A STUDY ON INFANT AND YOUNG CHILD FEEDING PRACTICES (IYCF)

Dissertation submitted to

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Affiliated to

MAHATMA GANDHI UNIVERSITY

In partial fulfilment of requirement for the

AWARD OF THE DEGREE OF MASTER OF SCIENCE IN

HOME SCIENCE (BRANCH C)

FOOD SCIENCE AND NUTRITION

By

CHINJU ROSE MARIA

Register No. AM23HFN005

DEPARTMENT OF HOMESCIENCE AND CENTRE FOR RESEARCH

APRIL 2025

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'Certified as bonafide research work'

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Author Name	CHINJU ROSE MARIA
Course of Study	M.Sc. Home Science Branch C - Food Science & Nutrition
Name of Guide	Dr. Shilpa Jose
Department	Home Science & Centre For Research
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I hereby declare that the thesis entitled **'A Study on Infant and Young Child feeding practices (IYCF) '** is a Bonafide record work done by me during the course of the study, under the supervision and guidance of Dr. Shilpa Jose, Associate Professor, Department of Home Science and Centre for Research, St. Teresa's College (Autonomous), Ernakulam.

Chinju Rose Maria

Place : Ernakulam

Date : 28/4/2025

DEPARTMENT OF HOME SCIENCE
AND CENTRE FOR RESEARCH
ST. TERESA'S COLLEGE AUTONOMOUS, ERNAKULAM

Dr. Shilpa jose
Associate Professor
Department of Home Science & Center for Research

CERTIFICATE

This is to certify that the thesis entitled **'A Study on Infant and Young Child feeding practices (IYCF) '** is an authentic record of the original research work carried out by **Ms Chinju Rose Maria** with **Reg No. AM23HFN005** under my supervision and guidance during the academic year 2023-25.

Ernakulam
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Dr. Shilpa jose

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I. INTRODUCTION

The World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) have both emphasized the significance of breastfeeding exclusively for the first 6 months of a child's life. This is a recommendation that has been made from a global perspective. The World Health Organization (WHO) reports that only about 41 % of infants around the world are exclusively breastfed for the first 6 months of their lives. This %age is higher in some countries than in others. This rate is significantly lower than the global target of fifty % by the year 2025, which is projected to be achieved.

There is a significant contribution that infant and young child feeding (IYCF) makes to the overall health and development of a child, and it is important to note that this contribution is significant. The nutrition that a child receives during their formative years is a significant factor in determining their growth, immunity, and cognitive abilities for the rest of their lives. Breastfeeding is the only method of nutrition that is recommended for infants for the first 6 months of their lives, according to both the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF). After that, the infants should be given appropriate complementary foods, and they should continue to be breastfed for at least 2 years after that. All of this should be d1 together. On the other hand, the adherence to these guidelines is inconsis10t in many parts of the world, including India, due to a variety of social, economic, and cultural factors.

Kochi, which is located in the state of Kerala, is an urban area, and as such, it presents a unique set of challenges when it comes to the procedures that are used to practice infant feeding. A number of factors, such as urbanization, an increase in the number of mothers who are employed, changes in lifestyle, and exposure to aggressive marketing of infant formula, have been attributed to a decrease in the %age of mothers who breastfeed their children. It is difficult for a significant number of working mothers to continue breastfeeding their children exclusively because of the pressures that are associated with their jobs and the lack of support systems, such as policies regarding maternity leave or facilities for breastfeeding in the workplace. Additionally, the availability of commercial baby foods and formula milk has altered the way in which mothers approach the introduction of complementary feeding. This frequently results in the premature weaning of infants from breastfeeding or the provision of diets of poor quality for infants. Consequently, the introduction of complementary feeding has become more problematic for mothers.

Despite the fact that Kerala's health indicators are relatively better than those of other states in India, studies have shown that urban mothers in Kerala have a difficult time adhering to the best practices for infant and young child care [Gopalakrishnan & Lakshmi, International Journal of Community Medicine and Public Health, 2021]. This is said to be the case despite the fact that Kerala's health indicators are relatively better. A number of factors, including the presence of nuclear family structures, a decreased level of support from older individuals, and an increased reliance on foods that are convenient, are among the factors that contribute to deviations from the recommended feeding practices. In addition, there is a lack of knowledge regarding the benefits of exclusively breastfeeding a child as well as the types of complementary feeding that are utilized in an appropriate manner. The overall nutritional status of children is negatively impacted as a result of the fact that many mothers rely on pre-packaged foods rather than preparing fresh meals that are rich in nutrients for their infants. This is a problem because healthy meals are essential for the development of children.

RELEVANCE OF THE STUDY

The evolution of infant feeding practices in urban areas can be attributed to a number of factors, including the modernization of urban areas, changes in lifestyle, and the increased availability of formula milk and processed baby foods. Even though there are efforts being made on a national and international scale to improve IYCF, there are still challenges that need to be overcome, particularly in urban settings such as Kochi. The conduct of this study is absolutely necessary in order to acquire an understanding of the actual feeding patterns of mothers, the difficulties that they encounter, and the role that hospitals and healthcare professionals play in providing support for them.

OBJECTIVES OF THE STUDY

1. Conduct a qualitative assessment of IYCF Practices by interviewing mothers of infants between the age 0-9 months ,her relatives and pregnant women.

2. To check implementation and compliance with IMS act through interview of hospital staff and health workes.

3. To conduct a Quantitative analysis of IYCF practices of young mothers.

II. REVIEW OF LITERATURE

The result of the present study entitled "A study on Infant and Young Child Practices (IYCF)" is given under the following topics.

2.1 Overview of infant and young child feeding (IYCF).

2.2 IYCF Practices in Urban India and Kerala.

2.3 Determinants of IYCF Practices among Mothers and Families.

2.4 Compliance with the Infant Milk Substitutes (IMS) Act.

2.5 Role of Health Systems and Health Workers in Promoting IYCF.

2.1 Overview of infant and young child feeding (IYCF)

In order to guarantee the best possible growth and development throughout the first 2 years of a child's life, it is essential to implement procedures that are known as infant and young child feeding (IYCF). Over the course of 10 Indian states, Rao et al. (2018) conducted a thorough community-based research that indicated that only 36 % of newborns were nursed within the first hour after delivery, and fifty % were exclusively breastfed during the first 6 months of their lives. Undernutrition was also shown to have a strong association with poor socioeconomic position, maternal illiteracy, and insufficient dietary variety, according to the findings of the research. Menon et al. (2019) conducted another research using data from the National Family Health Survey (NFHS)-3 and NFHS-4. They found that early beginning of breastfeeding and exclusive breastfeeding had improved, but they also found that there were continuing socioeconomic differences in supplementary feeding habits. The findings of Patel et al. (2010), who used data from the National Family Health Survey 2005-06 to estimate IYCF indicators and determinants of selected feeding practices in India, revealed that only 23.5% of mothers began breastfeeding within the first hour after birth, and that 46.4% of infants under the age of 6 months were exclusively breastfed.

A research conducted by Bagul and Supare (2012) in the urban slums of Nagpur, Maharashtra, discovered that only 32.56 % of women began nursing their infants within the first hour after birth, and 36.84 % exclusively nursed their children for a period of 6 months. 78.61% of mothers gave their infants prelacteal feeding, whereas 21.38 % of moms gave their infants colostrum instead. Literate women and mothers who were informed by health staff

were found to have a higher likelihood of exclusively nursing their children, according to the findings of the research.

It was stated by Thakur et al. (2016) that after 1 hour, 51.7% of women began nursing their children in a resettlement colony in Delhi, and 42 % of mothers exclusively nursed their children for a period of 6 months. The %age of moms who provided prelacteal feeding was 18.5%. According to the findings of the research, exclusive breastfeeding was shown to decline with increasing baby age and was considerably lower in households with higher incomes and among women who were employed.

According to the findings of a cross-sectional research conducted by Rajesh and Bhavana (2016) in the urban slums of Bellary, Karnataka, twenty-2 % of mothers exclusively breastfed their children, while 6ty-7 % of mothers started supplemental feeding at the right period. On the other hand, only 18.7% of women in urban slums performed optimum complementary feeding, which indicates that there is a considerable knowledge and practice gap among these moms.

Patel et al. (2021) conducted a comprehensive study that revealed that greater mother socioeconomic position and frequent prenatal care visits were positively associated with appropriate infant and young child care practices. On the other hand, low socioeconomic status and infrequent an10atal care were shown to be negative factors. The evaluation highlighted the need of implementing facility-based as well as community-based interventions in order to enhance the practices of IYCF in India.

It was discovered by Kakati et al. (2016) that in rural parts of the Kamrup district in Assam, 49% of women began nursing their children within the first hour, and 62.5% of them nursed their children exclusively for a period of 6 months. There were 79% of moms who gave their infants colostrum, and 34% of mothers gave their infants prelacteal meals. According to the findings of the research, children who were born in government facilities and children who were the first-born children had a greater rate of exclusive breastfeeding and early commencement of breastfeeding.

According to the findings of a research conducted by Biswas et al. (2010) in an urban slum in Kolkata, only 16.67% of women began nursing their children within the first hour, and 28.33% of them exclusively nursed their children. The administration of prelacteal meals was carried out by 29.16% of mothers, whereas 90% of mothers gave their infants colostrum.

According to the findings of the research, moms who were literate had a higher likelihood of nursing their children exclusively.

2.2 IYCF Practices in Urban India and Kerala

Practices that are known as Infant and Young Child Feeding (IYCF) are very important for ensuring that children under the age of 2 get the appropriate nutrition, growth, and development. The socio-cultural variables, availability to healthcare, maternal education, and changes in urban living all have a role in influencing these behaviors within the setting of urban India. According to Bansal et al. (2021), a cross-sectional research conducted in 2 metropolitan districts of Gujarat found that despite the fact that 78% of women began nursing within the first hour, 30% of mothers continued to practice bottle feeding, and 25% of mothers administered prelacteal meals to their infants. In urban contexts, this suggests that there is a substantial gap between academic understanding and actual practice.

Data from the nationwide Family Health Survey (NFHS)-3 (2005–06) and the National Family Health Survey (NFHS)-4 (2015–16) were evaluated by Nguyen et al. (2018). They found that there were nationwide improvements in exclusive breastfeeding (from 46% to 55%) and early initiation (from 23% to 42%). On the other hand, metropolitan areas continued to demonstrate inadequate complementary feeding practices, particularly with respect to the minimal dietary variety, which increased from just 15% to 21% over the course of 10 successive years.

Achalkar and Badesab (2015) conducted a study in an urban field practice area in Raichur and discovered that only 46.7% of women exclusively nursed their children for a period of 6 months, while 17.3% began receiving supplemental feedings at the same age. In addition, the research highlighted the fact that maternal education was substantially connected with appropriate IYCF practices, highlighting the importance of awareness and information transmission in urban environments.

In a similar vein, Dongre et al. (2010) found that only 36.84% of women in an urban slum in Nagpur practiced exclusive breastfeeding for a period of 6 months. In only 41.11 % of instances, complementary feeding was administered at the appropriate time, with women who were literate demonstrating greater compliance with the suggested measures. According to these results, mother literacy has a significant impact in affecting the conduct of young children living in metropolitan environments.

Despite the fact that 85 % of women in metropolitan Vadodara, Gujarat were aware of the advantages of breastfeeding, only 56 % of them actually practiced exclusive breastfeeding for the required 6 months, according to the findings of a research that was carried out by Patel et al. (2015). It is possible that external factors, such as the pressures of work and the absence of support structures, are contributing to the gap between awareness and actual practice.

Prelacteal feeding was still prevalent in urban Gujarat, according to a research conducted by Chudasama et al. (2009). The study indicated that more than forty % of moms gave their infants sugar water or h1y. Despite the fact that awareness programs were conducted, traditional beliefs and the pressure that comes from families continued to be significant influences in urban settings.

A study conducted by Shinde et al. (2018) found that working moms in the urban districts of Maharashtra were more likely to stop nursing their children exclusively at an earlier age. Based on the findings of their research, it was determined that supportive maternity leave policies and workplace breastfeeding facilities are necessary for enhancing the practices of infant and young child feeding among metropolitan mothers.

An early research was carried out in urban Tamil Nadu by Ananthakrishnan and colleagues (1993). They discovered that while the majority of women breastfed their children, the usage of supplements such as cow's milk was prevalent before the age of 6 months. This demonstrates that the concept of "exclusive" breastfeeding was of10 misconstrued by many people.

More recently, Pandey et al. (2021) conducted an investigation into urban slums in Delhi and found that the %age of infants who were exclusively breastfed was lower than the norm for the whole country. It has been determined that the primary obstacles consist of cultural misconceptions, an early return to work, and an absence of appropriate counseling.

The researchers Jain et al. (2016) found that over forty % of mothers in Bengaluru offered supplemental foods either too early or too late, which increased the likelihood that their children will suffer from malnutrition. Specifically designed educational programs for urban women were suggested by their research.

In spite of the fact that metropolitan areas of10 have greater access to healthcare, research conducted by Sharma and Sharma (2024) highlighted the fact that issues such as nuclear families, a lack of support from older people, and an increase in caesarean sections have a detrimental impact on IYCF practices.

