# Study Conducted to Assess the Knowledge of Mother Regarding in Newborn Health


***By***

*Shweta Jha*


*Dissertation submitted in partial fulfillment of the requirements of the degree*

*MBA Hospital and Health Management*

*Academic year, 2017-2019*


**The IIHMR University, Jaipur**

1, Prabhu Dayal Marg, Sanganer, Airport
Jaipur 302029, Rajasthan
Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

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Ph: 0141 3924700, Fax: 3924738
Website: **www.iihmr.edu.in**

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

**TO WHOMSOEVER MAY CONCERN**

This is to certify that **Dr. Shweta Jha** student of MBA Health and Hospital Management from The IIHMR University, Jaipur has undergone internship training at **Piramal Foundation, Bihar** from **1st Feb 2019 to 1st May 2019.**

The Candidate has successfully carried out the study on **To Assess the Knowledge of Mothers on New-Born Health in Barauni Block, Bihar** assigned to her during internship training and her approach to the study has been sincere, scientific and analytical.
The Internship is in fulfillment of the course requirements.

I wish her all success in all her future endeavors.

Dr Col. Ashok kaushik
Proctor and Dean
The IIHMR University,Jaipur
16 May 19.

Dr. Dhirendra Kumar
Professor
The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur- 302029, Rajasthan, India.
Ph.: 0141- 3924700, 2791431- 32, Fax: 0141 3924738, E-mail: iihmr@iihmr.edu.in, Web.: www.iihmr.edu.in

Piramal Foundation

The certificate is awarded to

**DR. SHWETA JHA**

In recognition of having successfully completed her

Internship in the department of

**OPERATIONS**

and has successfully completed her Project on

**STUDY TO ASSESS THE KNOWLEDGE OF MOTHERS ON THE NEW-BORN HEALTH**

**BARAUNI BLOCK, BEGUSARAI, BIHAR**

**Date: May 08, 2019**

**ORGANIZATION: PIRAMAL FOUNDATION**

She comes across as a committed, sincere & diligent person who has a strong drive and zeal for learning

We wish her all the best for future endeavors

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T +91 22 3802 3000 / 4000 (Board Line)

## CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **"A Study Conducted to Assess the Knowledge of Mothers on the New-Born Health"** and submitted by **Dr. Shweta Jha** Enrollment No **IIHMR-U/01/2017-19/0676** under the supervision of **Dr. Dhirendra Kumar** for award of MBA in Hospital and Health in The IIHMR University carried out during the period from 1st February 2019 to 1st May 2019 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Shweta Jha

**Dr. Shweta Jha**
**0676**

## ABSTRACT

**A Study Conducted to Assess the Knowledge of Mother Regarding Newborn Health**



**Author : Dr. Shweta Jha**

**Guided by: Dr. Dhirendra Kumar**



**BACKGROUND:**

A very significant part of any nation is new-born health, as the survival of the child is worried about the five many years of profitability. The most significant person in the life of new-born is the mother and is the individual who is in every case near child.

**OBJECTIVE**

To assess the knowledge of the mothers regarding essential new-born care.
To assess the knowledge of the mothers regarding the danger signs of newborn.

**METHODOLOGY**

Study design: The study has used a Cross-Sectional descriptive research design.
Duration of study: Study was carried out from a period of 1st February 2019 to 1st May 2019.
Study area: The work was conducted in Barauni block (Begusarai district), Bihar.
Data collection methods: 100 women having the newborn were interviewed. The data was collected using a structured questionnaire designed with help of literature review of previous questionnaire for assessing the knowledge of post-natal women regarding the danger signs of newborn.
Data analysis procedure: The analysis of the data was done by choosing important factors which affects the new-born health using the Excel.

**RESULTS**

The study found that maximum number (53%) of respondents were in the age group of 19-23 years and 91% of all respondents belong to Hindu religion. Further it was observed that 28% of respondents were illiterate. A knowledge index was designed composing 19 items that covers various aspect of newborn health for most common disease and its treatment. The study revealed that the about 53% of mothers have poor knowledge of the umbilical cord care.

Study further revealed that the 61% of mothers have poor knowledge regarding the identification of danger signs of neonatal jaundice. Further association was found between the knowledge of the mothers regarding newborn health and demographic variables. It was found that knowledge of the women was significantly associated with their education level.

**CONCLUSION:** To achieve the goals of reduction of IMR and MMR in these areas, health programs must effect a change in the behavioral patterns, habits and environmental factors of the population by imparting health awareness and educating the local health workers and women on hygiene, sanitation and issues related to new-born healthcare practices.

**KEYWORDS** : Newborn health, PNC, ANC, danger signs

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I would like to give my heartfelt thanks to my guide **Assistant Professor, Dr. Dhirendra Kumar** for his prompt replies, able guidance, constant words of encouragement and making this dissertation an enriching experience .

Last but not the least, I would like to give my sincere thanks to my parents and friends who helped me a lot in finalizing this project within the given time frame.

Dr. Shweta Jha
Roll No-0676

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**List of abbreviation**

| **Abbreviations** | **Full forms** |
|---|---|
| RMNCH+A | Reproductive Maternal Neonatal and Child and Adolescent Health |
| PNC | Post-natal care |
| ANC | Ante natal care |
| WHO | World health organization |
| ENC | Essential Newborn Care |
| DALY | Disability Adjusted Life Years |
| U5MR | Under 5 Mortality Rate |
| MCH | Maternal and Child Health |
| ASHA | Accredited Social Healthcare Activist |
| ANM | Auxiliary Nursing Midwifery |
| VHSND | Village Health Sanitation and Nutrition Day |

## 1. INTRODUCTION

A very significant part of any nation is new-born health, as the survival of the child is worried about the five many years of profitability. The most significant person in the life of new-born is the mother and is the individual who is in every case near child.

The current Infant Mortality Rate of India is 34/1000 live births and that of Bihar is 38/1000 live births which shows there is a need to work upon the new-born health in order to reduce the state's Infant Mortality Rate.

Creating awareness among the community members specially mothers is a critical factor to bring down the current Infant Mortality Rate. A large portion of the child mortality can be avoided by giving proper care at home and health facilities by early recognition of risk signs.

As per the WHO recommendations on the post-natal and newborn care, the primary objectives lie in:

1. Prevention, early detection/ diagnosis, and treatment of the complication of mother and infant
2. Referral of mother and newborn to the specialist care when necessary
3. Counselling for maternal and child health
4. Provision of contraceptive services and
5. Immunization

As per the estimates of WHO in 2012, child death rate causes in the age group of 0-5 years in Republic of India are due to neonatal cause (35%), Pneumonia (fifteen %), diarrheal diseases (12%), measles (3%), combat injury (3%) and others (fourteen %). The Major reasons of infant mortality are deliveries conducted at home by incompetent person , unavailability of essential care for asphyxia and temperature maintenance , poor quality of childcare practices, absence of timely identification of danger signs , evitable hold in the referral mechanism and inadequate healthcare facilities.

