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An Exploratory Study to Assess the Knowledge Regarding Newborn Care Among Postnatal Mothers in the Selected Hospitals Of Valsad District Gujarat with a View to Develop an Information Pamphlet

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ABSTRACT

Background: Our most valuable and future resources are our children. The family's nurturing practices have an impact on the future children's health. The term "Newborn care" describes the necessary attention given to a newborn by their mother or other caregiver, including nursing, regulating body temperature, breastfeeding, tending to the cord, cleaning the baby's eyes, and preventing infections and accidents.

Aim: The main aim of this study was to assess the knowledge of postnatal mothers regarding newborn care in a selected hospital in the Valsad district.

Methods: Non-Experimental Descriptive Design was adopted. The sample consists of 80 postnatal mothers selected through a Non-Probability Convenience Sampling Technique. The data collection tool consisted of a Demographic Variables and Structured Knowledge Questionnaire to assess the knowledge of mothers regarding newborn care. The data were collected and analysed using Descriptive and Inferential statistics.

Results: Findings of the study revealed that the level of knowledge among mothers majority 65 (81.25%) had an Average level of knowledge, followed by 5 (6.25%) Good level and 10(12.05%) Poor level of knowledge. Therefore, it can be concluded that the majority of mothers had an Average level of knowledge regarding newborn care and there was a significant association between the level of knowledge of postnatal mothers and their selected Demographic variable of area of residency of the mother. Other Demographic variables have no significant association with their level of knowledge among postnatal mothers.

Conclusion: The study findings concluded that the majority of the postnatal mother's, level of knowledge was not very high so to raise the level of knowledge among postnatal mothers an information pamphlet was developed and distributed.

KEYWORDS: Knowledge, Newborn care, Postnatal mothers, Exploratory study.



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INTRODUCTION

One of the fascinating features of nature is the birth of life. The new life is equipped with astonishing survival skills, yet they are completely dependent on others for feeding, warmth, comfort, love, security, attention and plenty of cuddles. The outside world is veritably different from the womb, where the temperature is constant. The physical and mental well-being of every individual depends on the correct management of events in the perinatal period (Stephon. W Elizabeth, 2004). The Newborn or neonatal period includes the time from birth to 28 days of life, during this period the care of the baby is crucial as it is the base for the healthy being throughout the life span. Mothers have always been the primary caregivers for their children, and regardless of a mother's level of education, wealth, or social standing, one of her many responsibilities is to meet her child's physical, emotional, social, intellectual, and moral requirements. Concerning the growing rate of mortality of babies the knowledge of mothers regarding care has become a high point. So, to impart this knowledge to them the most effective and efficient way will be the preparation of a pamphlet and to distribute it to the mothers.

NEED FOR THE STUDY:

Neonatal Mortality is the leading cause of mortality in children under 5 years of age. It is estimated that out of 3.9 million neonatal deaths that occur worldwide, almost 30% occur in India. The main causes of infant mortality in India are low birth weight (57%), respiratory infections (17%), Diarrhoeal diseases (4%), Congenital malformation (5%), and Cord infection (2%). Birth injury (3%) and unclassified are about 8%. Diseases and diseases linked to inadequate treatment within the first 28 days of life are the cause of death for children who pass away during this time frame.

Although the under-five death rate in Gujarat has dropped considerably, newborn mortality remains high, accounting for 63% of under-five deaths. Girls die at a higher rate than boys. Still, traditional practices of newborn care are seen among the mothers in Gujarat which are very harmful to the newborn. Pre-lacteal feeding practices, such as giving babies sugar water or honey, castor oil, applying powder or oil to the umbilical cord, applying Kajal, putting oil in the baby's eye, ear, or nose, leaving the baby unprotected and exposed, and not practising good hygiene, all contribute to the rising of neonatal morbidity and mortality. The quality of care provided to mothers and newborns remains a key concern, despite improvements in access to dedicated newborn care facilities. Despite occasional slip-ups and mistakes, moms continued to be an integral part of the family unit and the primary protector of the welfare of the children. Consequently, the mother is portrayed as the guardian of her child's health. Thus, a mother ought to be knowledgeable about caring for her newborn.

