INTERNATIONAL SCIENTIFIC JOURNAL OF ENGINEERING AND MANAGEMENT (ISJEM) ISSN: 2583-6129
VOLUME: 04 ISSUE: 10 | OCT – 2025 DOI: 10.55041/ISJEM05107
AN INTERNATIONAL SCHOLARLY || MULTIDISCIPLINARY || OPEN ACCESS || INDEXING IN ALL MAJOR DATABASE & METADATA

A Cross-sectional Study for assessment of constraints to Exclusive Breastfeeding Practice and Growth Outcomes among Infants

Jaspinder Kaur, Assistant Professor Saraswati College of Pharmacy, SGC Group, Gharuan-140413, Mohali, Punjab, India Email: jaspinder2112@gmail.com
Damanpreet Kaur, Assistant Professor Saraswati College of Pharmacy, SGC Group, Gharuan-140413, Mohali, Punjab, India Email: damanpreetkaur3282@gmail.com
Hamid Wani, Assistant Professor Saraswati College of Pharmacy, SGC Group, Gharuan-140413, Mohali, Punjab, India Email: hamidwani44@gmail.com

Abstract*—This cross-sectional study aims to assess the constraints to exclusive breastfeeding practice and explore their effects on infant growth outcomes. The study investigates factors such as knowledge gaps, cultural and social influences, maternal employment challenges, and lack of support systems that hinder exclusive breastfeeding. Additionally, it examines the association between these constraints and compromised infant growth, increased risk of infections, and potential health risks. A diverse sample of 200 lactating mothers with infants and their attendants were recruited from various socio-economic backgrounds within the Mohali region of the Punjab, India by convenience sampling technique. Data Collection with nursing mothers and the focus group discussion with grandmother's(attendants) were conducted in native language of respondents i.e., Punjabi language at preferred locations. Statistical analyses were conducted to explore the relationship between constraints and growth outcomes. Additionally, qualitative interviews were conducted to gain deeper insights into the experiences and perceptions of mothers regarding exclusive breastfeeding constraints. Data collection surveys last for an average of 47 minutes, while the focus discussion lasted for one hour ten minutes at all levels. The majority of participants belonged to the age groups of 20-24 years (40%) and 25-29 years (36%). Religious affiliation was diverse, with 60% identifying as Sikh and 40% as Hindu. In terms of education, 20% had completed under matric level. Concerning breastfeeding practices, 55% initiated breastfeeding immediately after birth, and 36% initiated within the first 2 hours. The majority breastfed their babies 6-8 times a day (70%) for less than half an hour each time (80%). Approximately half of the mothers supplemented breast milk with other substances (50%). Most mothers breastfed for less than or equal to 6 months (75%). Reasons for discontinuing exclusive breastfeeding included the baby being hungry after feeding (49%), maternal health problems (45%), fear of addiction to breast milk (43%), lack of husband's support (46%), and insufficient breast milk (40%). The findings of this cross-sectional study emphasize the importance of addressing the identified constraints to exclusive breastfeeding and their implications for infant growth outcomes. Targeted interventions, including breastfeeding education programs, cultural sensitivity training, workplace policies, and enhanced support systems, are crucial for promoting exclusive breastfeeding and improving infant health. Future research should focus on longitudinal studies to further investigate the long-term effects of exclusive breastfeeding and evaluate the effectiveness of interventions.

Index Terms—*Constraints, Exclusive breastfeeding, Infant growth, Maternal health, Perceptions.*

I. INTRODUCTION

Proper nutrition during the period of infancy and early childhood is critical to ensuring children's optimal growth, good health, and adequate development [1]. Breast milk is considered as the finest source of nutrients for a newborn and is therefore regarded helpful for both the mother and baby [2]. World Health Organization (WHO) advises that newborns be nursed exclusively for the first six months by breast milk only, followed by breastfeeding with supplementary meals for the next two years or longer [3]. By the term Exclusive breast feeding (EBF), World Health Organization (WHO) means as a condition in which a newborn receives solely breast milk from his or her mother or from a wet nurse for the initial 6 months of their life and no other solids or liquids are allowed except for some multi-vitamin supplements and medicines. [4]

The initial six months of life of infants witness a faster rate of growth and are also an especially high-risk phase for health problems related to nutrition in newborns. Breastfeeding is critical for maintaining an infant's ideal health condition, which includes adequate nutrients, immunity boosting antibodies, and superior developmental results [5]. It lowers the chance of acquiring diseases such as, asthma, type 2 diabetes, and obesity [5]. There is compelling evidence that breastfed babies have a lower risk of becoming overweight or obese during their adolescence [6],[7]. This is also supported by a meta-analysis result, stated that breastmilk consumption decreases the chance of becoming overweight by 4% for every month up to 9 months of age [8]. Furthermore, babies aged 6 months who were offered supplemental food were vulnerable to diarrhoea, thus, found under the category of stunting [9].

Despite substantial evidence of the benefits of breastfeeding, according to NFHS 4 data, the proportion of exclusively breastfed infants under the age of three in India is only 41.6%, while only 54.9% of children under the age of six months are exclusively get breastmilk [10].

