

## KNOWLEDGE, ATTITUDE, AND PRACTICES OF PARENTS REGARDING CARE AND BREASTFEEDING OF BABIES ADMITTED IN NICU AND PICU

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### ABSTRACT

**Introduction** - Neonatal intensive care unit (NICU) and pediatric intensive (PICU) care unit provide specialist care to premature and sick newborns, jaundice, and Respiratory distress syndrome. Constant worry and uncertainty about the survival of their babies are common concerns, and baby feeding challenges, worries of discharge, communication gaps between mothers and nurses, community acceptability of preterm babies, and financial difficulties are common in mothers.

**Objectives** – assessment of the knowledge, Attitudes, and Practices of parents regarding the care of babies admitted to the Neonatal Intensive Care Unit and Paediatric Intensive Care Unit and finding the association between knowledge score and socio-demographic variables.

**Methodology** - 100 parents participated in the study. The sampling method was purposive.

**Results**-The mean knowledge score of participants was 10.7, followed by a Median of 10.7, Mode 10.2, and a Standard Deviation of 4.12. The Majority, 59 % (59) of study participants' knowledge level is under the category of moderate knowledge, followed by 26 % (26) adequate knowledge and 15 % (15) in the inadequate knowledge category. A significant association exists between the sociodemographics variable and knowledge score.

**Conclusion** - A team of highly trained neonatologists and nurses manages the NICU and PICU units in the hospital setting. The significant challenge for nurses and doctors is parents' poor involvement due to lack of knowledge and poor practices and attitudes. Providing information about baby care and Breastfeeding during hospitalization in NICU and PICU can be an excellent strategy to gain support and involve parents in the care of their baby.

**Keywords:** NICU care, PICU care, Newborn in ICU

## **BACKGROUND OF STUDY**

Neonatal intensive care unit (NICU) and pediatric intensive (PICU) care unit provide specialist care to premature and sick newborns. The NICU and PICU units in the healthcare setting are managed by a team of highly trained neonatologists, nurses, and para-medical professionals. The PICU and NICU departments are designed to provide maximum safety, comfort, and medical care to neonates and children. The neonatal intensive care unit is used in cases such as Premature birth, Low birth weight, Major congenital disabilities for health care professionals, Neonatal jaundice, and Respiratory distress syndrome.

It is a significant challenge for health care professionals such as nurses and physicians to support participation by patients in caring for their children in NICU and PICU. It raises the central question of how parents are invited to participate in this environment.

Modern care in NICU and PICU is based on parental care of the child when the child is an inpatient. Research studies about NICU and PICU are essential because that are contributing to knowledge and progress in the care of the disease. NICU caters to babies with the most severe and life-threatening illnesses and injuries requiring constant, close monitoring and support from specialist equipment and medication to maintain normal bodily function.

Constant worry and uncertainty about the survival of their babies are common concerns, and baby feeding challenges, worries of discharge, communication gaps between mothers and nurses, community acceptability of preterm babies, and financial difficulties were commonly seen in mothers (1). The Mean duration of stay of neonates in the Neonatal Intensive Care Unit in India is seven days. About 45% of neonates in the birth weight categories of 1001 to 1500g stay for 11 to 30 days (2).

The study reported that Parents of 44 % of babies have no prior idea about NICU and why babies require NICU care. Lack of communication about their baby's illness, its cause, duration of treatment, and prognosis is generally felt by parents (3). The study aims to assess parents' knowledge, attitude, and practices regarding the care of babies admitted to NICU and PICU at IGM Hospital, Agartala, West Tripura.

## **OBJECTIVES**

1. To assess the knowledge, Attitudes, and Practices of parents regarding the care of babies admitted to the Neonatal Intensive Care Unit and Paediatric Intensive Care Unit.
2. To seek the association between knowledge score and socio-demographic variables of the study participants.

## METHODOLOGY

A hospital-based descriptive study was carried out at IGM Hospital, Agartala, West Tripura. After obtaining administrative permission from the hospital authority, the data were collected from 100 parents of babies admitted to the NICU and PICU Ward. The sampling method was purposive. The period of data collection was 31<sup>st</sup> May'2022 to 30<sup>th</sup> June 2022. A Pre-tested structured questionnaire was used to collect data comprised of two sections.

**Section I Consists of 7** items regarding Socio-demographic variables of the study participant.

**Section II Consists of 20** items regarding knowledge, 10 Items regarding attitude, and ten items regarding practices, which were included in the questionnaire related to the care of neonates and children admitted to NICU and PICU with different problems.

Marking and grading one mark assigned for correct answer and 0 mark assigned for the wrong answer in the knowledge questionnaire.

