



KNOWLEDGE ATTITUDE AND PRACTICE REGARDING INFANTS AND YOUNG CHILD FEEDING PRACTICES AMONG MOTHERS IN NORTH KERALA DURING THE COVID19 PANDEMIC.

Paediatrics

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ABSTRACT

INTRODUCTION: The infant feeding practice differs among the different cultures across the globe. Therefore, many movements have been initiated in recent years to optimize feeding practices. One of the crucial parts is protecting, promoting and supporting breast milk for newborn babies. But, unfortunately, there are many discrepancies between what has been recommended and what is being practised in reality. Various factors, including beliefs, social, cultural, and economic factors, influence the feeding practices in rural India. "(1) This current research highlights the knowledge attitude and practice of the mothers regarding infant feeding practice.

OBJECTIVES: To assess the different sociodemographic factors affecting feeding practices.

To find the knowledge, attitude and practice of infant feeding among mothers of north Kerala.

RESULTS: The knowledge regarding feeding practices among Kerala mothers is high, owing to the mother's educational status.(2)

CONCLUSION: The results obtained from the current research help formulate specific interventional programs in the future.

KEYWORDS

Attitude, Breastfeeding, COVID 19, Feeding Practices, Female education, Infant, Kerala, Knowledge, Pandemic, Rural, Young child

INTRODUCTION

Despite the well-recognized effectiveness of exclusive breastfeeding for the first six months of an infant life for reducing infant mortality, adherence to this practise is not widespread in the developing world. Poor infant feeding practices and their consequences are one of the world's major problems and a serious obstacle to social and economic development. Breastfeeding is one of the most important determinants of child survival, birth spacing, and the prevention of childhood infections. The beneficial effects of breastfeeding depend on its initiation, duration, and the age at which the breastfed child starts weaning. Breastfeeding practices vary among different regions and communities. Breastfeeding has been well recognized since old age to be the best feeding for a neonate. Early breastfeeding within one hour and for the first six months is vital to achieving Millennium Development Goals. Effective planning is needed to improve infant nutrition keeping in pace with the changing perceptions and social and cultural values. It is imperative to have an insight into existing knowledge, attitude and practices about infant feeding practices prevailing in the community.

The outbreak of COVID-19 is a stressful time for everyone. This stress may be especially true for mothers who are breastfeeding and concerned about their baby's health. At the same time, the recommendations regarding COVID 19 varies by context and is evolving rapidly. Based on recent shreds of evidence, only with Home isolation Individuals with mild to moderate symptoms can be managed. There are also lots of queries among mothers whether there is transmission COVID19 through breastfeeding. (3) Mothers should be counselled/advised to continue breastfeeding should the infant or young child become sick with suspected, probable, or confirmed COVID-19 or any other illness.(4)

Caring for infants and mothers at home, therefore, requires practising WHO-recommended infection prevention and control measures. In addition, in the context of limited availability and compromised access to markets, health facilities or in the case of lockdowns, communities and households will require information and support on feeding their infants and young children.(5) Intensifying the protection, promotion and support to adequate infant and young child feeding is, therefore, a critical action that needs to consider the context-specific barriers and bottlenecks in the country.(6)

Infant feeding practices have long been recognized as essential determinants of specific infections. Complementary feeding starts when breast milk is no longer sufficient, and the target age is 6–23

months. The gap between nutritional requirements and the amount obtained from breast milk increases with age. In addition, complementary foods must provide relatively large proportions of micronutrients.(7)

METHODS:

Study setting: The current research is a community-Based cross-sectional study. **Study population:** Mother's with a child less than two years of age. **Inclusion criteria:** All mothers who have accessibility to phone or any other means of communication. **Exclusion criteria:** Mothers who have pre-existing chronic medical conditions such as HIV, Hepatitis C and cancers. **Study tool:** Interviewer administered semi-structure questionnaire including sociodemographic characteristics of the participant to assess knowledge, attitude and practice regarding feeding practices among mothers having a child less than two years. **Data collection:** The participants were interviewed after taking informed consent. The principal investigator shared a participant information sheet with participants through an online data collection tool. The questionnaire contains 27 questions designed to assess the knowledge, attitude and practice among mothers. The questionnaire had various parameters including details - age of mother, age of the child (less than two years), number of children, religion, address-rural/urban, education, monthly family income. The study was conducted between June 2020 to October 2020. The sample size was calculated using $n = \left[\frac{Z^2 [1-\alpha/2] X p X [1-p]}{d^2} \right]$ with 51.3% prevalence of exclusive breastfeeding(8) 95% confidence level with 8.5% as absolute precision, thus $n = 139$ (rounded off to 150).

DATA ANALYSIS:

The data collected was entered into Microsoft Excel and analyzed using SPSS. Descriptive statistics, including frequencies, percentages and measures of central tendencies, were done.