Several variables influence Indian women's pattern of breastfeeding. These include physical and psychological characteristics such as BMI, the woman's psychosocial condition during postpartum (up to 6 months after childbirth), gestational age, and parity [11]-[16]. Furthermore, socio-demographic characteristics such as education level, socioeconomic position, and newborn gender also influence breastfeeding behaviours [17]-[19]. The existing study on the influence of maternal variables on baby nutritional status is confined to infants older than 6 months. However, because the majority of the information comes from cross-sectional research, causal inference is limited. These estimations are influenced by a number of additional causes of systematic inaccuracy. Most research, as evidenced in the study by Kerac et al. [20], omit babies aged 6 months from nutrition surveys, resulting in a paucity of information on their

nutritional consumption. Applying growth standards during the first months of infancy is critical for early diagnosis and preventing poor health and nutrition outcomes, which can influence cognition and physical growth later in life [21]. One significant constraint to exclusive breastfeeding is the lack of accurate information and knowledge among mothers. Insufficient understanding of the benefits and techniques of exclusive breastfeeding can lead to a lack of confidence and reduced initiation and continuation of breastfeeding. Additionally, cultural and social influences play a crucial role in breastfeeding practices. Societal norms, attitudes, and beliefs surrounding breastfeeding may discourage mothers from breastfeeding in public or introduce complementary foods earlier than recommended. These cultural and social factors can significantly impact exclusive breastfeeding rates.

Maternal employment is another constraint that poses challenges to exclusive breastfeeding. Many working mothers face difficulties in balancing their work responsibilities with breastfeeding. Limited workplace support, including inadequate provisions for breastfeeding breaks and lactation spaces, can hinder exclusive breastfeeding continuation. These challenges are further compounded by societal expectations and pressures faced by working mothers.

Furthermore, the support system available to breastfeeding mothers plays a vital role in exclusive breastfeeding practices. The absence of support from family members, partners, and healthcare providers can undermine a mother's confidence and ability to breastfeed exclusively. Adequate support and guidance are crucial for overcoming challenges and sustaining exclusive breastfeeding. The implications of inadequate exclusive breastfeeding extend beyond the immediate feeding practices. Infants who are not exclusively breastfed may experience compromised growth outcomes, including lower weight, length, and head circumference measurements. Moreover, they may be at a higher risk of infections, as breast milk provides immune protection against various diseases. The long-term consequences of inadequate exclusive breastfeeding can manifest in an increased risk of obesity and chronic diseases in later childhood.

As a result, there is an urgent need to analyse the nutritional condition of newborns because of feeding habits and other antecedent maternal variables in the future. Thus, we intended to investigate how breastfeeding habits impact newborn anthropometric status in research while measuring breastfeeding factors. As our country works towards achieving its commitments to the SDG 2030 (Sustainable Developmental Goals 2030) to reduce Neonatal mortality to at least as low as 12 deaths per 1,000 live births and under-5 mortality to at least as low as 25 deaths per 1,000 live births, adequate nutrition in form of breastfeeding is extremely essential, especially at the very beginning of life [22].

This research paper aimed to investigate the barriers that hinder exclusive breastfeeding practices and explore the effect of these barriers on infant growth. Understanding these barriers and their consequences is crucial for developing effective interventions to promote exclusive breastfeeding and improve infant health outcomes. In conclusion, understanding the constraints to exclusive breastfeeding practice and their effects on infant growth outcomes is vital for improving infant health and well-being. This cross-sectional study identifies the barriers faced by mothers and their implications for infant growth. By addressing these constraints through targeted interventions and support systems, policymakers and healthcare professionals can promote exclusive breastfeeding and optimize infant growth outcomes. Ultimately, ensuring the widespread practice of exclusive breastfeeding can contribute to healthier and thriving infant populations.

Research has shown that exclusive breastfeeding (EBF) is prevalent in various communities, with factors such as demographics, mortality, marriage age, population, and fertility playing significant roles. A study by Ravishankar et al. [23] found that the percentage of children exclusively breastfed for at least six months was negatively linked to demographic features, mortality, and age at marriage. A community-based study by Bhanderi et al. [24] found that EBF rates in a rural Gujarat community were 49.7%, with barriers such as early marriage, less educated parents, male child, Christian religion, working mother, fewer antenatal visits, operative delivery, late initiation of breastfeeding, not feeding colostrum, lack of knowledge about EBF, and poor counselling of mothers regarding EBF. A study by Similarly, Adamu et al. [25] found that greater maternal education, ANC attendance, mother occupation, and hospital delivery significantly impact EBF practice for six months. Agunbiade M Ojo et al. [26] also found that only a small percentage of nursing women practiced exclusive breastfeeding, with barriers such as hunger, maternal health problems, fear of babies becoming addicted, pressure from mother-in-law, breast pain, and work restrictions.

While there is a significant body of literature on exclusive breastfeeding practices and its impact on infant growth outcomes, there are still several gaps or lacunae that need to be addressed. These gaps provide opportunities for further research and a more comprehensive understanding of the constraints faced by mothers and the resulting effects on infant growth. Exclusive breastfeeding practices are influenced by cultural and socio-economic factors that vary across different regions and populations. Many studies have focused on high-income countries or specific cultural contexts, leading to a lack of generalizability to other settings. Further research is needed to explore the constraints to exclusive breastfeeding and growth outcomes in diverse cultural and socio-economic contexts, including low-income countries and marginalized populations.