A bent of recommendations from WHO known as Essential Newborn Care (ENC) are implemented with an intention to enhance neonatal health. This guidelines includes 8 important signs which needs to be look upon for early detection of new-born danger

signs i.e., stop feeding well, history of convulsion, fast breathing, severe chest of drawers indrawing, no spontaneous movements, temperature >= 37.50C, temperature < 37.50C, any tartness in first 24 hrs of liveliness.

Bihar being the socioeconomically backward states have poor child health indicant . According to NFHS-4 data, children under 3 years of age breastfed within one hour was 29.% in Begusarai. Similarly, children under 5 years who are stunted was 44.9% followed by 18.4% who are wasted. Inspite of the continued government efforts there is still a gap in Service delivery and expected outcome.

The Major reason in majority of the scenarios can be an absence of demand generation from the family end to seek aid for the newborn in emergency which is mainly because of lack of the mother ’s knowhow and family response about the danger sign of the newborn.Keeping in mind all the factors, a study was carried out in the Barauni block of Begusarai district to assess the knowledge of mothers on the danger signs of newborn.”

## 2. LITERATURE REVIEW

A study was conducted by Rama R, Gopalakrishnan S, Udayshankar Premier in 2014 in Tamil Nadu revealed that the only 15 % of mothers had adequate cognition regarding the newborn care , whereas only 39% of women know about infant feeding practices and 8% of them knew about immunisation . It was observed that only 42% of women had cognition about the growth monitoring and 33% of mothers knew about new-born illness . It concluded that mother’s educational background had a significant relation with the knowledge about the newborn care.

A descriptive study which was conducted by Hassan Saud Abdul Hussein, Dr. Afifa Radha Aziz in Pediatric Teaching Hospital in holy Karbala city, revealed that the only 34 % of mothers had knowledge about the neonatal jaundice. This study threw a light on the significant relationship between mothers' knowledge and their demographic characteristics( age ,level of education and socioeconomic status , neonate's age, neonate's ordinal position family and baby affected in one family).

Parul. A conducted a discipline in the government hospital of Ahmedabad to assess the cognition of female parent regarding the neonate care . The study highlighted that 60% of mother have below average knowledge about the umbilical cord care and timing of bathing tub . The woman had below average knowledge about the danger of pre-lacteal feed (45%) and immunization (36%). Further it was observed that 32% of women practiced the oil installment and 44% used gripe urine for the treatment of infantile colic. The study emphasized on the requirement and direction of improving the knowledge of the mothers about the newborn care and the need for working towards removing cultural barriers and myths.

A cross-sectional study was conducted by Reza Sharafi, Hassan Esmaeeli in Ravar/Kerman
medical health center. This study revealed that out of 316 mothers having a mean age of 25. 87 only 13.3 % had good knowledge about infant care. It was 8.2% of mothers had poor knowledge and 78.5% of mothers had moderate knowledge.

A community-based cross -sectional study was conducted by Mohammed Feyisso et al in the year 2015 in Ethiopia on 700 mothers with 100% response rate. Out of all study participant only 32.4 % had knowledge of at least one of any of the newborn danger signs. The result further showed that, Residences, educational status of the mothers, delivery and family size were predictors of treatment seeking behavior of mother's from health centre to newborn.

## 3.OBJECTIVES

To assess the knowledge of the mothers regarding essential new-born care.

## 3. METHODOLOGY

3.1. Study Design: Cross-sectional descriptive research design.

3.2. Setting: The study was conducted in Barauni block (Begusarai District), Bihar.

3.3. Duration of Study: 1st Feb 2019 to 1st May 2019.

3.4. Sample Size: 100 mothers (Total 5 Model VHSND sites in Barauni block with footfall of 15 lactating women during VHSND sessions.)

3.5. Inclusion criteria: 1. Mothers of children up to 6 months of age.
2.Mothers who are willing to participate in the study.

3.6. Exclusion criteria: Mothers who are not ready to participate in the study.

3.7. Sampling Technique: For this study convenience sampling technique method is selected and considered appropriate.

3.8. Procedure of data collection: To collect the data, a structured questionnaire was designed with help of literature review of previous questionnaire. This helped in assessing the knowledge of mothers regarding essential new-born care."

3.9. Ethical considerations: The interviewer explained the mothers about the aim of the study and informed that the information obtain would be confidential and only for the purpose of this study. Mothers had ethical rights to participate or refuse participation in the study. Consent to participate in the study was taken orally.

3.10 Method: Primary data was collected through the interview of mothers. The data was then transferred to Excel. The further analysis of the data was done by choosing important factors which affects the new-born health using the Excel.

# 4. RESULTS

## 4.1 Demographic Characteristics

**Age** :

Mean age of mothers (53%) were 19-23 years followed by 42% in 24-28 years of age group. Age of mothers is associated with their knowledge about childcare and adversely affects the infant death.

