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Knowledge of Mothers of Children Under Five Years of Age on Neonatal Infection

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ABSTRACT

Newborn care refers to the essential care provided to the newborn baby by the mother or by the care provider such as, breast feeding, maintaining body temperature, care of the cord, care of the eyes, and prevention of infection and injuries. Neonatal sepsis continues to be an important cause of morbidity and mortality worldwide due to the lack of adequate preventive and therapeutic strategies in low income settings and due to the increased survival of preterm and low-weight newborns. The present study aims to assess the knowledge of mothers of children under 5 years of age on neonatal infection at Life Kare Hospital, Amritsar. Descriptive study design was utilized to accomplish the objectives of the study. 50 mothers were selected for the study by using convenience sampling technique. The tool consists of demographic variables and structured knowledge questionnaire was administered to mothers of children under 5 years of age to collect the data. The data was collected and analyzed by using descriptive and inferential statistics. Findings of study revealed that 28(56%) had poor knowledge, 17(34%) had average knowledge and 5(10%) had good knowledge with an average mean score and SD was 8.38±2.212. The study concluded that mother plays a vital role in newborn care, they should have necessary knowledge in all the aspects of newborn care, thereby the study suggests that mothers should be educated on prevention of neonatal infection and preventive strategies to be implemented to prevent neonatal infection.

KEYWORDS

Knowledge, Mothers of under five children, Neonatal infection

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INTRODUCTION

Newborns need a special care and intensive monitoring and support during this critical period of adaptation. It is possible to increase perinatal survival and quality of human life through prompt and adequate management of newborn. The first week after birth is a time of major metabolic and physiological adaptation for newborn infants. The early life all newborn try to adapt to the external environment. So, newborns need a special care and intensive monitoring and support during this critical period of adaptation. In the developing countries five.[1]

The days and weeks following childbirth – the postnatal period – is a critical phase in the lives of mothers and newborn babies. Major changes occur during this period which determines the well-being of mothers and newborns. Yet, this is the most neglected time for the provision of quality services. Lack of appropriate care during this period could result in significant ill health and even death. Rates of provision of skilled care are lower after childbirth when compared to rates before and during childbirth. Most maternal and infant deaths occur during this time.[2]

Children are our future and utmost precious resources. The physical and mental well-being of an individual depends on the correct management of events in the perinatal period. After the birth of the child, its health depends upon the health care practice adopted by the family, especially by mothers. For all babies the interval between onset of illness and death can be in a matter of minutes or hours. It is, therefore, very important for us to recognize and plan for the care of a newborn.[3]

Among the almost 3.9 million newborn deaths that occur worldwide, about 30% occur in India. Children are our future and utmost precious resources. After birth the health of the child depends upon the health care practice adopted by the family, especially by the mothers. Information about neonatal infection will help in reducing mortality and morbidity during the neonatal period.[4]

Globally 10 million under five children die every year. Majority of them die in their neonatal period. Among them 98% of these deaths occur in developing countries. Almost half of the deaths in under-five year- olds occur in infancy. About two-thirds of infant deaths occur in the neonatal period. It has also been noted that one-third of all neonatal deaths occur on the first day of life, almost half within 3 days and nearly three-quarters within the first week of life. In developing countries, about 34 of every 1000 live births result in neonatal death.[5]

More than 40% of all deaths in children under 5 years of age occur during the neonatal period: the first month of life. Immunization of pregnant women has proven beneficial to both mother and

infant by decreasing morbidity and mortality. With an increasing number of immunization trials being conducted in pregnant women, as well as roll-out of recommended vaccines to pregnant women.[6]

Nurse has a vital role in prevention of disease and maintenance of health. Mother is the first nurse of every newborn. The mother's knowledge and practices play a crucial role in safe guarding and enhancing the newborn adaptation to new environment it is important to educate the mothers regarding various aspects of newborn care. So the care of newborn is very important for survival and healthy development of newborn[7]

Based on the review of literature and the personal experience of the investigator during hospital visits in urban areas is found that many neonates affected with neonatal infections and there is less awareness and practices on prevention of neonatal infections. Hence the investigator felt the need to assess the knowledge on prevention of neonatal infections among mothers of neonates, with a view to create an awareness of mothers regarding prevention of neonatal infections.

STATEMENT PROBLEM

A descriptive study to assess the knowledge of mothers of children under 5 years of age on neonatal infection in selected hospital, Amritsar.