Exclusive breastfeeding for the first six months of life is a critical public health intervention that provides optimal nutrition and health benefits to infants. However, despite the well-documented advantages, exclusive breastfeeding rates remain suboptimal in many regions worldwide. Understanding the constraints that hinder exclusive breastfeeding practices and exploring their impact on infant growth outcomes is essential for developing targeted interventions and improving infant health. This study identified the barriers that prevent mothers from practicing exclusive breastfeeding. By exploring these factors, the results provide valuable insights into the specific constraints faced by mothers in a given context. This knowledge is crucial for tailoring interventions and support systems to address the identified barriers effectively. Apart from that we also investigated the relationship between the identified constraints and infant growth outcomes. By comparing growth parameters, including weight, length, and head circumference, between exclusively breastfed infants and those who receive alternative feeding methods, our results assess the impact of these constraints on infant growth. Understanding the association between constraints and growth outcomes provides evidence for the potential long-term consequences of inadequate exclusive breastfeeding.

II. METHODOLOGY

A. Aims and Objectives

The primary objectives of this research study were as follows:

a. To identify the barriers that contribute to suboptimal exclusive breastfeeding practices.
b. To explore the effect of these barriers on infant growth, including weight, length, and head circumference measurements.

While secondary objectives were:

a. To inform evidence-based interventions and policies that effectively address the identified constraints and promote exclusive breastfeeding.

B. Study Design

This research study employed a descriptive cross-sectional design to collect data from a sample of lactating mothers with infants aged 0-1 year.

C. Study Setting

A diverse sample of 200 lactating mothers with infants and their attendants were recruited from various socio-economic backgrounds within the Mohali region of the Punjab, India by convenience sampling technique. Data Collection with nursing mothers and the focus group discussion with grandmother's(attendants) were conducted in native language of respondents i.e., Punjabi language at preferred locations. Data collection surveys last for an average of 47 minutes, while the focus discussion lasted for one hour ten minutes at all levels.

D. Study Period

Data for this research were collected from Month/Year to Month/Year from the samples of lactating mothers.

E. Data Collection

Data were collected using a Pilot tested questionnaire with a combination of quantitative surveys (questionnaire) and qualitative interviews (face to face in-depth interviews and focus group discussion). The questionnaire administered to gather demographic information and assess barriers to exclusive breastfeeding, including 3 major sections. First section encapsulated information about age, religion, age of baby, occupation, family type and size, level of education, place of child birth, sex of baby, whether pregnancy was planned or not. While second section captures the information about breastfeeding knowledge, intention, and factors encouraging or discouraging breastfeeding mothers from the practice of exclusive breastfeeding. Qualitative interviews were conducted with the attendants of the lactating mothers in third section with a subset of participants to gain deeper insights into their experiences and perceptions regarding exclusive breastfeeding and the barriers they faced. Apart from that, food diaries or records were used to record the types and quantities of food consumed over a specific period of time, typically 3-7 days using 24-hour recall practice.

F. Measurement of Infant Growth

Anthropometric measurements, including body weight and measurements of stature viz. Height, circumferences, skin fold thickness were collected from exclusively breastfed infants. These measurements were compared to determine any differences in growth patterns. While anthropometric measurements for adults include height, weight, body mass index (BMI), waist -to- hip ratio, and percentage of body fat.

G. Data Analysis

Quantitative data were analyzed using appropriate descriptive statistical methods, such mean, standard deviations, to explore the association between barriers to exclusive breastfeeding and infant growth outcomes. Qualitative data from interviews were thematically analyzed to gain a comprehensive understanding of the barriers encountered by mothers.

H. Ethical Consideration

This research study adheres to ethical guidelines of the Chandigarh University and ensure the protection of participants' rights and confidentiality. Informed consent was obtained from all participants, and they have the freedom to withdraw from the study at any time without consequences. The study protocol was also submitted to the relevant ethical review board for approval prior to data collection.

III. RESULTS

In terms of socio-demographic details, the study included a total of 200 respondents. Among these respondents, the majority (40%) belonged to the age group of 20-24 years, indicating a relatively young participant population. The next largest age group was 25-29 years, accounting for 36% of the participants. Additionally, 20% of the respondents were from the age group of 30-34 years, while the remaining 4% fell into the age group of 35-39 years.

Table I: Socio-demographic details of the subjects (N=200)

	Number (N)	Percentage (%)
Age group (in years)		
20-24	80	40
25-29	72	36
30-34	40	20
35-39	8	4
Religion		
Sikh	120	60
Hindu	80	40
Level of Education		
Under matric	40	20
Matric	80	40
Senior Secondary	60	30
Graduate	20	10
Occupation		
House wife	100	50
Employed in private sector	40	20
Employed in public sector	20	10

Self employed	40	20
Place of delivery		
Public hospital	100	50
Private hospital	80	40
Traditional birth	20	10
Parity		
Primiparous	80	40
Multiparous	120	60
Gender of Baby		
Male	120	60
Female	80	40
Age of baby (in months)		
Less than 3	60	30
3 to 6	80	40
7 to 10	40	20
11 to 12	20	10

In terms of religious affiliation, the study found that 60% of the subjects identified themselves as Sikh, while 40% identified as Hindu. This distribution highlights the diversity within the study population. Regarding educational attainment, 20% of the respondents had completed education up to the under matric level. This indicates that a proportion of the participants had education below the secondary level, which could potentially impact their knowledge and understanding of exclusive breastfeeding practices as shown in Table I.