The findings of Priya et al. (2018) indicate that in the metropolitan regions of Chennai, thirty-5 % of moms were using bottle feeding, while only fifty % of mothers were exclusively nursing their children. According to the findings of the research, compliance was not always increased by the presence of health professionals, but awareness was improved.

George and Mathews (2019) emphasize the fact that urbanization has led to a decrease in the %age of mothers who breastfeed their children in Kerala, despite the fact that the state has improved health indicators. The findings of their research conducted in Kochi revealed that only 55% of women followed the practice of starting breastfeeding at an early age, and that working moms experienced considerable obstacles when it came to sustaining nursing.

After conducting their research in Thiruvananthapuram, Mathew et al. (2020) found that 78 % of urban women were aware of the benefits of exclusive breastfeeding, but only 62 % really practiced it. For the purpose of bridging this gap, they emphasized the need of ongoing postnatal counseling appointments.

Finally, Nair et al. (2022) conducted an investigation of the practices of infant and young child feeding (IYCF) in metropolitan Ernakulam. They discovered that while the rate of breastfeeding start was high, the timing of supplemental feeding was delayed in 28% of the instances. They made the connection between this and a lack of understanding about food and the absence of community nutrition initiatives.

2.3 Determinants of Infant and Young Child Feeding (IYCF) Practices among Mothers and Families

At the maternal, household, and societal levels, a range of variables have an impact on the behaviors that are engaged in when it comes to infant and young child feeding (IYCF). Each of these factors has the po10tial to have a major influence on the nutritional status and overall health of newborns and young children. Education of the mother stands out as a crucial driver of infant and young child care practices, making it 1 of the most important aspects. According to Dhami et al.'s research from 2021, studies have repeatedly shown that greater levels of maternal education are connected with improved knowledge and behaviors around breastfeeding and supplemental feeding. According to Bhandari et al. (2004), women who have received education are more likely to commence breastfeeding in a timely manner and to stick to suggested practices such as nursing exclusively throughout the first 6 months of a child's life.

In addition, socioeconomic status (SES) is a crucial factor that contributes to the formation of IYCF practices. It is of10 the case that families with greater socioeconomic status have access to better healthcare, nutrition education, and resources, all of which aid in the promotion of appropriate eating habits. On the other hand, a lower socioeconomic status is of10 associated with poor feeding habits. This is on account of a number of variables, including food poverty, restricted access to healthcare, and diminished mother autonomy (Nguyen et al., 2018). A cycle of poor nutrition and health outcomes in disadvantaged groups is further contributed to by this economic gap, which further adds to the cycle.

Another important factor to consider is the frequency of an10atal care (ANC) visits. In the course of routine ANC visits, healthcare practiti1rs have the opportunity to teach women about the recommended practices for infant and young child care. According to Patel et al. (2010), there is a favorable correlation between maternal at10dance throughout pregnancy and improved feeding habits. These practices include the prompt commencement of breastfeeding as well as the provision of appropriate supplemental feeding practices. In addition, health activities that take place during ANC visits assist women in comprehending the significance of exclusive breastfeeding and the role it plays in lowering the rates of illness and death among infants.

This is especially true in rural and semi-urban settings, where cultural attitudes and practices have a significant impact on the activities of young people. In many societies, traditional beliefs and rituals, such as avoiding colostrum or introducing solid meals at an early age, may delay or prevent optimum nursing practices from being implemented. According to Gupta et al. (2019), some cultural norms prohibit the practice of feeding infants colostrum, despite the fact that it has been shown to have positive effects, and instead favor the early introduction of supplementary meals, which has a negative impact on the health of infants. The dynamics of the family also have a considerable effect in the choices of feeding, notably the influence of grandmothers and mothers-in-law for their children. It is common for senior members of the family, particularly grandmothers, to play a large part in the customs of child upbringing in many different cultures. Their experiences and opinions may either help or impede the implementation of the most effective IYCF methods. Based on their own feeding ideas and experiences, Kavle et al. (2014) propose that the support or resistance from these family members may either promote or discourage exclusive breastfeeding. This is dependent on the individual's experience and views on feeding.

Another factor that has an effect on the practices of IYCF is the job status of the mother. Due to time restrictions and a lack of breastfeeding facilities in the workplace, working moms of10 encounter substantial problems which make it difficult for them to continue practicing exclusive breastfeeding. According to Choudhary et al. (2019), working moms are more likely to start their children on formula or solid foods at an earlier age. This practice reduces the %age of mothers who breastfeed their children exclusively and may have negative effects on the health of their children. For the purpose of assisting working moms in maintaining appropriate feeding habits, workplace rules, such as those pertaining to maternity leave and settings that are suitable to nursing, are of the utmost importance.

A significant comp1nt that plays a role in IYCF practices is exposure to the media. When it comes to newborn feeding, mothers who have access to various media channels, such as television, radio, or social media, are of10 better knowledgeable about the many suggested procedures. Media campaigns that target infant and young child feeding patterns have been demonstrated to be successful in spreading vital nutrition information to mothers, which has resulted in better feeding practices in some urban and rural regions, according to research conducted by Senarath et al. (2012).

In addition, eating practices are influenced by parity, which refers to the number of children a mother has. It is possible that moms who have more than 1 child have more expertise in handling the feeding of infants and may have greater confidence in their ability to breastfeed their children. The research conducted by Yadav et al. (2015) revealed that multiparous moms were more likely to adhere to suggested feeding methods in comparison to primiparous mothers. Primiparous women may be more susceptible to ambiguity and may depend on advice or misinformation from outside sources.

Early feeding habits may be strongly impacted by both the form of birth and the location of the delivery. The presence of skilled healthcare workers who support early beginning of breastfeeding is connected with improved breastfeeding results as a result of the fact that institutional births are associated with these outcomes. According to Tiwari et al. (2019), however, cesarean births are of10 related with delayed commencement of breastfeeding owing to postoperative recovery concerns. This may be a barrier to early bonding and the beginning of nursing.

There is also the factor of maternal age, which has been found as a driver of infant and young child feeding patterns. Younger moms of10 exhibit behaviors that are not optimum for

nursing. teenage moms may be less likely to commence breastfeeding at an earlier age or to follow suggested supplementary feeding methods, which increases the risk of child malnutrition, according to Kumar et al. (2015). This is because teenage mothers have inadequate knowledge and experience.

Moreover, the order of birth might have an effect on feeding patterns. As a result of the fact that women of10 have more time and at10tion to devote to their first child, Singh et al. (2017) found that first-born children were more likely to obtain exclusive breastfeeding and timely supplemental feeding than later-born children. On the other hand, succeeding children could get less at10tion, which might result in delayed or irregular feeding habits.

There is a discernible gap in the practices of IYCF in urban and rural areas. It has been reported by Sinha et al. (2016) that urban moms, in general, have greater access to healthcare services and knowledge on infant and young child care practices. Nevertheless, they are also more likely to experience obstacles such as returning to work earlier than expected, having little help from family members, and being dependent on formula feeding. On the other hand, moms who live in rural areas have a 10dency to adhere to more traditional traditions, which, depending on the views of the community, might come with both positive and negative consequences.

It has been shown that community-based interventions may enhance the practices of early childhood care and education, especially when they incorporate mother support groups and peer counseling. According to Bhandari et al. (2004), the success of such interventions in encouraging optimum feeding habits is highlighted by the fact that they provide women both emotional support and practical assistance, which ultimately results in increased rates of exclusive breastfeeding and improved supplemental feeding.

In conclusion, the policies and programs implemented by the government, such as the Integrated Child Development Services (ICDS) in India, have had a considerable influence on the practices of Infant and Young Child Care. According to Avula et al. (2013), community-based initiatives that are sponsored by the government have the po10tial to deliver essential nutrition education and supplemental feeding to mothers and children, therefore contributing to an improvement in the overall outcomes of infant and young child care in settings with limited resources.

2.4 Compliance with the Infant Milk Substitutes (IMS) Act

The baby Milk replacements (IMS) Act was a major legislative endeavor that was developed in India in 1992 with the in10tion of preventing the improper advertising and sale of baby meals, feeding bottles, and replacements for newborn milk. In view of the rising concerns over baby malnutrition and the health advantages of exclusive breastfeeding, its major objective is to encourage breastfeeding by restricting the marketing of infant formula and other replacements. This is in response to the fact that nursing is the healthiest option for infants. Despite the fact that it was passed into law, maintaining compliance with the IMS Act continues to be a difficult undertaking. This is due to a number of issues, including insufficient enforcement, practices within the sector, and gaps in education among the general public. The IMS Act has a number of important rules, 1 of which is the restriction on promoting infant milk replacements in any way, whether directly or indirectly. The Act places limitations on the ability of producers to promote formula milk via various marketing efforts including as commercials, sponsorships, and other methods. On the other hand, research has shown that formula milk manufacturers of10 find methods to get around these limits. For instance, they may fund events that are at10ded by medical personnel or provide free samples to healthcare institutions (Bhandari et al., 2003). This sort of indirect advertising continues to undercut the aims of the Act and results in ongoing high rates of formula milk usage, despite the fact that breastfeeding has been shown to have several advantages.

Another obstacle that must be overcome in order to achieve compliance is the role that medical personnel play in favoring formula feeding. Formula milk manufacturers of10 target healthcare professionals, such as physicians and nurses, with incentives like as free samples and training materials. It is common for these firms to approach these individuals. According to the findings of research conducted by Bhandari et al. (2004) and Tiwari et al. (2019), a significant number of healthcare practiti1rs continue to advocate formula milk. This may be the result of a lack of understanding about the Infant and Mother Safety Act (IMS Act) or the introduction of financial incentives by formula firms. Under the requirements of the Act, which are in10ded to guarantee that health practiti1rs support exclusive breastfeeding, particularly during the first 6 months of a child's life, this conduct is in violation of those rules. The absence of stringent monitoring and enforcement of the IMS Act is another factor that contributes to the complexity of the issue. According to the findings of a research conducted by Gupta and colleagues (2017), the Act does exist in principles; nevertheless, its implementation on the ground is of10 slack. This of10 results in monitoring organizations

having insufficient resources, which in turn leads to low levels of enforcement at the grassroots level. For the most part, violations of the Act, such as the advertising of formula milk at medical facilities and clinics, are not subject to any kind of oversight. In light of this, healthcare institutions and health experts continue to be affected by the marketing strategies used by formula producers, which results in the perpetuation of feeding practices that are less than optimum.

Furthermore, the insufficient public knowledge on the terms of the IMS Act and the risks associated with formula feeding is a major obstacle that stands in the way of the successful implementation of the IMS Act. There is a widespread lack of awareness among women and families about the po10tially negative consequences of formula milk, particularly when it is used as an alternative to nursing exclusively during the first few months of a child's life. There is still widespread misperception regarding breastfeeding, according to Patel et al. (2015) and Sinha et al. (2016). Many families believe that formula milk is a safer and more convenient alternative to breast milk, despite the fact that public health initiatives have been conducted to increase awareness about the benefits of nursing. The continued widespread use of formula milk is a contributing factor to the poor level of compliance with the IMS Act, which is a result of this lack of awareness.

In spite of these obstacles, there have been a number of activities that have been undertaken with the in10tion of enhancing compliance with the IMS Act. There have been efforts made by government agencies and non-governmental organizations (NGOs) to increase knowledge about breastfeeding and the Infant and Mother Safety Act (IMS Act). These efforts have of10 targeted healthcare staff, community leaders, and the general public. The Baby-Friendly Hospital Initiative (BFHI) and the Baby-Friendly Community Initiative have been significant in promoting breastfeeding and guaranteeing compliance with the Infant and Mother's Health Act (UNICEF, 2018). These programs have played a vital part in ensuring that breastfeeding is encouraged. Despite the fact that their influence varies from area to region and is sometimes hampered by poor execution, these programs have been helpful in lowering the use of formula milk and providing encouragement for breastfeeding.

When it comes to guaranteeing compliance, the function that government regulation plays is very essential. Several suggestions have been made in order to increase the enforcement of the IMS Act. These suggestions include the implementation of more rigorous monitoring methods, the implementation of more harsh sanctions for infractions, and the improvement of training for healthcare personnel about the significance of breastfeeding and

the legal elements of the IMS Act. According to Avula et al. (2013), in order to accomplish the overall aim of promoting optimum infant and young child feeding practices, it is required to enhance the legislative framework and increase public and professional education. This is necessary in order to promote compliance with the IMS Act.

2.5 Role of Health Systems and Health Workers in Promoting IYCF

Within the context of ensuring that mothers and caregivers adopt appropriate feeding habits, the role that health systems play in encouraging practices that are associated with infant and young child feeding (IYCF) is of the utmost importance. As main venues for the dissemination of information and the provision of support for breastfeeding and supplementary feeding practices, health systems serve as primary communication channels. According to the findings of a research that was conducted by Hajeebhoy and colleagues (2014), health systems that include IYCF counseling as a comp1nt of their normal maternity and child health services have the po10tial to considerably boost breastfeeding rates and decrease the need for formula feeding. Through the incorporation of IYCF counseling into normal healthcare services, women are guaranteed to get consis10t assistance that is supported by research about the techniques that are most effective for feeding their infants.

