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COMMUNITY BASED SURVEY ON ESSENTIAL NEONATAL CARE UTILIZATION AND SENSITIVITY AMONG RURAL MOTHERS

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ABSTRACT

Neonatal mortality is one of the most neglected public health issues. A major obstacle has been the incorrect perception of mothers that only costly, high-level technology and health facility-based care can decrease neonatal mortality. Hence, to assess the rural mothers knowledge, sensitivity and level of neonatal care service utilization, a community based survey was done. This study adopted a community based cross-sectional study design with a sample size of 100. The tools include a questionnaire to assess knowledge, a Likert scale for sensitivity and a checklist to identify the level of utilization of neonatal care services. The rural mothers had a mean knowledge of 14.23 ± 1.82 , had sensitivity towards neonatal care with mean of 21.38 ± 3.29 and utilized the services at the mean frequency of 7.21 ± 0.89 . The correlation between knowledge, sensitivity and utilization of rural mothers which shows all these three variables had significant relationship with each other at $p = 0.05$ level. The study concludes that though the level of knowledge of rural mothers was moderate, community-based promotion of key neonatal care practices, such as women empowerment via education, promotion of appropriate IEC materials, and highlighting and delivering information and education to all pregnant women, to be undertaken.

KEYWORDS

Essential neonatal care, Knowledge, Sensitivity and Survey.

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INTRODUCTION

Newborn babies have the right to live to their full potential and to survive and grow into childhood. It is the responsibility of the family, community, and government to ensure that they have a healthy start in life. A human being's greatest risk of death occurs at birth and the first 28 days of life - the neonatal period. Seventy five percent of neonatal deaths take

place in the first seven days, the early neonatal period. Ironically, most of these are preventable¹. Essential neonatal care is defined by the World Health Organization (WHO) as a comprehensive strategy aimed at improving the health of newborns through interventions prior to conception, during pregnancy, at and shortly after birth, and in the postnatal period. The WHO recommended essential newborn care practice, as a critical intervention for saving newborns' lives. Essential newborn care include cord care, temperature regulation and maintenance, early and exclusive breastfeeding, eye care, immunization at birth, care for the low birth weight newborn and management of newborns². Universal coverage of these essential cares would decrease neonatal death by an estimation of 71%³. Despite the fact that the national average for institutional deliveries in India is about 50%, certain states have less than 25% institutional deliveries. (National Federation of High Schools-3) This is due to socio-cultural barriers, as well as a lack of acceptable services in terms of coverage and quality. As a result, trained delivery attendants and crucial newborn carers are required to improve infant survival which can be offered effectively at the community level as well, as revealed by Bang *et al*⁴. In a resource-poor area of rural India, a simple, low-cost package of essential newborn care delivered through a culturally sensitive community mobilisation and behaviour change communication programme by community-based health workers and volunteers improved key newborn care practices and reduced neonatal mortality to half within one year. To reduce neonatal death, India has tried a number of attempts to improve newborn survival. Increased coverage of competent care at birth for newborns in conjunction with maternal care is one of RCH II's key objectives for newborn and child health. IMNCI is now being adopted across the country. Despite these facts, still the neonatal mortality is high among rural population. There is a need to improve access to good maternal and child care, particularly for the rural and poor, by reducing physical, social, and financial barriers, encouraging community participation, and maximizing the use of current maternity and child health service facilities. Hence,

this study was undertaken as a community based survey, to assess the rural mothers' knowledge, sensitivity and level of neonatal care service utilization.

MATERIAL AND METHODS

This study adopted a community based cross-sectional study design with a sample size of 100 from a selected rural area. The questionnaire included demographic data, maternal variables such as the type of delivery, parity, Antenatal care, and nutrition education etc. Structured questionnaire to assess the knowledge regarding essential newborn care services among mothers was developed which included all of the following topics: Umbilical cord care, thermoregulation, optimal breast feeding, eye care and vaccination at birth. A Likert scale to assess the perception and a checklist to find the utilization of essential neonatal care services was also prepared by the investigators. The content validity and reliability of the tools were obtained. Institutional review board approved the study protocol and consent from the participants was obtained before the data collection. At the end of the data collection, the mothers were given training on the essential care of children and information on the governmental programmes available by a video assisted teaching.