Maximum percentage 40% were matric followed by 60% senior secondary level and 10% were graduate. Maximum number of subjects (50%) were house wife followed by 20%, 10% employed in private & public sector, self-employed. A higher percentage 50% of the subjects gave birth to baby in public hospital, followed by 40% in private hospital and rest 10% mothers gave birth at home (traditional birth attendant). Out of total data for parity women parous and 60% comes the category of primiparous and 60% comes under multiparous. The percentage of baby boy among all birth was 60% and that of baby girls was 40%. Among all the infants 30% of infants aged less than 3 months, 40% aged 3-6 months, 20% aged 7-10 months and only 10% of babies aged between 11-12 months. When it was asked from mothers about reasons for choosing breastfeeding, 98% choose breastfeeding due to social norm by following this, 64% mothers think that breastfeeding will help baby to grow in a normal pattern. 40% mothers choose breast feeding to provide baby with natural immunity. 32% mothers think it is a form of child spacing. 40% think breast feeding is easy and comfortable. 50% of mothers choose breast feeding, so that she returned body to normal. (fig. 1)

The findings from this survey on breastfeeding reveal important insights into the breastfeeding practices of mothers. Among the participants, 55% of mothers-initiated breastfeeding immediately after birth, highlighting the significance of early breastfeeding initiation. Furthermore, 36% of mothers started breastfeeding within the first 2 hours after birth, demonstrating adherence to the recommended timeframe. Only a small percentage (8%) of mothers-initiated breastfeeding more than 2 hours after birth. The proportion of mothers who were unable to recall the exact timing of their breastfeeding initiation was negligible (1%).

Regarding the frequency of breastfeeding, the data indicates that 70% of mothers breastfeed their babies 6 to 8 times a day, which aligns with the recommended frequency for optimal health benefits for both mother and baby. Conversely, 20% of mothers breastfeed less than 6 to 8 times daily. Only 1% of mothers breastfeed their babies less than 8 times a day, while 9% breastfeed their babies as often as the baby desires.

The duration of each breastfeeding session was also examined in the study. Results show that 80% of mothers breastfeed their babies for less than half an hour each time. A smaller proportion (10%) breastfeed for half an hour, while only 2% breastfeed for more than half an hour. Interestingly, 8% of mothers did not keep track of the length of time for each breastfeeding session as depicted in Table II.

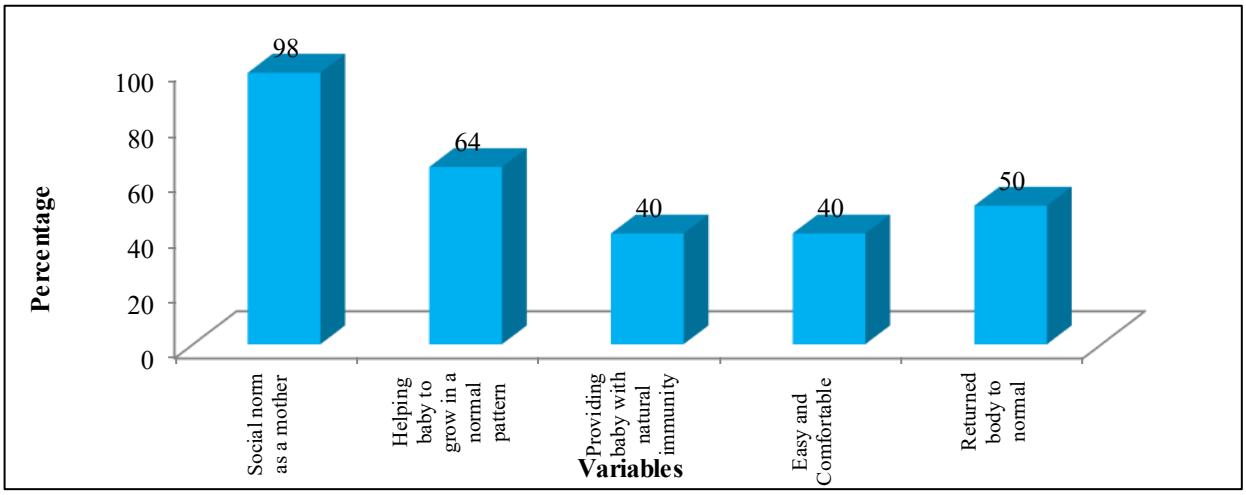

Figure 1: Reasons for choosing breastfeeding.

Table II: Breast Feeding Information

When did you start to feed your baby?	**N**	**%**
Immediately after birth	110	55
Within the first 2 hour after birth	72	36
After more than 2 hours of birth	16	8
Cannot remember	2	1
How often do you breastfeed your baby daily?	**N**	**%**
<6 to 8 times	40	20
6 to 8 times	140	70
>8 times	2	1
As often as the baby wants	18	9
Length of times for each breastfeeding.	**N**	**%**
Less than half an hour	160	80
Half an hour	20	10
More than half an hour	4	2
I don't count	16	8
Give baby supplement other than milk	**N**	**%**
Rarely	16	8
Sometimes	100	50
Often	70	35
Most of the time	14	7
Period intended to breastfeed baby (months)	**N**	**%**
≥6	150	75
7 to 12	50	25

Supplementation with substances other than breast milk was observed among the study participants. The majority (50%) of mothers reported providing supplements to their babies in addition to breast milk. Among these, 35% reported occasionally providing supplements, 8% reported providing supplements often, and 7% reported rarely providing

supplements. It is worth noting that supplementing breast milk with other substances can impact the exclusivity and benefits of breastfeeding.