When it comes to promoting breastfeeding and supplementary feeding, healthcare professionals, notably nurses, midwives, and pediatricians, play a crucial role. As a result of the fact that they are of10 the initial point of contact for new moms and their families, they are in a very advantageous position to exert influence on feeding patterns. Mbuya et al. (2016) conducted a research that showed the considerable influence that educating health professionals has on IYCF counseling. The study noted that healthcare personnel who have received proper training are more likely to advocate for and promote breastfeeding. When it comes to providing assistance and addressing frequent issues that mothers have in the early stages of infant feeding, health providers who get regular training and updates on IYCF practices are more positi1d to do so.

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) have collaborated to develop the Baby-Friendly Hospital Initiative (BFHI), which is 1 of the most effective worldwide programs that encourage healthcare institutions to promote breastfeeding via particular practices. Within healthcare institutions, the goal of this project is to establish an atmosphere that encourages breastfeeding as the standard method of feeding for infants and young children. Sinha et al. (2016) conducted a research that indicated

that hospitals that were designated as Baby-Friendly had a substantial increase in the %age of mothers who breastfed their infants during the first few hours and days following delivery. For the purpose of assisting moms in effectively initiating breastfeeding, these institutions use procedures such as rapid skin-to-skin contact and postponing the introduction of formula milk.

There are a number of obstacles that prevent healthcare personnel from efficiently performing their duties in this function, despite the fact that they play an important role in promoting IYCF practices. According to the findings of a research conducted by Tiwari et al. (2019), a significant number of healthcare personnel, especially those working in settings with limited resources, are confronted with difficulties such as insufficient training on IYCF, severe workloads, and a lack of resources. As a result of these obstacles, they are unable to provide appropriate counseling and support for mothers, which in turn hinders the effectiveness of the initiatives to promote the Independence of Young Children. Taking action to address these concerns is very necessary in order to enhance the quality of healthcare services for mothers and children that are associated with newborn feeding.

Another significant element that has a significant impact on IYCF practices is the absence of a health system infrastructure that is supportive. The health care systems in many low- and middle-income countries do not have the essential infrastructure to give effective support for breastfeeding, as stated by Taneja et al. (2014). This lack of infrastructure includes the absence of specialist lactation counselors as well as proper follow-up services. The absence of continuity of care, particularly after the mother has been discharged from the hospital, results in the mother having little advice on feeding habits after she is back at home. This gives rise to an increased likelihood that the mother will stop nursing at an earlier age.

Furthermore, the personal views and behaviors of health personnel about breastfeeding may have a significant impact on the feeding choices that women choose after giving birth. According to the findings of a study conducted by Bhandari and colleagues in 2003, health professionals who had a positive attitude about nursing were more likely to urge women to nurse their children exclusively. On the other hand, those who had a more neutral or negative attitude toward breastfeeding were less likely to act in this manner. The results of this study highlight the need of not only providing professional training but also making efforts to alter the attitudes of health professionals so that they are in line with the most effective IYCF practices.

In terms of training, a research that was conducted by Arifeen and colleagues (2008) emphasized the value of community-based interventions in educating healthcare personnel, especially in rural regions. According to the findings of the research, health professionals who had received specialized training in infant and young child feeding were more likely to advocate and support breastfeeding habits as well as participate in programs that educated them about complementary feeding. In rural and disadvantaged locations, this method was shown to be helpful in enhancing mother knowledge as well as the health outcomes for infants.

Inadequate engagement and communication between health services and the community is another factor that impedes the promotion of evidence-based approaches for young children. The value of community-based treatments that engage healthcare professionals was highlighted in a research that was conducted by Chandran and colleagues (2017). This was particularly apparent in the early stages of child development. In order to more successfully promote IYCF practices and reach moms who may not have access to institutional care, health systems that connect with the community via outreach initiatives are able to do so.

In addition, it is the role of health experts to monitor and evaluate feeding habits in order to guarantee that moms are adhering to the required recommendations. The findings of a research conducted by Dadhich et al. (2016) indicate that health professionals who actively participate in monitoring infant and young child eating patterns during regular check-ups and postnatal visits are able to assist in identifying early indicators of insufficient feeding and providing prompt treatments. Regular monitoring and follow-up are necessary in order to guarantee that newborns obtain the appropriate amount of nourishment throughout the first 2 years of their lives, which are considered to be especially crucial.

The correction of misunderstandings and incorrect information on the feeding of infants is 1 area in which health systems have the po10tial to play a major influence. A great number of moms are confronted with contradictory recommendations on newborn feeding from members of their family, friends, and the media. In a research that was conducted by Gupta and colleagues (2015), it was shown that health providers, by providing good counseling, have the ability to dispel myths and misunderstandings and present information that is supported by evidence about the significance of exclusive breastfeeding during the first 6 months of a child's life.

It is also rather important for health services to play a role in resolving the social and cultural obstacles that interfere with breastfeeding. It was pointed out by Kundu et al. (2019) in their research that healthcare practiti1rs have the ability to affect mother feeding patterns by addressing cultural attitudes and practices that may be barriers to breastfeeding. Workers in the health care industry may assist in overcoming the social taboos and stigmas that are connected with breastfeeding, particularly in public places, by giving advice that is respectful to culture norms.

When it comes to determining how successful the IYCF marketing activities are, having a reliable monitoring system is quite necessary. Sethi et al. (2017) state that health systems need to include certain indicators in order to keep track of whether or not IYCF procedures are being implemented at the community and facility levels. Through the use of regular monitoring, health systems are able to evaluate the effectiveness of treatments and pinpoint areas in which they need extra assistance. During this monitoring process, health professionals have the po10tial to play a significant role by ensuring that the data collection is correct and adequately reflects the practices of the local IYCF.

In addition to enhancing the capabilities of individuals, health systems should prioritize the development of supportive working conditions for those who are employed in the healthcare industry. The findings of a study conducted by Suri et al. (2018) underlined the significance of establishing workplace policies that encourage breastfeeding. These policies should include the provision of maternity leave and the establishment of areas where women may express their milk. It is not only the healthcare professionals who profit from these measures, but they also serve as a great example for other moms who are employed at the healthcare institution.

In conclusion, health care systems have a responsibility to take preventative measures in order to meet the requirements of vulnerable groups, such as families with low incomes and those living in rural or neglected regions. Padez et al. (2017) conducted a research that highlighted the fact that underprivileged groups of10 experience extra obstacles to healthy newborn feeding. These obstacles include restricted access to healthcare services and a lack of educational resources. By delivering treatments that are specifically geared toward the needs of young people, healthcare systems that actively reach out to these groups may assist in overcoming these problems.

III. METHODOLOGY

Study entitled " A study on Infant and Young Child Practices (IYCF)" is given under the following headings

3.1 Selection of study area

3.2 Sampling Method and sample size

3.3 Tools and techniques

3.4 Data analysis

3.1 Selection of study area

A - Qualitative study

The qualitative study was carried out in 3 localities a corporation area (kochi) a municipality (Piravom) and a Panchayath (Edakkattuvayal) is considered to be one of the most significant cities in Kerala, in addition to a few other metropolitan areas that are located in close proximity to Kochi.

Working mothers, nuclear families, a fast-paced lifestyle, and the impact of the media are among factors that affect IYCF practices. A municipality area of Panchayath were selected to compare the IYCF practices between there areas.

B - Quantitative Study

For this a google form was circulated among mothers of young children to assess breastfeeding practices and knowledge.

3.2 SAMPLING METHOD AND SAMPLE SIZE

A. Qualitative study

In order to facilitate the gathering of narratives as well as numerical data, a combination of qualitative and quantitative sampling methods was used in the present study.

Purposive sampling was used in order to choose the individuals who would take part in this investigation from each locality according to protocol provided by Breastfeeding Promotion

Network of India (BPNI) & IBFAN Asia Pacific. (n.d.). Tools for investigating infant and young child feeding. Breastfeeding Promotion Network of India.

https://www.bpni.org/research/tools-investigating-iinfant

1. Mothers of infant 0-9 months : 3 mothers

2. Pregnant women : 2 pregnant women

3. Mother-in-law, Father in low, husband :

4. Community workers : 1 or 2

Due to the fact that the study was centred on certain populations, such as mothers of infants, and young children pregnant women, close relatives, and community health professionals, this sampling method was carried out.

Figure 01: Qualitative data collection by in-depth interview with a relative

Figure 02: Qualitative data collection by in-depth interview with a superintend

B - Quantitative sample

The sample size for the quantitative comp1nt consisted of 40 mothers who had kids ranging in age from 6 months onwards. During their visits to the hospital, vaccine appointments, or other medical appointments, these mothers were contacted to fill out a google form pertaining to the survey

The participants were provided with a standardized questionnaire that was designed to collect information on breastfeeding, complementary feeding, the use of formula, and hospital help. A request was sent to them to finish filling it out. Due to the responses that they provided, I was able to comprehend the general feeding habits and trends prevalent among mothers.

3.3 TOOLS AND TECHNIQUES

Standardized survey questionnaires provided by BPNI for qualitative and quantitative survey on IYCF practices were used for the present study from 0 - 9 months. These questionnaires served as the primary instrument for the quantitative and qualitative aspects of the study. This questionnaire had both multiple-choice and short-answer questions that were linked to breastfeeding, the timing of supplemental feeding, the use of formula milk, bottle feeding, and the sort of help that was obtained from hospitals. The women were questioned on their experiences with childbirth, the frequency of feedings, the introduction of their first meal, the difficulties they had while nursing, and how they managed to feed their children while still juggling work or other responsibilities around the home. The questions were kept straightforward, and the wording that was used was plain and easy to comprehend, making it possible for even women with a basic education to respond without difficulty.

3.4 DATA ANALYSIS

Descriptive statistics were used in order to conduct the analysis of the quantitative data that was collected from subjects via the utilization of structured questionnaires. It may be deduced from this that the responses were presented in the form of percentages and frequency counts after they were compiled together. A few instances of this would be the number of mothers who nursed their children exclusively, the number of mothers who introduced supplemental meals at the proper time, and the number of mothers who supplied their children formula milk. Due to the availability of these numbers, it was easy to monitor what the majority of mothers were doing and to identify the areas in which there were gaps.

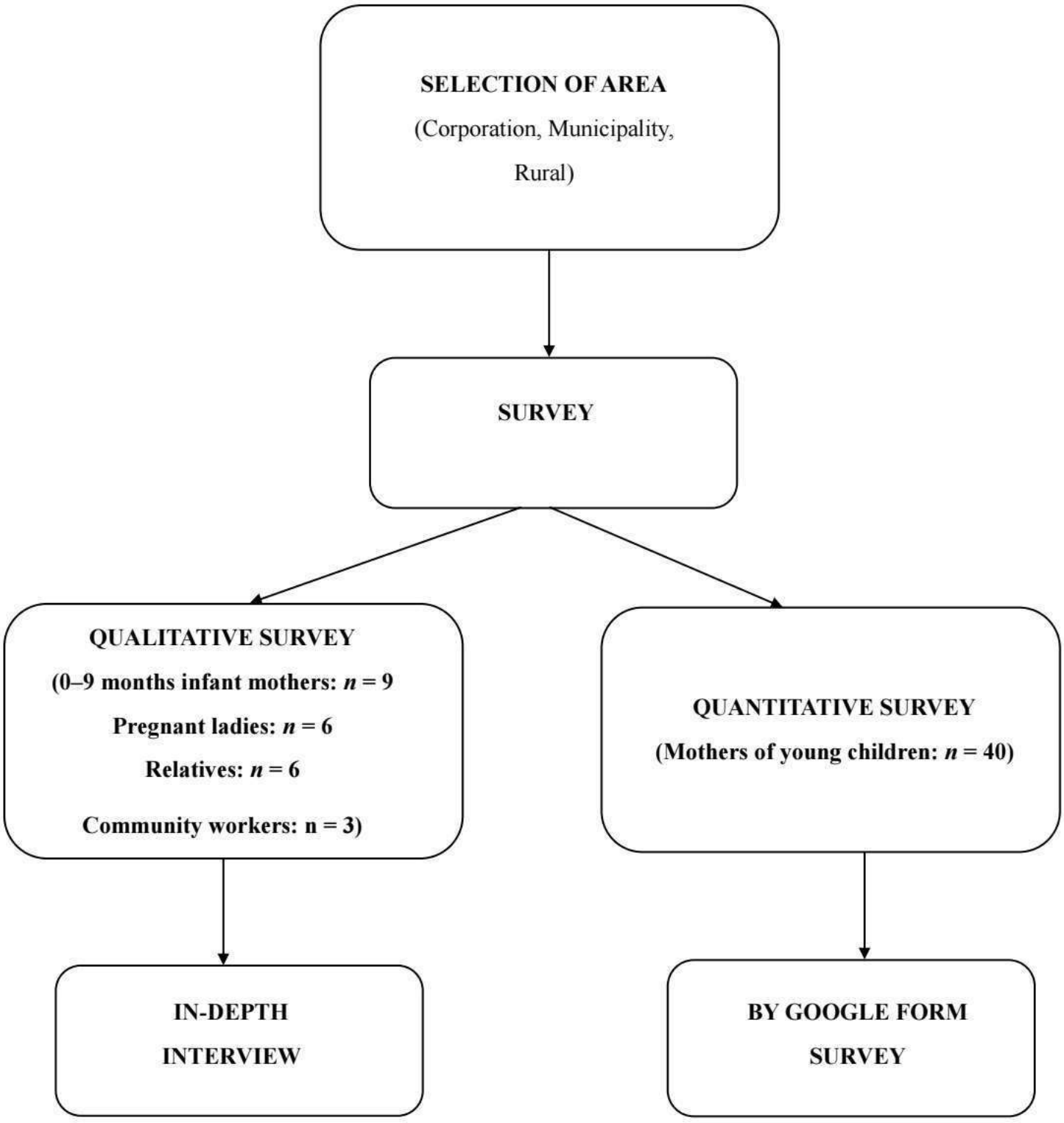

Figure 03:RESEARCH DESIGN

IV. RESULT AND DISCUSSION

The results of the present study entitled "A study on Infant and Young Child Feeding (IYCF) practices" is given under the following headings:

4.1 Qualitative assessment of IYCF Practices among mothers (0-9months), pregnant women and relatives

4.2 Qualitative assessment of IYCF among community health workers and relatives

4.3 Quantitative assessment of IYCF practices among young mothers

4.1 Qualitative assessment of IYCF Practices among mothers (0-9months), pregnant women and relatives

Qualitative assessment of Infant and Young Child Feeding (IYCF) practices among infant and young child (0–9 months) mothers, pregnant women, and their relatives yields vital information on prevailing cultural beliefs, knowledge gaps, and cultural norms. In-depth interviews and focus group discussions revealed that while most mothers know the benefits of exclusive breastfeeding, family practice and influence shape compliance. Pregnant women incline towards seeking feeding advice from elders, and myths related to prelacteal feeds and early weaning still persist in some families. The relative influence, especially grandmothers, also contribute to feeding decision-making, suggesting the need for whole-family IYCF education.

