



KNOWLEDGE, ATTITUDE AND PRACTICE OF EXCLUSIVE BREASTFEEDING AND KNOWLEDGE REGARDING HUMAN MILK BANKING AMONG POST NATAL MOTHERS IN RAICHUR DISTRICT

Paediatrics

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ABSTRACT

Objectives : 1) To study knowledge, attitude and practice towards exclusive breastfeeding among postnatal mothers

2) Knowledge regarding human milk banking

Materials and Methods: Source of Data: Postnatal mothers attending outpatient/inpatient Department of Pediatrics, Navodaya Medical College Hospital and Research Centre, Raichur. **Methods of Collection of Data: Study Design:** Cross-sectional Descriptive Study. **Duration of Study:** 1 year. **Results:** The analysis reveals no significant associations between breastfeeding practices and religion ($p=0.186$), education ($p=0.319$), occupation ($p=0.311$), family type ($p=0.757$), or parity ($p=0.985$). However, antenatal counseling significantly improved breastfeeding practices ($p=0.023$), highlighting its importance in promoting effective breastfeeding among mothers. **Conclusion:** This study highlights the importance of providing antenatal counseling to improve exclusive breastfeeding rates among new mothers. It found that, while demographic factors did not significantly influence breastfeeding practices, focused educational efforts can make a meaningful difference. The findings suggest that increasing awareness and support for breastfeeding and human milk banking is essential for empowering mothers and promoting healthier infant feeding practice.

KEYWORDS

Breastfeeding, Complimentary Feeding, Antenatal Counselling

INTRODUCTION

Exclusive breastfeeding is a critical aspect of infant nutrition and maternal health, recognized globally for its numerous benefits. The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life, as it provides optimal nutrition, supports immune system development, and fosters a strong mother-infant bond. Despite its advantages, many mothers face challenges in practicing exclusive breastfeeding due to a lack of knowledge, cultural beliefs, and inadequate support systems. (1,2) Understanding the knowledge, attitudes, and practices (KAP) surrounding exclusive breastfeeding is essential for developing effective interventions that promote this vital practice. By assessing mothers' awareness and perceptions, healthcare providers can tailor educational programs to address misconceptions and enhance support mechanisms. (3,4)

In India, only 25% of newborns are breastfed within the first hour after birth. (5) According to data from the National Family Health Survey, only 46.4% of infants under six months are properly initiated and continued on breastfeeding. Globally, 60% of deaths among infants and young children are linked to inadequate feeding practices. (6) Furthermore, two-thirds of deaths related to infectious diseases can be attributed to suboptimal breastfeeding practices. Inappropriate infant feeding can adversely affect a child's growth and development, particularly in developing countries where access to basic healthcare services is limited. (7)

Human milk banking is the process of collecting, screening, pasteurizing, and distributing human breast milk from donors to infants in need, particularly those who are premature or ill. This practice supports infant health, promotes breastfeeding, and addresses challenges faced by mothers who may be unable to provide sufficient milk for their babies. (8,9)

Human milk banking in India is a growing initiative aimed at supporting infants. Understanding milk banking is crucial for Indian mothers, as it can offer vital nutritional support and promote the health of vulnerable newborns. (10)

Study Aims and Objectives

- 1) To study knowledge, attitude and practice towards exclusive breastfeeding among postnatal mothers
- 2) Knowledge regarding human milk banking

MATERIALS AND METHODS

Source of Data

Postnatal mothers attending outpatient/inpatient Department of Pediatrics, Navodaya Medical College Hospital and Research Centre, Raichur.

Methods of Collection of Data

Study Design: Cross-sectional descriptive study

Duration of Study: 1 year.

Sample Size:

$P = 87.5\%$ or 0.875

$Z = 1.96$ at 95% CI

Precision, $d = 3\% \times 0.875 = 0.02625$

Sample size,

$n = (z)^2 \frac{p(1-p)}{d^2}$

$n = 610$

Data Collection

Data was collected using a comprehensive and interviewer-administered questionnaire which sought information as age, occupation, educational status, initiation breastfeeding, pre-lactal feeding & knowledge, attitude, practice of EBF.

Inclusion Criteria

Mothers aged >18 years who were breastfeeding at the time of study.

Exclusion Criteria

- 1) Mothers with psychiatric or critical illness were excluded.

Methodology

Ethics committee approval was obtained before the start of the study by the institutional ethics committee.

Prior to data collection, the purpose of the study was explained to the mother.

A cross-sectional descriptive study was conducted for all postnatal mothers admitted, attending postnatal outpatient department, immunization clinic in the Department of Pediatrics, NMCHRC, Raichur, Karnataka over a period of 12 months.

A structured questionnaire was used to collect data on socio-demographic characteristics, KAP of exclusive breastfeeding, knowledge regarding HMB.

Statistical Analysis

Data was summarized using descriptive statistics of frequency and percentages. The respondents rating of questionnaire of knowledge,

attitude and practise was classified as good or poor based on their response. Chi square and Fischer exact test were used to test association between knowledge, attitude and practise with socio demographic factors. Fischer test was used if frequency was <5 and chi square if it was >5 . The level of significance was set at $p < 0.05$. Data were analysed with Statistical Package for Social Sciences (SPSS) software (version 27).