Regarding the duration of breastfeeding, 75% of mothers breastfed their babies for less than or equal to 6 months, which is aligned with the recommended duration of exclusive breastfeeding. In contrast, 25% of mothers continued breastfeeding their babies from 7 to 12 months, indicating a significant proportion who extended the duration of breastfeeding beyond the initial 6 months.

These findings provide valuable insights into the breastfeeding practices of mothers participating in the study. They highlight areas of adherence to breastfeeding recommendations, such as early initiation, frequency, and duration, as well as areas where improvements can be made, such as minimizing supplementation and extending the duration of breastfeeding. These results contribute to a better understanding of current breastfeeding practices and can inform interventions and policies aimed at promoting and supporting optimal breastfeeding practices for the health and well-being of both mother and baby.

The results of this study indicate that various factors influenced women's decision to choose breastfeeding as a feeding method for their infants depicted in fig. no. 2. Among the participants, 80% reported that encouragement from their own mothers played a significant role in their decision to breastfeed. This highlights the influential role of maternal support in promoting breastfeeding practices. Interestingly, 67% of women reported that social pressure influenced their decision to breastfeed. This suggests that societal expectations and norms surrounding breastfeeding played a significant role in their choice. Personal determination and experience were cited as influential factors by 65% of women. This indicates that their own positive experiences or beliefs in the benefits of breastfeeding motivated them to choose this feeding method. In terms of spousal support, 51% of women stated that they were encouraged to breastfeed by their husbands. This highlights the importance of partner involvement and support in promoting breastfeeding practices. Regarding support from healthcare professionals, 46% of women mentioned that nurses and midwives played a crucial role in helping them choose breastfeeding. Family dynamics also played a role, as 50% of women reported that their decision to breastfeed was influenced by encouragement from their mothers-in-law. This highlights the impact of extended family members on breastfeeding practices. Media was a source of knowledge for 13% of women, indicating that information obtained from television, radio, or other media platforms influenced their decision to breastfeed. Furthermore, 5% of women mentioned that encouragement from their neighbours played a role in their decision to breastfeed, suggesting that social support from the immediate community influenced their choice. Religious affiliation was a factor for 10% of women, with members of their religious community encouraging them to choose breastfeeding.