Table 1: Knowledge on Breastfeeding Among Mothers (0–9 months).

n = 9

Sl. No	Questions	Response		
		Urban (Kochi)	**Semi Urban (Municipality)**	**Rural (Panchayath)**
1	When the infant should start breastfeeding?			
	* As soon as possible	1	2	1
	* After the birth	2	1	1
	* Within 1 hour	-	-	1
1(a)	Why?			
	* For immunity and bonding	1		
	* To feed colostrum	2	3	3
	* Advised by nurse or hospital	-	-	-
2	Whether pre-lacteal feeding should be given to babies?			
	* Yes	1 (Yes)	2 (Yes)	3 (Yes)
	* No	-	-	-
2(a)	If yes, why?			
	* Traditional practice	1	2	3
	* Given honey or water	-	-	-
3	How long should only breast milk be			

	given? Why? * Up to 6 months – recommended for immunity and digestion	3	3	3
3(a)	Breast milk with water – why? * To avoid dehydration or based on old customs	1	1	1
3(b)	Breast milk with other food and supplements – why? * Belief of early strength development or poor milk supply	1	2	2
4	At what age should complementary feeding be started? Why? * After 6 months – breast milk not enough * Doctor's advice	3 -	3 -	3 -

5	What should complementary feeding consist of? Why? * Porridge, mashed banana, rice gruel – easy to digest * Homemade food preferred	3 -	3 -	3 -
6	Frequency of these items and why? * 2–3 times a day – to meet nutrition needs as child grows	3	3	3

Knowledge on Breastfeeding Among Mothers (n = 9)

All nine mothers were aware that nursing should begin within an hour of the baby's birth. Even though they were well aware of the benefits of colostrum, 100% of them still used pre-lacteal feeding techniques such giving honey or water because of traditional beliefs. 100% of mothers were aware that breastfeeding should be the only option for six months, even though 33% (3 women) gave breast milk with water and 55.5% (5 mothers) gave extra meals early. All mothers (100%) agreed that the optimal time to start supplemental feeding was at 6 months, 100% recommended mashed meals or porridge, and 100% fed two to three times a day to meet nutritional needs.

Mothers of Infant:

Table 2: Current Breastfeeding Practices Among Mothers (0–9 months)

n = 9

Sl. No	Questions	Response		
		Urban (Kochi)	**Semi Urban (Municipality)**	**Rural (Panchayath)**
1	When did you start breastfeeding?			
	* Immediately	3	2	2
	* Delayed	0	1	1
1(a)	If delayed, why?			
	* C-section / mother weak	0	1	1
1(b)	If on time, who advised?			
	* Nurse/Hospital	3	2	0
	* ASHA	0	1	3
2	Given anything other than breast milk since birth?			
	* Yes/No	1	1	1
2(a)	If yes, what and why?			
	* Water	1	0	0
	* Honey	0	1	0
	* Sugar Water	0	0	1
2(b)	Quantity and frequency			
	* Once	1	1	1
3	Faced problems in breastfeeding?			
	* Yes	1	2	1
3(b)	What problem?			
	* Less milk	1	0	0
	* Latching issue	0	1	0
	* Sore nipple	0	1	0
	* Pain while feeding	0	0	1

3 (c)	Support needed			
	* Doctor	1	0	0
	* Family help	0	1	0
	* ASHA	0	1	1
4	Breast milk sufficient?			
	* Yes	2	2	2
	* No	1	1	1
5	Corrective action if not sufficient			
	* Formula	1	0	0
	* Water & Rest	0	1	0
	* Home remedies	0	0	1
6	Advised on breastfeeding by anyone?			
	* Yes	3	3	3
7	Who gave advice?			
	* Nurse	1	1	0
	* ASHA	0	2	2
	* Doctor	2	0	0
	* Elder	0	0	1
8	Any change from past practice?			
	* Yes	2	2	2
	* No	1	1	1
9	What change?			
	* Started earlier			
	* Avoided pre-lacteal	1	1	1
	* Followed exclusive	1	1	1
	feeding	1	1	1

Among the 9 mothers, 77.7% (7 mothers) started breastfeeding immediately after birth, while 22.3% (2 mothers) faced delays mainly due to C-section or maternal weakness. Nurses and ASHA workers played an important role in advising timely breastfeeding, especially in rural

areas where 100% support came from ASHA workers. About 33.3% (3 mothers) reported giving something other than breast milk, such as water, honey, or sugar water, but it was limited to a one-time practice. Around 44.4% (4 mothers) faced breastfeeding problems like less milk, latching issues, or sore nipples, and support was mostly sought from doctors, family, or ASHA workers. Breast milk sufficiency was positive for 66.6% (6 mothers), while 33.3% (3 mothers) adopted corrective actions like formula feeding, rest, or home remedies. Notably, 100% of mothers received breastfeeding advice from health staff, with guidance mainly coming from nurses and ASHA workers. When compared to previous practices, 66.6% (6 mothers) reported changes like starting breastfeeding earlier, avoiding pre-lacteal feeding, and practicing exclusive breastfeeding. This shows a shift towards better awareness and improved practices influenced by healthcare support and educational interventions.

Table 3: Strengthening Capacity of the Mother for Optimal Breastfeeding Practices

n = 9

Sl. No	**Questions**	**Response**		
		Urban (Kochi)	**Semi Urban (Municipality)**	**Rural (Panchayath)**
1	What information would be helpful?			
	* Benefits of exclusive breastfeeding	3	3	-
	* Feeding techniques	-	-	3
	* How to manage work & feeding	-	-	-
2	Who should provide this information?			
	* Doctor	2	1	0
	* ASHA worker	0	2	2
	* Nurse/Health educator	1	0	1
3	What support is needed?			
	* Family support	2	2	2
	* Flexible work	1	0	0
	* Awareness sessions	0	1	1

All nine mothers (100%) expressed a need for more information to enhance their breastfeeding practices. Urban mothers (100%) wanted to know the benefits of exclusive breastfeeding, while semi-urban mothers emphasized the need for proper feeding techniques, and rural mothers focused more on how to manage work along with breastfeeding. When asked who should provide this information, 66.6% of urban mothers preferred doctors and health educators, whereas in semi-urban and rural areas, 66.6% and 100% respectively suggested ASHA workers and nurses as the ideal sources of guidance. This highlights the growing trust in frontline community health workers, especially in rural settings.

In terms of support needed, 66.6% of mothers across all locations mentioned family support as crucial, particularly in urban and rural areas. A smaller proportion, 33.3% (3 out of 9 mothers), mentioned the importance of flexible work environments, mostly from urban areas. Awareness sessions were seen as important by another 33.3%, with one mother from each location pointing this out. These findings suggest that improving breastfeeding education through trusted healthcare providers and increasing family and workplace support can significantly strengthen a mother's capacity to follow optimal breastfeeding practices effectively.

Table 4: Knowledge on Breastfeeding Among Pregnant Women

n = 6

Sl. No	**Questions**	**Response**		
		Urban (Kochi)	**Semi Urban (Municipality)**	**Rural (Panchayath)**
1	When should the infant start breastfeeding? * Within 1 hour / Immediately after delivery	2	2	2
1(a)	Why? * For immunity * Colostrum is important * Doctor/nurse advice	- 2 -	- 2 -	- 2 -
2	Should pre-lacteal feeding be given?	1 (Yes)	1 (Yes)	1 (Yes)

2(a)	If yes, why? * Traditional belief / family pressure	1	1	1
2(b)	Only breast milk – how long? Why? * 6 months – complete nutrition	2	2	2
2(c)	Breast milk with water – why? * To avoid dehydration (belief)	1	2	2
2(d)	Breast milk with other food/supplements – why? * Baby becomes stronger / family custom	1	1	2
3	At what age should complementary feeding be started? Why? * 6 months – breast milk alone not sufficient	2	2	2
4	What food items should be given and why? * Mashed banana, rice, porridge – easy to digest, affordable	2	2	2
5	Frequency of feeding and why? * 2–3 times daily – to match child's growing needs	2	2	2

All six pregnant women (100%) across urban, semi-urban, and rural areas showed awareness that breastfeeding should begin within one hour after birth. Their primary reason was the importance of colostrum and immunity, with healthcare provider advice reinforcing this belief, especially among semi-urban and rural participants. However, despite this knowledge, all six women (100%) acknowledged the persistence of pre-lacteal feeding traditions in their families. The reason given was cultural or family pressure, which indicates the strong influence of traditional beliefs on feeding behavior.

All six women agreed that exclusive breastfeeding should be continued for six months, acknowledging it as essential for the baby's complete nutrition. However, five out of six women (83.3%)—one urban, two semi-urban, and two rural—still believed that water can be

given to infants during breastfeeding, mainly to prevent dehydration. Similarly, some also supported the early addition of other foods or supplements based on family customs and perceived strength benefits.

All respondents correctly identified six months as the appropriate age to begin complementary feeding and recommended local, affordable foods like mashed bananas and porridge. They also unanimously agreed on feeding two to three times daily, indicating a basic understanding of infant nutritional needs despite some lingering traditional misconceptions.

Table 5: Future Intentions Regarding Breastfeeding Practices Among Pregnant Women n = 6

Sl. No	Questions	Response		
		Urban (Kochi)	Semi Urban (Municipality)	Rural (Panchayath)
1	Received any advice on breastfeeding during ANC care?			
	* Yes	2	2	2
2	From whom and what type of advice?			
	* Doctor/Nurse	2	1	0
	* ASHA	1	2	2
	* Elder women	0	0	1
3	If problems occur, whom would you approach?			
	* Doctor	1	0	0
	* ASHA	1	2	2
	* Family/Elders	1	1	1
4	When did they first breastfeed their child?			
	* Within 1 hr	2	1	1
	* After 1 hr	1	2	2

4(a)	Duration of exclusive breastfeeding?			
	* 6 months	2	0	0
	* 4 months	0	2	0
	* 5 months	0	1	2
4(b)	Breastfeeding with water?			
	* Occasionally	1	0	0
	* Regular	0	2	0
	* Rarely	0	1	1
4(c)	Breastfeeding with food/supplements?			
	* 6 months	1	0	0
	* 5 months	0	2	0
	* 7 months	0	0	2
5	Age when complementary feeding was started?			
	* 6 months	2	1	2
	* 5 months	1	2	1
6	Type and frequency of food?			
	* Homemade (2–3/day)	2	0	0
	* Mixed (2/day)	1	2	0
	* Gruel (1–2/day)	0	1	3

All six pregnant women (100%) had received breastfeeding advice during their antenatal care (ANC). Doctors and nurses were the primary sources for urban women, while ASHA workers guided those from semi-urban and rural areas. One rural woman also received advice from elder family members. In case of breastfeeding problems, all participants indicated they would seek help—urban women equally from doctors, ASHA, and family, while semi-urban and rural women preferred ASHA and family elders.

When recalling their earlier breastfeeding experience, only two out of six women (33.3%) breastfed within an hour of delivery; the remaining four (66.7%) delayed. Regarding exclusive breastfeeding, two women (urban) adhered to the full six months, two semi-urban women reported four months, and rural women opted for five months. Some still practiced

giving water—mostly semi-urban women on a regular or occasional basis—indicating traditional beliefs still exist.

The intended start for complementary feeding was mostly six months among urban and rural participants, while some semi-urban mothers began at five months. Homemade food, such as gruel and mixed types, was common, with rural women mostly feeding gruel 1–2 times a day, whereas urban women fed homemade food more frequently. These findings highlight mixed practices and the influence of both awareness and tradition.

