

Mothers' Knowledge Regarding Neonatal Baby Care

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Abstract—Neonatal mortality is a major problem, all over the world especially, in the developing countries. The aim of this study was to determine the knowledge of mothers, who were admitted to the postnatal ward of Teaching Hospital Kurunegala regarding the neonatal baby care. This descriptive cross sectional study was carried out in the postnatal ward, at the Teaching Hospital in Kurunegala (North Western Province), Sri Lanka. The data was collected by interviewing 246 post-natal mothers, aged 15 – 45 years, who were in the post-natal ward, during the period of 18th April to 2nd May 2011. The mean age of the sample was 26 years. Nearly half of mothers (48.4%) completed education up to O/L. The percentage of mothers who completed education up to secondary and higher education level was 41.3%. A considerable proportion of mothers were unemployed (86%). Half of them had one child. The percentage of postnatal mothers, who had two children, is 30%. Others had more than two children.

Education level was found to be positively and significantly associated with knowledge regarding neonatal care. Additionally, occupation and age too were found to be significantly associated with knowledge level. Parity did not show a significant association with maternal knowledge regarding neonatal care as expected. The results showed that mothers' knowledge and practices regarding breast feeding was at a satisfactory level in mothers selected to the sample population. But knowledge of mothers was not at a satisfactory level regarding umbilical cord care. More than half of them were in less than average knowledge level. It was found that mothers' knowledge of prevention of neonatal hypothermia was poor. A large proportion of them (45.52%) were in the poor knowledge group and 42.27% of them were in very poor knowledge group. The results showed clearly that mothers' knowledge of prevention of neonatal hypothermia was the most deficient knowledge field of mothers who lived in Kurunegala area. Maternal knowledge of breastfeeding was the only satisfactory knowledge field from these three areas for mother who lived in

Kurunegala area. The study showed in majority of mothers, adequate knowledge and practices regarding neonatal care were lacking. Especially, in the field of prevention of neonatal hypothermia and care for the neonatal umbilical cord.

Keywords— *Kurunegala; Neonatal care; Priyadarshanie; Sri Lanka*

I. INTRODUCTION

Neonatal deaths have been estimated be approximately 4 million annually in the world [8], while the infant mortality rate is 11.2 per 1000 live births [2]. Neonates are at risk for death due to various health problems, even though they have been born with average birth weights, thus, the morbidity and mortality rates in newborn infants are higher.

Breast feeding is the best natural feeding and breast milk is the best milk. The basic food of infant is mother's milk. Breast feeding is the most effective way to provide a baby with a caring environment and complete food. It meets the nutritional as well as emotional and psychological needs of the infant [8]. Essential newborn care practices, such as drying and wrapping the baby immediately after the birth, initiation of breast feeding within one hour of birth had improved in the intervention areas [9]. Breast milk provides optimal nutrition and promotes the child's growth and development [11].

Hypothermia is considered as the silent killer of neonates. It increases the neonatal morbidity and mortality. Maintenance of warmth of the neonates enhances their survival. Thermal protection of the newborn babies is considered as one of the most important essentials in neonatal care [8]. To prevent neonatal hypothermia, immediate actions should be carried out [8].

The umbilical cord is cut about 2-3 inches from the naval with aseptic precautions during delivery and tied with sterile cotton thread or disposable plastic clip. The cord must be inspected.

No dressing should be applied and the cord should be kept open and dry. Normally, it falls off after 5 to 10 days [8].

Local practices of putting various substances on the cord stump - whether in health facilities or at homes - should be carefully examined and discouraged if found harmful and substituted with acceptable ones [11].

Mothers were the principal provider for skin and cord care during the neonatal period. Unhygienic cord care practices are prevalent in the study area [1].

Providing optimal care will greatly improve the survival of infants [8]. Most neonatal deaths can be prevented by taking measures such as clean delivery, prompt resuscitation, infection control, thermal protection and breast feeding. Thus the improvements in the survival of newborn is dependent on health care provided [6].

II. MATERIALS AND METHODS

This research was performed as a descriptive cross sectional study and was carried out in the Teaching Hospital, Kurunegala. Every mother who was admitted to the postnatal ward during the given period of time was included in the study population.

An interviewer administered questionnaires were used as the research tool. Mothers were classified to five categories according to the knowledge level. The variables studied were parity, age, educational level and occupation. Data collection was carried out in the period between 18th of April and 2nd of May 2011. Every mother admitted to the postnatal ward, was selected until n=246 was obtained. Inclusion criteria and exclusion criteria were considered.

The questionnaire was pretested by giving questionnaires to 10 patients in postnatal ward to answer it prior to gathering data. Ethical clearance was obtained through ethical clearance

committee, Faculty of Allied Health Sciences, University of Peradeniya.

06. Implementation

The pre-prepared questionnaire forms were used and data collection was done according to interviewer administered questionnaires method in the postnatal at the teaching hospital Kurunegala under permission of Director, hospital and ward sister. The permission was obtained through a letter.

The gathered data was analyzed by using SPSS (version 13.0).

