

AWARENESS REGARDING NEONATAL CARE AMONG POSTNATAL MOTHERS ATTENDING TEACHING HOSPITAL, CHITWAN

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Received on: 25/02/2021

Revised on: 15/03/2021

Accepted on: 05/04/2021

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ABSTRACT

Background: In many countries around the world, neonatal deaths are so commonplace that children are not even named until they survive their first month of life. Most of the neonatal deaths are preventable if their mothers are aware and provide proper newborn care. The study was carried out with the aim to find out the level of awareness regarding neonatal care among postnatal mothers at Teaching Hospital, Bharatpur-10, Chitwan. **Methods:** A descriptive cross sectional study design was used to measure the level of awareness among 80 postnatal mothers attending in Chitwan Medical College Teaching Hospital, Bharatpur-10, Chitwan by using enumerative sampling technique. Data was collected by using structured face to face interview schedule from dated 2018 June 20- 2018 July 4 and was analyzed through descriptive and inferential statistics. **Results:** Among a total of 80 respondents, 45% of respondents belonged to age group 20-27 years, while majority of respondents 72.5% were from urban areas, most of the respondents 97.5% were literate, 62.5% were primipara. Mean score of respondents' awareness regarding neonatal warmth and breastfeeding was 77.5 and 60.7 respectively followed by hygiene, danger signs and immunization 63, 68 and 42 respectively. **Conclusion:** It is concluded that more than half 58.8% of postnatal mothers had adequate level of awareness on neonatal care while statistical significant association was found between the level of awareness with religion $p=0.012$ and place of residence $p=0.025$. However, awareness regarding frequency of breastfeed in a day, position after burping, sleeping hours in a day, time and frequency of urination and meconium passed after birth, time for neonatal bath, hypothermia and disease preventable vaccine name after birth was still inadequate. Hence, there is need of awareness program by government and health personals on neonatal care to postnatal mothers.

KEYWORDS: Awareness, Neonatal care, Postnatal mothers.

INTRODUCTION

Neonatal period is the most crucial period in the life of infant because it is vulnerable time in completing many of the physiological adjustment required for extra uterine existence. Prompt and correct action for neonatal care can make the difference in life and death or between a normal healthy life and one with serious handicap "A healthy start in life" make the entire life healthy. The development of any country is reflected by their mortality rate like maternal mortality rate and infant mortality rate and neonatal mortality rate. Globally 2.6 million children died in the first month of life approximately 7,000 newborn deaths every day. The majority of all neonatal deaths 75% occur during the first week of life, and about 1 million newborns die within the first 24 hours, which account for 46% of all deaths among children of under 5. More than 80% of newborn deaths can be attributed to three main causes: prematurity, complications during childbirth and

neonatal infections.^[1] Despite of the global efforts to develop and promote the newborn health by conducting different programs, plans and strategies, the neonatal mortality and morbidity rate is still high in developing countries like Nepal, Infant mortality rate was 28.4 deaths per 1,000 live births, Neonatal mortality rate was 21.1 deaths per 1,000 live births.^[2] These rates can be reduced only with the good care practices that are given to the newborn by the mother.

MATERIALS AND METHODS

Descriptive, cross-sectional research design by using Non- probability, enumerative sampling technique was used to collect the data on awareness regarding neonatal care among postnatal mothers. The population for the study was the mothers of newly born babies upto 28 days of life who were delivered in Chitwan Medical College. After obtaining ethical clearance from CMC-Institutional review committee, data was collected by using structured

interview schedule through face to face interview from a total of 80 postnatal mothers within the period of 2 weeks (2018 June 20- 2018 July 4).

RESULTS

Among a total of 80 respondents, 45% of respondents belonged to the age group of 20-27 years. Majority

83.75% of respondents were from Hindu religion. More than half (51.2%) of the respondents belonged to joint family. Regarding educational status majority of the respondents 97.5% were literate, among them, 29.5% had secondary level education, more than half of respondents 56.2% got their husband support during neonatal care.

Table 1: Respondents' Socio-demographic Characteristics.