Table 6: Strengthening Capacity of Pregnant Women for Optimal Breastfeeding Practices

n = 6

Sl. No	Questions	Response		
		Urban (Corporation)	**Semi Urban (Municipality)**	**Rural (Panchayath)**
1	What information may be helpful?			
	* When to breastfeed	2	1	2
	* How to handle problems	1	2	0
	* Lactation diet	0	0	1
2	Who should give this information?			
	* Doctor	2	0	0
	* ASHA	0	2	2
	* Nurse	1	0	0
	* Anganwadi staff	0	1	1
3	What support is needed to follow proper practices?			
	* Family support	2	1	2
	* Workplace support	1	0	0
	* Awareness programs	0	2	1

When asked about strengthening breastfeeding practices, most pregnant women (5 out of 6) expressed a need for more information, especially about when to breastfeed and how to handle breastfeeding-related problems. In urban areas, women preferred guidance on the right time to breastfeed, while semi-urban mothers focused more on problem management. For trusted sources of information, doctors were preferred in urban regions, while ASHA workers and Anganwadi staff were preferred by semi-urban and rural women.

In terms of support needed, family support was the most cited requirement among urban and rural women. Semi-urban women highlighted the need for more awareness programs to help them follow proper breastfeeding practices. Workplace support was mentioned only by a few women, mostly from urban areas. Overall, the data shows that clear communication, professional counseling, and strong family involvement are key for ensuring optimal breastfeeding practices among pregnant women in different settings.

Table 7: Knowledge on Breastfeeding Among Mother-in-law / Father-in-law / Husbands n = 6

Sl. No	**Questions**	**Response**		
		Urban (Corporation)	**Semi Urban (Municipality)**	**Rural (Panchayath)**
1	Do you think breastfeeding an infant is important? * Yes	2	2	2
2	What are the advantages of breastfeeding? * Healthy baby * Natural nutrition * Bonding	2- -	2- -	2- -
3	When should breastfeeding be started after birth?			

	* Within 1 hour * After cleaning baby	2 0	2 0	0 2
4	Why? * Colostrum is healthy * Immunity * Bonding	2-	2-	2-
5	Should infant be fed with other liquid before breastfeeding? * Yes	1	2	2
6	What liquid is given in custom? * Honey * Sugar water * Plain water	1 1 0	1 0 0	0 1 1
7	Why are these liquids given? * Tradition * Digestion * Ritual	1 0 2	1 1 1	1 0 1
8	How long should only breast milk be given? * 6 months * 4–6 months * 3–5 months	2 0 0	0 2 0	0 0 2
9	How long breast milk with water? * Occasionally * After 2 months * Daily after 3rd month	1 2 0	0 1 0	0 1 2
10	How long breast milk with other liquids? * After 6 months			

	* From 5th month	3	0	0
	* Based on advice	0	3	0
		0	0	3
11	What support would you provide to the mother?			
	* House help	2	1	1
	* Emotional support	1	2	1
	* Time to rest	1	1	2
12	At what age should complementary feeding start?			
	* 6 months	3	0	0
	* 5–6 months	0	3	0
	* 4–6 months	0	0	3
13	What food items should be given?			0
	* Rice/banana	3	0	0
	* Mashed dal	0	3	3
	* Rice gruel/fruits	0	0	
14	Frequency of feeding?			
	* 3 times	3	0	0
	* 2–3 times	0	3	0
	* 2 times	0	0	3
15	Should updated breastfeeding info be given to the mother?			
	* Yes	3	3	3
16	From whom should the info come?			
	* Doctor/Nurse	2	1	0
	* ASHA	1	2	2
	* Anganwadi	0	0	1

17	What support is needed? * Rest * Emotional support * Health awareness	 2 1 1	 1 1 1	 1 1 1
18	Willing to support mother in community practices? * Yes	 3	 3	 3

All family members (100%) including mother-in-law, father-in-law, and husbands believed that breastfeeding is important for the infant's health, nutrition, and emotional bonding. A majority in urban and semi-urban areas (66.7%) believed breastfeeding should start within one hour of birth, whereas in rural areas, both respondents suggested it should begin only after cleaning the baby. Knowledge of colostrum's benefits was common across all respondents.

Despite awareness, pre-lacteal feeding was still practiced by 83.3% of respondents, especially in semi-urban and rural areas. Traditional liquids like honey, sugar water, and plain water were still used due to cultural rituals or beliefs. Only urban respondents strongly agreed with exclusive breastfeeding for 6 months, while others mentioned shorter durations like 3–5 months.

Support provided by family members included household help, emotional encouragement, and allowing rest. While all agreed that complementary feeding should start around 6 months, only urban families consistently identified appropriate food items and feeding frequency.

Everyone (100%) supported providing updated breastfeeding information to mothers, mostly from doctors, ASHA workers, or Anganwadi staff. All participants showed willingness to engage in community support practices, indicating a strong potential for involving male and elder family members in future IYCF awareness and support programs.

4.2 Qualitative assessment of IYCF among community health workers and relatives

The qualitative evaluation of IYCF practices among relatives and community health workers gives a useful overview of their knowledge, attitudes, and participation in promoting optimal infant feeding. As opinion leaders in maternal and child health, their knowledge and practice influence feeding choices at the community level. In interviews and observations made in the field, this section examines what activities health workers (ASHA workers, Anganwadi workers, and nurses) undertake to promote breastfeeding, including health talks, counseling, and home visits. It also captures the views of relatives, most often older women family members, whose traditional knowledge and experience influence infant feeding norms. The results emphasize the strengths and weaknesses of the support systems at the community level, identifying the necessity of ongoing education and capacity building.

Table 8: Knowledge on Breastfeeding Among Community Health / Nutrition / Other Workers

n = 3

Sl. No	Questions	Response		
		Urban (Corporation)	Semi Urban (Municipality)	Rural (Panchayath)
1	Are you doing anything to promote breastfeeding? * Yes	 1	 1	 1
2	If yes, what? * Health talks * Counselling * Home visits * Group meetings	 1 1 0 1	 0 1 0 2	 0 0 1 1
3	Do you think breastfeeding is important for infants? * Yes	 1	 1	 1

4	What are the advantages? * Immunity * Growth * Bonding * Free * Safe	 1- - - -	 1- - - -	 1- - - -
5	When should infant be put to breast after birth? * Within 1 hour * Immediately	 1 0	 0 3	 1 0
6	Why? * Colostrum * Immunity * Bonding	 1 1 0	 1 2 0	 1 0 1
7	How long only breast milk? * 6 months – recommended	 1	 1	 1
8	How long breast milk with water? * Avoided * Only summer * From 5th month	 3 0 0	 0 3 0	 0 0 3
9	How long breast milk with other liquids? * After 6 months * 5–6 months * Based on hunger	 3 0 0	 0 3 0	 0 0 3
10	Should pre-lacteal be given? * No	 1	 1	 1

11	Why do some still insist on it?			
	* Tradition	1	1	1
	* Elders' advice	0	1	0
	* Rituals	1	1	1
12	Do you advise them against it?			
	* Yes	1	1	1
13	Has advice made impact?			
	* Partially	1	1	1
	* Improving	1	2	0
	* Mixed	1	0	2
14	Age to start complementary feeding?			
	* 6 months	1	1	1
15	What food to include?			
	* Porridge	1	1	1
	* Rice	1	1	1
	* Mashed veg/fruits	1	1	1
16	Feeding frequency?			
	* 2–3/day	2	0	0
	* 3/day	1	2	0
	* 2–4/day	0	1	1
17	Breastfeeding with complementary food till?			
	* 2 yrs	3	0	0
	* 1.5–2 yrs	0	0	3
18	Support provided to mothers?			
	* Counselling			

	* Home visits * Family awareness	1 1 0	1 2 0	1 1 1
19	Want to receive updated techniques? * Yes	 1	 1	 1
20	From whom should info be given? * Doctor * NGO * Health Dept	 2 1 0	 1 1 0	 0 1 2

All community health workers (100%) across urban, semi-urban, and rural settings actively promoted breastfeeding practices through activities like health talks, counseling, home visits, and group meetings. They unanimously recognized the importance of breastfeeding for building immunity, promoting growth, ensuring safety, and fostering emotional bonding. All respondents agreed that breastfeeding should ideally commence within one hour of birth, emphasizing the role of colostrum for the newborn's health.

Exclusive breastfeeding for six months was universally recommended. All health workers discouraged pre-lacteal feeding and advised mothers against offering water or other liquids before six months. Despite these efforts, they acknowledged that traditional beliefs and elder advice still sometimes influenced early supplementation practices. Their interventions have seen partial and improving impacts in their respective communities.

There was complete awareness regarding complementary feeding initiation at six months, with porridge, rice, and mashed vegetables being the most suggested foods. Feeding frequency advice varied slightly, but generally, 2–4 meals per day were recommended based on age.

All workers expressed interest in receiving updated breastfeeding techniques and preferred learning from doctors, NGOs, or health departments. Overall, the findings highlight strong foundational knowledge but also reveal the ongoing need for training and reinforcement to address persistent traditional practices.

4.3 Quantitative assessment of IYCF practices among young mothers

Quantitative evaluation of IYCF practices among young mothers gives quantifiable information on actual feeding practices and practice adopted during the initial few months of an infant's life. Exclusive breastfeeding rate, timely introduction to complementary feeding, and awareness of recommended IYCF standards. The findings assist in understanding patterns, gaps, and potential areas for targeted intervention in promoting improved IYCF practices among young mothers.

Table 9: Demographic Information of the Respondents (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Level of Education	Primary (up to class 5)	1 (2.5)
		Secondary (class 6–10)	4 (10)
		Higher Secondary (class 11–12)	9 (22.5%)
		Graduate/Postgraduate	26 (65%)
2	Age of the Mother	18–25 years	9 (22.5%)
		26–30 years	13 (32.5%)
		31–35 years	12 (30%)
		36 years and above	6 (15%)
3	Employment Status	Housewife	28 (70%)
		Private Sector Employee	7 (17.5%)
		Government Employee	3 (7.5%)
		Self-employed	2 (5%)
4	Family Monthly Income	Below ₹10,000	5 (12.5%)
		₹10,000 – ₹30,000	14 (35%)
		₹30,000 – ₹50,000	15 (37.5%)
		Above ₹50,000	6 (15%)
5	Type of Family	Nuclear	34 (85%)
		Joint	6 (15%)
6	Number of Living Children	1	25 (62.5%)
		2	11 (27.5%)
		3 or more	4 (10%)
7	Gender of the Child	Male	20 (50%)
		Female	20 (50%)

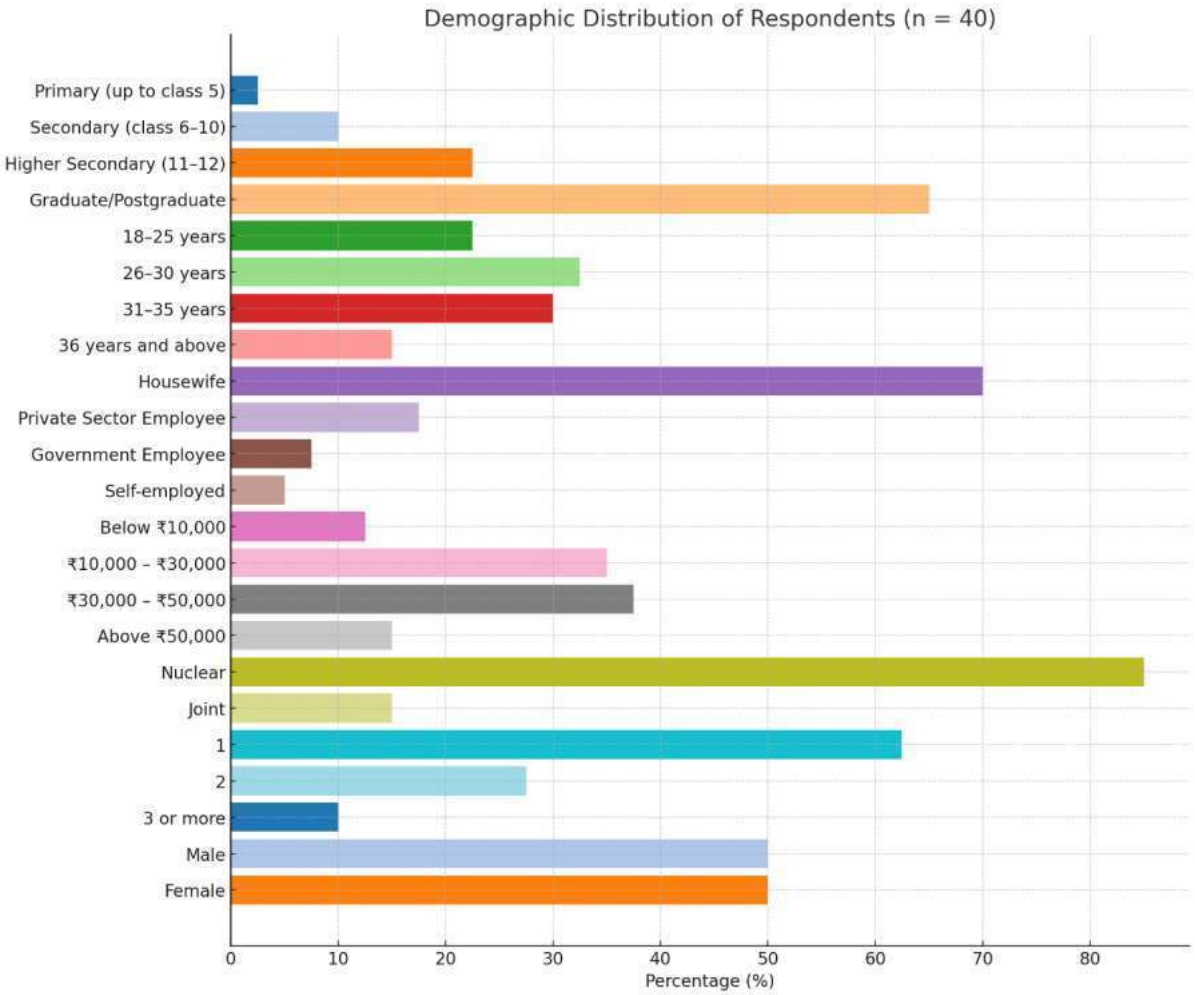

Figure 9.1: Horizontal Bar Chart Showing Demographic Distribution of Respondents (n = 40)

A graduate or postgraduate degree was held by the majority of the moms (65%) (26 out of 40). Just one mother (2.5%) had completed primary school, compared to nine (22.5%) who had advanced to higher secondary and four (10%) who had finished secondary school.