III. RESULTS

The mean age of the sample was 26 years with the age ranging from 15 years to 45 years. Nearly half of the mothers (48.4%) had completed education up to O/L. The percentage of mothers who had completed education up to A/L and to higher education was 41.3%. A considerable proportion of mothers (86%) were unemployed. Approximately half of mothers had one child. The percentage of postnatal mothers, who had two children, was 30%. Others had more than two children.

Level of education was found to be positively and significantly associated with the knowledge regarding neonatal care. In addition, occupation and age also were found to be significantly associated with the knowledge level. As expected parity did not show a significant association with the maternal knowledge regarding neonatal care.

TABLE I

Knowledge On Breast Feeding		
Category	Frequency	Percentage (%)
Very Poor	2	0.81
Poor	19	7.72
Average	48	19.53
Good	116	47.15
Very Good	60	24.39
Total	245	99.6
Unclassified	1	0.4
Total	246	100.0

TABLE II

Knowledge On Umbilical Cord Care		
Category	Frequency	Percentage (%)
Very Poor	33	13.44
Poor	92	37.39
Average	90	36.58
Good	30	12.19
Very Good	0	0
Total	245	99.6
Unclassified	1	0.4
Total	246	100.0

TABLE III

Knowledge On Neonatal Hypothermia		
Category	Frequency	Percentage (%)
Very Poor	104	42.27
Poor	112	45.52
Average	24	9.75
Good	5	2.03
Very Good	0	0
Total	245	99.6
Unclassified	1	0.4
Total	246	100.0

TABLE IV ASSOCIATION BETWEEN THE KNOWLEDGE WITH SELECTED SOCIO-DEMOGRAPHIC VARIABLES

Considered Demographic Factor	Socio	"P" Value	Significant Association
Age with the Knowledge		P = 0.045	✓
Educational Level with the Knowledge		P = 0.000	✓
Parity with the Knowledge		P = 0.258	X
Occupation with the Knowledge		P = 0.000	✓

✓	There is a significant association
X	There is no significant association

The results showed that mothers' knowledge and practices regarding breast feeding was at a satisfactory level in the considered population. But knowledge of mothers regarding umbilical cord care was not at a satisfactory level. More than half of them had less than average knowledge level. It was also found that mothers' knowledge of prevention of neonatal hypothermia was poor. With regards to this, a large proportion of them were in the poor knowledge group (45.52%) and very poor knowledge group (42.27%).

The results clearly showed that prevention of neonatal hypothermia was the most deficient

factor in mothers' knowledge. Maternal knowledge of breastfeeding was the only satisfactory knowledge field.

IV. DISCUSSION

The present study showed that a fair number of mothers was in a satisfactory knowledge level group regarding breast feeding practices. It was found that more than one-third (43.5%) of mothers gave the colostrum to their babies. Out of those who did not give colostrum, 66.9% did not give it [6]. More than one-third (36.6%) of the mothers initiated breastfeeding within 1 hour of birth and 30.2% initiated after 1st day. There were 33.2% mothers who initiated within 1-24 hours.

A study conducted in Haryana, India revealed that 75% of newborns were given pre lacteal feeds of honey, tea and diluted milk, and babies were often not breastfed during the first 3 days and colostrum was discarded [3] Which is not comparable to the results of the present study.

According to the results of the present study, it is clearly shown that more than half of the mothers (50.83%) did not have a satisfactory knowledge level regarding neonatal umbilical cord care. None of them had a very good knowledge level, however, a considerable proportion (36.58%) had an average and (12.19%) of them had a good knowledge.

A study conducted in Bangladesh [7], yielded, effective cord care (46%). An extensive care was given to the umbilical cord including massage and/or applying substances. Above results can be compared with the results of the mothers' knowledge regarding neonatal umbilical cord care.

In this study, it was found that maternal knowledge regarding neonatal hypothermia was at a very poor level. Only a small proportion of them knew how to protect their babies from hypothermia (2.03%). None had a very good knowledge regarding neonatal hypothermia. Similarly [4], the majority of the newborns (79.7%) were washed with warm water and dried up with a clean cloth immediately after birth, while 18.1% of newborns were not given a bath and only dried up with a clean cloth.

It was clearly shown that there were different socio-demographic variations within selected sample population.

Good newborn care practices were associated with the higher level of education and maturity of age. Which is comparable to the results of the present study [10].

It was examined significant associations between newborn care practices, and socio-demographic factors and, it was found that neonatal care practices were related to educational level, age and occupation[5], which is also comparable to the results of the present study.

V. CONCLUSION

Majority of the mothers had a satisfactory knowledge on correct breast feeding practices. Poor knowledge and practices were associated with younger, lower educated and unemployed mothers. Maternal knowledge about neonatal umbilical cord care and protecting baby from hypothermia were at a poor level. Prevention of neonatal hypothermia showed the least awareness among mothers in comparison to the other two.

It is recommended that expectant mothers be educated regarding the aspects of neonatal care discussed in the present study, in addition to breast feeding.

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