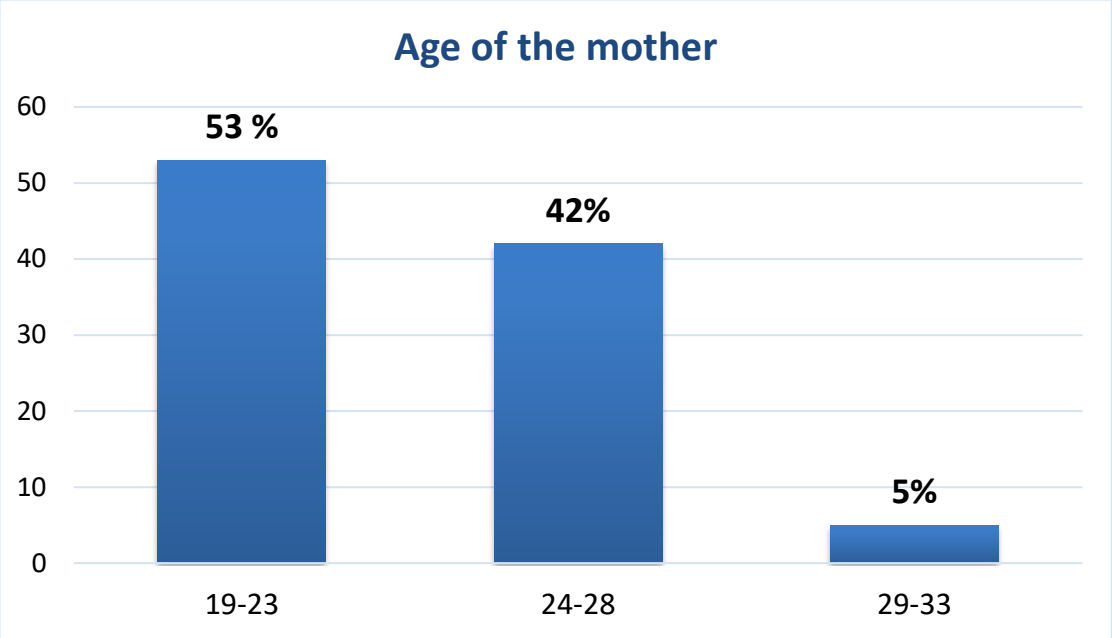


Figure 5.1 : Age of women

**Religion:**

India is a secular country with a diverse cultural practice which directly have impact on the health of infants.From 100 respondents about 91% of the respondents belong to Hindu religion while 9% of them belong to other religion like Muslims, Sikhs, Christians.

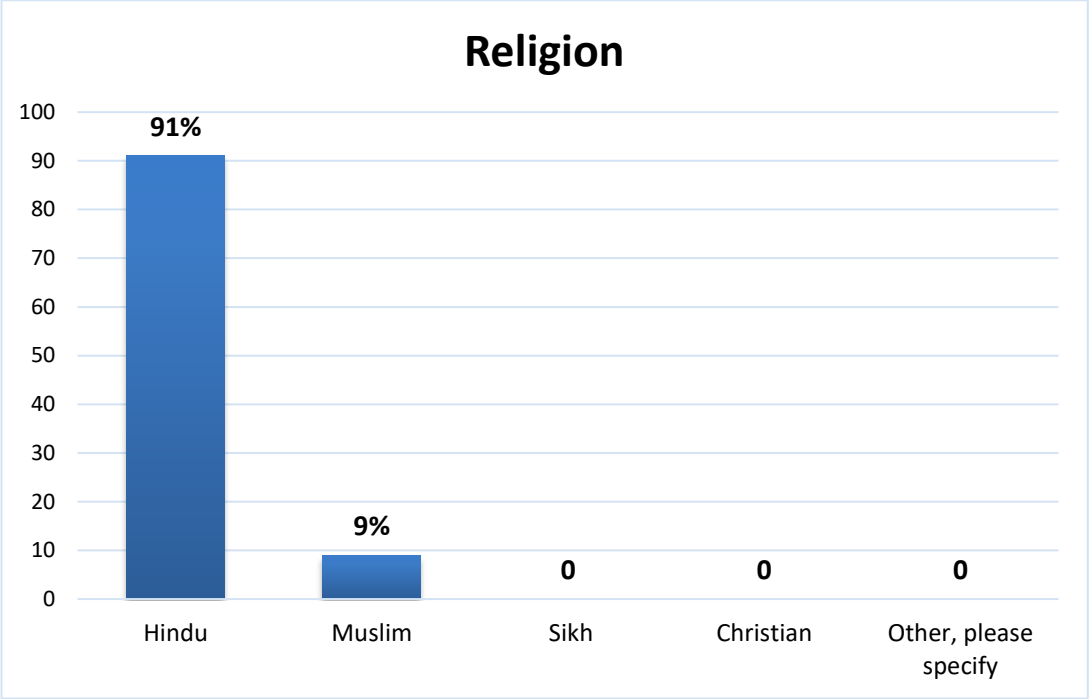


**Figure 5.3 : Religion of women**

**Caste :**

Another important factor is caste because there is history of cultural beliefs and myths which results in harmful infant care practices. Of total 100 respondents 60% of them belong to OBC, 23% belong to Schedule Class, 8% belong to Schedule Tribe and 9% belong to general category.

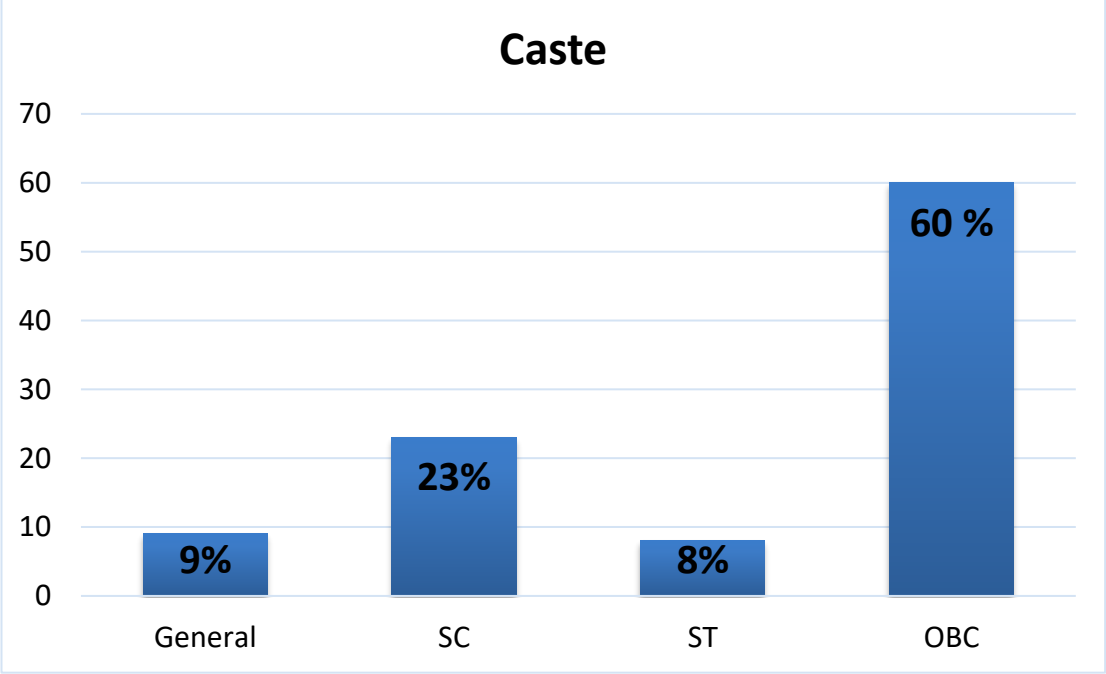


Figure 5.4 : Caste of women

**Education:**

Studies conducted previously revealed that education of the mother plays a significant role in the seeking care for the newborn. The study found that about 28% women were illiterate, 11% received education till 5th std, 33% of women have completed middle school i.e., till 10th std, 22% of women received secondary education, only 6% are graduated and none of them went for post-graduation study.