Thirteen moms (32.5%) were between the ages of 26 and 30, twelve (30%) were between the ages of 31 and 35, and nine (22.5%) were between the ages of 18 and 25. Of them, just 6 (15%) were older than 36. Of those who worked, 28 moms, or 70%, were housewives. Seven (17.5%) worked in the private sector, three (7.5%) in the government, and two (5%), who were self-employed women. In terms of income, 14 respondents (35%) made between ₹10,000 and ₹30,000 per month, while 15 respondents (37.5%) had a family income between ₹30,000 and ₹50,000 per month. Five families (12.5%) made less than ₹10,000, and just six families (15%) made more than ₹50,000.The majority of women (34, or 85%) lived in nuclear households,

whereas only 15% of moms lived in joint families. Only four moms (10%) had three or more children, while 25 mothers (62.5%) had just one, and 11 mothers (27.5%) had two. With 20 male and 20 female children (50 percent each), the gender distribution was equal.

Table 10: Pregnancy and Delivery Details of the Respondents (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Antenatal Check-ups	Yes	37 (92.5%)
		No	3 (7.5%)
2	Provider of Antenatal Check-ups	Government Hospital	19 (47.5%)
		Private Hospital	18 (45%)
		Community Health Center	2 (5%)
		Others	1 (2.5%)
3	Place of Delivery	Private Hospital	23 (57.5%)
		Government Hospital	16 (40%)
		Others	1 (2.5%)
4	Type of Delivery	Normal	31 (77.5%)
		Cesarean	7 (17.5%)
		Forceps Delivery	2 (5%)

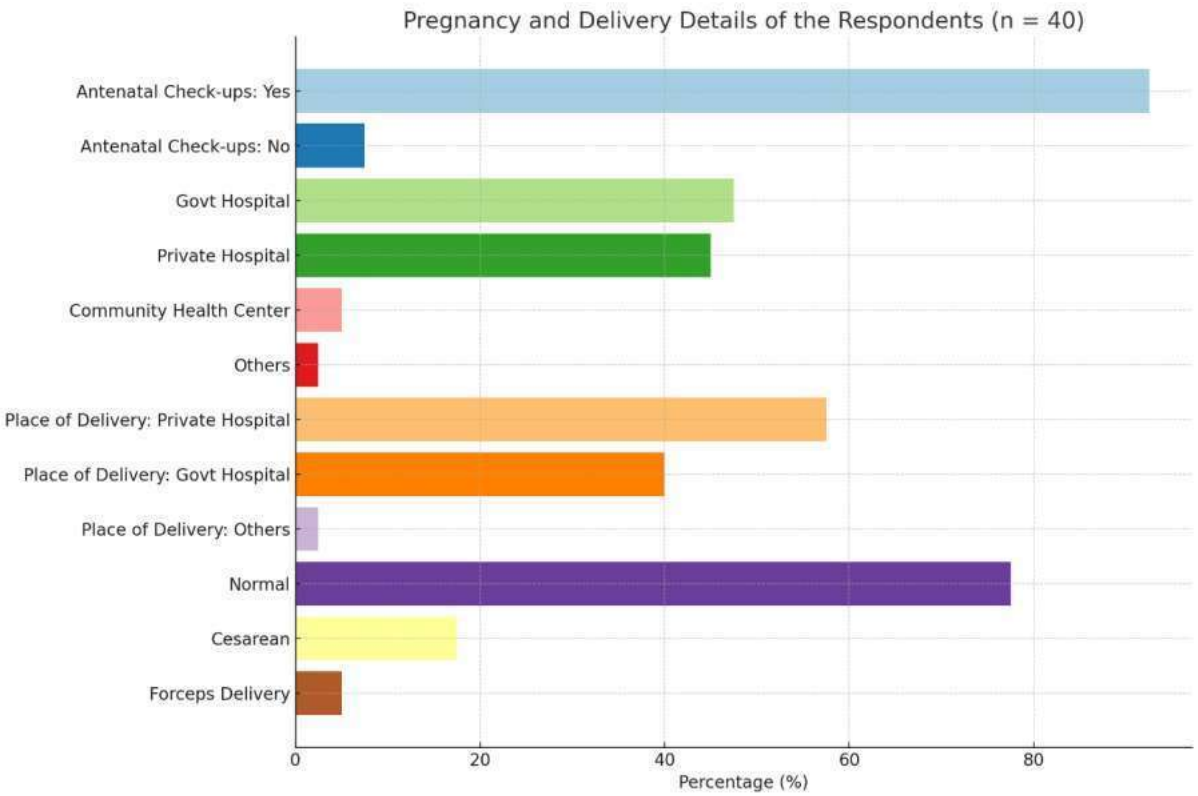

Figure 10.1: Horizontal Bar Chart Showing Pregnancy and Delivery Details of Respondents (n = 40)

Prenatal checkups were attended by 37 moms (92.5%), the vast majority. The majority of service providers were government hospitals (19 moms, 47.5%), with private hospitals coming in second (18 mothers, 45%). Just two moms (5%) visited community health facilities, and one mother (2.5%) said "others."

Of the mothers who gave birth, 23 (57.5%) picked private hospitals. One woman (2.5%) reported using a different location, whereas 16 mothers (40%), chose government hospitals. 31 moms, or 77.5%, had normal births. Two moms experienced forceps deliveries (5%), while seven mothers (17.5%) had cesarean sections.

Table 11: Breastfeeding Practices of the Respondents (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Time of First Breastfeeding After Birth	Within 1 hour	27 (67.5%)
		1–4 hours	9 (22.5%)
		5–12 hours	4 (10%)
2	Pre-lacteal Feeding Given Before Breastfeeding	No	27 (67.5%)
		Yes	13 (32.5%)

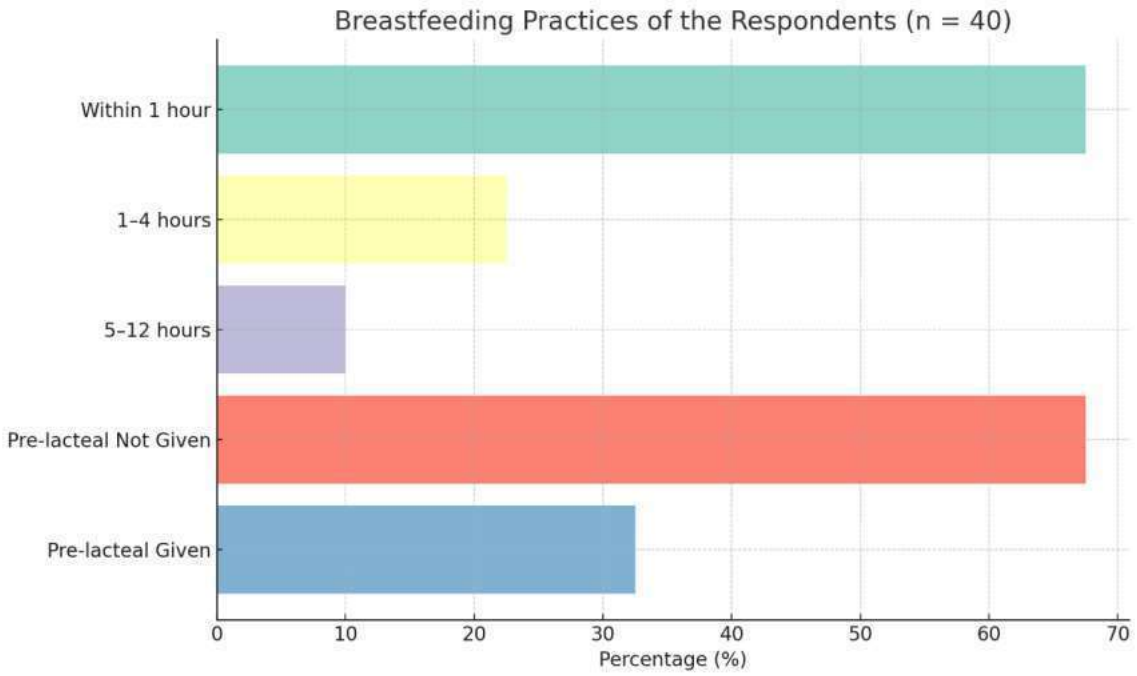

Figure 11.2: Horizontal Bar Chart Showing Breastfeeding Practices Among Respondents

Within the first hour following delivery, a significant majority of mothers—27 out of 40, or 67.5 percent—started breastfeeding. Some mothers showed delayed commencement, with 4 (10%) starting between 5 and 12 hours and 9 (22.5%) starting within 1 to 4 hours. Pre-lacteal feeding adherence to optimal practices was relatively excellent, with 13 mothers (32.5%) admitting to administering some feed before to breastfeeding initiation and 27 mothers (67.5%) not doing so.

Table 12: Complementary Feeding Practices of the Respondents (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Age of Introducing Complementary Foods	After 6 months	28 (70%)
		4–6 months	9 (22.5%)
		Before 4 months	3 (7.5%)
2	Type of Complementary Food Given	Home-cooked porridge	17 (42.5%)
		All of the above	14 (35%)
		Packed baby food	4 (10%)
		Rice/wheat-based food	4 (10%)
		Mashed fruits/vegetables	1 (2.5%)

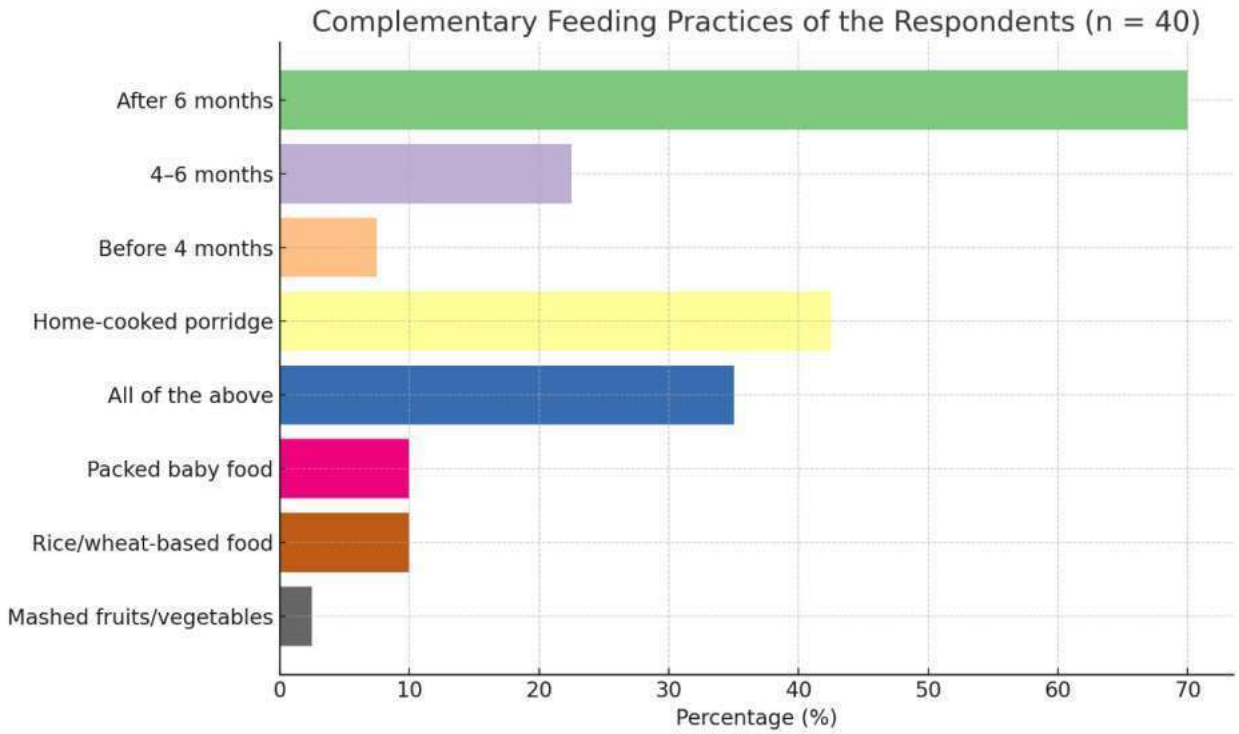

Figure 12.1: Horizontal Bar Chart Showing Complementary Feeding Practices Among Respondents

After six months, which is the optimal time, 28 moms (70%) started supplemental feeding. However, 3 women (7.5%) introduced solids before 4 months, which may be harmful to health, and 9 moms (22.5%) did so between 4 and 6 months.