RESULTS :

A Total of 150 mothers participated in this current study. The age-wise distribution of study participants is as follows:

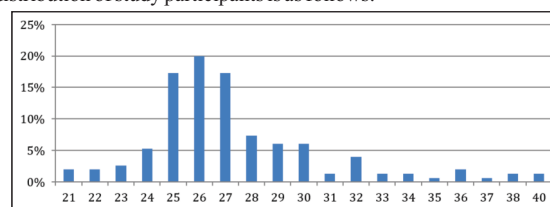


Figure 1: Age-wise distribution of the study participants

The majority of the study participants belonged to an age group less than 27 years (66 %).

Table 1: Sociodemographic Characteristics of the study population

Parameter	Category	Percentage
Age of the child	< 6 months	25%
	Six months - 1 year	50%
	1 - 2 year	25%
Parity	one	69.30%
	two	22%
	three	8.60%
Religion	Hindu	53.30%
	Islam	36%
	Christian	10.70%
Residence	Rural	61.30%
	Urban	38.60%
Education	Higher Secondary	14.6%
	Under Graduate	62%
	Post Graduate	23.3%
Family Income	< 5000	5.60%
	5000 - 10000	8.50%
	10000- 20000	8.10%
	20000 -50000	30.60%
	50000 & above	47.20%

Parity The number of children that the participants have is one child (69.3%), two children (22%) and three children (8.6 %). The sociodemographic details have a peculiar trend in Kerala; most belonged to Rural Kerala(61.3%). Moreover, the education level is high even among rural females (undergraduate (62%) and postgraduate (23.3%)), which reflects in the family income.

Knowledge: Among the knowledge regarding feeding practice, how long the child should be given exclusive breastfeeding(EBF)is responded as follows:78.60% up to six months, followed by 16.60% for one year and up to 2 months (4.6%)

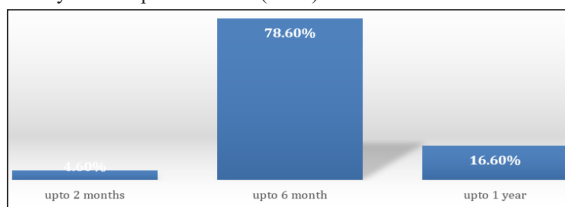


Figure 2: Knowledge of mothers regarding Exclusive breastfeeding

Table 2: Knowledge Attitude and Practice of Breastfeeding Practices

Variable	Response	Frequency
breastfeeding is beneficial	to child	18%
	to mother	0%
	to mother and child	82%
	no benefit	0%
Frequency of breastfeeding /day		
	8-12 times & more	72%
	5-6 times	21.30%
	2-4 times	3.30%
	Don't know	3.30%
Breastfeeding during mother's illness		
	yes	76%
	no	18%
	sometimes	6%
Planning of Breastfeed before delivery		
	yes, for several months	86.60%
	yes, for few weeks	3.30%
	no, I didn't plan	16%
Breast and formula feeds are equal		
	Yes	22.60%

	No	60%
	May be	17.30%

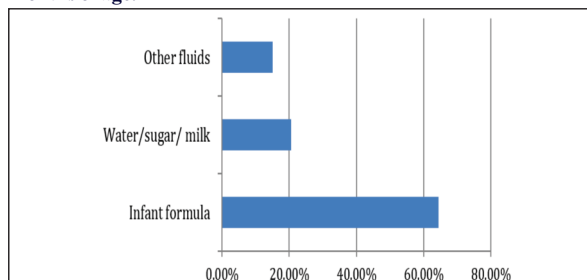
Table 3: Time of initiation of breastfeeding

Response	Individual	Percentage
Within 30 minutes of delivery	78	51.6%
Within 24 hours of delivery	72	48.3%
Not breastfed	0	0%
Don't know	9	6%

Table 4: Knowledge Attitude and Practice of weaning Practices

Variable	Response	Frequency
Initiation of other foods		
	Birth	0.60%
	Between 2- 4 months	3.30%
	After six months	88.60%
	After one year	4.60%
	Don't know	2.60%
Infants spit out semisolid foods - Initial feeds		
	Dislike for the food	23.30%
	Not matured to Swallow	53.30%
	Don't know	23.30%
Do Drugs get secreted in Breast milk		
	Yes	52%
	No	24%
	sometimes	24%
Type of complimentary food along with breastfeeding		
	Homemade	62%
	Commercial feeds	8.60%
	Both	20.60%
Frequency of Oral feeds for your child/day		
	3 - 4 times	34%
	5-8 times	24.60%
	>8times	38.60%
	Don't know	8%
Peace of mind and Physical Calmness of mother		
	Yes	52%
	No	18%
	sometimes	30%
Acceptance of New food by child		
	one time	18.60%
	three-time	54%
	12 times	20.60%
	> 30 Times	6.60%
Mothers Don't Know full stomach of Child		
	True	38.60%
	False	42%
	Don't know	19.30%
Separate bowl / Plate for Child		
	Yes	93.30%
	no	3.30%
	sometimes	3.30%

Figure 3: What food is given, other than breast milk before six months of age.