OBJECTIVES OF STUDY

1. To assess the knowledge of mothers of children under 5 years of age on neonatal infection
2. To find out the association between level of knowledge of mothers of children under 5 years of age on neonatal infection with their selected demographic variables.

RESEARCH METHODOLOGY

RESEARCH DESIGN

For the present study, descriptive study design is utilized to achieve the objectives of the study.

VARIABLES UNDER STUDY

Independent variables:

Knowledge of mothers of children under 5 years of age on neonatal infection

Demographic variables

The demographic variables under the study are age in years, educational status of mother, occupation of mother, Family monthly income, religion, area of habitat and source of information.

RESEARCH SETTING

The present study was conducted at Life Kare Hospital, amritsar.

POPULATION

For the present study, population was mothers of children under 5 years of age.

SAMPLING TECHNIQUE

The study subjects were selected by using convenience sampling technique.

SAMPLE SIZE

The sample size for present study was 50 postnatal mothers

SAMPLING CRITERIA:

Inclusion criteria:

- Mothers who are willing to participate in the study.
- Mothers who are cooperative.
- Mothers who can read/understand English or Punjabi language.

Exclusion criteria:

- Mothers who are not cooperative.
- Mothers who are critically ill.

SELECTION AND DEVELOPMENT OF TOOL

The tool was developed by keeping in mind the objectives of the study and prepared after extensive review of literature, internet sources and through discussion with guide, co-guide and opinions of various experts in the field of obstetrics and gynecological nursing.

DESCRIPTION OF TOOL

The tool consists of 2 parts:-

Part A: Socio-Demographic variables:

It consist of 7 variable items for obtaining information from postnatal mothers i.e. age in years, educational status of mother, occupation of mother, Family monthly income, religion, area of habitat and source of information.

Part B: Self structured knowledge questionnaire on neonatal infection. The questions includes on definition, causes, risk factors, signs and symptoms, assessment and diagnosis, treatment and prevention of neonatal infection.

Scoring Criteria:

- Scores ranging from 0-7 would be considered poor knowledge
- Scores ranging from 8-14 would be considered average knowledge
- Scores ranging from 15-21 would be considered good knowledge

RELIABILITY OF TOOL

The reliability of the tool was assessed by cronbach's alpha (r=.749). The tool was found to be reliable.

RESULTS AND DISCUSSION

Table 1 Frequency and Percentage Distribution of Demographic Variables N=50

S.NO	Demographic Variable	Frequency (f)	Percentage (%)
1	Age of mother (in years)		
	a. 20-25 yrs	7	14
	b. 26-30 yrs	19	38
	c. 31-35 yrs	20	40
	d. 36 – 40 yrs	4	8
2	Educational status of mother		
	a. Primary	10	20
	b. Secondary	11	22
	c. Higher secondary	22	44
	d. Graduation and above	7	14
3	Occupation of mother		
	a. Employed	7	14
	b. Business	11	22
	c. Laborer	22	44
	d. Housewife	20	40
4	Monthly family income (Rs)		
	a. 5001-10000	13	26
	b. 10001-15000	23	46
	c. Above 15000	14	28
5	Habitat		
	a. Urban	28	56
	b. Rural	22	44
6	Type of family		
	a. Nuclear	24	48
	b. Joint	23	46
	c. Extended	3	6
7	No of children		
	a. One	27	54
	b. Two	19	38
	c. Three	4	8
8	Source of information		
	a. Family/friends	17	34

	b.	Health care/physician	27	54
	c.	Internet	6	12

Table 2 Level of knowledge regarding of mothers of children under 5 years of age on neonatal infection N=50

S.NO	LEVEL OF KNOWLEDGE	f	%	MEAN	SD
1	Poor Knowledge (0 - 7)	28	56		
2	Average Knowledge (8 - 14)	17	34	8.38	2.212
3	Good Knowledge (15 - 21)	5	10		

Table 2 depicts the level of knowledge regarding neonatal infection among mothers of children under 5 years of age, the results reveals that 28(56%) had poor knowledge, 17(34%) had average knowledge and 5(10%) had good knowledge with an average mean score and SD was 8.38±2.212. **Anjum Fathima, Dr. Santosh (2019)[8]** conducted a **study to assess the knowledge regarding selected neonatal infections and their prevention among primi gravida mothers attending H.S.K medical college hospital and research center, Bagalkot. Findings showed** that 21(52.50%) of subjects had inadequate knowledge, 11(27.50%) subjects had medium and only 8(20%) had adequate knowledge regarding selected neonatal infections and their prevention.

