delivery	14	10	3.95
b) Instrumental delivery	3	1	
Lower segment cesarean section	10	12	

\*p value < 0.05 level of significance S- Significant\* NS-Non-Significant

## Discussion:

Cultural influence and traditional understandings, combined with a lack of neonatal health knowledge, are the main factors driving mothers' lack of awareness of the essential newborn care practices. With better knowledge, a mother can formulate a more effective strategy to safeguard the health of her child. Simply stated, if neonatal morbidity and mortality are to be reduced, mothers need to be informed about essential newborn care practices. In this study, only a small proportion of respondents (37.0%) had good knowledge of newborn care. In contrast, a study in India[9] found that the majority of postnatal mothers had excellent knowledge of newborn care practices. The results of another study conducted in 2006[11] were more like the present ones, in that mothers' knowledge of most of the studied items on newborn care practices was below a satisfactory level. Breastfeeding knowledge was encouraging, with most mothers aware of the value of breastfeeding, the initiation of breastfeeding within 1 h of birth, colostrum, EBF until 6 months of age, and the avoidance of prolaternal feeding. These findings show that the emphasis placed on breastfeeding by health-care providers during antenatal care has paid off. However, the awareness of breastfeeding on demand and burping practices was poor, possibly because there were not enough postnatal visits. While all pregnant women should attend ANC as soon as possible and make more than four visits before delivery, postnatal visits are equally necessary to assure adequate newborn care. A small proportion of mothers knew the umbilical cord should be left as it is, and the first bath following birth should be delayed; the study also revealed moderate knowledge of newborn eye care and newborn hygiene; these areas need improvement. The variations in the mothers' understanding of harmful practices suggest the influence of traditional practices and/or a lack of dissemination of information by healthcare providers on best practices, especially for cord care. Awareness of the need for vaccine at birth and the benefits of vaccination was moderate, even though Bangladesh's expanded program on immunization is pushing it. Mothers were even less aware of the kangaroo method (skin- to skin contact) to thermo regulate newborns; this gap can be explained by the inadequate dissemination of information on thermoregulation by health-care providers during both antenatal and postnatal periods. Taken together, the findings suggest that mothers should be better educated in newborn care practices by health-care providers, especially midwives and trained birth attendants. delivery, postnatal visits are equally necessary to assure adequate newborn care. A small proportion of mothers knew the umbilical cord should be left as it is, and the first bath following birth should be delayed; the study also revealed moderate knowledge of newborn eye care and newborn hygiene; these areas need improvement. The variations in the mothers' understanding of harmful practices suggest the influence of traditional practices and/or a lack of dissemination of information by healthcare providers on best practices, especially for cord care. Awareness of the need for vaccine at birth and the benefits of vaccination was moderate, even though Bangladesh's expanded program on immunization is pushing it. Mothers were even less aware of the kangaroo method (skin- to skin contact) to thermoregulate newborns; this gap can be explained by the inadequate dissemination of information on thermoregulation by health-care providers during both antenatal and postnatal

periods. Taken together, the findings suggest that mothers should be better educated in newborn care practices by health-care providers, especially midwives and trained birth attendants.

## Conclusion

The knowledge of essential newborn care so they can disseminate adequate knowledge to mothers. Finally, individual communities should be motivated to take steps to improve the care of newborn.

Competing interest:

All authors report no conflicts of interest for this work.

Authors' contributions

All authors have read and approved the final version of the manuscript.

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