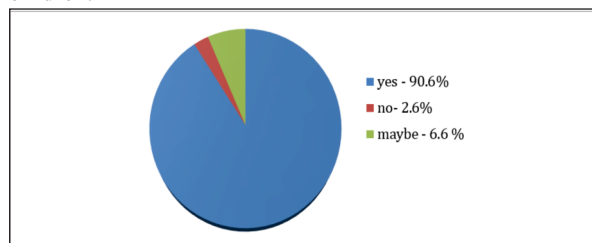


Out of 150 mothers, 48 of them started other food before the age of six months. The infant formula feed (64.5%) is the most common feed used by the mother, followed by water/sugar/milk (20.5%) and other fluids (15.5%).

Table 5: Are drugs/medicines secreted in breastmilk when mothers eat them?

Response	Individual	Percentage
Yes	78	52%
No	36	24%
sometimes	36	24%

The breast milk content will have the medicines consumed by the mother. And unhygienic practices causes diarrhoea(90.6%). These are the reflection of the awareness level among the mothers.

Figure 4: Do you think unhygienic practices cause diarrhoea in children?

The covid 19 pandemic have played a critical role in enhancing the perception of infection control practices. But since this variable is specifically regarding the incidence of diarrheal episodes. Moreover, this establishes the awareness of mothers regarding feeding practices independently.

Table6: Do you think feeding your child in front of T.V is a more beneficial way in making him eat the whole meal

Response	Individual	sometimes
Yes	21	14%
No	86	57.3%
sometimes	43	28.7%

DISCUSSION

This study assessed the feeding practices among infants and young child, who are less than two years of age, and analyzed their knowledge, attitude, and practice. Participants of this study included 150 mothers in and around Atholi. The study population have mothers of different age groups, <25 years (12%), 25 – 35 years(82%), >35 years (8%).

Our study shows that about 51.6% of mothers had good knowledge about the time of breastfeeding initiation. This result is inconsistent with a study done in eastern India that shows 52% of mothers knew breastfeeding initiation. (9)

And 88.6% of the mother had practised exclusive breastfeeding(EBF) for six months. The rate of EBF is higher than a study done in rural Tamilnadu, where only 34% of infants received EBF for six months(10). A large percentage, 82% of mothers, knows breastfeeding is beneficial to both mother and child and no mother thinks that there is no benefit of breastfeeding. Furthermore, a significantly large number of mothers (76%) breastfed the child even when the mother herself fell ill, which is in line with the recommendation by WHO and UNICEF "Infant and Young Child Feeding in the Context of COVID-19" – March 2020. (3)

CONCLUSION

From the current research regarding infants & young child feeding practices (less than two years), we concluded that there is good knowledge among mothers regarding the feeding practices of their children. There was no varying distinguishing of KAP among mothers of a different religion.

The increase in meal frequency for the infants ensured the energy requirements. In this study, 72 % of infants were fed more than 12 times per day, which determines to prevent malnourishment.(11) Mothers having more than one child have better knowledge, attitude and practice than mothers with a single child. Infant formula was noticeably the preferred alternative to breastmilk. Mothers had a good attitude regarding breastfeeding their children for several months. Complimentary feeding is carried out at the correct age, and homemade food was preferred by most; mothers also understands the importance of weaning for their state peace and calmness also. Moreover, mothers prefer vegetarian food for their child Roughly only

half of the population do not let their child eat their meals by watching television It is also noticed that mothers take less effort and initiative in introducing new food to their children. This less effort may be because the new foods may lead to an additional burden to the mother(if the child falls sick) during the covid19 pandemic. (12) The mothers take extra care to prevent such hospitalization due to diarrheal episodes during the global health care crisis(COVID 19).

RECOMMENDATIONS

There is persuasive evidence available to support national breastfeeding duration goals. This research presents adequate evidence to support the recommendations by the health authorities. Furthermore, there is also enough proof that the feeding practices met the energy needs of the children.

The recommendation and goals treat breastfeeding as an optimal way to feed infants during their first year of life, along with the timely addition of complementary feeding.

Child-centred programmes have to be formulated and implemented to mitigate the impact of covid19.

Constant monitoring of determinants that reflects the child health should be done by the local health authorities.

Any change in the determinants should be identified early and reported to the state and national health authorities to take appropriate action.

Supply of commodities for children should be ensured irrespective of the pandemic crisis.

Disseminating infant feeding information through mobile phones to target young mothers, who are increasingly using mobile technology, is an option.

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