Variables	Number	Percentage
Age of the respondent		
Below 20 years	14	17.5
20-27 years	36	45.0
28-35 years	14	17.5
Above 35 years	16	20.0
Religion		
Hinduism	67	83.75
Buddhism	11	13.75
Christianity	2	2.5
Place of residence		
Rural	22	27.5
Urban	58	72.5
Types of the family		
Nuclear	39	48.8
Joint	41	51.2
Educational status of the respondent		
Literate	78	97.5
Illiterate	2	2.5
Educational level of the respondent (n=78)		
General literate	16	20.5
Basic level	18	23.1
Secondary level	23	29.5
Bachelor and above	21	26.9
Educational status of the husband		
Literate	76	95.0
Illiterate	4	5.0
Educational level of the husband (n=76)		
General literate	13	17.1
Basic education	19	25.0
Secondary education	26	34.2
Bachelor and above	18	23.7
Occupation of the respondent		
Employed	37	46.2
Unemployed	43	53.8
Yearly income of the respondent (n=37)		
≤ 1 year	27	73.0
> 1 year	10	27.0
Husband's support during neonatal care		
Yes	45	56.2
No	35	43.8

Median= 26, (Q_3-Q_1) = (31.75-22), Min=16, Max=37

Table 2: Respondents' Obstetric Characteristics.

Variables	Number	Percentage
Number of children		
1	50	62.5
2	16	20.0
3	9	11.25
More than 3 children	5	6.25
Age of newborn baby		
Less than 7 days	64	80
More 7 days	16	20
Previous history of neonatal death		
Yes	1	1.3
No	79	98.7
Antenatal visits by the respondent		
2 times	3	3.75
3 times	3	3.75
4 times	42	52.5
More than 4 times	32	40.0
Types of delivery		
Normal	50	62.5
Cesarean section	30	37.5

Table 2 reveals that, more than half 62.5% of the respondents had one child. Regarding the previous history of neonatal death, majority of respondents 98.7% had no previous history of neonatal death where only 1.3% had history of neonatal death due to respiratory

distress. More than half 52.5% of respondents had visited hospital for 4 times during pregnancy. Likewise regarding delivery of the child, 62.5% of the respondents had normal delivery.

Table 3: Respondents' Awareness regarding Neonatal Care: Warmth, Breastfeeding, Physiological Functions and Hygiene.

Items	Correct statements	Frequency	Percentage	
Warmth	Way to keep neonate warm	By covering the baby with atleast 2 layers of cotton clothes	72	90.0
	Benefits of skin to skin contact	It helps to prevent from hypothermia in low birth weight babies	52	65.0
Breastfeeding	First feed for the baby	Colostrum feed	68	85.0
	Time for breastfeed after delivery	Within 1 hour	41	51.2
	Meaning of exclusive breastfeeding	Providing only breast milk to the child upto 6 months	77	96.2
	Frequency of breastfeed in a day	10-12 times	16	20.0
	Reason for burping	It prevents the child from vomiting and helps in proper digestion of milk after feeding	67	83.8
	Best position after burping	Lateral position	22	27.5
Physiological functions	Neonatal sleep per day	16-18 hours	28	35.0
	Timing for passage of urine after birth	Within 1 day	2	2.5
	Frequency of urination in a day	6-8 times	2	2.5
	Timing for passage of meconium	Within 3 days	30	37.5
	Measure to be taken before breastfeeding	Wash each breast with lukewarm water before breastfeeding	58	72.5
	Appropriate time for hand washing	Before touching to the baby	74	92.5
Hygiene	Reason to keep cord clean	To prevent from infection	60	75.0

	and dry			
	Way to keep cord clean	Cleaning with boiled lukewarm water	51	63.8
	Way of cleaning eyes	Cleaning the eye separately with clean cotton	52	65.0
	Time for neonatal bath	After umbilical cord stump fall off	11	13.8
	Way of cleaning the baby for first few days	By using boiled lukewarm water	47	58.8

Table 3 represents respondent's response on items like neonatal care: warmth, breastfeeding, physiological functions and hygiene.

Table 4: Respondents' Awareness regarding Neonatal Care: Danger Signs and Immunization. n=80.

	Items	Correct statements	Frequency	Percentage
Danger Signs	Umbilical cord infection	Redness and pus at umbilical cord	69	86.25
	Eye infection	Redness, swelling and discharge with pus from the eye	44	55.0
	Jaundice	Yellowish discoloration of skin and sclera of eyes	74	92.5
	Recognition of losing warmth/hypothermia	Baby remain cold even after keeping in mother's chest	32	40.0
	Reason for neonatal immunization	To protect the child from some diseases	56	70.0
	Disease preventable vaccine given at the time of birth	Tuberculosis preventive vaccine	11	13.8

Table 5 represents respondent's response on items neonatal: danger signs and immunization.