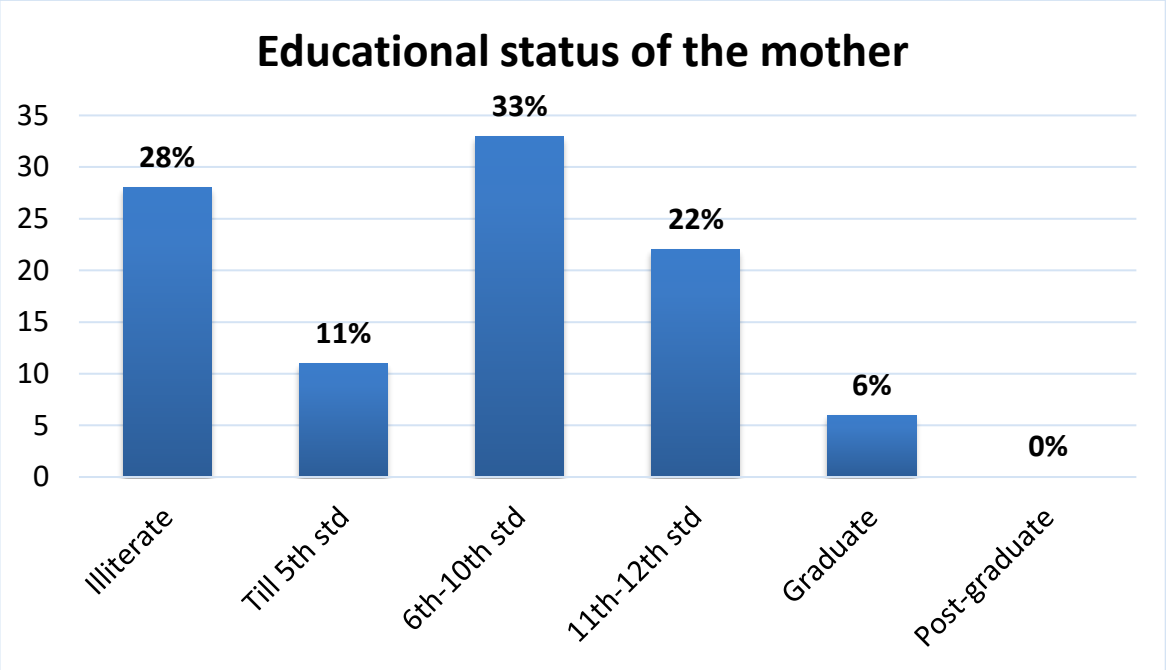


Figure 5.5 : Education of the women

## 4.2. Place of delivery

Place of delivery is a deciding factor in mother's knowledge regarding new-born health and identifying danger signs. Out of 100 mothers, it was observed that 94 % of them chose institutional delivery whereas still 6 % went for home delivery practices.

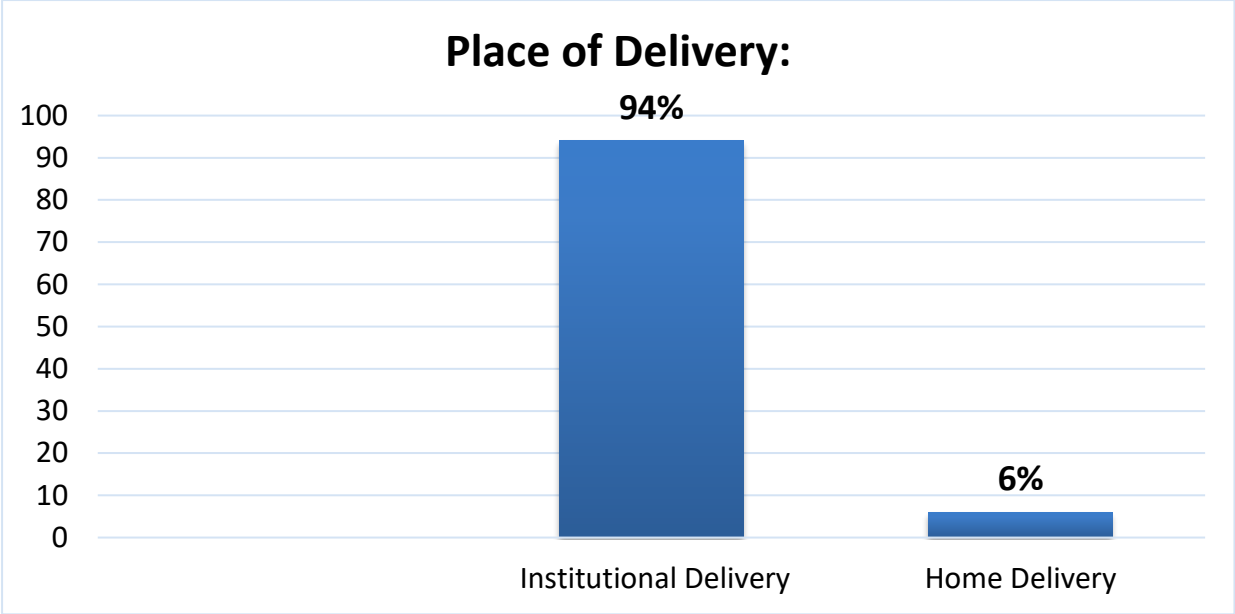


Figure 5.6 : Place of delivery

**4.3 Knowledge regarding initiation of breast feeding**

Due to the certain beliefs and cultural practices in India this is delayed for the initial few hours. The data collected from the questionnaire revealed that 85% of the mothers have knowledge that children should be breastfed within 1 hr of delivery and 15% of them do not know about this.

