

# **Assess Knowledge and Attitude on Home Based Newborn Care (HBNC) Among Post Natal Mothers in Selected Hospital, Bhubaneswar, Odisha**

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## **ABSTRACT**

**Introduction:** Each year nearly 3.1 million of the newborns die during the neonatal period and almost (99%) death occur in the developing countries. They need optimal care for improved survival. The care depends on the knowledge and attitude of mother. **Objectives:** To identify the knowledge & attitude on home based newborn care among post natal mothers.

**Methodology:** A total of 169 post natal mothers were participated in the study. A non-experimental descriptive survey design and consecutive sampling was used in this study. Data were collected by the researcher by face to face interview. A structured interview schedule covering socio-demographic factors, knowledge, & attitude of post-natal women on home-based baby care was employed, using 25 MCQs and a 5-point Likert scale. Data were analyzed by SPSS-20.

**Results:** The study's findings revealed that there was a weakly positive association between knowledge & attitude on home-based newborn care among postnatal mothers, with a correlation coefficient of 0.079 and a p value of 0.937, which was not statistically significant. The knowledge level are statistically significant with selected socio demographic variables of Educational qualification, Occupation, Parity, Monthly family income and the attitude level are statistically significant with selected Socio demographic Variables Age, Educational qualification, Parity and Monthly family income.

**Conclusion:** The mother is the typical person who provides immediate care for the infant. As a result, a variety of factors influence her knowledge and attitude towards baby care. As a result, time and satisfactory performance at home-based new-born care necessitate instructional programmes aimed specifically at postnatal mothers.

**Keywords:** Post natal Mother, HBNC, Knowledge, Attitude.

## **INTRODUCTION**

Healthy baby are the greatest resource and pride of a nation. The term “newborn baby” refers to the period between birth and the age of 28 days. When a baby is born he/she has to transition

from foetal life to extra uterine life. All the body systems undergo some changes. For a better chance of survival, they require the best possible care. Because protecting the life of a newborn is linked to the future adult's survival and productivity,

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newborn care is extremely cost-effective. They are the building blocks of life. As a result, vital infant care is stressed in order to lower neonatal death and morbidity rates.<sup>1</sup>

Each parent has the right to get necessary information regarding every procedure and they have to learn about to perform successfully to their child. Their attention should be a focus on immediate and exclusive breastfeeding, drying, warming, weighing, and measuring of baby, immunization, periodic health visits, etc. Neonatal care is the term used to describe the treatment given to a newborn child from the time of delivery until around a month later.<sup>2</sup>

More than one million newborn babies die every year in India without having access to medical care. There is a need to provide home-based care to newborn babies because over 85% of births in rural India occur at home. A significant proportion of deaths are caused by potentially preventable conditions such as sepsis, hypothermia, and birth asphyxia. Home Based Newborn Care scheme for reduction of neonatal mortality.<sup>3</sup>

## OBJECTIVES

1. To identify the knowledge and attitude on home based newborn care (HBNC) among post natal mothers.
2. To find out the co-relation between knowledge & attitude on home based newborn care (HBNC) among post natal mothers.
3. To find out the association of knowledge with selected socio-demographic variables.
4. To find out the association of attitude with selected socio-demographic variables.

## MATERIAL & METHODS

The study included descriptive Survey research design. Before conducting the final study, a pilot study was carried out for the period of 1 week with 17 samples. As a result 169 postnatal mothers were chosen who were admitted in postnatal ward by using consecutive

sampling technique. Data were collected by the researcher by face to face interview. With 25 MCQs and a 5-point Likert scale, a structured interview schedule comprising socio-demographic variables, knowledge, and attitude of post-natal mother on home-based newborn care was used. Data were analyzed by SPSS-20. Approval of research proposal from institute review board. The hospital's medical superintendent, the professor in charge, and the nurse in charge of the postnatal unit all gave their written consent.

## ANALYSIS AND INTERPRETATION

The results of the study were organized and presented under the following sections.

