Knowledge on Newborn Care among Primigravida Mothers at Selected Village, Kancheepuram District

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Abstract

Introduction: Newborn care is the care which is given immediately after the birth. Newborn care includes, warmth, cord care, eye care, breasting feeding and immunization. *Objective:* To assess the knowledge on newborn care among primigravida mothers. *Materials and Methods:* Quantitative research approach and descriptive research design was adopted. A total of 50 samples were selected by using non probability purposive sampling technique in SRM Rural Health Center at Mamandur village. Structured knowledge questionnaire was used to assess the level of knowledge on newborn care. The collected data was analyzed by using descriptive and inferential statistics. *Results:* The results of the study revealed that 36(72%) mother had moderately adequate knowledge, 14 (28%) mother had adequate knowledge and none of them had inadequate knowledge on newborn care. and there is a significant association on the level of knowledge among primigravida mothers with their demographic variables of family income and type of family. *Conclusion:* Most of the primigravida mothers had moderately adequate knowledge, Hence it is necessary to enhance their knowledge through an educational approach .

Keywords: New Born; Primigavid; Mothers; Breast Feeding.

Introduction

The birth of an infant is one of the most awesome inspiring and emotional events that can occur in one's life time. After 9 months of anticipation and preparation, the neonate arrives amid a flurry of excitement. The new human being affects the lives of the parents and families adjust easily to the necessary changes in their life style, where as others find it difficult to cope with these changes and feel varying degrees of turmoil and anxiety. This is especially true if the neonate is not the robus, healthy, lovable infant who was expected [1].

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The birth of the baby is one of life's most wondrous moment. A healthy adult emerges from a healthy infant. Newborn baby has amazing abilities, yet are completely depend on others for every aspect of such as feeding, warmth and comfort [2].

WHO (2001) states that, based on the data collected, causes of neonatal deaths, infections (tetanus, sepsis, pneumonia, diarrhea) 32%, complication of prematurity 24%, birth asphyxia 29%, congenital anomalies 10% and others 5%. Newborn mortality is one of the world's most neglected health problems. It is estimated that globally four million newborn die before they reach one month of age and another four million are still born each year. Deaths during the neonatal period (the first 24th days of life) accounts for almost two-thirds of all deaths in the first year of life and 40% of deaths before the age of five [3].

Darmstadt (2000) mentioned, the vast majority of neonatal deaths occur during the first months of life, when a child's risk of death is nearly 15 times greater than at any other time before his or her first birth. Reduction in neonatal mortality have

been less in the developing countries. A study conducted in Bangladesh, Mali, Nepal and Pakistan, to assess the knowledge of mothers regarding effective care of neonate among mothers ages ranged 15-35 years 82% women were illiterate with minor criteria of being able to read and they have not an adequate knowledge regarding neonatal care [4].

Most of neonatal deaths could be prevented through cost-effective interventions, such as tetanus toxoid immunization or exclusive breast feeding. The saving newborn lives initiatives is designed to reduce neonatal mortality and morbidity by strengthening and expanding these and other interventions in , Asia, Africa, and Latin America. The guide is intended to discuss behavior change within the context of essential newborn care and to provide guidelines on how to plan, manage, and use qualitative research and design a patient information booklet strategy [5].

The problems of poor health indicators are compounded by poor education. In a demographic and health survey 2001– 2002, the median number of years of formal education amongst females was 5.8 urban and 2.0 in rural Zambia, while the neonatal mortality rate was 31 per 1000 for urban births and 35 per 1000 for rural births. Research has also shown that the neonatal mortality rate for women without education was 39 per 1000 as compared to 34 per 1000 for those with primary education, and 27per 1000 for those with secondary education [6].

Two third of the baby's in our country are born at home and are at higher risk of developing sepsis. Babies born in hospital may also develop infection at home after discharge from the hospital. The commonest sources of infection in the community are unhygienic practice during delivery at home which include delivery in dark dirty room, cord cut with any available sharp instrument and the baby wrapped in old dirty cloths and other practices that increase the risk of infection include harmful applications to the cord, discarding colostrums and use of prelacteal feeds numerous visitors, who could be carries of infection are another source of infection for the babies. Unhygienic practices at birth are also responsible for infections and deaths both of the baby and mother. The introduction of five cleans at delivery which include clean surface, clean hands, clean blade, clean cord tie and clean cloths have contributed to the reduction of neonatal infections [7].

Newborn care is of immense importance for the development and healthy life of a baby. The newborn care takes place immediately following birth, in the transition period, and during the postnatal period. This care may be shared with the parents in the maternity unit of a hospital or in an alternative birth centre or assumed by parents in the home [8].

So the investigator felt that mothers of newborn children should possess knowledge about newborn care, because they are the primary care takers. If they possess adequate knowledge, they can able to take care of their newborn and take precaution. It is the nurse's responsibility to impart knowledge about newborn care.