Table 3 Association between level of knowledge score and demographic variables of mothers of children under 5 years of age N=50

Demographic Variable	Poor Knowledge	Average knowledge	Good knowledge	χ^2 value df P value
Age in years				
a. 20-25 yrs	2	4	1	2.881
b. 26-30 yrs	11	6	2	6
c. 31-35 yrs	12	6	2	0.410 NS
d. 36 – 40 yrs	3	1	0	
Educational status of mother				
a. Illiterate	1	2	0	10.26
b. Primary	5	6	2	8
c. Secondary	11	3	0	0.036*
d. Higher secondary	10	3	1	
e. Graduation and above	1	4	1	
Occupation of mother				
a. Employed	6	1	0	3.324
b. Own business	5	5	1	6
c. Laborer	7	4	1	0.344 NS
d. Housewife	10	7	3	
Monthly family income (Rs)				
a. 5001-10000	9	3	1	1.265
b. 10001-15000	12	7	4	4
c. Above 15000	7	7	0	0.531 NS

Area of habitat				1.152
a. Urban	15	9	4	2
b. Rural	13	8	1	0.696 NS
Type of family				
a. Nuclear	13	8	3	1.765
b. Joint	12	9	2	4
c. Extended	3	0	0	0.614 NS
No of children				
a. One	14	9	4	2.014
b. Two	10	8	1	2
c. Three	4	0	0	0.851 NS
Source of information				
a. Family/friends	7	8	2	3.452
b. Health care/physician	16	8	3	4
c. Internet	5	1	0	0.178 NS

***p value <0.05 level of significance** **NS-Non-Significant**

Table 3 revealed that education of mother was found significant association with level of knowledge score at p<0.05 level of significance. The other demographic variables such as age, occupation of mother, monthly family income, area of residence, type of family, no of children and source of information had no significant association with level of knowledge score regarding neonatal infection among mothers of underfive children. **Manta Khatri Chhetri, Satyam prakash (2018)[9]** conducted a descriptive study to assess the Knowledge Regarding Neonatal Sepsis among Postnatal Mother at Selected Hospitals of Biratnagar, Nepal. Results showed that 76% had moderate knowledge, 13% had inadequate knowledge and only 10 % had adequate knowledge. It was found that there is significant association between level of knowledge and age (p<0.05). There was no association between knowledge score and other socio-demographic variables in this study.

NURSING IMPLICATIONS:

The findings of the study have implication in the field of nursing profession in the areas of nursing practice, education administration and research. Nurse acts as an educator, leader, counselor and motivator.

Nursing Practice

- Nurses play a vital role in assessing the health status of the newborn and mothers.
- The nurse needs adequate knowledge and skill to assess the newborn and to prevent them from infection.
- Nurses need knowledge regarding risk factors of neonatal infection, to identify and prevent the neonate from infections.

- Nurses should practice safe practices in caring of the newborn and preventing them from hospital acquired infections.
- Nurses should educate the mothers regarding newborn care and prevention of neonatal infection by practicing safe practices in caring of the newborn.

Nursing Education

- Education is a key component in improving the knowledge and practice of the mothers regarding newborn care and prevention of neonatal infection.
- The present study emphasized on educating the staff nurses to improve their skills on assessment and prevention of newborn infection.
- Nursing education should focus on knowledge and practices among nurses on safe practices on newborn infection and its prevention.
- Nurses should be educated on various protocols to be implemented to prevent the newborn from infection.

Nursing Administration

- Nursing administrators should take initiative and be involved in organizing various sessions to update the skills among staff nurses in caring the newborn in all the aspects of care.
- Nursing administrators should ensure to provide continuous education to the nurses in updating their knowledge and practice skills to educate the mothers of newborn regarding neonatal infections.
- Nursing administrators should organize for continuous training sessions for the mothers of newborn and to enhance their knowledge regarding neonatal infection prevention.

Nursing Research

- Nursing research can be conducted among the practices of mothers regarding prevention of neonatal infection.
- Research can be conducted among the mothers to assess the knowledge, attitude and practices of mothers on neonatal infection prevention.
- The findings of the study can be implemented to enhance the knowledge of mothers and to promote the utilization of research findings in managing the newborn infection.

CONCLUSION

The findings of the study shows that 28(56%) had poor knowledge, 17(34%) had average knowledge and 5(10%) had good knowledge. Since, mother plays a vital role in newborn care,

they should have necessary knowledge in all the aspects of newborn care, thereby the study suggests that mothers should be educated on prevention of neonatal infection and preventive strategies to be implemented to prevent neonatal infection.

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