Reducing child morbidity and mortality rates requires promoting health both at home and in the larger community. According to WHO reports a comprehensive strategy, healthy eating habits among mothers, Breastfeeding, Immunizations, enhanced hygiene, and children's normal development would all contribute to a decrease in the child death rate. Mothers should prioritize having their knowledge and ability about caring for newborns assessed, as they are the ones who provide the majority of the infants' care, around the clock. Thus, the investigators were compelled to evaluate the mother's understanding of critical newborn care.

STATEMENT OF THE PROBLEM

An exploratory study to assess the knowledge of postnatal mothers regarding Newborn care in selected hospitals of Valsad district Gujarat with a view to develop an information pamphlet.



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OBJECTIVES OF THE STUDY

- 1. To assess the knowledge of Postnatal mothers regarding Newborn care.
- 2. To find out the association of knowledge of postnatal mothers regarding newborn care with their selected demographic variables.

HYPOTHESIS

H1 - There is an association of knowledge of postnatal mothers regarding newborn care with their selected demographic variables such as Age, Religion, Education, and Area of residency and previous source of knowledge about Newborn care at the level of $P \le 0.05$.

ASSUMPTIONS

• Mothers may not have ample knowledge regarding Newborn care.

RESEARCH METHODOLOGY

1. RESEARCH APPROACH/DESIGN

A Quantitative research approach, Non-Experimental descriptive design was adopted for the study.

2. VARIABLES UNDER STUDY:

- Research Variables: Knowledge of postnatal mothers regarding newborn care.
- **Socio-demographic variables:** Age, Religion, Education, Area of residence and Previous source of knowledge.

3. SETTING OF THE STUDY:

The study was conducted at postnatal wards of Haria L.G Rotary Hospital, Vapi and Shrimad Rajchandra Hospital and Research Centre, Dharampur.

4. POPULATION:

Postnatal mothers who are admitted in the postnatal wards of selected hospitals of Valsad district.

5. SAMPLE AND SAMPLE SIZE:

The sample size is 80 postnatal mothers.

6. SAMPLING TECHNIQUE:

Non-probability convenience sampling technique was used for selecting 80 postnatal mothers for the present study.

7. SAMPLING CRITERIA:

• Inclusion Criteria

Postnatal mothers who are

- 1. Available during data collection.
- 2. Willing to participate in the study.
- 3. Primigravida.
- Exclusion Criteria: Postnatal mothers are those who are sick at the time of data collection

8. DEVELOPMENT OF THE TOOL:

- The tool is divided into two parts.
- **Part 1.** Sociodemographic variables Age, Religion, Education, Area of Residency and Previous source of knowledge.
- Part 2. Self-structured questionnaire: It comprises 25 questions. Each question carries a "1" answer and a "0" for inappropriate answers.



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- **9.** A structured knowledge questionnaire was prepared based on the following criteria:
- 1. Questions for assessing knowledge related to general knowledge about Newborn
- 2. Questions for assessing knowledge related to personal hygiene
- 3. Questions for assessing knowledge related to the maintenance of body temperature
- 4. Questions for assessing knowledge related to immunization

SCORING TECHNIQUE:

| LEVEL OF KNOWLEDGE | SCORE | PERCENTAGE (%) |
|-----------------------|-------|----------------|
| Poor | 0-8 | 32% |
| Average | 9-16 | 32% |
| Good | 17-25 | 36% |

RELIABILITY OF THE TOOL

• The reliability of the instrument was established by administering the tool to 8 postnatal mothers who were admitted to postnatal wards of selected hospitals in Valsad District. The reliability was established using the spilt half method and r = 0.93 for knowledge. The reliability of the tool was tested by using Karl Pearson's Correlation method.

DATA ANALYSIS AND INTERPRETATION

Data analysis was done through

- 1. Descriptive (percentage and frequency)
- 2. Inferential statistics (Chi-square).

RESULTS

- The analysis and interpretation of the present study were done according to the objectives of the study.
- The study findings are organized under the following headings
- **Section 1**: Description of sample characteristics
- **Section 2:** Description of mother's level of knowledge.
- **Section 3:** Association between mother's level of knowledge with their selected demographic variable.