### **Section-I: Frequency & percentage distribution of participants according socio-demographics variables of postnatal mothers.**

In this study, More than half (61%) participants were in age group 26-30yrs and (7%) were in age group more than 36yrs respectively. Majority (87%) participants were in Hindu religion and only (13%) were in Muslim religion. More than half (59%) participants were in higher secondary education, only (15%) no of participants were in Graduation and above. Majority (89%) participants were in Unemployed and only (11%) no of participants were employed. More than half (64%) participants were Nuclear family and (36%) participants were Joint family. More than half (63%) participants were in rural area and only (37%) participants were in urban area. More than half (63 %) participants were primipara and (37%) participants were Multipara. More than half (69%) participants were lower segment caesarean section and only (31%) participants were Normal Vaginal delivery. Majority (70%) participants were Gestational age Term Baby and only (13%) were having post term baby. More than half (53 %) participants were Monthly family income 20000-29999 and (2%) were <10000. Majority (88%) participants were age of newborn baby 0-6 days and (12%) were age of newborn baby 7-14 days. More than half (62 %) participants

were Birth Weight of the Baby 2.5-3kg and only (16%) were having birth weight of the baby less than 2.5kg. In relation to gender of child, More than half (56%) were Boy child and (44%) were Girl child. More than half (65%) participants were information regarding newborn care in Health Professional and only (7%) were in Family and friends.

**Section-II: Descriptive statistics to assess the level of knowledge on home based newborn care among post natal mother in terms of frequency and percentage.**

Table 1 shows that More than half (49.11%) no of participants had average knowledge, (41.42%) had good knowledge, and only (9.46%) had poor knowledge on home based newborn care among postnatal mother.

**Table 1: Frequency & percentage distribution to assess the level of knowledge on home based newborn care among postnatal mother**

**n=169**

<i>Knowledge of postnatal mother</i>	<i>Frequency (f)</i>	<i>Percentage (%)</i>
Poor knowledge <sup>(8-13)</sup>	16	9.46
Average knowledge <sup>(14-20)</sup>	83	49.11
Good knowledge <sup>(21-25)</sup>	70	41.42

**Section-III: In terms of frequency and percentage, descriptive statistics to assess the level of attitude toward home-based newborn care among post-natal mothers.**

Table 2 shows that More than half (57.98%) no of participants were having average positive attitude, (36.68%) were neutral attitude and only (5.32%) were having negative attitude on home based newborn care among postnatal mother.

**Section-IV: This section describes the correlation between knowledge and attitude on home based care among post natal mother.**

Table 3 shows that the correlation value between knowledge and attitude toward

**Table 2: Frequency & percentage distribution to assess the level of attitude on home based newborn care among post natal mother**

**n=169**

<i>Attitude of postnatal mother</i>	<i>Frequency (f)</i>	<i>Percentage (%)</i>
Negative <sup>(30-40)</sup>	9	5.32
Neutral <sup>(41-50)</sup>	62	36.68
Positive <sup>(51-60)</sup>	98	57.98

**Table 3: Correlation between knowledge and attitude on home based newborn care among post natal mother**

**n=169**

<i>Criteria</i>	<i>Mean</i>	<i>r value</i>	<i>P value</i>
Knowledge of post natal mother	19.331	0.079	0.937
Attitude of post natal mother	49.952		

$P \leq 0.05^*$  is significant

**Table 4: Chi-square analysis to find out the association between levels of knowledge with selected socio-demographic variables**

**n=169**

<i>Socio-demographic characteristics</i>	<i>Chi-square</i>	<i>df</i>	<i>P value</i>
Age	9.68	6	0.138
Educational qualification	14.99	4	0.005*
Occupation	14.33	2	0.001*
Parity	7.91	2	0.019
Monthly family income	33.74	6	0.000*
Age of newborn	5.92	2	0.052
Source of information	3.45	4	0.484

**Table 5: Chi-square analysis to find out the association between levels of attitude with selected socio-demographic variables**

n=169

<i>Socio-demographic characteristics</i>	<i>Chi-square</i>	<i>df</i>	<i>P value</i>
Age	26.08	6	<b>0.000*</b>
Educational qualification	12.84	4	<b>0.012*</b>
Occupation	5.95	2	0.061
Parity	.7.73	2	<b>0.021*</b>
Monthly family income	35.43	6	<b>0.000*</b>
Age of newborn	4.275	2	0.118
Source of information	5.54	4	0.236

$P \leq 0.05^*$  is significant

home-based newborn care among postnatal mothers being 0.079, with a statistically significant p value of 0.937, indicating that there was a weak positive correlation between knowledge & attitude toward home-based newborn care among postnatal mothers.