RESULTS

Socio – Demographic Characteristics of Studied Population

Character	Group	Number
Age	18 to 26 years	387
	>27 years	223
Religion	Hindu	408
	Christian	6
	Muslim	196
Education	Primary school	84
	High school	108
	College	349
	Graduate	69
Occupation	House wife	450
	Employee	160
Type of family	Nuclear	352
	Joint family	258
Parity	Primiparous	221
	Multiparous	389
Antenatal counselling	Yes	94
	No	516
Gestation at birth	Term	549
	Preterm	61
Mode of delivery	Vaginal	358
	c- section	252
Gender	Male	318
	Female	292

KAP of Breast Feeding

Ever heard of exclusive breastfeeding	Yes	259
	No	351
Aware of position and attachment of breastfeeding	Yes	446
	No	164
How often do you breastfeed	Every one hour	69
	Every two hours	311
	Every three hours	105
	On demand	125
Whether any prelacteal feeds given	Yes	46
	No	564
When was complimentary feeding started	< 6months	106
	6- 8 months	503
	>8 months	1
Was breastfeeding continued after complimentary feeding	Yes	548
	No	62
Are you aware of milk banking	Yes	64
	No	546

Analysis of Association of Sociodemographic Characters with Breast Feeding Practices.

	Good N (%)	Poor N (%)	P value
Religion			
Hindu	210	198	
Muslim	114	82	0.186
Christian	4	2	
Total			
Education			
College	181	168	
Graduate	43	26	
High school	54	54	0.319
Primary school	48	36	

Total	326	284	
Occupation			
Employee	91	69	
Unemployed	235	215	0.311
Total	326	284	
Family			
Joint	136	122	
Nuclear	190	162	0.757
Total	326	284	
Parity			
Multi	208	181	
Primi	118	103	0.985
Total	326	284	
Antenatal counselling			
No	272	244	
Yes	54	40	0.023
Total	326	284	

Discussion

The study aimed to analyze the association between sociodemographic characteristics and breastfeeding practices among a sample population. The results indicate varying degrees of influence from different sociodemographic factors on breastfeeding practices, with particular emphasis on antenatal counseling.

1. Religion: The data suggests that Hindu mothers had a higher proportion of good breastfeeding practices compared to Muslim mothers, although the p-value of 0.186 indicates that this difference is not statistically significant. This may imply that cultural or religious beliefs could play a role in breastfeeding practices, but further investigation is needed to understand these nuances.

2. Education: The educational background of mothers appears to have an impact on breastfeeding practices, particularly among those with college education, who exhibited better breastfeeding practices compared to those with lower educational attainment. However, the p-value of 0.319 indicates that this association is not statistically significant, suggesting that while education may influence practices, it may not be the sole determinant.

3. Occupation: The employment status of mothers did not show a significant association with breastfeeding practices (p-value = 0.311). Both employed and unemployed mothers had similar rates of good and poor breastfeeding practices. This could suggest that employment status does not heavily influence breastfeeding behavior, and other factors may play a more critical role.

4. Type of Family: The type of family structure (nuclear vs. joint) also did not demonstrate a significant association with breastfeeding practices (p-value = 0.757). This indicates that whether a mother is part of a nuclear or joint family does not appear to affect her breastfeeding practices significantly.

5. Parity: The parity of mothers (primiparous vs. multiparous) showed no significant difference in breastfeeding practices (p-value = 0.985). This suggests that whether a mother is having her first child or has had multiple children does not substantially influence her breastfeeding behavior.

6. Antenatal Counseling: A significant finding was observed in relation to antenatal counseling (p-value = 0.023). Mothers who received antenatal counseling had better breastfeeding practices compared to those who did not. This highlights the importance of providing adequate information and support during pregnancy to promote healthy breastfeeding practices.

CONCLUSION

In conclusion, while several sociodemographic factors were assessed for their association with breastfeeding practices, only antenatal counseling emerged as a significant predictor of good breastfeeding practices. The lack of significant associations with religion, education, occupation, family type, and parity suggests that these factors alone may not sufficiently explain variations in breastfeeding behavior.

Many postnatal mothers lack awareness of human milk banking (HMB), including its benefits, donation processes, and safety measures. Cultural beliefs, misinformation, and limited healthcare education contribute to low participation. Improving awareness through antenatal counseling, community programs, and media campaigns can enhance knowledge and encourage milk donation, benefiting vulnerable infants.

This study underscores the importance of antenatal counseling as a crucial intervention for promoting effective breastfeeding practices. Healthcare providers should prioritize comprehensive education and support for expectant mothers to enhance their knowledge and confidence in breastfeeding, potentially leading to improved outcomes for both mothers and infants. Future research should explore additional variables and contextual factors that may influence breastfeeding practices, as well as the long-term impacts of antenatal counseling on maternal and child health.

Limitations

Limitations of the study include a small, potentially non-representative sample from a single institution, reliance on self-reported data, lack of control for confounding variables.

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Conflict of Interest: None declared

Ethical Approval: The study was approved by the Institutional Ethics Committee

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