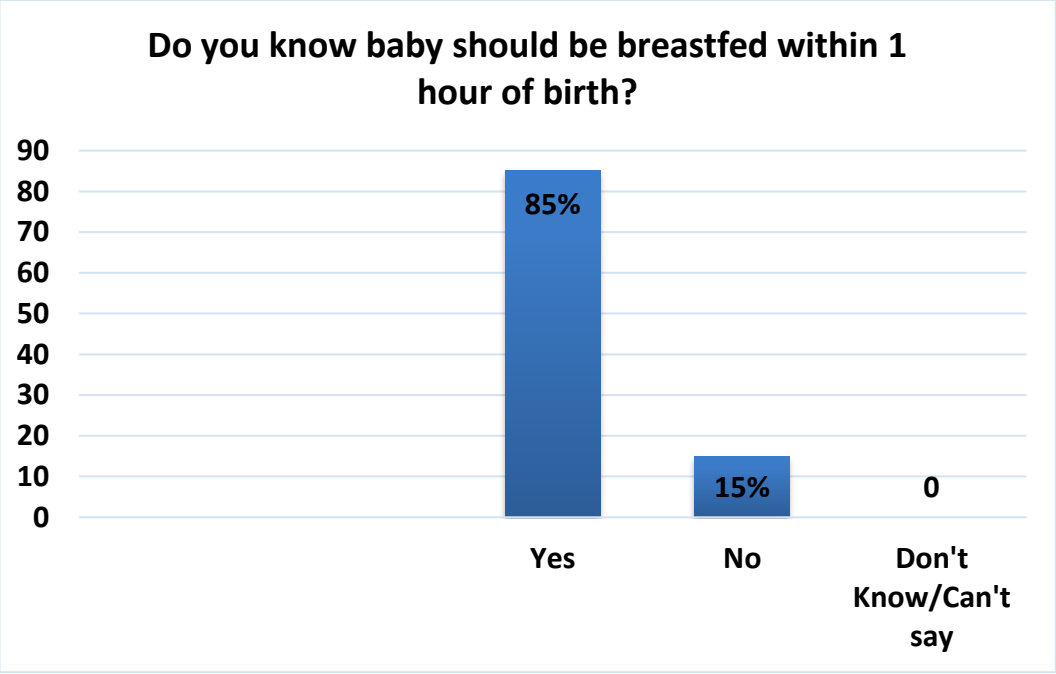


Figure 5.7 : Knowledge regarding breastfeeding within 1 hour

## 4.4 Knowledge of women regarding the exclusive breastfeeding of children up to 6 months of age

Undernutrition in children is influenced not only by food and child feeding practices in the first two years after birth but also by knowledge of mothers, gender inequity, household poverty, and other such issues. This study shows that 80% of women have knowledge regarding the exclusive breastfeeding of children up to 6 months of age. Remaining 20% have no knowledge cannot say if exclusive breastfeeding should be practiced or not.

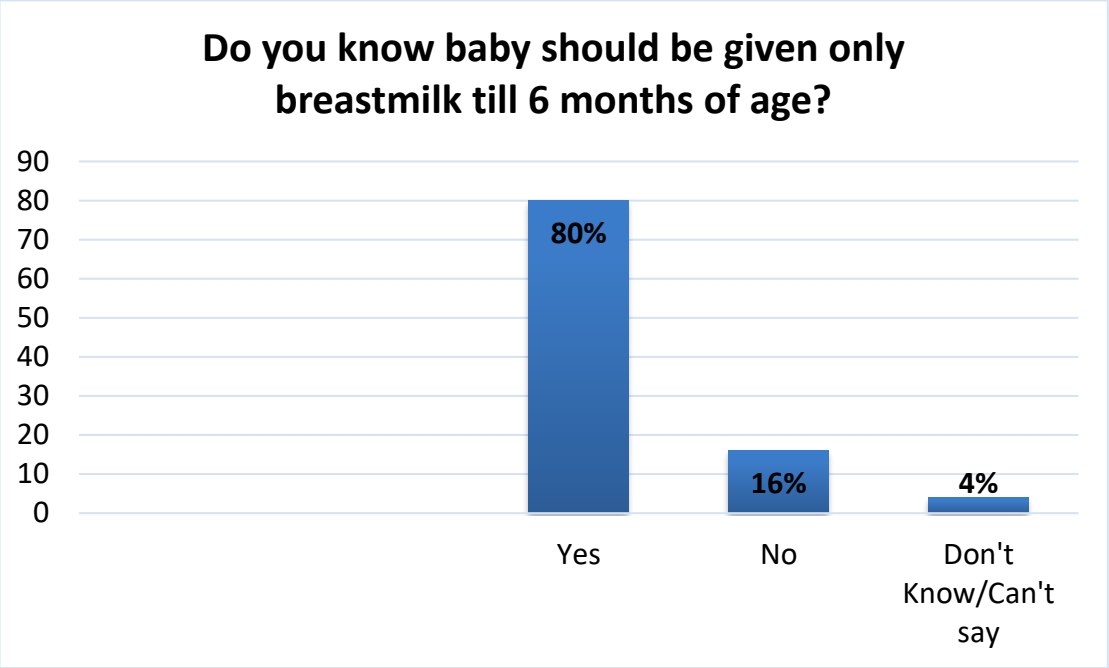


Figure 5.8 : Knowledge regarding the exclusive breastfeeding of children up to 6 months of age

## 4.5. Knowledge of women regarding the KMC contact

Thermoregulation is a major problem ne-borns. Kangaroo mother care is a way to give the appropriate warmth to the babies and avoid the risk of hypothermia. Here, it was observed that only 50% of women have knowledge regarding the importance of KMC contact to keep the baby warm, while rest 50% have no knowledge regarding it.