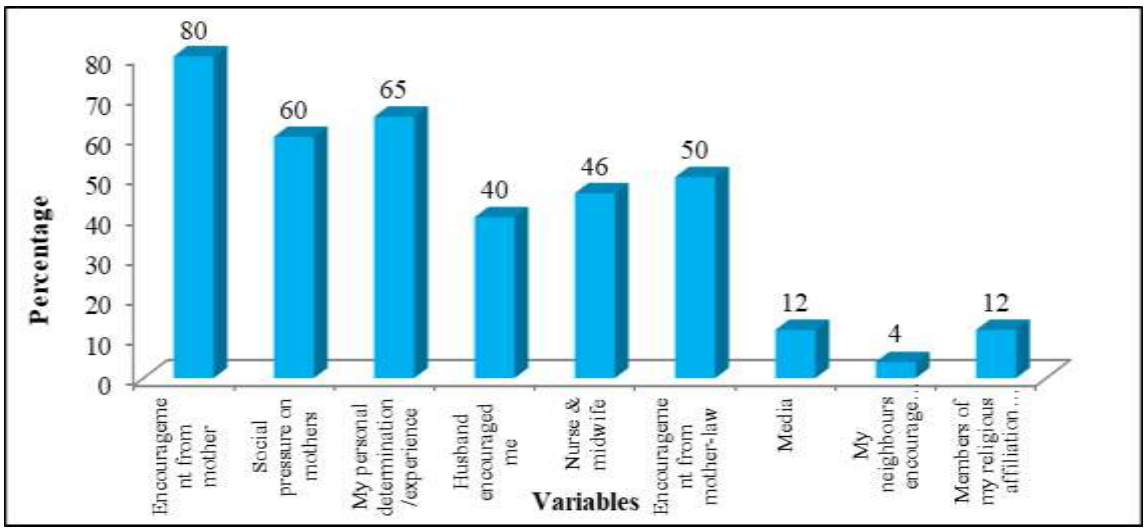

Figure 2: What helped women choose breastfeeding

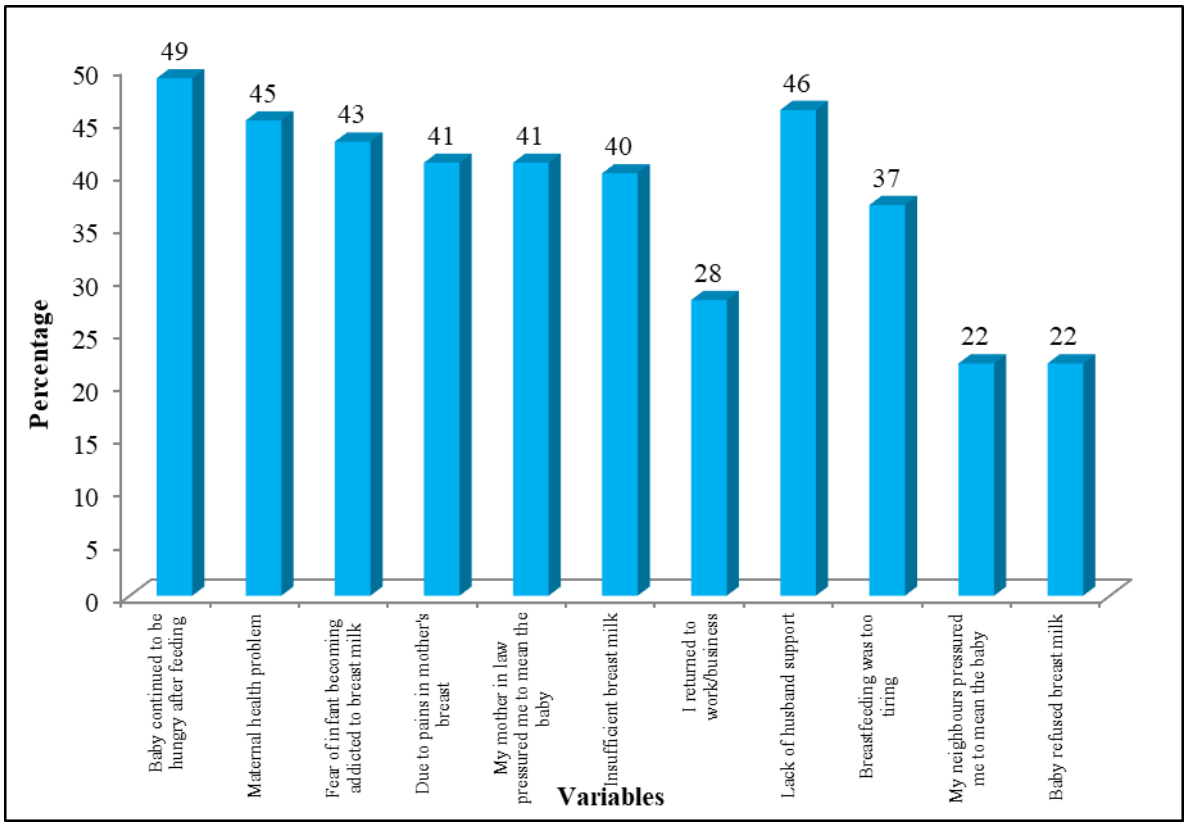

Figure 3: Reasons for discontinuation of exclusive breastfeeding.

Among the participants, the most frequently mentioned reason (cited by 49% of mothers) was that their baby continued to be hungry after breastfeeding. This suggests that mothers perceived their breast milk to be insufficient in meeting their baby's needs, leading them to seek alternative feeding methods. Maternal health problems were also a significant factor, with 45% of mothers reporting this as a reason for discontinuing exclusive breastfeeding. These health issues may have affected their ability to breastfeed effectively or made it uncomfortable or painful for them to continue breastfeeding. Fear of the infant becoming addicted to breast milk was mentioned by 43% of mothers. This perception may stem from concerns about prolonged breastfeeding or a desire to transition to alternative feeding methods as the child grows older. Lack of support from husbands was reported by 46% of mothers. This highlights the importance of spousal involvement and support in sustaining exclusive breastfeeding practices.

Insufficient breast milk, either self-perceived or true, was cited as a reason for discontinuation by 40% of mothers. This perception may be based on concerns about low milk supply or the belief that their breast milk was not meeting the nutritional needs of their infant adequately. Pain in the mother's breast during breastfeeding was reported by 41% of mothers. Breastfeeding-related pain can be caused by various factors, such as latch difficulties or underlying conditions, which may

contribute to a mother's decision to discontinue exclusive breastfeeding. The perception that breastfeeding was too tiring (self-perceived) was mentioned by 37% of mothers. This suggests that some mothers may have experienced fatigue or exhaustion related to breastfeeding, leading them to seek alternative feeding methods. Less common reasons for discontinuing exclusive breastfeeding included the mother's return to work (28%), pressure from neighbors to wear the baby (22%), and the baby refusing breast milk (22%). These factors highlight additional challenges that mothers may face in maintaining exclusive breastfeeding practices as shown in fig. no. 3.

IV. DISCUSSION

The present cross-sectional study aimed to assess the constraints to exclusive breastfeeding practice and explore their effects on infant growth outcomes. Through the examination of various factors, including knowledge gaps, cultural influences, maternal employment, and support systems, this study provides valuable insights into the barriers faced by mothers and their implications for infant health. The following discussion highlights the key findings and their implications.

Regarding breastfeeding practices, a notable percentage of mothers-initiated breastfeeding immediately after birth, with adherence to the recommended timeframe of within 2 hours. The majority breastfed their babies 6-8 times a day, aligning with optimal health benefits. The duration of each breastfeeding session was generally less than half an hour, with a small proportion extending to half an hour. Supplementation with substances other than breast milk was common, with half of the mothers providing supplements occasionally.

Concerning the duration of breastfeeding, the majority breastfed for less than or equal to 6 months, as recommended for exclusive breastfeeding. However, a quarter of the mothers extended breastfeeding beyond 6 months.

The study further explored the reasons behind mothers' decisions to choose breastfeeding. Maternal support, social pressure, personal determination and experience, spousal support, healthcare professionals, family influence, media, neighbours, and religious affiliation all played roles in influencing their decisions. Reasons for discontinuing exclusive breastfeeding included perceived insufficiency of breast milk, maternal health problems, fear of addiction to breast milk, lack of spousal support, breastfeeding-related pain, fatigue, return to work, pressure from neighbours, and the baby refusing breast milk.

The most frequently cited reason for discontinuing exclusive breastfeeding was the perception of inadequate milk supply, mentioned by 49% of mothers. These results are in line with the results from other research studies also [28-29]. This indicates a need for education and support to address misconceptions and ensure mothers are aware of the normalcy of frequent breastfeeding to meet their baby's needs.

