



Correlation the Breastfeeding Practices of Mothers in Relation to the Factors Influencing Breast Feeding

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ABSTRACT:

Children are regarded as a divine gift, and as guardians, it is our responsibility to fulfil their needs. The presence of children brings joy and purpose to our lives. Parents bear the responsibility of providing proper nourishment, love, and attention, and ensuring good health for their children. Mother's milk is recognized as the optimal food for infants and is considered the fundamental right of every child. This study aimed to explore the correlation between breastfeeding practices among mothers and the factors influencing these practices. This study employed a cross-sectional descriptive design and was conducted in the Department of Pediatrics at Meenakshi Medical College Hospital and Research Institute, Kanchipuram, which adheres to the baby-friendly hospital initiative. The sample size comprised 210 patients, and data were collected using a pre-designed questionnaire. Questions were presented to mothers in their native language, and their responses were recorded in English. The majority of mothers in this study fell within the age group of 21 to 25 years, with 7% being literate. A significant number of mothers identified as homemakers. Age, education, occupation, economic status, religion, and family type were identified as significant factors associated with mothers' knowledge and attitudes toward exclusive breastfeeding. The findings revealed that exclusive breastfeeding practices remain low within the community. To address this, creating awareness through health education on breastfeeding practices among mothers is crucial. Such efforts can serve as a protective shield, guarding infants from malnutrition and infections.

Introduction

The tradition of breastfeeding dates back to the dawn of human evolution, representing a natural and idealistic method of nourishing infants. This practice fosters a distinctive biological and emotional connection between mother and child [1]. Not only does breastfeeding offer comprehensive nutrition, but it also confers early protection against illnesses and supports the overall growth and development of the baby. Early initiation of breastfeeding has been linked to a reduced risk of postpartum and anemia in mothers, as well as a lower risk of diabetes and various malignancies, notably breast cancer [2].

Recognized as the first fundamental right of the child, breastfeeding holds immense significance. Exclusive breastfeeding during the initial six months of life, coupled with the timely introduction of weaning foods, lays a crucial foundation for subsequent childhood growth [3]. The positive impacts of breastfeeding are contingent upon factors such as initiation, duration, and the age at which weaning occurs. Breastfeeding practices exhibit variations across regions and communities, with influences stemming from factors like rural or urban residence, cultural nuances, socio-economic conditions, psychological well-being, religious values, and literacy levels, particularly the educational background of mothers and their employment status [4].



Over the past two decades, urbanization has experienced significant growth globally, impacting both developed and developing nations. This trend is accompanied by a rise in slum populations in urban areas. Reports suggest an increased risk of inadequate child feeding practices in urban slums, where families lack the traditional support of a joint family system [5].

In light of these considerations, this study was undertaken to examine the correlation between breastfeeding practices among mothers of children under 2 years old and the influencing factors. The research was conducted in the Department of Pediatrics at Meenakshi Medical College in Kanchipuram.

Materials and Methods

This study adopts a cross-sectional descriptive design and is carried out within the Department of Pediatrics at Meenakshi Medical College Hospital and Research Institute in Kanchipuram. The hospital is committed to the principles of the Baby-Friendly Hospital Initiative, encompassing a dedicated policy aimed at promoting, protecting, and supporting breastfeeding. To ensure the success of these initiatives, the hospital has a competent team comprising paediatricians, senior residents, and staff nurses who have undergone specialized training in breastfeeding services.

The sample size for this study encompasses a total of 210 patients. Data collection was facilitated through a meticulously designed questionnaire. Mothers were

presented with questions in their native language, and their responses were subsequently recorded in English.

The questionnaire is comprehensive, covering various aspects related to the mothers, including age at childbirth, educational background, occupation, pregnancy desirability, the number of antenatal visits, counselling received during antenatal care on breastfeeding and the intake of iron and folic acid tablets, socioeconomic status, as well as their knowledge and attitude toward breastfeeding. Furthermore, the questionnaire delves into delivery details, such as the place of birth, and gathers information regarding the initiation and duration of breastfeeding, artificial feeding practices, reasons for weaning, and the specific weaning practices employed.

Prior to the commencement of the study, ethical approval and permission were obtained from the ethical committee members. The purpose and nature of the study were explained to the mothers, and their informed consent was secured before they participated in the research. This rigorous approach ensures that the study adheres to ethical standards and respects the rights and well-being of the participants.