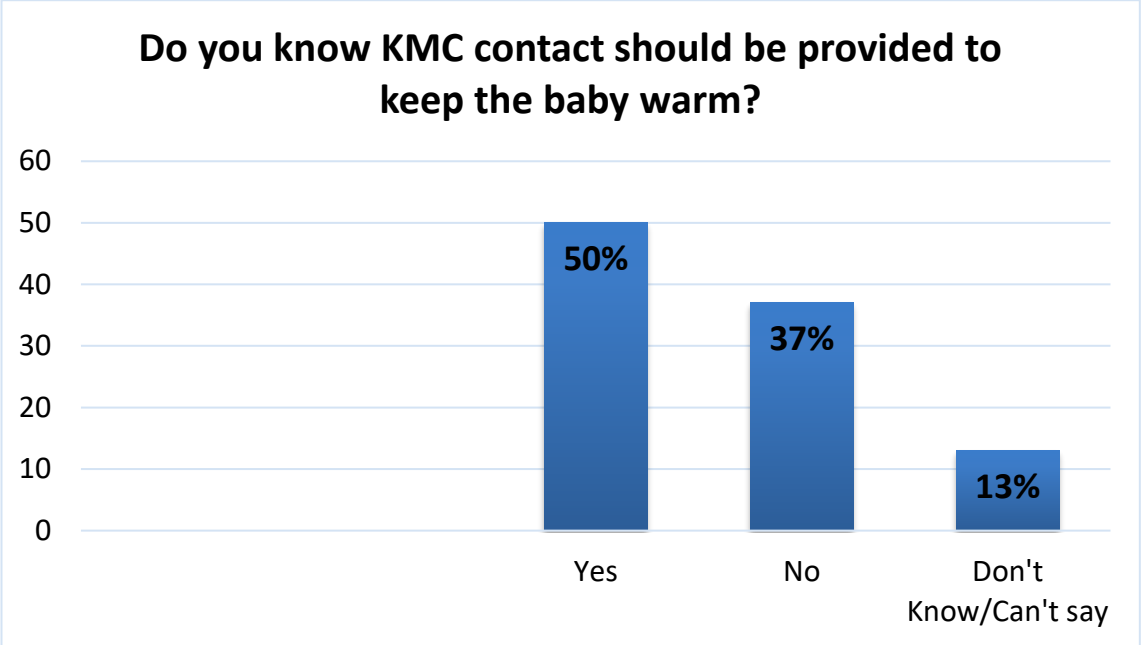


Figure 5.8. Knowledge regarding the Kangaroo Mother Care

## 4.6. Knowledge of women regarding the hand-hygiene practice before handling the baby

Hand-hygiene practice is crucial to maintain the good health of new-borns. It was observed that 80% of women has knowledge that hands should be washed before handling the baby. While 20% of respondent have no knowledge regarding the same.

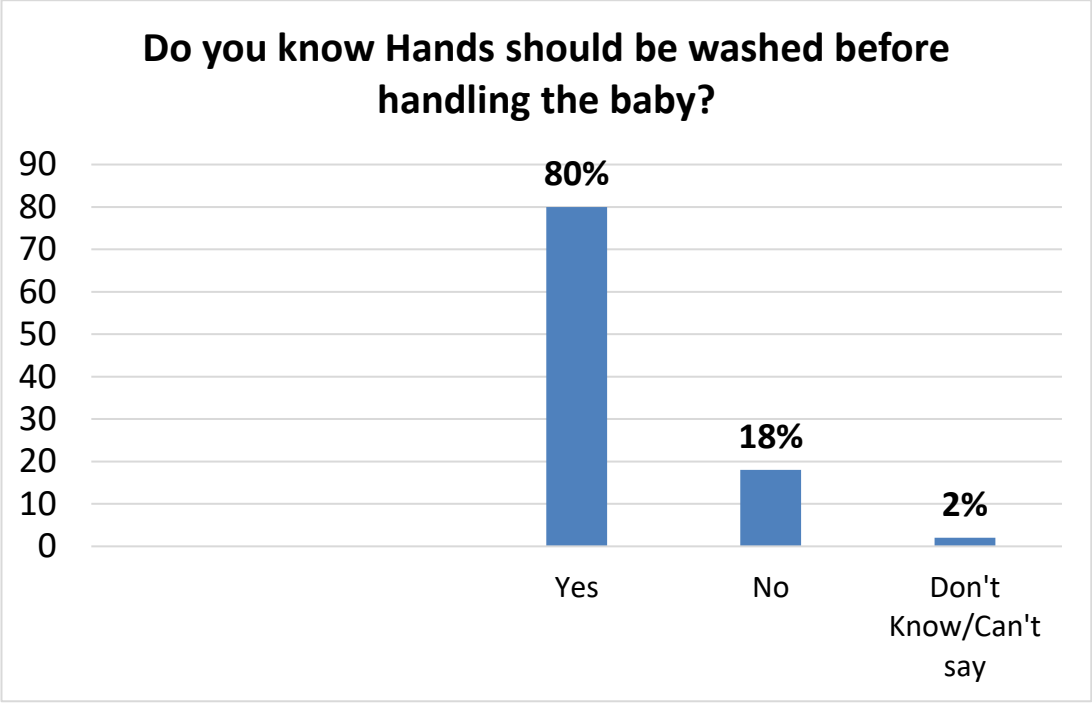


Figure 4.9. Knowledge regarding the hand-hygiene practice before handling the baby

## 4.7. Knowledge of women regarding the cord-care of the baby

Various cultural practices have been observed throughout the India for cord-care of new-borns. Umbilical cord of the baby should be kept dry until it falls off of its own. This study revealed that only 47% of women have knowledge regarding the proper umbilical-cord management. 53% of women have no/poor knowledge regarding the cord care of the baby.

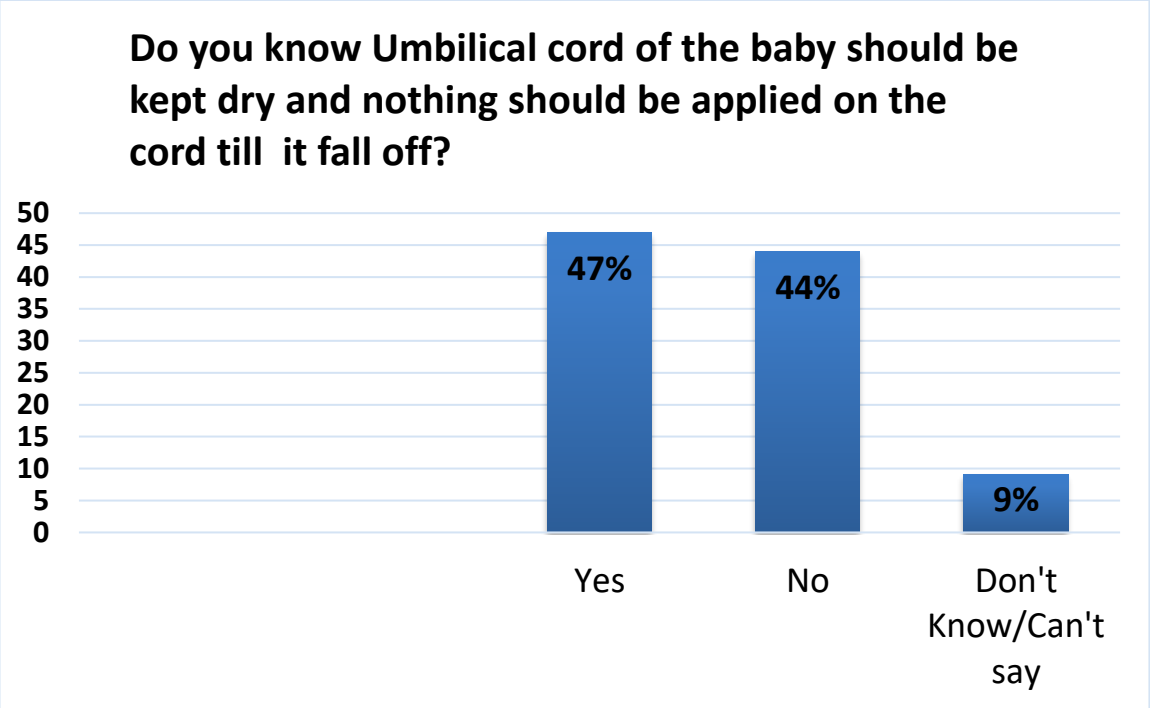


Figure 4.10. Knowledge regarding the cord-care of the baby

## 4.8 knowledge of women regarding the danger signs for the baby

### 4.8.1. Knowledge regarding the fast breathing or difficulty in breathing

The study analyzed that 45% of women know that difficulty in breathing or fast breathing is the danger sign of newborn. Remaining 52% of women do not have knowledge, if the fast breathing poses any danger for the baby.

