

Brief Research Communication

## Mothers Perception of Health Care Needs of Preterm Neonates in Intensive Care Unit

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### Abstract

**Background:** Family members of the new born admitted to neonatal intensive care unit (NICU) of hospitals are stressed and in are in undue anxiety. **Aims:** What are the health care needs of preterm neonates admitted to NICU as perceived by the mothers. **Materials and methods:** Thirty mothers whose preterm child was being provided care in NICU were studied. An interview questionnaire tool was applied and the perception of the mother about her child's health care need was rated using a scale. **Results:** Majority of the mothers were under 25 years (86.60%), 60% were from nuclear families and 66.6% were primis. Majority of the babies were born premature between 32-37 weeks of gestation (76.6%) and 70% of them were malnourished (birth weight < 2.5 kg). Mothers of critical new born child in intensive care units are anxious for information about the child's condition. **Conclusion:** Nurses in the NICU are primary care givers and information providers. Provision of appropriate and adequate information and counselling to mothers are essential for quality preterm care.

**Key words:** Preterm child, perceived health care, intensive care.

### Introduction

The management of a preterm child poses challenges in perinatal health care.<sup>[1]</sup> For families the birth of a preterm child cause undue stress and anxiety and economic burden to meet the cost of health care services for the prolonged hospital stay. The mother of a preterm child has an important role in promoting its health, being the primary agent of direct care, providing access to health care services and modelling attitudes and behaviours that influences the child care.<sup>[2-5]</sup> Poor awareness among mothers about the needs of preterm child are an important cause for immediate readmissions to NICU after discharge.<sup>[6]</sup> The knowledge of mothers about special aspects of care of preterm babies is very important to prevent complications in the child.<sup>[7]</sup> As these aspects influence the long term outcome in the

child along with the medical, nursing and para-medical personals, the mother can play a vital role in preventing chronic disabilities in her child. This task will also improve the emotional bond between the mother and child. Educating mothers regarding special home care aspects for their preterm babies will play a major role in reducing neonatal morbidity as well as mortality. Hence this study was undertaken to assess mothers with preterm children on the perceived need for their new born child.

### Materials and methods

Thirty mothers of new born preterm children admitted to the NICU of a rural medical college referral hospital in Kolar were studied. The mothers of new born child born before 37 weeks of gestation who could understand and speak the local Kannada language was purposively selected and interviewed using a pre-tested and validated structured questionnaire. The awareness of the mother on and the felt needs for her preterm child was assessed from the questionnaire tool and rated on a scale. The questionnaire tool consists of 37 items under

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breastfeeding, thermoregulation, assurance needs, equipment's, monitors, danger signs and discharge from NICU. Institutional ethics committee clearance was obtained before the start of the study and informed consent from the study participants was obtained.

## Results

The socio-demographic characteristics of the mothers of the preterm child admitted to the NICU of the rural medical college referral hospital is summarized as table 1.

**Table 1.** Socio-demographic characteristics of the studied mothers of preterm children. (n= 30)

Characteristics		No.	(%)
Age (in years)	≤ 20	09	30
	21-25	17	56.6
	≥ 26-30	04	13.3
Education level	Primary education	17	56.6
	High school	03	10
Occupation	Graduation and above	04	13.3
	House wife	27	90
Income per month (Rs)	Working woman	03	10
	<5000	10	33.3
Place of residence	>5000	20	66.6
	Urban	12	40
Type of family	Rural	18	60
	Nuclear	18	60
	Joint	12	40
Religion	Hindu	25	83.3
	Christian	03	10
	Muslim	02	6.6

As depicted in table 2 the most important felt need perceived by the mothers was information related to equipment's and monitors used in NICU (4.1%), followed by

assurance needs (3.9%), thermoregulation (3.6%) and information related to premature baby (3.6%). The least important needs felt by preterm mothers were mostly information related to danger signs (2.7%), discharge (1.9%) and about breast feeding (1.7%).

