A Descriptive Study To Assess The Knowledge Regarding Danger Signs of Neonatal Illness Among Postnatal Mothers In SMI Hospital Dehradun" In A View To Develop An Information Booklet

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ABSTRACT
A study was conducted to assess the knowledge regarding danger signs of neonatal illness among postnatal mothers in SMI Hospital Dehradun, in view of developing an information booklet. The research design selected was one descriptive study. The setting was Shri Mahant Indiresh Hospital, Dehradun. 80 postnatal mothers were selected using a convenient sampling technique. A self-developed knowledge questionnaire regarding the dangerous sign of neonatal illness was used to collect the data. The result of the study showed that (3.75%) of postnatal mothers had adequate knowledge, (48.75%) had a moderate level of knowledge, and (47.5%) had an inadequate level of knowledge. Thus, the study concluded that the majority of postnatal mothers have moderate knowledge regarding danger signs of neonatal illness which states that there was a lack of knowledge regarding danger signs of neonatal illness.

Keywords: *Knowledge, Danger Signs, Neonatal illness, Postnatal mothers*

I. INTRODUCTION

A new baby is like the beginning of all things, wonder, hopes, a dream of possibilities. A neonate is also called a newborn. The neonatal period is the first 4 weeks of a child's life. Many critical events can occur in this period. Neonates are particularly vulnerable to heat loss through convection, conduction, evaporation, and radiation. Neonates and young infants often present with specific symptoms and signs that indicate severe illness. These signs might be present at or after delivery or in a newborn presenting to hospital or develop during a hospital stay. The danger signs are breathing difficulty, feeding poorly, jaundice, pallor, bleeding, convulsions, fever, vomiting, less than normal movements, discharge/swelling from the umbilicus, and diarrhea or blood in the stool. Neonates are very vulnerable just after birth as they make the transition from the safety of the womb to the external world. It is the most difficult time for them when they learn to breathe, feed, and also a time of growth where their lungs, heart, brain, kidneys, liver learn to coordinate. The worst part is that their communication is limited, and their primary caregivers need to know the signs and symptoms of danger and sickness.

Most neonates die due to preventable or treatable causes such as complications during birth, pneumonia, diarrhea, neonatal sepsis, and malaria. According to WHO, about 0.75 million neonates die every year in India, the highest for any country in the world. Globally, 2.4 million children die in the first month of life in 2019- approximately 7,000 newborn deaths every day- most of which occurred in the first week, with about 1 million dying on the first. UNICEF stated that approximately 6,700 neonatal deaths every day, with about a third of all neonatal deaths occurring within the first day after birth and close to three quarters occurring within the first week of life.

II. RESEARCH METHODOLOGY

Research Approach
Quantitative evaluative research approach was used in the study.

Research Design
The research design selected for the study was one group pretest design.

Setting
The study was conducted in SMI Hospital, Patel Nagar, Dehradun.

Sample and Sampling Technique
The study subjects were selected in the 1st and 2nd weeks of July 2019. Postnatal mothers who were admitted in the postnatal and those who are fulfilling the selection criteria were selected. The data was collected with the help of a structured knowledge questionnaire.
The sample consisted of 80 postnatal mothers.

Convenient sampling technique was used to select a sample for the study.

Instrument
Tool 1: Socio-demographic profile-
This tool was developed to collect information regarding sample characteristics. It consists of 10 items (Age, religion, educational status, occupational, type of family, family income, no. of children, the gender of neonates, residential area, and previous exposure of knowledge.

Tool 2: Structure knowledge questionnaire
A structured knowledge questionnaire was developed to assess the knowledge of postnatal mothers regarding danger signs of neonatal illness. It consisted of 32 items, each scoring 1 mark for the right answer and 0 for the wrong answer.

III. DATA ANALYSIS
Table –I
Frequency and percentage distribution of Demographic variables

N=80

Sr. No.	Demographic Variable	Frequency(f)	Percentage(%)
1.	Age		
	• 18-24	55	68.75%
	• 25-29	20	25%
	• 30-34	3	3.75%
	• 35-39	2	2.5%
2.	Religion		
	• Christian	16	20%
	• Muslim	10	12.5%
	• Hindu	52	65%
	• Sikh	2	2.5%
3.	Education		
	• Primary school	12	15%
	• High school	40	50%
	• Higher secondary	22	27.5%
	• Degree/above	6	7.5%
4.	Occupation		
	• Housewife	64	80%
	• Private job	9	11.25%
	• Government job	5	6.25%
	• Business	6	2.5%
5.	Income of family		
	• Rs.10,000-15,000	56	70%
	• Rs.16,000-30,000	12	15%
	• Rs.31,000-45,000	10	12.5%
	• Rs.45,000 or above	2	2.5%
6.	Type of family		
	• Nuclear family	64	80%
	• Joint family	13	16.25%
	• Extended family	3	3.75%
7.	Number of children		
	• 1	4	5%
	• 2	46	57.5%
	• 3	22	27.5%
	• More than 3	8	10%
8.	Gender of neonate		
	• Male	57	71.25%
	• Female	23	82.5%
9.	Residential area		
	• Urban	14	17.5%
	• Rural	66	82.5%
10.	Previous exposure of knowledge		
	• Yes	36	45%
	• No	44	55%