Methodology

Quantitative approach and Descriptive research design was adopted for this study.Variables includes demographic variables and study variable . Demographic variables comprises of Age, education, occupation, family income, type of family, religion, type of marriage and duration of marriage and the study variable was Knowledge on newborn care .The study was conducted in the antenatal outpatient department of SRM Rural Health center in Mamandur village. The setting was chosen on the basic of feasibility in terms of availability of adequate samples on co-operation extended by the authority. Accessible population consists of primigravida mothers who were attending antenatal outpatient department in SRM Rural Health Center at Mamandur village. The sample consists of primigravida mothers those who fulfills the inclusion criteria, who were attending antenatal outpatient department in SRM Rural Health Center at Mamandurvillage. 50 primigravida mothers was selected by adopting Non probability purposive sampling technique.The inclusion criteria were Primigravida mothers with any weeks of gestation, Women who were able to understand Tamil or English. The Exclusion criteria were Primigravida mothers who had mental illness and mothers those who were not co-operative. The tool comprises of 2 sections. Section-A deals with demographic details of primigravida mothers such as age, education, occupation, family income, type of family, religion, type of marriage, duration of marriage and Section B was structured knowledge questionnaire includes 20 questions to assess the knowledge on newborn care among primigravida mothers.Each questions was given four options. Each correct answer was awarded score 1. Each incorrect answer was awarded score '0'.

Content validity obtained from the Dean of SRM

college of nursing , Vice principle of college of nursing and experts from the department of nursing and medical. Based on the suggestion given by the experts, a few modification were made after getting consent from all experts. Reliability of the tool was established by retest methods 'r' value was 0.08 and it was found to be reliable, hence the tool was considered reliable for proceeding the main study.

Ethical Consideration

The study was approved by dissertation committee of SRM college of nursing, SRM University, Kattankulathur, Kancheepuram District. Permission was obtained from the Dean, SRM College of Nursing and informed consent was obtained from each participant for the study before starting data collection. Assurance was given to the subjects that anonymity of each individual would be maintained and they are free to withdraw from the study at anytime.

Data Collection Procedure

After obtained formal approval from the in charge staffs of SRM rural health centre at Mamandur village. The investigator explained the objectives and methods of data collection to the antenatal mothers. Data collection was done in the antenatal outpatient department and in antenatal mothers who satisfied the inclusion criteria were selected using non probability convenient sampling technique.The investigator communicated with Tamil language, introduced self to the antenatal mothers, initially the antenatal mothers were made comfortable at the outpatient department and structured questionnaire tool was given to them.

The investigator collected information regarding section-A [demographic data] and section-B knowledge assessment tools and the responses marked simultaneously.

It took around 15 minutes from each sample to obtain the necessary data. The investigator thanked the antenatal mothers, nursing personnel for extending their fullest co-operation. Both descriptive and inferential statistics were used to make the analysis and interpretation.

Results

Description of Demographic Variables

Among 50 primi gravida mothers 12 (24%) mothers were below the age of 20, 30 (60%) were in the age group of (20-30) and 8 (16%) mothers were above 30 years.Considering the educational status of mothers, 12 (24%) have undergone primary level of education, 10 (20%) completed middle level, 16 (32%) have undergone high school level and 12 (24%) had intermediate level of education.Considering the occupation of the primi gravida mothers, 27 (54%) are un employed; 10 (20%) are un skilled worker, 2 (4%) are semi skilled workers, 4 (8%) are skilled workers, 4 (8%) are clerical level and 3 (6%) are semi professionals. Considering the family income, 7 (14%) mothers family income was between (Rs1590-Rs4726),18 (36%) mothers were in between (Rs4727-Rs7877), 20 (40%) were in between (Rs7878-Rs11876) and 5 (10%) were in-between (Rs15754-Rs31506).Considering the type of families of the gravida mothers, 31 (62%) belongs to nuclear family, 18 (36%) belongs to joint family and 1 (2%) belong extended family.Considering the religion of primi gravida mothers, 43 (86%) wer Hindus, 4 (8%) were Christians and 3 (6%) were other religions. Considering the type of marriage, 13 (26%) had consanguineous marriage, 26 (52%) had non

Table 1: Assessment of level of knowledge on newborn care among primi gravid mothers.