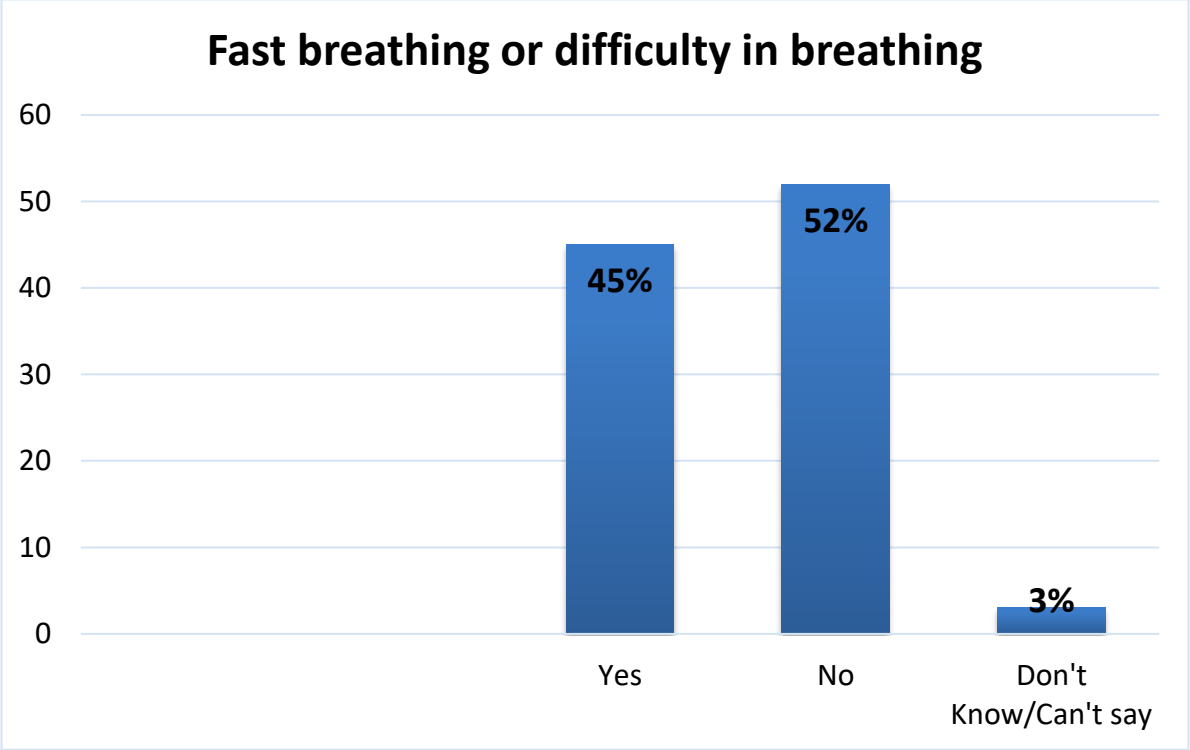


Figure 4.11. Knowledge regarding the fast breathing/difficulty in breathing

**4.8.2. Knowledge regarding the neonatal jaundice**

Neonatal jaundice is one the leading cause of death among the new-borns. Identification of danger sign such as hands and feet of the baby are yellow is vital for prompt medical treatment and thereby reducing the infant mortality.

It was observed that only 33 % women have knowledge if the hands and feet of the baby are yellow , it's a danger sign .

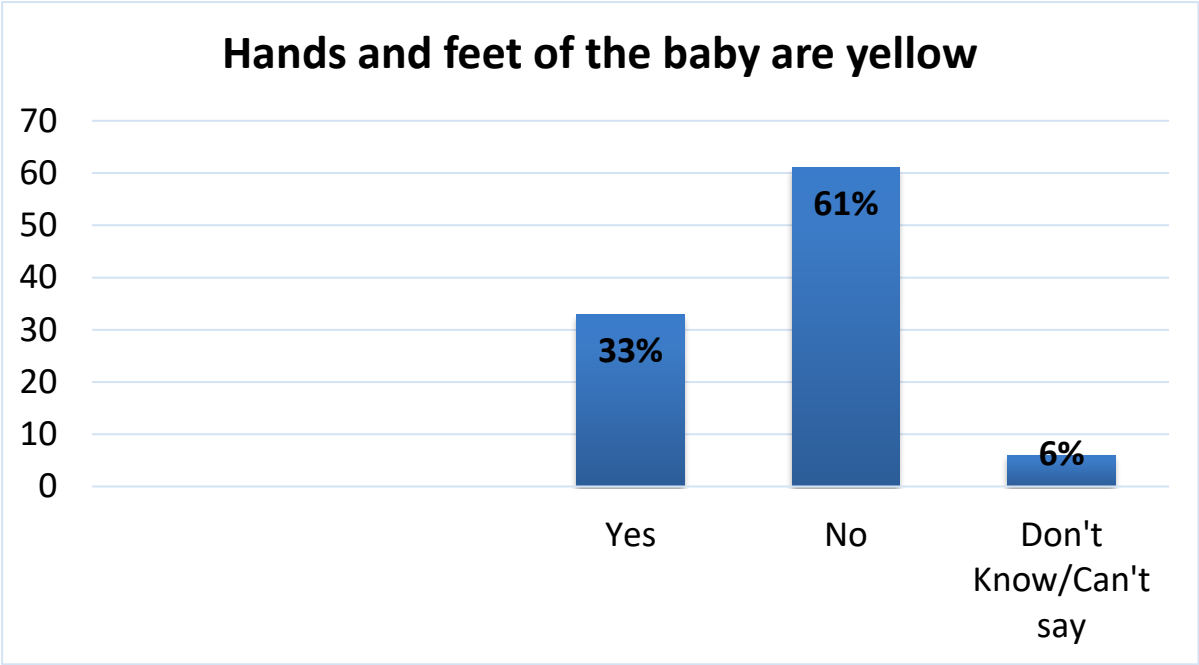


Figure 5.12. Knowledge regarding the neonatal jaundice

**4.8.3. Knowledge regarding baby not able to breastfeed properly**

The study analyzed that 68% of women know that baby not able to feed is the danger sign of newborn. While the remaining 30% women has no knowledge if the baby not able to breastfeed properly is a danger sign for baby's health.