SECTION 1: SAMPLE CHARACTERISTICS

Table 1. Frequency and Percentage Distribution of Sample Characteristics (N=80)

| Sr. No. | Demographic Variables Characteristics | Frequency | Percentage (%) |
|---------|---------------------------------------|-----------|----------------|
| 1. | Age | | |
| | (a) 20-25 | 17 | 21.25 |
| | (b) 26-30 | 56 | 70 |
| | (c) 31 -35 | 05 | 6.25 |



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| | (d) >35 | 02 | 2.5 |
|----|--|----|-------|
| | Religion | | |
| 2. | (a) Hindu | 72 | 90 |
| | (b) Muslim | 08 | 10 |
| 3. | Education | | |
| | (a) Illiterate | 7 | 8.75 |
| | (b) Primary School | 10 | 12.5 |
| | (c) Secondary School | 29 | 36.25 |
| | (d) Higher Secondary School & above | 34 | 42.5 |
| 4. | Area of residency | | |
| | (a) Rural | 46 | 57.5 |
| | (b) Urban | 34 | 42.5 |
| 5. | Previous sources of knowledge about newborn care | | |
| | (a) Family | 56 | 70 |
| | (b) Friends | 14 | 17.5 |
| | (c) Health care team | 05 | 6.25 |
| | (d) Mass media | 05 | 6.25 |

Table 1. Reveals that the majority of samples 56 (70%) were between 26- 30 years age group, followed by 17 (21.25%) between 20-25 years, 5 (6.25%) were 31-35 years of age and 2 (2.5%) were > 35 years.

- According to religion majority of samples 72 (90) were Hindu followed by 8 (10%) were Muslims.
- Based on education majority of samples 34 (42.5%) studied higher secondary school or above, followed by 29 (36.25%) who studied till secondary school, 10 (12.5%) who studied till primary school and 7 (8.75%) were illiterate.
- Regarding the area of residency 46 (57.5%) were from rural areas and 34 (42.5%) were from urban areas
- With regards to the area of the previous level of knowledge 56 (70%) from family, 14 (17.5%) from friends, followed by 5 (6.25%) from health care team and mass media.

SECTION 2 –Objective 1: Assess the level of knowledge among postnatal mothers

Table 2.1 Frequency and Percentage distribution of level of knowledge among postnatal mothers

(N=80)

| Level of | Postnatal Mothers | | | | | |
|-----------|-------------------|----------------|--|--|--|--|
| knowledge | Frequency (f) | Percentage (%) | | | | |
| Poor | 10 | 12.05 | | | | |
| Average | 65 | 81.25 | | | | |
| Good | 5 | 6.25 | | | | |
| Total | 80 | 100 | | | | |



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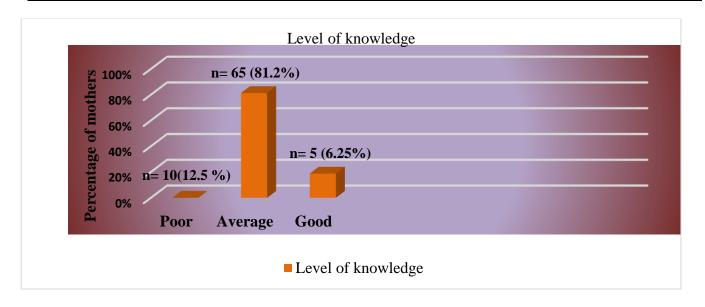


Table 2.2 Mean and Mean Percentage distribution of level of knowledge as per knowledge areas among mothers according to knowledge score.

N=80

| Areas of knowledge | No. of Items | Min. Score | Max. Score | Mean | Mean % | Area wise priority |
|--------------------|-----------------|---------------|---------------|------|--------|--------------------------|
| General | 14 | 0 | 14 | 7.26 | 51.85 | 2 |
| information on the | | | | | | |
| newborn | | | | | | |
| Personal hygiene | 7 | 0 | 7 | 4.5 | 64.28 | 3 |
| Maintenance of | 2 | 0 | 2 | 0.91 | 44.5 | 1 |
| body temperature | | | | | | |
| Immunization | 2 | 0 | 2 | 1.55 | 77.5 | 4 |

Table 2.1 shows that the highest mean knowledge score and mean percentage score was found in immunization 1.55 (77.5%), followed by personal hygiene 4.5 (64.28%), general information on the newborn 7.26 (51.87%) and maintenance of body temperature 0.91 (44.5%).

Therefore, it can be concluded that the level of knowledge was the highest about immunization.