In attitude, scale marking is given as follows-

For Positive attitude question –Strongly agree – 05, Agree – 04, Uncertain -03, Digagree -02, Strongly disagree -01

For negative attitude question -Strongly agree – 01, Agree – 02, Uncertain -03, Disagree -04, Strongly disagree – 05

For practice question - 1 for correct and 0 for the wrong answer.

Sl. No.	Knowledge Score	Categories
1.	0 - 7	Inadequate knowledge
2.	7 - 13	Moderate knowledge
3.	13 - 20	Adequate knowledge

## RESULTS

The mean knowledge score of participants was 10.7, followed by a Median of 10.7, Mode 10.2, and a Standard Deviation of 4.12 (Shown in Table 2).

The socio-demographical arrangement of participants was incorporated in Table 1. Table 1 revealed that the Majority, 53 % (53) of study participants, belonged to the age group of 27 to 36 years, followed by 47 % (47) in the 18 to 27 years. Regarding the Gender Majority, 97 % (97) of participants were female, and 3 % (3) were male. In terms of religion Majority, 80 % (80) of study participants belonged to the Hindus, followed by 20 % (20) from other communities. Regarding education, the Majority, 59 % (59) of study participants' educational level is up to middle school grade, followed by 35 % (35) in high school and more

and 6 % (6) under primary level. The Majority, 92 % (92) of study participants, were engaged in household activities, followed by 5 % (5) who were related to business, and 3 % (3) had a government job. Regarding Family types, the Majority, 55 % (55) of study participants, belong to a joint family, and 45 % (45) of participants belong to nuclear Family. Regarding the size of family, the Majority, 42 % (42) of study participants, had up to 3 members, followed by 24 % (24) belonging to a family size of up to 5 members and 34 % (34) having more than five members.

**Table 01** Socio-demographic Characteristics of participants

Sl. No.	Socio-demographic variables	Categories	Frequency distribution	
			Values	Percentage (%)
1	Age	18-27	47	47
		27-36	53	53
2	Sex	Male	3	3
		Female	97	97
3	Religion	Hindu	80	80
		Others	20	20
4	Education	Primary School	6	6
		Middle School	59	59
		High School and above	35	35
5	Occupation	Govt. job	3	3
		Housewife	92	92
		Business	5	5
6	Type of family	Nuclear	45	45
		Joint	55	55
7	No. of family members	Up to 3	42	42
		Up to 5	24	24
		More than 5	34	34

**Table 2:** Mean, Median, Mode, and Standard Deviation of study participants according to their Knowledge Score

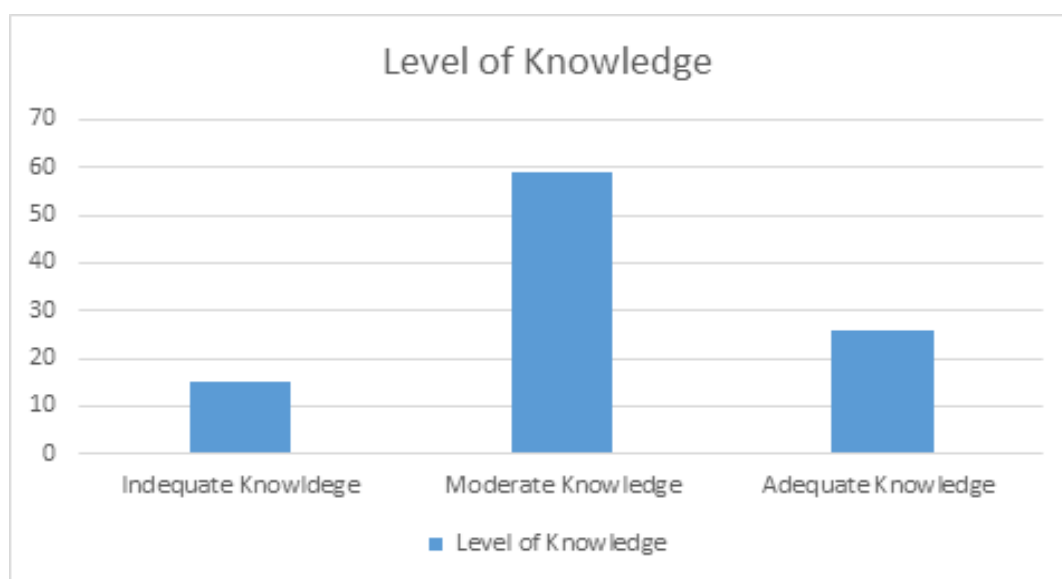
Mean	Median	Mode	Standard Deviation
10.7	10.6	10.2	4.1208

**Table 3:** Knowledge level of the study participants

**N=100**

Sl. No.	Level of Knowledge	Frequency	Percentage
1.	Inadequate Knowledge	15	15
2.	Moderate Knowledge	59	59
3.	Adequate Knowledge	26	26

Table 3 shows that the Majority, 59 % (59) of study participants' knowledge level is under the category of Moderate knowledge, followed by 26 % (26) adequate knowledge and 15 % (15) Inadequate knowledge.