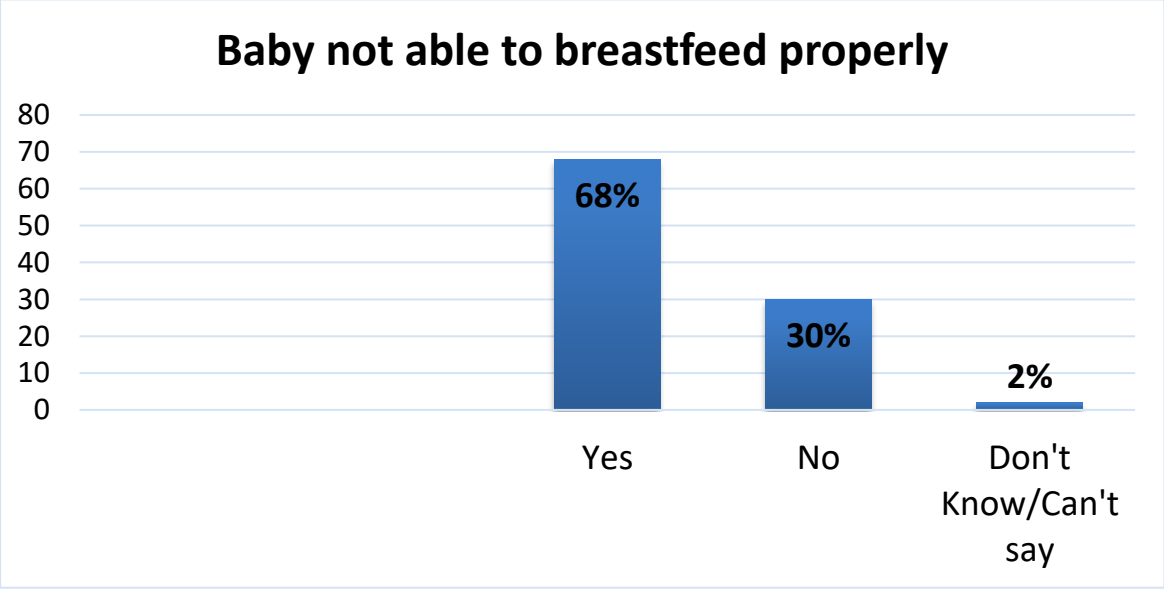


Figure 5.12 Knowledge of women regarding baby not able to breastfeed properly

## 5. DISCUSSION

The maternal and child healthcare programmes has come a long way to provide a superior quality of care to mothers and infants who seek medical care. Nevertheless, the most crucial component of the providing healthcare effectively to mother and child is to build the capacity of Front-line workers in order to receive evidence-based results.

About 53% of women were in the age group of 19-23 years. A further analysis of the caste found that 60% belong to OBC, 23% belong to SC category and 9% and 10% belong to General and ST respectively. Around 28% of women were illiterate and 28% were educated above the higher secondary level. It was concluded that 50% mothers have knowledge regarding the KMC contact on keeping baby warm. Also, it was found that 45% of the respondents consider fast breathing or difficulty in breathing pose a danger for new-borns.

Breastfeeding being the important aspect of the care of newborn to improve its overall health, this study tried to determine the knowledge of women about the practice breastfeeding within 1 hour of birth. It was found that 85% of the mothers have knowledge regarding the initiation of the breastfeeding with an hour after the delivery and 80% women have knowledge regarding exclusive breastfeeding of baby up to 6 months of age.

The maternal and youngster health care programmes has come a long way to provide a superior lineament of care to mothers and infants who seek health care. Nevertheless, the most crucial component of the providing healthcare effectively to mother and child is to improve the capacity of Front-line workers in order to receive grounds -based results. About 53% of respondent were in the age group of 19-23 years. A further depth observation of the caste found that 60% belong to OBC, 23% belong to SC category and 9% and 10 % belong to General and ST respectively. Around 28 % of them were illiterate and 28% were educated above the higher secondary . It was concluded that 50% mother have knowledge regarding the KMC contact on keeping baby warm. Also, it was found that 45% of the responder consider difficulty in breathing pose a danger for New-Born . Breastfeeding being the important panorama of the care of newborn baby to improve its overall health, this study tried to determine the knowledge of women about the pattern breastfeeding within 1 hour of birth. It was found that 85% of the mothers

have knowledge regarding the starting of the breastfeeding with an hour after the obstetrical delivery and 80% women have knowledge regarding exclusive breastfeeding of baby up to 6 months of age.

The study revealed that the about 53% of mothers have below average knowledge of the umbilical cord care and 61% of mothers have poor knowledge regarding the identification of danger signs of neonatal jaundice. Neonatal jaundice and sepsis contribute most to the infant mortality and under-5 mortality.

Attention needs to be given to the community sensitization and supportive supervision activities of the community health workers, which in turn will raise awareness among the mothers regarding the breastfeeding, temperature maintenance of newborns to avoid going them into hypothermia, and identification of danger signs of new-borns.

## 6. CONCLUSION

Any Health Programme in India is fragmented without the support of the focused-on network. Same is the situation for the maternal and child healthcare programs. As mother is the main person who is close to the child in most extreme circumstances, it is vital for the mother to perceive the peril indications of the infant for early conclusion of danger signs and looking for medicinal help. A lot of capacity building trainings are given to specialists like ASHA and ANM for advising mothers in regard to the infant care. It is important to tell people that there will be an immediate impact on child mortality, and they will have respectable motherhood experience. Advocacy and communications programs for dissemination of key messages further boost the institutional deliveries conveyed women to the health care facilities and gave a chance to the healthcare provider to interact and enhance the knowledge of women for new-born health care. However, it becomes impossible for hospital to track down mother and baby after the discharge. To avail the medical advice and generate need , it is requirement that the mother identifies the sign of peril at early so that the infant gets the adequate set of care at the earliest. There was an endeavor to improve the knowledge of mother in regard to the new-born health and danger signs by arranging community sensitization meetings of the pregnant ladies and just conveyed mother in order to help

peer learning and annul the legends and confusion of the Pregnant & lactating mothers and their relatives.

The low awareness of modern health services and ever existing cultural barriers contributed utmost to the challenges to reduce the Under-5 mortality and morbidity.

On the whole, to achieve the goals of reduction of IMR and MMR in these areas, health programs must effect a change in the behavioral patterns, habits and environmental factors of the population by imparting health awareness and educating the local health workers and women on hygiene, sanitation and issues related to new-born healthcare practices.

1. Instrument


2. Bibliography

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