Results

Distribution of study subjects based on age group

The present study showed that the most common age group for motherhood was 51 % between 21 to 25 years followed by 23% between 26- 30 years and 16% below 20 years and very few (8) cases were seen below 18 years. (Table.1)

Table 1: Distribution of study subjects based on age group

Age group	Frequency	Percentage
15 – 20 years	35	16.67%
21 – 25 years	108	51.43%
26 – 30 years	49	23.33%
31 – 35 years	18	8.57%
Total	210	100.0%

Distribution of children of mothers based on age group

Among 210 children included in the study, 25.2% were below 6 months, 30.48% were in the age group of 7 – 12

months, 19. 05% were in the age group of 13 – 18 months and 25.25% were in 19 – 24 months age group.(Table.2)

**Table 2:** Distribution of children of mothers based on age group

Age group in months	Frequency	Percentage
0-6	53	25.24%
7-12	64	30.48%
13- 18	40	19.05%
19- 24	53	25.24%
Total	210	100.0%

Distribution of study subjects based on Education

It was found in this study that 22.86% were illiterates and 77.14% were literates. Among total study subjects, 35.2% mothers completed primary schooling, 20% completed

secondary schooling, 14.6% completed higher secondary and only 7.0% were graduates.

Table 3: Distribution of study subjects based on Education

Education	Frequency	Percentage
Illiterate	48	22.86%
Primary	74	35.24%
Secondary	42	20.00%
Higher Secondary	31	14.76%
Degree and above	15	7.14%
Total	210	100.0%

Comparison of breast feeding score socio demographic characters

Knowledge and attitude of mothers was assessed based on above questions and these questions were given scores for correct response score 1 and for incorrect score 0 so

maximum score can be obtained was score 25 . Age, education, occupation, economic status, religion and type of family were found to be significant associates of their knowledge & attitude (based on mean score).(Table.4)

Table.4. Comparison of breast feeding score socio demographic characters

Variables	Mean score	P value*
Age group		
15 – 20 years	13.65	0.0001
21 – 25 years	14.28	
26 – 30 years	15.87	
31 – 35 years	18.30	
Education	16.20	0.01
Illiterate	17.12	
Primary	17.87	
Secondary		



PUC	18.23	
Degree and above	19.01	
Occupation	12.23	
Unemployed	13.76	
Unskilled	14.45	0.08
Semiskilled	14.23	
Skilled	16.76	
Professional		
Economic status	17.83	0.03
APL BPL	13.23	
Religion	18.76	0.003
Hindu Muslims Others	13.67	
	12.89	
Type of family		
Nuclear	12.98	0.001
Joint	17.89	
Three generation	18.43	

Distribution of children according to Anthropometry
 Excluding children below 6 months- 53. Among 210 children 10.4% are below 3rd percentile, 26.6% are in

between 3 - 15th percentile, 33.3% are in between 15 - 50 percentile and only 4.2% are between 50 - 85th percentile.(Table.5)

Table 5. Distribution of children according to Anthropometry

Anthropometry Percentile	Frequency	Percentage
< 3	22	10.4%
3-15	56	26.6%
15- 50	70	33.3%
50- 85	9	4.2%
Total	157	100.0%

Distribution of children of mothers according to birth weight

Among 210 children, 73.8% of children had birth weight more than/equal to 2.5 Kgs and 26.19% had birth weight less than 2.5 kilograms. (Table.6)

**Table 6.** Distribution of children of mothers according to birth weight

Birth weight	Frequency	Percentage
<2.5 kgs	55	26.19%
≥2.5 kgs	155	73.81%
Total	210	100%

Distribution of mothers according to pre lacteal feeds given

Among 210 children, 24% of children received pre lacteal feeds and 76 % did not receive. (Table.7)

Table.7. Distribution of mothers according to pre lacteal feeds given

Pre lacteal	Frequency	Percentage
Given	50	24%
Not given	160	76%
Total	210	100%

Relation between type of delivery and pre lacteal given

Among 149 mothers of vaginal delivery 16% had given pre lacteal feed, 88 % did not give pre lacteal feeds. Among 61 mothers of LSCS delivery 84 % had given pre lacteal feeds and 11.8% did not give pre lacteal feeds. Proportion of vaginal delivery was high among mothers

who did not give (88%) pre lacteal feed compared to those who had given (16 %). This difference was found to be statically significant with significant p value of 0.0001, chi square 75.4 and DF 1. (Table.8)

Table 8 : Relation between type of delivery and pre lacteal given

Type of delivery	Pre lacteal				Total	
	Given		Not given			
Vaginal	8	16%	141	88%	149	71.0%
LSCS	42	84%	19	11.8%	61	29.0%
Total	50	100%	160	100%	210	100%
Chi square 75.409 df-1 p value< 0.0001						

Distribution of mothers according to initiation of breast feeding

Only 40.95 % of mothers had initiated breast feeding within 1 hour of delivery followed by 28.75% fed within 1 – 4 hours 15.71% fed within 5 – 24 hours and 14.76%

fed after 24 hrs. Majority delivered in hospital still did not give breast milk within < 1/2 hour. BFHI not enforced effectively. (Table.9)