Objective 2: Find the association between the level of knowledge among postnatal mothers with selected demographic variables

Table. 3 Association between level of knowledge among postnatal mothers and selected demographic variables

N=80

| | | Level of knowledge | | | | | | |
|--------------------------|-----------------|--------------------|--------|-----------|---------|------|----------|---|
| Domographia | | (f) | | Calculate | Tabl | d | Inferenc | |
| Demographic Variables | Characteristics | | | | d Value | e | f | e |
| variables | | Poo | Averag | Goo | | valu | | |
| | 1 | r | e | d | | e | | |



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| 1) Age | a) 20-25 | 6 | 4 | 7 | 5.76 | 12.59 | 6 | NS |
|--------------|------------------------|----|----|----|------|-------|---|-----|
| 1) Age | | 23 | 6 | 27 | 3.70 | 12.37 | 0 | 110 |
| | b) 26-30 | | | | | | | |
| | c) 31 -35 | 2 | 0 | 3 | | | | |
| | d) >35 | 2 | 0 | 0 | | | | |
| 2) Religion | a) Hindu | 30 | 10 | 32 | 1.64 | 5.99 | 2 | NS |
| | b) Muslim | 3 | 0 | 5 | | | | |
| 3) Education | a) Illiterate | 4 | 0 | 3 | 5.92 | 12.59 | 6 | NS |
| | b) Primary School | 6 | 0 | 4 | | | | |
| | c) Secondary School | 11 | 6 | 12 | | | | |
| | d) Higher | 12 | 4 | 18 | | | | |
| | Secondary | | | | | | | |
| | School & | | | | | | | |
| | above | | | | | | | |
| 4) Area of | a) Rural | 16 | 10 | 20 | 8.66 | 5.99 | 2 | S* |
| residency | b) Urban | 17 | 0 | 17 | | | | |
| 5) Previous | a) Family | 22 | 8 | 26 | | | | |
| source of | b) Friends | 3 | 0 | 2 | 1 | | | |
| knowledge | c) Healthcare Team | 3 | 0 | 2 | - | 10.50 | | |
| about | d) Mass media | 3 | 0 | 2 | 2.56 | 12.59 | 6 | |
| Newborn | 2) =/2400 1110 014 | | | _ | | | | NS |
| care | | | | | | | | |

^{&#}x27;NS' = non-significant, '*' = significant at the level of 'p' < 0.05.

Table 3 depicts that as per age calculated chi-square value (5.76, df 6) was less than the table value (7.82). This means that there was no association between age and level of knowledge among postnatal mothers.

According to religion calculated chi-square value (1.64, df 2) was less than the table value (12.59) It means that there was no association between religion and level of knowledge among postnatal mothers. Regarding education calculated chi-square value (5.92, df 6) was less than the Table value (12.59). It means that there is an association between education and level of knowledge among postnatal mothers. According to the area of residency, the calculated chi-square value (8.66, df 2) was more than the Table value (5.99). It means that there is an association between the area of residency and the level of knowledge among postnatal mothers.

Considering the Previous source of knowledge regarding newborn care calculated chi-square value (2.56, df 2) was less than the Table value (12.59). This means that there is no significant association between the previous source of knowledge and the level of knowledge among postnatal mothers.



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FINDINGS OF THE STUDY

There is a significant association between the Area of residency and the level of knowledge among mothers at a 0.05 level of significance. Other data has no significant association with the level of knowledge.

LIMITATIONS

- 1. The study is limited to postnatal mothers in selected hospitals in Valsad district
- 2. The sample size is only 80 postnatal mothers:

Hence, this limits the generation of findings beyond the study samples.

RECOMMENDATIONS

- The study can be replicated on a larger sample in other community health centres, primary health centres, rural health centres, and subcentres
- A study can be undertaken to compare the knowledge between the urban and the rural populations.
- Similar study can be conducted to assess the knowledge of community health workers on newborn care
- Similar studies can be done to compare the knowledge of prime antenatal mothers and multiparous antenatal mothers on newborn care.
- A study can be conducted to assess the knowledge, beliefs, and practices of primi antenatal mothers on newborn care.

CONCLUSION

Mother is the prime caregiver of her child and hence she should be able to take care of her newborn and identify deviations from health. In the antenatal period, the mother is most receptive to learning skills in newborn care. Thus, all these factors point in one direction the level of knowledge of the postnatal mother should be high to render better care to the newborn. The study findings concluded that the majority of the postnatal mother's, level of knowledge was not very high only the area of residence and level of knowledge on caring for a newborn are very much associated with each other. So, with an ideology to raise the level of knowledge among postnatal mothers an information pamphlet was developed and distributed.

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