RESULTS AND DISCUSSION

The study findings show that 67% mothers were in the age group of 21-25 years and 18% were in the age group of 20-25 years, 57% attended up to high school education, and 72% home makers. Most of the mothers (98%) gave birth in a health institution, 94% were full term delivery, and 70% did not visit the hospital in the first week after delivery for any reasons. The majority of the mothers (63%), were multiparous, and 100% had received antenatal care (ANC) during their pregnancy, 84% received nutrition education during antenatal checkups. Nearly half of the mothers (51%) knew about neonatal immunizations.

Table No.1 shows the rural mothers knowledge on essential newborn care which includes 62% of mothers had good knowledge on immunization, 42% had good knowledge on exclusive breast feeding and

40% had good knowledge on thermoregulation of the neonate. Still, there were few gray areas which need to be given much importance among antenatal and post natal mothers were, cord and eye care of neonate and importance of temperature maintenance among neonates. Similar findings were reported in few studies which concluded that around three-quarters of mothers did not provide essential newborn care to their babies (ENC). The use of ENC was substantially linked with occupation, parity, and new born care counselling during delivery. It is suggested that knowledge be disseminated at the community level, women be empowered, and employees be trained^{5,6}.

The Table No.2 shows the mean and SD of the rural mothers knowledge, sensitivity and utilization of the neonatal services in which the rural mothers had a mean knowledge of 14.23±1.82, had sensitivity towards neonatal care with mean of 21.38±3.29 and utilized the services at the mean frequency of 7.21 ±.089.

This shows that the rural mothers had moderate level of knowledge and sensitive about the neonatal care. Regarding the care utilization, they are not still comfortable with the services provided. The similar findings were reported from the study by Kokebie, T *et al*, (2015) that the study identified low comprehensive practices of essential new born care in the study area^{5,6}.

The Table No.3 shows the correlation between knowledge, sensitivity and utilization of rural mothers which shows all these three variables have significant relationship with each other at p = 0.05 level. It shows that when we increase the level of knowledge among mothers, which can improve their level of sensitivity towards the neonatal care and equip them effectively use the neonatal care services. Thus, all the measures to improve the mothers' knowledge on neonatal care services are the need of the hour to reduce the neonatal morbidity and mortality among rural population.

Table No.1: Level of knowledge of essential neonatal care among rural mothers

S.No	Variables	Poor (<50%)		Moderate (50-75%)		Good (>75%)	
		N	%	N	%	N	%
1	Essential newborn Care services	23	23	41	41	36	36
2	Exclusive Breast feeding	21	21	37	37	42	42
3	Cord and Eye Care	40	40	27	27	33	33
4	Immunization	17	17	21	21	62	62
5	Thermoregulation	48	48	12	12	40	40

Table No.2: Mean and SD of Knowledge, sensitivity and essential neonatal care utilization

S.No	Group	Knowledge		Sensitivity		Utilization	
		M	SD	M	SD	M	SD
1	Postnatal women	14.23	1.82	21.38	3.29	7.21	0.89

Table No.3: Correlation between of knowledge, sensitivity and utilization of rural mothers

S.No	Variables	Mean	S.D	'r'
1	Knowledge	14.23	1.82	0.321**
2	Sensitivity	21.38	3.29	0.190**
3	Utilization	7.21	0.89	0.296**

CONCLUSION

The present study shows that overall knowledge among mothers regarding essential newborn care services was found to be moderate and so as about sensitivity and utilization of neonatal services. It is suggested that community-based promotion of key new-born care practices, such as women empowerment via education, promotion of appropriate IEC materials, and highlighting and delivering information and education to all pregnant women, be undertaken.

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DECLARATION OF CONFLICTING INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

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