Table –II
Classification of respondents on pre-test knowledge score on danger sign of neonatal illness among the postnatal mothers

N=80

S. No.	Level of knowledge	Frequency	Percentage (%)
1.	Adequate knowledge	3	3.75%
2.	Moderate knowledge	39	48.75%
3.	Inadequate knowledge	38	47.5%

The pre-test table II depicts that the majority of postnatal mothers had moderate knowledge scores (48.75%), 47.5% had inadequate knowledge scores, and 3.75% had adequate knowledge scores regarding danger signs of neonatal illness.
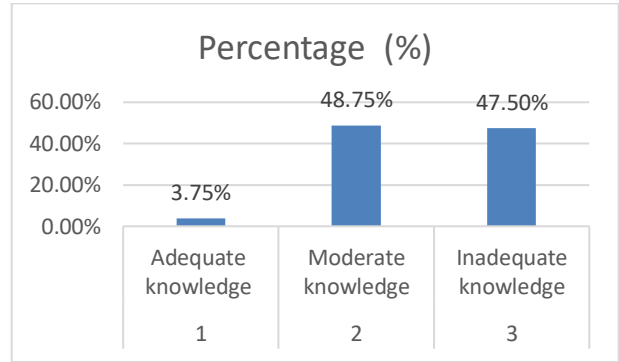
Fig.1: Percentage-wise distribution of Pre-test knowledge

Table –III
Association between pre-test knowledge score and demographic variables on danger sign of neonatal illness among the postnatal mothers

N=80

Sr. No	Demographic Variable	Adequate	Moderate	Inadequate	DF	Calculated value	Tabulated value	Level of association
1.	Age 18-24 25-29 30-34 35-39	2 1 0 0	22 15 3 0	29 5 1 2	6	9.67	12.59	#
2.	Religion Christian Muslim Hindu Sikh	0 0 3 0	4 6 40 2	12 4 9 0	6	20.38	12.59	*
3.	Education Primary school High school Higher secondary Degree/above	0 2 1 0	3 28 18 5	9 10 3 1	6	16.7	12.59	#
4.	Occupation Housewife Private job Government job Business	1 2 0 0	11 7 3 1	52 0 2 1	6	30.88	12.59	*
5.	Income of family Rs.10,000-15,000 Rs.16,000-30,000 Rs.31,000-45,000 Rs.45,000/above	2 0	43 11	11 1	6	6.11	12.59	#

		1 0	9 1	0 1				
6.	Type of family Nuclear family Joint family Extended family	1 1 1	12 5 0	51 7 2	4	12.16	9.49	*
7.	Number of children 1 2 3 More than 3	0 1 1 1	0 37 19 2	4 6 4 5	4	25.6	9.49	*
8.	Gender of neonate Male Female	1 2	27 12	29 9	2	2.62	5.99	#
9.	Residential area Urban Rural	3 0	53 1	10 13	2	34.05	5.99	*
10.	Previous exposure of knowledge Yes No	0 3	16 1	21 39	2	21.28	5.99	*

Table III – Hence, it is concluded that there is an association of danger signs of neonatal illness among postnatal mothers to their religion, occupation, no. of children, residential area, previous exposure of knowledge

IV. DISCUSSION

Recommendations

Based on the findings of the study, the following recommendations have been made for further study-

• The study can be replicated on a large sample for the generalization of findings.

• A comparatives study can be conducted to assess the level of knowledge regarding danger signs of neonatal illness among postnatal mothers in a rural and urban community

• A comparative study can be conducted to assess the level of knowledge on danger signs of neonatal illness among primiparous and multiparous mothers.

V. CONCLUSION

The study was undertaken by the researcher with the purpose of assessing the knowledge and provide an information booklet among postnatal mothers regarding danger signs of neonatal illness. The quantitative research approach was used. The study was conducted on 80 postnatal mothers admitted to SMI Hospital, Patel Nagar, Dehradun. The self-developed knowledge questionnaire was administered to assess the knowledge of postnatal mothers regarding the dangerous sign of neonatal illness. A pre-test was conducted by administering a structured questionnaire to assess the knowledge of postnatal mothers regarding danger signs of neonatal illness, and an information booklet was provided among postnatal mothers regarding the dangerous sign of neonatal illness.

The study concluded that postnatal mothers have moderate knowledge regarding danger signs of neonatal illness.

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