N=50

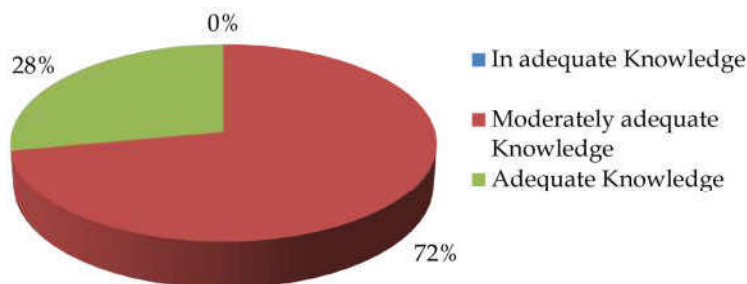| Level of Knowledge	Frequency	Percentage
In adequate knowledge	0	0%
Moderately adequate knowledge	36	75%
Adequate knowledge	14	28%

Fig. 1: Percentage distribution of level of knowledge on newborn care among primi gravida mothers

Table 2: Association between the level of knowledge on newborn care among primi gravida mothers and with their demographic variables   N = 50

Demographic Variables		Level of knowledge						Chi square test
		In adequate		Moderately adequate		Adequate		
		N	%	N	%	N	%	
Age	<20 years	0	0	10	27.8	2	14.3	X^2 = 1.22
	20-30	0	0	20	55.6	10	71.4	P = 0.542
	>30 years	0	0	6	16.7	2	14.3	Non significant
Education	Primary	0	0	10	27.8	2	14.3	X^2 = 6.336
	Middle	0	0	9	25.0	1	7.2	P = 0.149
	High school	0	0	11	30.6	5	35.7	Non significant
	Intermediate	0	0	6	16.7	6	42.9	
Occupation	Un employed	0	0	19	52.8	8	57.1	X^2 = 10.418
	Un skilled	0	0	8	22.2	2	14.3	P = 0.064
	Semi skilled	0	0	2	5.6	0	0	Non significant
	Skilled	0	0	3	8.3	1	7.2	
	Clerical	0	0	4	11.1	0	0	
	Semi professional	0	0	0	0	3	21.4	
Family Income	Rs 1590-4726	0	0	6	16.7	1	7.2	X^2 = 7.85
	Rs 4727-7877	0	0	14	38.9	4	28.6	P = 0.05
	Rs 7878-11816	0	0	15	41.7	5	35.7	Significant
	Rs 15754-31506	0	0	1	2.8	4	28.6	
Type of family	Nuclear	0	0	20	55.6	11	78.6	X^2 =6.99
	Joint	0	0	16	44.4	2	14.3	P = 0.05
	Extended	0	0	0	0	1	7.1	Significant
Religion	Hindus	0	0	32	88.9	11	78.6	X^2 = 1.127
	Christians	0	0	2	5.6	2	14.3	P = 0.569
	Others	0	0	2	5.6	1	7.1	Non significant

*Significant at P=0.05

consanguineous marriages

The above table reveals that 36 (72%) mothers had moderately adequate knowledge, 14 (28%) mothers had adequate knowledge and none of them had inadequate knowledge.

Table 3 reveals that there is significant association between the level of knowledge among primi gravida mothers and with their demographic variables of family income and type of family at P< 0.05 level. There is no association with respect to other variables.

Discussion

Among 50 samples, 36 (72%) mothers have moderately adequate knowledge,14 (28%) mothers have adequate knowledge and non of them have inadequate knowledge.

Rama R,et al (2014) also conducted a similar study on assessment of knowledge regarding newborn care among mothers in Kancheepuram district. This community based cross sectional study was done in Kancheepuram district, using a sample size of 100 mothers arrived based on the expected number of pregnancies in the area. The participants were selected by simple random sampling and data collected regarding the knowledge on new-born care among the mothers, using a structured interview schedule. The study result showed that mean age of mothers was 25 years and mean weight of babies was about 3 kg. Regarding the education status, 67% studied up to 10th standard and 18% studied up to plus two levels. Majority of them got information on new born care from health workers (44%) and family members (36%). The level of adequate knowledge regarding new-born care was present only in 15%, feeding practices in 39%, various components of immunization in 8%, growth and development in 42% and about new-born illness in 33% of the mothers. The knowledge regarding new born care was found to have a significant association with the educational status of the mothers [9].

The present findings also revealed that there was a significant association between the level of knowledge among primi gravida mothers and with their demographic variables of family income and type of family at P< 0.05 level. This may be due to

the accessibility of media and also due to the economic and educational status. There was no association with respect to other variables. Hence, the null hypothesis stated that there will be no significant association between knowledge on newborn care among primi gravida mothers and their demographic variables was not accepted for type of family, income and accepted for other demographic variables.

Conclusion

The findings of the present study revealed that only 28% of primi gravida mothers in the group had adequate knowledge. The study also shows that the higher income groups, and those who are from nuclear families have adequate knowledge on newborn care. Hence the knowledge on newborn care can be enhanced by providing health education regarding newborn care in all the aspects in the hospitals, in certain outpatient departments like pediatric OPD and maternity OPD, the students need to be utilized to teach the mothers about newborn care.

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