Cultural and social influences were found to play a crucial role in breastfeeding practices. societal expectations and norms surrounding breastfeeding were found to be influential, with 67% of women citing social pressure as a factor in their decision to breastfeed. This underscores the need for supportive breastfeeding environments that align with societal expectations. Societal norms, attitudes, and beliefs surrounding breastfeeding influenced mothers' decisions and behaviours. The pressure to conform to societal expectations and the lack of acceptance of breastfeeding in public settings were reported as deterrents to exclusive breastfeeding [30]. Addressing these cultural influences requires targeted interventions that challenge misconceptions, promote breastfeeding as a natural and normal practice, and provide support to mothers in public spaces.

Insufficient support from family members, partners, and healthcare providers emerged as a crucial barrier in this study. Many mothers reported a lack of encouragement, assistance, and information from their support systems, which negatively affected their ability to initiate and sustain exclusive breastfeeding. This finding is supported by the recent studies [27] and emphasizes the importance of strengthening support systems through educational campaigns, involving partners and family members, and providing consistent guidance and support from healthcare providers. Apart from that poor maternal health is another factor that resist the mothers from exclusive breast feeding, also seen in many other studies [27,31,32].

The results of this study have implications for policy development and interventions to promote exclusive breastfeeding practices. Targeted educational campaigns should focus on addressing knowledge gaps and cultural influences, emphasizing the benefits of exclusive breastfeeding for both infants and mothers. Workplace policies need to be implemented to support working mothers in maintaining exclusive breastfeeding, while healthcare providers should play an active role in providing guidance and support to breastfeeding mothers.

This study contributes to the existing body of knowledge by highlighting the specific constraints faced by mothers in exclusive breastfeeding practices and their impact on infant growth outcomes. However, some limitations should be acknowledged. The cross-sectional design limits the ability to establish causality or temporal relationships. Additionally, the study relied on self-reported data, which may be subject to recall bias.

All in all, this cross-sectional study provides valuable insights into the constraints to exclusive breastfeeding practice and their effects on infant growth outcomes. By addressing the identified barriers and promoting supportive environments, policymakers and healthcare professionals can work towards improving exclusive breastfeeding rates, leading to better infant health and well-being. Further research, including longitudinal studies, is warranted to explore the long-term effects of exclusive breastfeeding and the effectiveness of interventions in diverse settings.

V. Conclusion

The results emphasize the critical need for targeted interventions and policy changes to address the identified barriers and promote exclusive breastfeeding practices. Enhancing breastfeeding knowledge among mothers through educational campaigns and involving healthcare providers can help overcome knowledge gaps and improve breastfeeding confidence. Tackling cultural and social influences requires community-wide initiatives to challenge misconceptions, normalize breastfeeding, and create supportive environments. The findings support the implementation of evidence-based interventions and policy changes that promote breastfeeding knowledge, create supportive environments, and enhance support systems for breastfeeding mothers. By addressing these barriers, policymakers, healthcare professionals, and communities can work together to improve exclusive breastfeeding rates and contribute to the overall health and well-

being of infants. Future research, including longitudinal studies, should further investigate the long-term effects of exclusive breastfeeding and the effectiveness of interventions in diverse populations to guide comprehensive strategies for promoting optimal infant feeding practices.