**Figure 2:** Level of knowledge

**Table 4** Association of knowledge score with socio-demographical variables

S.No.	Socio-demographical variables	calculated chi-square value	Degree of Freedom	critical chi-square value	Significant
1.	Age	7.62	2	5.991	Significant
2.	Gender	1.1	2	5.991	Not Significant
3.	Religion	15.73	2	5.991	Significant
4.	Family type	6.85	2	5.991	Significant
5.	No. of a family member	10.61	4	9.488	Significant

A significant association was seen between the sociodemographics variable and knowledge score. In contrast, the calculated chi-square value of age, religion, family type, and the number of family members, i.e., 7.62, 15.73, 6.85, and 10.61, was more significant than the critical chi-square value.

Attitude regarding Breastfeeding during hospitalization is depicted in table -05

**Table 5:** Attitude of participants regarding Breastfeeding during hospitalization in NICU

Sl. No.	Statements	Strongly Agree (5)	Agree (4)	Some times (3)	Disagree (2)	Disagree Strongly (1)
1	Breastfeeding develops strong bonding between mother and child.	55	22	23	0	0
2	Do you think Breast feeding should be initiated within ½ an hour after Birth.	8	2	64	26	0
3	Do you believe Colostrum feeding is harmful to new borne babies (a Social Stigma)	18	10	2	10	60
4	Do you believe only Breastfeeding should be continued up to 6 months of your baby's age?	6	53	29	12	0
5	Breastfeeding is harmful during minor ailments of baby	5	0	34	25	35
6	Do you think Breastfeeding should be on demand for your baby?	12	44	44	0	0
7	Do you think proper positioning of the post-natal mother will facilitate Feeding to your baby?	8	37	43	12	0
8	Do you believe that Regular changing of your clothes will prevent Sore or Cracked nipples or any other breast infection?	6	41	42	11	0
9	Do you think that consumption of a balanced diet; Drink lots of healthy Fluids have an influence on Breastfeeding?	17	20	42	21	0
10	I am afraid of disfigurement due to Breastfeeding my baby	0	95	5	0	0

**Table 6:** Practice of Exclusive Breastfeeding among the study participants,  
N=100

S. No	Items	Yes Frequency (%)	No Frequency (%)
1.	Did you start breastfeeding your baby within ½ an hour after birth?	69	31
2.	Was your baby fed with colostrum?	58	42
3.	Do you feed your baby frequently-the more you nurse, the more you may produce milk.	82	18
4.	Do you maintain hygiene and cleanliness before feeding your baby?	82	18
5.	Do you practice for yourself, have a balanced diet, and drink lots of healthy fluids before feeding your baby?	66	34
6.	Would you like to continue only Breastfeeding for up to 6 months of your baby?	75	25
7.	Do you change your clothes regularly to prevent sore, cracked nipples, or any other infection?	98	2
8.	Do you continue breastfeeding when you are not feeling well or sick?	54	46
9.	Do you feed your baby when they are sick?	81	19
10.	Do you maintain proper positioning for you and your baby to facilitate the adequate feeding of your baby?	85	15

## DISCUSSION

The PICU and NICU in hospitals or nursing homes are designated areas that provide maximum safety, comfort, and medical care to neonates and children. This area is used for babies with Premature birth, Low birth weight, Major congenital disabilities, Neonatal jaundice, and Respiratory distress syndrome. Many challenges are encountered by health care professionals to involve parents in caring for their children in NICU and PICU. It raises the central question of how parents are invited to participate in this environment. The finding of our study suggests that lack of sufficient knowledge about caring for a baby is a central

concern regarding the care the baby. Poor practices regarding breastfeeding and unfavorable and moderately favorable attitudes affect breastfeeding practices and caring of newborns and children admitted to NICU and PICU. Several socio-demographical factors such as age, religion, family type, and the number of family members also affect the knowledge level of parents. Our study was limited to Agartala Tripura state. Regular training about the care of neonates and children is necessary for good caring of children and neonates admitted to NICU and PICU.

## **CONCLUSION**

The NICU and PICU units in the hospital setting are managed by a team of highly trained neonatologists, nurses, and para-medical professionals. The significant challenge faced by nurses and doctors is the poor involvement of parents due to lack of knowledge and poor practices and attitudes. Information about the care of the baby and Breastfeeding during hospitalization in NICU and PICU can be an excellent strategy to gain support and involve parents in the care of their baby. For better prognosis and good quality of care involvement of mothers is necessary. Barriers that affect the involvement of parents in the care of babies during hospitalization may be reduced by updating the knowledge of parents regarding the care of newborns.

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