In terms of food types, porridge prepared at home was preferred by 17 mothers (42.5%). A further 14 (35%) used a combination of alternatives, such as cereal, mashed foods, and packed food. Four women (10%) selected just packaged baby food, four more (10%) selected rice or wheat-based food, and only one mother (2.5%) explicitly selected mashed fruits or vegetables.

Table 13: Formula Milk and Bottle Feeding Practices of the Respondents (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Use of Formula Milk for the Child	Yes	18 (45%)
		No	22 (55%)
2	Bottle Feeding Practice	Yes	30 (75%)
		No	10 (25%)

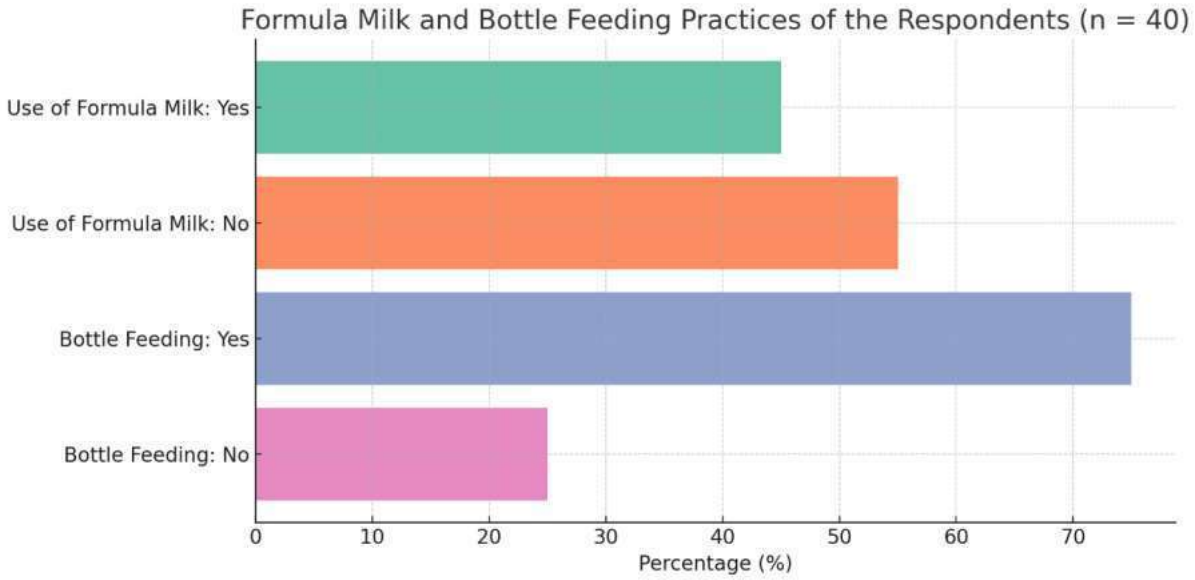

Figure 13.2: Horizontal Bar Chart Showing Formula Milk Usage and Bottle Feeding Practices Among Respondents

Nearly half of mothers rely on alternatives to breastmilk, as evidenced by the fact that 18 women (45%) utilized formula milk and 22 mothers (55%) did not.

However, just 10 moms (25%) avoided bottle feeding, whereas 30 mothers (75%) did so. This implies that regardless of the use of formula, bottle feeding is a commonly accepted practice.

Table 14: Health Care and Hospital Support Received by the Respondents (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Information on Risks of Formula Feeding Provided	Yes	33 (82.5%)
		No	7 (17.5%)

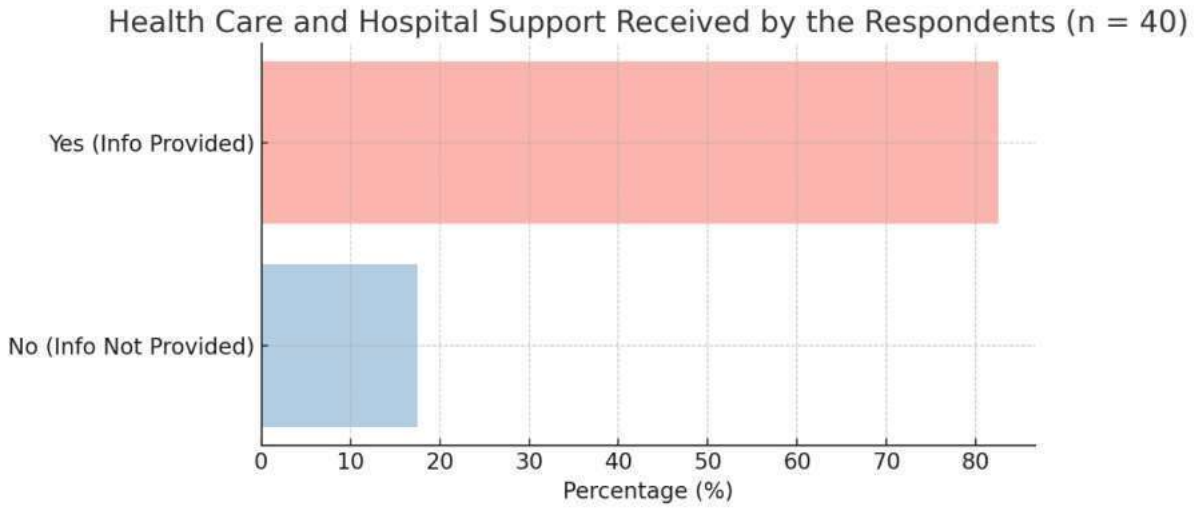

Figure 14.1: Horizontal Bar Chart Showing Information on Risks of Formula Feeding Provided to Respondents

The majority of mothers (33 out of 40, or 82.5%) stated that medical personnel had told them about the dangers of formula milk. Nevertheless, seven moms (17.5%) reported not receiving this information, indicating a lack of counseling coverage.

Table 15: Challenges Faced and Perceptions on Breastfeeding Support (n = 40)

SI No	Characteristic	Category	No. of Respondents (%)
1	Major Challenges in Breastfeeding	Low milk supply	10 (25%)
		Others	10 (25%)
		Sore nipples / breast pain	8 (20%)
		Lack of time	6 (15%)
		Social pressure to use formula milk	4 (10%)
		Baby refuses to breastfeed	2 (5%)
2	Support Needed for Continued Breastfeeding	Family support	16 (40%)
		More awareness programs	13 (32.5%)
		Better maternity leave policies	4 (10%)
		Workplace support	4 (10%)
		Others	3 (7.5%)

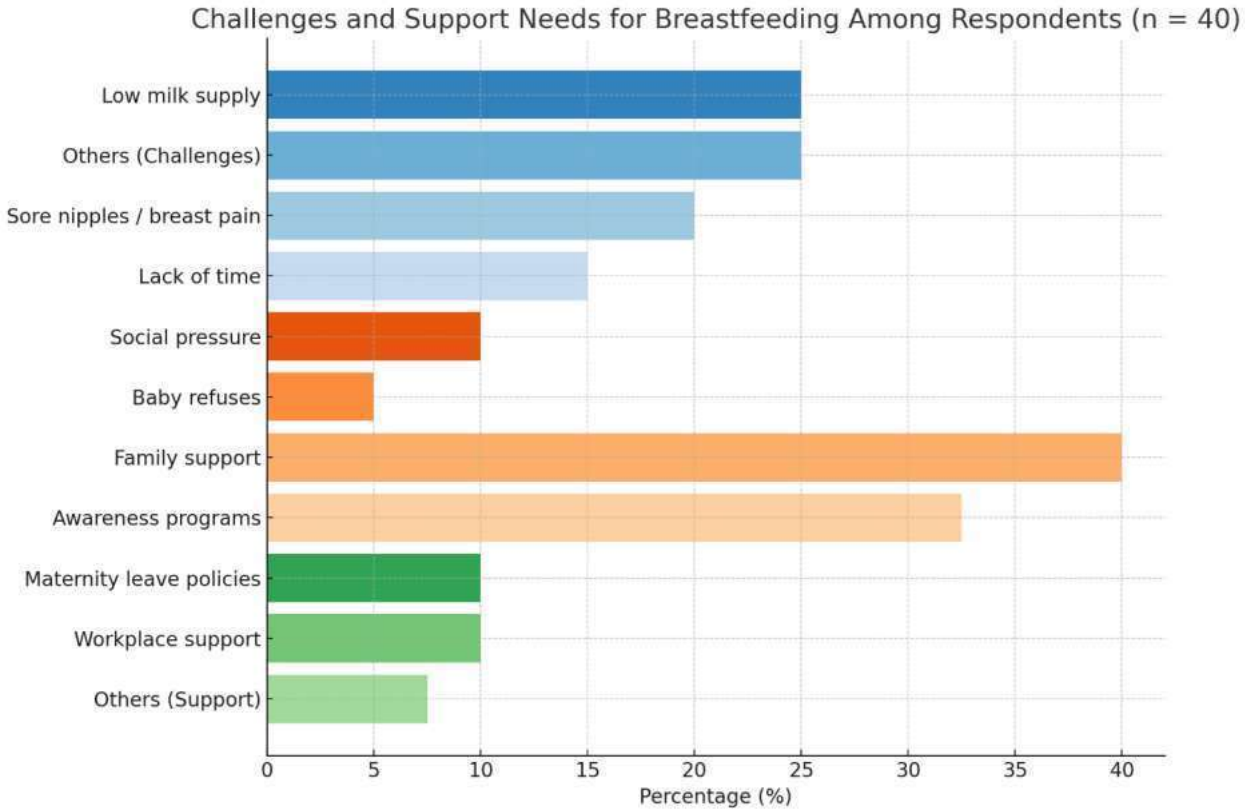

Figure 15.1: Horizontal Bar Chart Showing Breastfeeding Challenges and Support Needs Among Respondents

Low milk supply was the most frequent issue women encountered, as stated by 10 out of 25. Ten more mothers (25%) selected "other" concerns that were not detailed. Eight mothers (20%) reported having sore nipples or breast soreness, while six (15%) mentioned not having enough time. Two moms (5%) said that their infant refused to nurse, while four mothers (10%) reported feeling pressured by society to use formula milk.

When asked if they needed strong family support, 16 women (40%) said they did. Thirteen mothers (32.5%) desired additional awareness campaigns. Just four mothers (10%) each stated that improved business policy or maternity leave would be beneficial. Three mothers, or 7.5%, offered "other" recommendations for assistance.

V. SUMMARY AND CONCLUSIONS

Summary

In Kochi city and the surrounding areas, the current study was carried out to evaluate the Infant and Young Child Feeding (IYCF) practices of mothers, expectant mothers, family members, and community health workers. Understanding breastfeeding and supplemental feeding-related knowledge, habits, obstacles, and support networks was the main goal of the study. Examining how well these methods adhere to national and international guidelines, such as those set forth by the WHO, UNICEF, and the Indian Medical Service Act, was another goal.

Qualitative and quantitative methods were combined in a mixed-method approach. Mothers of infants ages 0 to 9 months, pregnant women, husbands, mother-in-laws, father-in-laws, and community health professionals were all interviewed in-depth for the qualitative study. Using a standardized questionnaire, 40 moms of young children participated in the quantitative portion of the study. Three locations—rural (Edakkattuvayal Panchayath), semi-urban (Piravom Municipality), and urban (Kochi Corporation area)—were used to gather data.

According to the qualitative results, the majority of moms knew that nursing should begin within the first hour after delivery. Mothers recognized the value of colostrum and the health advantages of six months of exclusive breastfeeding. However, some ancient practices, such as providing pre-lacteal foods like sugar water or honey, persisted despite widespread awareness. These practices were influenced by cultural ideas, family elders, and a lack of effective hospital counseling.

Nearly all moms and expectant mothers chose home-cooked foods such porridge, mashed bananas, and rice gruel and were aware that supplemental feeding should begin after six months. The actual practice differed, though, with some moms introducing meals a little sooner because of advice from family elders or a perceived lack of milk supply. Time limits and work obligations made it more difficult for working moms in particular to continue exclusive breastfeeding.

Although breastfeeding was generally supported by family members such as mothers-in-law and spouses, some still preferred the more conventional practice of providing prelacteal feeds. Through group meetings, counseling sessions, and house visits, community health workers were aggressively pushing breastfeeding. They admitted that cultural obstacles occasionally hampered their influence, but their understanding of early initiation, exclusive breastfeeding, and supplemental feeding was deemed adequate.

The personal insights were corroborated by quantitative results from the survey of 40 moms. About 32.5% of women had provided pre-lacteal feeds, and 67.5% of mothers had started nursing within an hour of giving birth. After six months, about 70% started introducing supplemental foods, primarily home-cooked meals. However, 75% of women bottle-fed their children and 45% used formula milk, suggesting a move toward more contemporary feeding methods driven by the demands of urban living and work.

Many moms cited issues like insufficient milk supply, uncomfortable nipples, lack of time, and social pressure to use formula milk. The most crucial factor for continuing breastfeeding was deemed to be family support, which was followed by enhanced maternity leave regulations, awareness campaigns, and workplace assistance.