Table 5: Respondents' Awareness Mean Score According to Different Areas of Neonatal Care.

Domains	Max. Score	Mean \pm SD	Mean (%)
Warmth	2	1.55 \pm 0.782	77.5
Breastfeeding	6	4.18 \pm 2.317	60.7
Physiological functions	4	0.79 \pm 1.281	19
Hygiene	7	4.43 \pm 2.956	63
Danger signs	4	3.12 \pm 1.37	68
Immunization	2	0.84 \pm 0.808	42
Total	25	14.91 \pm 9.51	55.03

Table 5 reveals that, respondents' awareness on mean score and mean percentage related to neonatal care according to awareness areas in which respondents overall mean percentage on awareness score was 55.03%

with highest score 77.5% in awareness on warmth and minimum score 19% in awareness on physiological functions.

Table 6: Respondents' Level of Awareness regarding Neonatal Care n=80.

Level of awareness	Frequency	Percentage
Adequate \geq 14	47	58.8
Inadequate $<$ 14	33	41.2
Total	80	100

Median value: 14, Maximum Score: 21, Minimum Score: 7, $Q_1=12$ $Q_3=16$

Table 6 reveals that, 58.8% of the respondents had adequate level of awareness whereas only 41.2% of the

respondents had inadequate level of awareness on neonatal care.

Table 7: Association between Respondents' Level of Awareness regarding Neonatal Care and Selected Variables.

Variables		Level of Awareness		χ^2	P Value
		Adequate n (%)	Inadequate n (%)		
Age of the respondents	$<$ 26 years	24 (54.3)	21 (45.7)	0.866	0.352
	\geq 26 years	22 (64.7)	12 (35.3)		
Place of residence*	Rural	8 (36.4)	14 (63.6)	6.275	0.012
	Urban	39 (67.2)	19 (32.8)		

Types of the family	Nuclear	21 (53.8)	18 (46.2)	0.755	0.385
	Joint	26 (63.4)	15 (36.6)		
Religion*	Hinduism	43 (64.2)	24 (35.8)	5.015	0.025
	Non- Hinduism	4 (30.8)	9 (69.2)		
Educational status of the husband**	Literate	44 (57.9)	32 (42.1)	0.639	0.451
	Illiterate	3 (75.0)	1 (25.0)		
Employment status	Employed	23 (62.2)	14 (37.8)	0.331	0.565
	Unemployed	24 (55.8)	19 (44.2)		
Husband's support during neonatal care	Yes	26 (57.8)	19 (42.2)	0.040	0.841
	No	21 (60)	14 (40.0)		
Number of children	1 child	26 (52.0)	24 (48.0)	2.507	0.113
	More than 1 child	21 (70.0)	9 (30.0)		
Antenatal visits by the respondent	≤ 4 times	25 (52.1)	23 (47.9)	2.201	0.138
	≥ 4 times	22 (68.8)	10 (31.2)		

Significance at 0.05 *Significant ** Fisher's Exact test

Table 7 reveals that, there was a statistical significant association between religion and place of the respondents. However it showed that, there was no statistical significant association between age, type of family, educational status, employment status, husband's support, number of children and antenatal visits of the respondents.

DISCUSSION

The findings of the present study revealed that 45% of postnatal mothers belonged to the age group 20-27 years. It also revealed that more than half 58.8% of the postnatal mothers have adequate level of awareness. The findings of the study also showed that the mean score awareness of six domains along with mean percentage was 55.03%. Similar study conducted by Nepal and Thapa (2017) found that 78% of mothers had inadequate knowledge.^[3]

The findings of the present study found that, there was statistical significant association between the level of awareness and socio-demographic variable i.e. religion $p=0.012$ and place of residence $p=0.025$, similar supportive findings was found in the study conducted by Nepal & Thapa (2017), where significant association was found between parity of mother ($P\text{-value}<0.04$) and place of birth ($P\text{-value}<0.04$) to knowledge on newborn care and parity of mother to the practice of newborn care ($P\text{-value}<0.03$).

CONCLUSION

The study concluded that, despite of this advanced technology in health care still neonatal morbidity and mortality is high and there is need to create awareness to the mothers regarding neonatal care in the community.

ACKNOWLEDGEMENTS

Author's heartfelt thanks goes to Chitwan Medical College, Teaching Hospital, Bharatpur, Chitwan for providing opportunity to conduct this study and also acknowledged to all the participants for their kind cooperation during data collection.

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