There was no significant statistical association between demographic variables of mothers with their perceived health care needs of preterm babies. The birth weight is having significant association with perceived health care needs (p value- 0.005) whereas sex of the baby, gestational age, mode of delivery and type of feeding does not have significant statistical association with perceived health care needs of preterm neonates. Mothers whose preterm baby's birth weight was less felt that her child has more health care needs.

**Table 2.** Distribution of perceived health care needs and awareness of preterm babies among the studied mothers

Felt needs	Scale range	Mean Scale	Rank order
Preterm baby	1-4	4.358	4
Breast feeding	1-8	4.13	7
Thermo regulation	1-4	4.39	3
Assurance needs	1-4	4.69	2
Equipments and monitors	1-4	4.9	1
Danger sign	1-6	4.28	5
Discharge	1-7	4.0	6

shows that, there is no significant association between demographic variables of mothers with their perceived health care needs of preterm babies. But considering about the demographic variables of baby only the birth weight is having significant association with perceived health care needs (p value- 0.005) where as sex of the baby, gestational age, mode of delivery and type of feeding was not having any association with perceived health care needs of preterm neonates. Mothers whose preterm baby's birth weight was less felt more health care needs of preterm neonates.

**Table 3.** Association of perceived health care needs with socio demographic data of the babies

Demographic variables	Median		Chi-square	df	P value Inference
	<Median	>Median			
<b>Sex</b>					
a) Male	3	17			0.197
b)Female	0	10	1.667	1	NS
<b>Gestational age</b>					
a)26-31 weeks	0	07			0.314
b)32-37weeks	3	20	1.014	1	NS
<b>Birth weight</b>					
a)<1.5kg	0	21			0.005
b)>1.5kg	3	06	7.778	1	S
<b>Mode of delivery</b>					
a)NVD	2	22			0.543
b)LSCS	1	05	0.370	1	NS
<b>Type of feeding</b>					
a)Breast feeding	1	09			
b)Palada feeding	1	08			0.989
c)Tube feeding	1	10	0.022	2	NS
d) NBM					

S-Statistically significant, NS-Statistically not significant.

## Discussion

The most important felt need perceived by the preterm mothers was information related to equipments and monitors, assurance needs, thermoregulation and information related to premature baby. The least important needs felt by preterm mothers were mostly information related to danger signs, discharge and breast feeding. Studies on perceived health care needs have documented that need to inform parents on the treatment plan and procedures, answering parents questions honestly, actively listening to parents fear and expectations and assisting child hospitalisation. Few studies have also cited assurance needs as very important.<sup>[8-10]</sup>

When compared with nurses and parents on perceived health care needs the needs for assurance, proximity, and information were significantly more important for parents as compared with nurses.<sup>[10]</sup> Among association of selected demographic variables only the birth weight of the baby was found to be statistically significant with perceived health care needs (p 0.005). So it is evident that mothers whose preterm baby's birth weight was less, felt more health care needs of preterm neonates. A study on the parental awareness and

knowledge related to their premature child reported little knowledge by mothers about NICU principles and premature baby needs and care.<sup>[11]</sup> However studies. has also shown that supporting and participation of mothers in caring their preterm babies, helps them to develop competencies in providing care to preterm babies.<sup>[12,13]</sup> Hence adequate information, motivation, counselling are essential to help mothers of preterm babies to improve quality of care and outcome of preterm babies.

## Conclusion

The overall findings of the study shows that the most important needs felt by mothers of preterm were information related to equipments and monitors, assurance needs, on thermoregulation and information related to preterm baby. Nurses are the primary care givers and educators who should support parents of premature infants to form positive and loving relationship with their baby for better outcome during hospital and after discharge. Further findings suggests to plan a hospital based parental awareness and training programme for mothers of preterm babies, regarding care of preterm babies in order to reduce stress of mothers, enhance infant-mother bonding and faster recovery of preterm babies.

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