



Knowledge, attitude and practices regarding breastfeeding, cord care and thermoregulation among primipara mothers: A correlational study

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Abstract

Maternal and newborn care practices, especially breastfeeding, cord care, and thermoregulation, are crucial for neonatal survival [1, 2] inadequate knowledge and poor practices in these areas contribute significantly to neonatal morbidity and mortality in India [3]. So this study was aimed to assess the knowledge, attitude, and practices (KAP) of primipara mothers regarding breastfeeding, cord care, and thermoregulation, and to develop an information booklet for improved maternal and newborn care. The descriptive cross-sectional design employed and structured knowledge questionnaires, observation checklist and attitude scale were used to collect data among 50 primipara mothers admitted in Taluka General Hospital, Gokak, Belagavi District. The result showed that among the participants, 38% had inadequate knowledge, 52% moderate knowledge, and only 10% adequate knowledge regarding breastfeeding, cord care, and thermoregulation. Attitudes were more favorable: 68% had favorable attitudes, 24% neutral, and 8% unfavorable. In practice, 41% of mothers demonstrated poor practices, 47% moderate and only 12% good practices. Education was significantly associated with knowledge ($p < 0.05$), while age was significantly associated with practice ($p < 0.05$). No significant association was found with occupation or residence. The study highlights the need for structured health education programs and the provision of user-friendly educational booklets to bridge the gap between knowledge and practice. Improved maternal awareness is expected to reduce neonatal risks and promote healthier outcomes.

Keywords: Breastfeeding, cord care, thermoregulation, primipara mothers, neonatal care, information booklet

Introduction

Neonatal mortality remains a significant public health concern, especially in low-and middle-income countries, accounting for nearly 2.4 million deaths annually. In India, despite improvements in institutional deliveries, the neonatal mortality rate stands at 22 per 1,000 live births. Most deaths are preventable through essential newborn care practices such as timely initiation of breastfeeding, proper cord care, and maintenance of thermal stability. According to WHO, practices such as exclusive breastfeeding, proper cord care, and effective thermoregulation could prevent a large proportion of neonatal deaths [3]. Primipara mothers, being less experienced, are particularly vulnerable to knowledge and practice gaps [4]. Primipara mothers, being first-time caregivers, are more susceptible to inadequate knowledge, cultural misconceptions, and poor practices. This makes them a critical target group for educational interventions. Evidence shows that structured health education enhances maternal knowledge, attitude, and self-efficacy in neonatal care. This study was designed to assess

the knowledge, attitude, and practices (KAP) of primipara mothers regarding breastfeeding, cord care, and thermoregulation, identify associated factors, and develop an information booklet to promote safe practices.

Materials and Methods

A descriptive correlational study was employed on 50 primipara mothers were selected by using convenience sampling technique who were admitted to Taluka General Hospital Gokak data was collected by using structured knowledge questionnaires, Attitude scale and Observational checklist.

Results

Demographic Characteristics

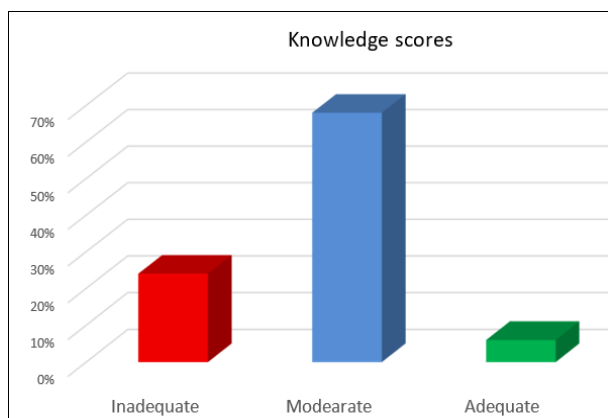
Most mothers were aged 26-30 years (46%). About 22% had no formal education, 41% belonged to nuclear families, and 44% resided in rural areas. Most mothers were aged 26-30 years (46%). About 22% had no formal education, 41% belonged to nuclear families, and 44% resided in rural areas.

Table 1: Frequency and percentage distribution of demographic variables of primi para mothers, N=50

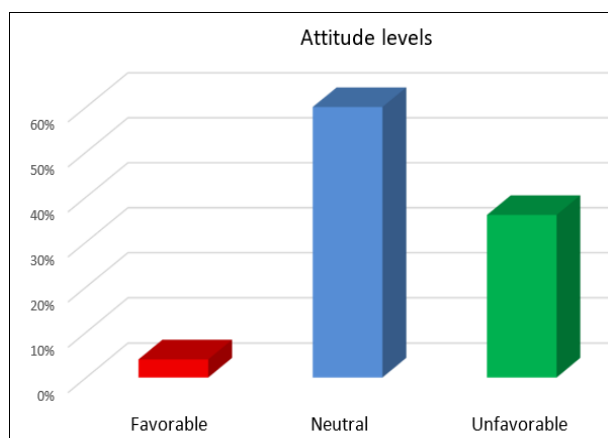
Demographic variable	Frequency (F)	Percentage (%)
Age of the mother (26-30 yrs)	23	46%
Education (Illiterate)	11	22%
Family (Nuclear)	20	40%
Residence (Rural)	22	44

Table 2: Knowledge regarding breastfeeding, cord care and thermoregulation among primi para mothers, N=50

	Frequency (%)	Number
Inadequate	24%	12
Moderate	68%	34
Adequate	8%	4

**Fig 1:** Bar Diagram show level of knowledge among primipara mothers

The data in Table 3 reveals the distribution of knowledge levels among 50 primi para mothers concerning essential newborn care practices such as breastfeeding, cord care, and thermoregulation. It was observed that a majority of the mothers (68%) demonstrated an average level of knowledge, scoring between 11 and 20. A smaller proportion, 6%, exhibited good knowledge with scores ranging from 21 to 30. Meanwhile, 24% of the participants had poor knowledge, scoring between 1 and 10. These findings highlight the need for enhanced educational interventions to improve mothers' understanding of critical newborn care practices, especially among those with poor knowledge levels.