**Section-V: This section discusses the findings about the relationship between postnatal mother's knowledge and their chosen socio-demographic characteristics.**

Table 4 shows that the knowledge level are statistically significant with selected socio demographic variables of Educational qualification, Occupation, Parity, Monthly family income as the chi square value are 14.99, 14.33, 7.91 and 33.74 & p values are 0.005, 0.001, 0.019 & 0.000 respectively which is  $>0.05$ . The chi square value of age of post natal mother, Age of Newborn and Source of information regarding newborn care 9.68, 5.92 and 3.45 & p values are 0.138, 0.052, & 0.484 respectively which are not statistically significant.

**Section-VI: This section describes the findings related to association between attitudes of post natal mother with their selected socio-demographic variables.**

Table 5 shows that the attitude level are statistically significant with selected socio demographic variables Age, Educational qualification, Parity and monthly family income as the chi square values are 26.08, 12.84, 7.73 and 35.43 and p values are 0.000,

0.012, 0.021 and 0.000 respectively which is  $<0.05$ . The chi square value of Occupation, Age of Newborn and Source of information regarding newborn care are 5.95, 4.27 and 5.54 & p values are 0.051, 0.118 & 0.236 respectively which are not statistically significant.

## DISCUSSION

In this study, More than half participants (49.11%) were average knowledge, (41.42%) were good knowledge, and (9.46%) were poor knowledge on home based newborn care among postnatal mother and More than half participants (57.98%) were average positive attitude, (36.68%) were neutral attitude and (5.32%) were negative attitude on home based newborn care among postnatal mother. There was poor positive correlation between level of knowledge and attitude on home based newborn care among postnatal mother as evidenced by r value 0.079 and p value 0.937 which was statistically significant. In socio-demographic variables like Educational qualification, Occupation, Parity, Monthly family income were statistical significance association with knowledge on home based newborn care among postnatal mother as the chi square values were 14.99, 14.33, 7.91 and 33.74 & p values were 0.005, 0.001, 0.019 and 0.000 respectively which was  $>0.05$ .

Age, Educational qualification, Parity and monthly family income were statistical

significance association with attitude on home based newborn care among postnatal mother as the chi square values were as the chi square values are 26.08, 12.84, 7.73 and 35.43 and p values are 0.000, 0.012, 0.021 and 0.000 respectively which was  $<0.05$ .

In this study the result findings that majority (87%) participants were having Hindu religion and 13% were Muslim religion.

The result is supported by the study of Choudhary Mangi Lal et al. (2021) on Determinants of knowledge & practices of postnatal mothers on essential newborn care in a selected area of rural Haryana, where he found that (96.7%) postnatal mothers belonged to Hindu religion.<sup>36</sup>

In the present study the Educational status of the post natal mother was predictor of knowledge, with p value  $<0.05$ , which was significant.

The result is supported by the study of Mall A et al. (2021) the knowledge & practices toward neonatal care among primipara mothers in Dehradun, Uttarakhand: A correlation study where they found that Educational qualification.<sup>39</sup>

## LIMITATIONS

- Data were collected from post natal mother who were available in the IPD of hospital on the day of the survey, which means participants that were in home were excluded.
- It can't be conducted according to initial planning i.e in the community setting due to covid-19 situation.

## CONCLUSION

Healthy baby are the greatest resource and pride of nation .Care and nurturing of the newborn become primary responsibilities of parents, specially the mother. The mother is usual person for the immediate care provider of the newborn. Hence, her knowledge and attitude regarding newborn care is influenced by various factors. Therefore, educational

programs specially directed at postnatal mother are a need for time and the satisfactory performance at home based new born care.

**Conflict of Interest:** Nil

**Source of Funding:** Self

## Ethical Clearance

The proposal was authorized by the ethics committee of SOA, Deemed to be university, for the current research investigation. The hospital's medical superintendent, the professor in charge, and the nurse in charge of the postnatal unit all gave their written consent. At the time of data collection, all study participants signed a written informed consent form.

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