**Table 9.** Distribution of mothers according to initiation of breast feeding

Initiation of breast Feeding	Frequency	Percentage
<1 hour	86	40.95%
1 – 4 hours	60	28.57%
5 – 24 hours	33	15.71%
>24 hours	31	14.76%
Total	210	100.00%

Relation between type of delivery and appropriate initiation of breastfeeding

Among those who initiated breast feeding appropriately, 77% of mothers had vaginal delivery compared to 27% of

mothers who did not. The proportion of LSCS (73%) was high among mothers who did not initiated breast feeding appropriately and this association was found to be statistically significant with significant P value. (Table.9)

Table.9 Relation between type of delivery and appropriate initiation of breastfeeding

Type of delivery	Breastfeeding initiation				Total	
			Not			
	Appropriate		appropriate			
Vaginal	142	77.2%	7	26.9%	149	71.0%
LSCS	42	22.8%	19	73.1%	61	29.0%
Total	184	100%	26	100%	210	100%

Chi square – 27.9411

df-1

p value< 0.001

Distribution of mothers according to reasons for discarding colostrum

Among 210 mothers, 42 mothers did not give colostrum to their babies and among them, the reasons found that

Advised by relatives/ friends in 38%, Not good for baby health in 20%, Unhygienic in 17%, Social customs in 11% and Non specific in 14%. (Table.10)

Table 10. Distribution of mothers according to reasons for discarding colostrum

Reasons	Frequency	Percentage
Advised by relatives/friends	16	38.27%
Not good for baby health	8	19.75%
Unhygienic	7	17.28%
Social customs	5	11.11%
Non specific	6	13.58%
Total	42	100.00%



Discussion

The present study showed that the most common age group for motherhood was 51 % between 21 to 25 years followed by 23% between 26- 30 years and very less cases were seen below 20 years. 72% of the mother's were home makers with 73% nuclear family and 25% from joint family. Literacy of the mother's varied with only 7% availing a degree, 35 % completed primary with 20% completing secondary and 22% were illiterate.

According to the study done by Swetha R [6] in Vijayawada Andhra Pradesh it was seen that the most common age group in slum and non slum dwellers were 50% in 21 -25 years , followed by 26 -30 years with 22%, only 9 % of the cases were seen between 31 -40 years, there were 17 % seen between 15 - 20 years. Among them 56% from the slum dwellers were literate and 43% were illiterate. 75% of the mother's were home makers and only 25% were employed. 71% of them lived in a nuclear family with 19% living in joint family.

In the present study it was observed that 16.7% of mothers had less than 3 antenatal visits and 83.3% had more than 3 visits. Mansa et al [7] in Lucknow showed 85.5% of the beneficiaries surveyed were found to receive at least three antenatal care services from any health facility. Community health centre was the most common source for such care. Neeraj Agarwal et al [5] 30% of the cases received nearly more than 3 visits.

In this study, 98.0 % of mothers had institutional delivery and 2.0% delivered in home. According to the study done by Geeta S. Pardeshi [8], in the rural district of Maharashtra according to the National Rural Health Mission in 2009 nearly 69% of the total number of deliveries (n=2, 211) in 2008- 2009 in rural and were conducted in institutions whereas the remaining were conducted at home. The percentage of home deliveries conducted with an assisted by health personnel was 7% in 2005 and only 2% in 2009 as most of the mother's were aware of institutional deliveries.

In the present study only 40.95% of mothers had initiated breast feeding within 1 hour of delivery followed by 28.75% fed within 1 – 4 hrs 15.71 % fed within 5 – 24 hrs and 14. 76% fed after 24 hrs. According to the studies done by Indu K. Sharma [9] initiation of breast feeding depends on the socioeconomic factors. According to the cross sectional study conducted in correlation to the geographical factors delayed initiation of feeding is more prevalent in the women of Bangladesh who have less literacy. Working mothers in Pakistan has a delayed

initiation of breast feeding. In an urban area of India, Kolkata.

Among 210 study subjects, 165 mothers initiated breast feeding appropriately (within 1 hr in case of vaginal delivery and 4 hrs in LSCS). Appropriate breastfeeding initiation was high among literates (86.1%) compared to illiterates (13.9%). According to the study conducted by Gulshan Saeed et al [10] in Pakistan it was noted that among 1353 cases 54% of the cases had vaginal delivery and 45% of the cases has caesarean sections. It was noted that 70 % of women had problems with feeding their babies when they were matched for the mode of delivery, 58% of women with feeding problems belonged to the caesarean delivery group and 42% of complaining mothers had vaginal delivery.

Conclusion

In this study, we found that exclusive breastfeeding practice is still low in the community. Creating awareness through health education about breastfeeding practices among mothers should form a shield to protect the baby from malnutrition and infections.

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