Regarding hospital and medical assistance, the majority of moms had been counseled on breastfeeding at their prenatal visits. A tiny portion, meanwhile, continued to lack sufficient knowledge regarding the dangers of formula feeding.

Overall, the study showed that while moms, expectant mothers, and even community health workers had rather high levels of knowledge, cultural customs, misunderstandings, changes in modern lifestyles, and difficulties at work continued to have an impact on real feeding practices. Therefore, to close the knowledge gap between IYCF and practice, community-wide initiatives, improved support networks, and ongoing education are required.

Conclusion

This study shed important light on the present issues and trends surrounding the feeding practices of infants and young children in an urban environment such as Kochi, Kerala. The results demonstrated that mothers, expectant moms, and healthcare professionals had a comparatively high level of awareness of the advantages of exclusive breastfeeding, the timing of supplemental feeding, and the early commencement of nursing.

Even with this encouraging trend, there were still a number of glaring gaps between practice and understanding. Bottle feeding, formula feeding, prelacteal feeding, and the early or delayed introduction of complementary foods are still prevalent. Due mostly to perceived low milk production, work constraints, lack of family support, and conventional factors, many moms were unable to practice exclusive breastfeeding for six months.

Choices about feeding were greatly influenced by the family, especially by older women like mothers-in-law. Traditional traditions like prelacteal feeding and early weaning continued

because of generational beliefs, even when many relatives supported breastfeeding in theory. This suggests that in order to promote IYCF behaviors, interventions should target the broader family and community network in addition to women.

Anganwadi employees and community health professionals played a key role in raising awareness about appropriate feeding practices. It was discovered that although their involvement was significant, it was constrained by the profoundly ingrained cultural customs in families. Their ability to support good IYCF practices can be further increased by strengthening their abilities through updated training on breastfeeding counseling and communication techniques.

The setting of the hospital had a mixed effect. Although many moms received breastfeeding counseling during prenatal visits and delivery, there were several gaps, especially with relation to formula milk promotion and the absence of post-discharge follow-up. To guarantee improved breastfeeding results, the Baby-Friendly Hospital Initiative (BFHI) criteria must be more strictly implemented.

Quantitative findings indicated that, although not invariably, improved IYCF practices were linked to higher maternal education. Even well-educated women occasionally resorted to conventional wisdom or encountered real-world obstacles that hindered them from adhering to advised procedures. This implies that knowledge on its own is insufficient and that institutional support, social support, and practical support are all equally crucial.

In order to help working moms effectively continue nursing, the study also underlined the necessity of better maternity leave laws, workplace breastfeeding facilities, and flexible work schedules.

In conclusion, even though Kochi has made strides in encouraging healthy feeding habits for infants and early children, further work is required to close the knowledge and behavior gaps. In order to restrict the marketing of formula milk, strategies should emphasize workplace policies, community support networks, family-inclusive education, and consistent enforcement of the IMS Act.

In metropolitan locations like Kochi, IYCF practices can be improved by increased awareness, support, and resource accessibility, which would ultimately improve long-term health outcomes, child growth, and nutrition.

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APPENDIX I

Structured Questionnaire Used Quantitative Data Collection

Section 1: General Information

1. Level of Education
   - □ No formal education
   - □ Primary (up to class 5)
   - □ Secondary (class 6–10)
   - □ Higher secondary (class 11–12)
   - □ Graduate/Postgraduate
2. Age of the Mother
   - □ 18–25 years
   - □ 26–30 years
   - □ 31–35 years
   - □ 36 years and above
3. Employment Status
   - □ Housewife
   - □ Private sector employee
   - □ Government employee
   - □ Self-employed
   - □ Others (please specify)
4. Family Monthly Income
   - □ Below ₹10,000
   - □ ₹10,000 – ₹30,000
   - □ ₹30,000 – ₹50,000
   - □ Above ₹50,000
5. Type of Family
   - □ Nuclear
   - □ Joint
6. Number of Living Children
   - □ 1

□ 2

□ 3 or more

7. Gender of the Child

□ Male

□ Female

8. Age of Preschooler

□ 3–4 years (Nursery)

□ 3.5–4.5 years (Preschool)

□ 6–9 months

Section 2: Pregnancy and Delivery Details

9. Did you receive antenatal check-ups during pregnancy?

□ Yes □ No

10. Who provided the check-ups?

□ Government hospital

□ Private hospital

□ Community health center

□ Traditional birth attendant

□ Others

11. Where was your baby born?

□ Government hospital

□ Private hospital

□ Home delivery

□ Others

12. Type of delivery

□ Normal

□ Cesarean

□ Forceps delivery

Section 3: Breastfeeding Practices

13. Did you receive any breastfeeding counselling during pregnancy?

□ Yes □ No

14. When did you first breastfeed your baby after birth?

□ Within 1 hour

□ 1–4 hours

□ 5–12 hours

□ More than 12 hours

15. Did you give anything other than breast milk before initiating breastfeeding?

□ Yes □ No

If yes, what was given?

□ Plain water

□ Sugar water

□ Formula milk

□ Honey

□ Others

16. Who advised you to give this before breastfeeding?

□ Doctor/Nurse

□ Mother-in-law / Elderly family member

□ Other mothers

17. How frequently did you breastfeed your baby in a day?

□ Less than 5 times

□ 5–8 times

□ 9–12 times

□ More than 12 times

18. Are you currently practicing exclusive breastfeeding?

□ Yes □ No

If not, what else do you give your baby?

□ Formula milk

□ Cow/buffalo milk

□ Water

□ Fruit juice

□ All of the above

Section 4: Complementary Feeding

19. At what age did you introduce solid/semi-solid food to your child?

□ Before 4 months

□ 4–6 months

□ After 6 months

20. What food do you usually give your child?

□ Home-cooked porridge

□ Packed baby food

□ Mashed fruits/vegetables

□ Rice/wheat-based food

□ All of the above

21. How frequently do you feed solid or semi-solid food per day?

□ Once

□ Twice

□ Three times or more

22. Where do you get advice on complementary feeding?

□ Doctor/Nurse

□ Family members

□ Internet/social media

□ Other mothers

□ All of the above

Section 5: Formula Milk and Bottle Feeding

23. Were you using formula milk for your child?

□ Yes □ No

24. If yes, what are the reasons?

□ Insufficient breast milk

□ Mother is working

□ Baby refused breast milk

□ Doctor recommended

□ Others

25. Does your baby drink from a bottle with a nipple?

□ Yes □ No

26. If yes, how often do you sterilize the bottle?

□ After every use

□ Once a day

□ Occasionally

□ Never

Section 6: Health Care and Hospital Support

27. Did the hospital encourage skin-to-skin contact after birth?

□ Yes □ No

28. Did hospital staff promote breastfeeding within the first four hours after delivery?

□ Yes □ No

29. Were you given any information on the risks of formula feeding?

□ Yes □ No

30. Did hospital staff suggest formula feeding for your baby?

□ Yes □ No

31. Were you provided breastfeeding support or counselling at the hospital?

□ Yes □ No

Section 7: Challenges and Perceptions

32. What are the major challenges you face in breastfeeding?

□ Low milk supply

□ Baby refuses to breastfeed

□ Sore nipples/breast pain

□ Lack of time

□ Social pressure to use formula milk

□ Others

33. What kind of support would help you continue breastfeeding?

□ Better maternity leave policies

□ Family support

□ Workplace support

□ More awareness programs

□ Others

QUALITATIVE SURVEY ON INFANT AND YOUNG CHILD FEEDING

Format for In-Depth Interviews

Mothers of Infant

Background Information

- Name:
- Age (in years):
- Education:
- No. of living children: Boys ___ Girls ___
- Sex: Boy / Girl
- Age of the infant (months):

Knowledge on Breastfeeding

1. When the infant should start breastfeeding?
2. Why?
3. Whether pre-lacteal feeding should be given to babies?
4. If yes, why?
5. How long infant should be breastfed, probe the duration for:
   a) Only breast milk, why?
   b) Breast milk with water, why?
   c) Breast milk with other food and supplements, why?

Complementary Feeding

6. Complementary feeding should be started at what age, why?
7. The complementary feeding should consist of what items, why?
8. The frequency of these items, why?

Current Breastfeeding Practices

9. When you started breastfeeding?
10. If delayed, why?
11. If at desired time, who advised for this?
12. Did anything given to baby other than breast milk since birth?
13. If yes, what, why?
14. Its quantity and frequency?
15. Whether faced any problems in initiation and continuation of breastfeeding?
16. What problem?
17. What support is needed to overcome the problem?
18. Do the amount of milk is perceived to be sufficient?
19. If no, perceived corrective action by the mothers?

Advice and Changes in Practices

20. Whether mother have been advised on breastfeeding practices by any one?
21. If yes, from whom and type of advice received from each one of them?
22. Is there any change in the breastfeeding practices adopted for older siblings?
23. If yes, what changes and why?

Strengthening Capacity of the Mother for Optimal Breastfeeding Practices

24. What sort of information regarding breastfeeding may be helpful for the mother?
25. Who would be the appropriate person to provide the information on breastfeeding?
26. What help/support is needed by mother to follow appropriate breastfeeding practices?

Pregnant Women

Background Information

- Name:
- Age (in years):
- Education:
- No. of living children: Boys ___ Girls ___
- Sex: Boy / Girl
- Age of the infant (months):

Knowledge on Breastfeeding

1. When the infant should start breastfeeding?
2. Why?
3. Whether pre-lacteal feeding should be given to babies?
4. If yes, why?
5. How long infant should be breastfed, probe the duration for:
   a) Only breast milk, why?
   b) Breast milk with water, why?
   c) Breast milk with other food and supplements, why?

Complementary Feeding

6. Complementary feeding should be started at what age, why?
7. The complementary feeding should consist of what items, why?
8. The frequency of these items, why?

Future Intentions Regarding Breastfeeding Practices

9. Whether you have received any advice on breastfeeding practices as a part of your ANC care?
10. If yes, from whom and type of advice received from each one of them?
11. If faced with any problems in initiation and continuation of breastfeeding, whom would you approach and why?
12. If the woman has living children, probe about the breastfeeding practices of youngest child:
    a) When she had first put the baby to the breast, why?
    b) How long continued exclusive breastfeeding was given, why?
    c) How long breastfeeding with water, why?
    d) How long breastfeeding with other food and supplements, why?
13. At what age complementary feeding was started in the last child?
14. What type of food was given and its frequency?

Strengthening Capacity of the Woman for Optimal Breastfeeding Practices

15. What sort of information may be helpful for her?
16. Who would be the appropriate person to provide the information on breastfeeding?
17. What sort of support/help is needed to follow appropriate breastfeeding practices?

Mother-in-law / Father-in-law / Husbands

Background Information

- Name:
- Age (in years):
- Education:
- No. of living children: Boys ___ Girls ___
- Sex: Boy / Girl
- Age of the infant (months):

Knowledge on Breastfeeding

1. Do you think breastfeeding an infant is important?
2. What are the advantages of breastfeeding an infant?
3. Ideally when the infant should be put on breastfeeding after birth?
4. Why?
5. Whether the infant should be fed with other liquid before starting breastfeeding?
6. What liquid is customarily given to infant in your society?
7. Why these liquids are given?
8. How long an infant should be given only breast milk, why?
9. How long an infant should be given breast milk with water, why?
10. How long an infant should be given breast milk with other liquids, why?

Support and Complementary Feeding

11. What kind of support you may like to provide the breastfeeding mother in your family?
12. Complementary feeding should be started at what age, why?
13. The complementary feeding should consist of what items, why?
14. What is the frequency of these complementary feeding, why?

Information and Support

15. Would you approve that latest information on optimal breastfeeding should be imparted to the nursing mother in your family?
16. From whom this knowledge should be imparted?

Probe from Mother-in-law

17. What support/help is needed to practice optimal infant feeding practices by the mother?

18. Would you be willing to support the mother in follow-up of appropriate breastfeeding practices in your community?

Community Health / Nutrition / Other Workers

Background Information

- Name:
- Age (in years):
- Education:
- No. of living children: Boys ___ Girls ___
- Sex: Boy / Girl
- Age of the infant (months):

Knowledge on Breastfeeding

1. Are you doing anything to promote breastfeeding?
2. If yes, what?
3. Do you think breastfeeding an infant is important?
4. What are the advantages of breastfeeding an infant?
5. Ideally when the infant should be put on breastfeeding after birth?
6. Why?
7. How long an infant should be given only breast milk, why?
8. How long an infant should be given breast milk with water, why?
9. How long an infant should be given breast milk with other liquids, why?

Pre-lacteal Feeding Practices

10. In your opinion, whether any pre-lacteal should be given to infants?
11. If no, why community members insist on pre-lacteal?

12. Do you advise them for not giving it?
13. If yes, has your effort had any impact on the ongoing practices?

Complementary Feeding

14. Complementary feeding should be started at what age, why?
15. The complementary feeding should consist of what items, why?
16. The complementary feeding should be given in what frequency, why?
17. For how long breastfeeding should be continued with complementary feeding, why?

Support and Knowledge Transfer

18. What kind of support you may like to provide to the breastfeeding mother in your community?
19. Would you like to have latest art or technique on breastfeeding which will help you in convincing community members?
20. From whom this knowledge should be imparted?