REFERENCES

[1] World Health Organization, "Infant and Young Child Feeding," The World Health Organization, Lyon, France, 2009.
[2] C. Ku and S. K. Chow, "Factors influencing the practice of exclusive breastfeeding among Hong Kong Chinese women: a questionnaire survey," Journal of Clinical Nursing, vol. 19, no. 17–18, pp. 2434–2445, Aug. 2010.
[3] H. Hanif, "Trends in breastfeeding and complementary feeding practices in Pakistan, 1990-2007," International Breastfeeding Journal, vol. 6, no. 1, p. 15, 2011.
[4] L. Elyas, A. Mekasha, A. Admasie, and E. Assefa, "Exclusive Breastfeeding Practice and Associated Factors among Mothers Attending Private Pediatric and Child Clinics, Addis Ababa, Ethiopia: A Cross-Sectional Study," International Journal of Pediatrics, vol. 2017, pp. 1–9, 2017.
[5] L. M Gartner et al., "Breastfeeding and the use of human milk," Pediatrics, vol. 115, no. 2, pp. 496–506, Feb. 2005.
[6] R. von Kries et al., "Breast feeding and obesity: cross sectional study," BMJ, vol. 319, no. 7203, pp. 147–150, Jul. 1999.
[7] W. H. Dietz, "Breastfeeding May Help Prevent Childhood Overweight," JAMA, vol. 285, no. 19, p. 2506, May 2001.
[8] T. Harder, R. Bergmann, G. Kallischnigg, and A. Plagemann, "Duration of Breastfeeding and Risk of Overweight: A Meta-Analysis," American Journal of Epidemiology, vol. 162, no. 5, pp. 397–403, Sep. 2005.
[9] T. Khadivzadeh and S. Parsai, "Effect of exclusive breastfeeding and complementary feeding on infant growth and morbidity," Eastern Mediterranean Health Journal, vol. 10, no. 3, pp. 289–294, May 2004.
[10] National Family Health Survey India. Indian Institute for Population Sciences. National Family Health Survey India; 2014.
[11] L. E. Edwards, W. F. Dickes, I. R. Alton, and E. Y. Hakanson, "Pregnancy in the massively obese: Course, outcome, and obesity prognosis of the infant," American Journal of Obstetrics and Gynecology, vol. 131, no. 5, pp. 479–483, Jul. 1978.
[12] E. Mok et al., "Decreased Full Breastfeeding, Altered Practices, Perceptions, and Infant Weight Change of Prepregnant Obese Women: A Need for Extra Support," Pediatrics, vol. 121, no. 5, pp. e1319–e1324, May 2008.
[13] J. J. Henderson, S. F. Evans, J. A. Y. Straton, S. R. Priest, and R. Hagan, "Impact of Postnatal Depression on Breastfeeding Duration," Birth, vol. 30, no. 3, pp. 175–180, Aug. 2003.
[14] A. Hamdan and H. Tamim, "The Relationship between Postpartum Depression and Breastfeeding," The International Journal of Psychiatry in Medicine, vol. 43, no. 3, pp. 243–259, Apr. 2012.
[15] D. C. Hatton, J. Harrison-Hohner, S. Coste, V. Dorato, L. B. Curet, and D. A. McCarron, "Symptoms of Postpartum Depression and Breastfeeding," Journal of Human Lactation, vol. 21, no. 4, pp. 444–449, Nov. 2005.
[16] R. Chudasama, PC Patel and AB Kavishwar "Determinants of Exclusive Breastfeeding in South Gujarat Region of India," Journal of Clinical Medicine Research, vol. 1, pp. 102-108, 2009.
[17] B. A. Aidam, R. Pérez-Escamilla, A. Lartey, and J. Aidam, "Factors associated with exclusive breastfeeding in Accra, Ghana," European Journal of Clinical Nutrition, vol. 59, no. 6, pp. 789–796, May 2005.
[18] M. L. W. Mascarenhas, E. P. Albernaz, M. B. da Silva, and R. B. da Silveira, "Prevalence of exclusive breastfeeding and its determiners in the first 3 months of life in the South of Brazil," Jornal de Pediatria, vol. 82, no. 4, pp. 289–294, Aug. 2006.
[19] J. Scott, I. Aitkin, C. Binns, and R. Aroni, "Factors associated with the duration of breastfeeding amongst women in Perth, Australia," Acta Paediatrica, vol. 88, no. 4, pp. 416–421, Jan. 2007.
[20] M. Kerac et al., "Prevalence of wasting among under 6-month-old infants in developing countries and implications of new case definitions using WHO growth standards: a secondary data analysis," Archives of Disease in Childhood, vol. 96, no. 11, pp. 1008–1013, Feb. 2011.
[21] R. Martorell, "The Nature of Child Malnutrition and Its Long-Term Implications," Food and Nutrition Bulletin, vol. 20, no. 3, pp. 288–292, Jan. 1999.
[22] UNICEF data: Monitoring the situation of children and women. Child survival and the SDGs . 2020. Available from: https://data.unicef.org/topic/child-survival/ child-survival-sdgs.
[23] R. N, M. Joseph, and S. Shashidhara, "Factors influencing exclusive breastfeeding (EBF) in Empowered Action Group (EAG) states and Assam," Clinical Epidemiology and Global Health, vol. 8, no. 1, pp. 170–174, Mar. 2020.
[24] D. Bhanderi, Y. Pandya, and D. Sharma, "Barriers to exclusive breastfeeding in rural community of central Gujarat, India," Journal of Family Medicine and Primary Care, vol. 8, no. 1, p. 54, 2019.
[25] S. Koya et al., "Determinants of Breastfeeding Practices and Its Association With Infant Anthropometry: Results From a Prospective Cohort Study in South India," Frontiers in Public Health, vol. 8, Oct. 2020.
[26] A. Adamu et al., "Prevalence and factors influencing exclusive breastfeeding practice among nursing mothers: A prospective study in North-Western Nigeria," Nigerian Journal of Basic and Clinical Sciences, vol. 19, no. 2, p. 139, 2022.
[27] O. M. Agunbiade and O. V. Ogunleye, "Constraints to exclusive breastfeeding practice among breastfeeding mothers in Southwest Nigeria: implications for scaling up," International Breastfeeding Journal, vol. 7, no. 1, Apr. 2012.
[28] J. Abuidhail, H. Al-Modallal, R. Yousif, and N. Almresi, "Exclusive breast feeding (EBF) in Jordan: Prevalence, duration, practices, and barriers," Midwifery, vol. 30, no. 3, pp. 331–337, Mar. 2014.
[29] P. N. Kakute et al., "Cultural Barriers to Exclusive Breastfeeding by Mothers in a Rural Area of Cameroon, Africa," Journal of Midwifery & Women's Health, vol. 50, no. 4, pp. 324–328, Jul. 2005.
[30] D. Tamiru, "Introduction of Complementary Foods to Infants within the First Six Months and Associated Factors in Rural Communities of JimmaArjo," International Journal of Nutrition and Food Sciences, vol. 2, no. 2, p. 77, 2013.
[31] M. Nabulsi, "Why are breastfeeding rates low in Lebanon? a qualitative study," BMC Pediatrics, vol. 11, no. 1, Aug. 2011.
[32] G. E. Otoo, A. A. Lartey, and R. Pérez-Escamilla, "Perceived Incentives and Barriers to Exclusive Breastfeeding Among Periurban Ghanaian Women," Journal of Human Lactation, vol. 25, no. 1, pp. 34–41, Feb. 2009.