**Fig 2:** Bar diagram shows level of attitude among primipara mothers**Table 3:** Attitude regarding breastfeeding, cord care and thermoregulation among primi para mothers, N=50

Attitude Level	Frequency (%)	Number
Favorable	4%	2
Neutral	60%	30
Unfavorable	36%	18

Table 3 presents the distribution of attitude scores among 50 primi para mothers concerning breastfeeding, cord care, and thermoregulation. The findings reveal that the majority of participants (60%) exhibited a positive attitude, with scores ranging from 51 to 100. A notable proportion (36%) demonstrated a negative attitude with scores of 50 or below, indicating the presence of misconceptions or a lack of favorable perceptions toward essential newborn care practices. Only 4% of the mothers had a highly positive attitude, with scores between 101 and 150, suggesting that a very limited number of participants possessed a strongly favorable outlook. These results highlight the importance of implementing targeted educational interventions to enhance the attitude of primi para mothers toward newborn care.

Table 4: Shows the distribution of practice levels, N-50

Practice Level	Frequency (%)	Number
Poor	66%	33
Moderate	34%	17
Good	0%	0

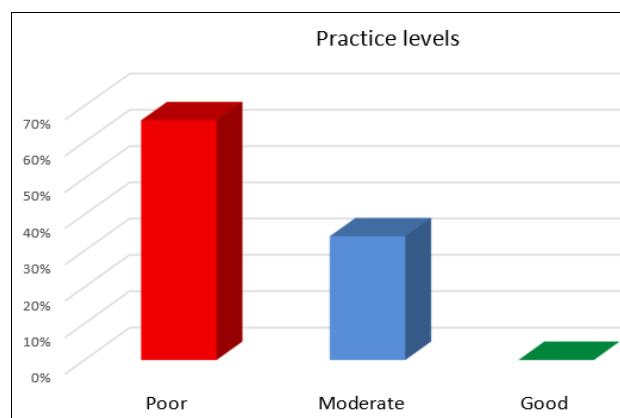
**Fig 3:** Bar diagram shows level of practice among primipara mothers

Table 4 presents the distribution of practice scores among 50 primi para mothers related to breastfeeding, cord care, and thermoregulation. The data reveal that a majority of the mothers (66%) demonstrated poor practice with scores of 50 or below, indicating inadequate implementation of essential newborn care practices. About 34% of the mothers exhibited moderate practice, with scores between 51 and 100. Notably, none of the participants (0%) achieved a score indicative of good practice (101-150), underscoring a significant gap between knowledge and actual caregiving behaviors. These findings emphasize the urgent need for practical skill-based training and regular follow-up to improve newborn care practices among primi para mothers. The analysis shows a significant association between education level and knowledge ($p < 0.05$). This indicates that participants with higher levels of education demonstrated better knowledge compared to those with lower levels of

education. Hence, education appears to play an important role in influencing knowledge regarding the studied topic.

Table 5: Shows the association between demographic variables and KAP, N=50

N=50		
Variable	Associated with	Significance
Education	Knowledge	$p < 0.05$

Table 6: Correlation between the knowledge and attitude regarding breastfeeding, cord care and thermoregulation among primi para mothers, N=50

Variables	Knowledge	Attitude
Knowledge	1	0.084
Attitude	0.084	1
Sig. (2-tailed)	-	0.563

Table 7: Correlation between knowledge and practice regarding breastfeeding, cord care, and thermoregulation Among Primi Para Mothers, N=50

Variables	Knowledge	Practice
Knowledge	1	0.279*
Practice	0.279*	1
Sig. (2-tailed)	-	0.049

Table 8: Shows the Pearson correlation between attitude and practice among primipara mothers regarding breastfeeding, cord care, and thermoregulation, N=50

Variables	Attitude	Practice
Attitude	1	0.021
Practice	0.021	1
Sig. (2-tailed)	-	0.886

The correlation coefficient was $r = 0.021$, with a p-value of 0.886, indicating a very weak and statistically non-significant relationship.

Discussion

This study revealed substantial gaps between knowledge and practice among primipara mothers regarding essential newborn care. Although mothers demonstrated favorable attitudes, knowledge deficits hindered appropriate practices. The findings are consistent with other studies in India reporting poor cord care and delayed initiation of breastfeeding as contributing factors to neonatal morbidity. Education and age were critical determinants influencing maternal practices, underscoring the importance of targeted interventions. Structured teaching and provision of educational materials like booklets can significantly improve outcomes.

Conclusion

The study concludes that primipara mothers admitted in Taluka General Hospital possess limited knowledge and suboptimal practices regarding breastfeeding, cord care, and thermoregulation. Despite positive attitudes, interventions are necessary to bridge the knowledge-practice gap. An information booklet was developed as part of the study to empower mothers with clear, practical guidelines.

Recommendations

Health workers should incorporate regular education

sessions, distribute information booklets, and provide hands-on demonstrations in postnatal wards. Further research can focus on evaluating the effectiveness of such interventions.

Ethical Consideration

Approval was obtained from Institutional Ethical committee and Formal permission was obtained from Principal and Taluka Health Officer and consent from participants.

Conflict of Interest

Not available

Financial Support

Not available

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