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"LIQUID LOVE: EXPLORING MATERNAL INSIGHT REGARDING BREASTFEEDING IN WESTERN MAHARASHTRA-A CROSS SECTIONAL STUDY."

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Abstract:

Background: Breastfeeding offers nutritional, immunological and emotional benefits while strengthening the bond between mother and infant. It is crucial for mothers to be well-informed about these advantages to promote healthy breastfeeding practices. Our study aims to assess mother's awareness and perception of breastfeeding and to determine the various factors related to mother's knowledge of breastfeeding.

Methods: This cross-sectional study carried out in the rural and urban field practice areas of a medical college located in Western Maharashtra and involved postnatal mothers residing within the region. Data were gathered through in-person interviews using a prepared, semi-structured questionnaire. The collected data was entered into Microsoft Excel and analysed using SPSS Version 27 software. Descriptive statistics such as frequencies and percentages were used to summarize the data. P-value of less than 0.05 was considered statistically significant.

Results: Among the postnatal mothers surveyed, a high level of awareness (88%) regarding the benefits of breastfeeding was observed. Healthcare providers and family/friends were the main sources of this information. While the majority of mothers (90%) understood the advantages for their infants, fewer were aware of the benefits for themselves or their families. The most frequently cited difficulties were perceived low milk production (27%) and sore nipples (25%). Furthermore, the length of breastfeeding was linked to the mother's education and occupation.

Conclusions: Most mothers were aware of breastfeeding benefits for babies, but awareness of maternal and family benefits was limited. Education and occupation influenced breastfeeding duration. Despite this knowledge, issues like sore nipples and insufficient milk supply were common experiences.

Key-words: Breastfeeding, Exclusive Breastfeeding, Complementary feeding, Colostrum, Awareness, Perception

Introduction:

Breastfeeding is universally recognized as the cornerstone of infant nutrition and health. The World Health Organization (WHO, 2023)[(1)] recommends exclusive breastfeeding for the first six months of life, followed by continued breastfeeding along with appropriate complementary foods for up to two years or beyond. Breastfeeding significantly contributes to the physical, cognitive, and emotional development of infants, while also providing numerous health benefits to mothers. Despite these well-established recommendations, many mothers around the world, including in India, do not breastfeed as per guidelines due to lack of awareness, cultural misconceptions, societal pressures, and other personal and systemic factors.

In the Indian context, breastfeeding practices vary widely by region. Maharashtra, being one of the most populous and socio-culturally diverse states in India, presents complex demographic and cultural dynamics that influence maternal health behaviours, including breastfeeding. While government programs and health missions such as *Janani Suraksha Yojana* (JSY), Integrated Child Development Services (ICDS), and *Pradhan Mantri Matru Vandana Yojana* (PMMVY) have made commendable efforts in promoting maternal and child health, challenges in awareness and perception still persist in many areas.

National Family Health Survey (NFHS-5)[(2)] data from Maharashtra shows, 52.9% of new-born were breastfed within one hour of birth and 71.2 % were exclusively breastfed which is an improvement still short for universal coverage.

Understanding the level of awareness and perception regarding breastfeeding among mother is crucial to develop required interventions. Awareness plays a pivot role in influencing decision related to early initiation, exclusive breast feeding and feeding beyond six months. This study helps to assess the awareness and perception among mother regarding breastfeeding and to identify different factors related to practices.

The insights from this study will inform future strategies to enhance breastfeeding promotion efforts and support maternal and child health in the region.

Methods: This is an observational, cross-sectional analytical study carried out in the rural and urban field practice areas of a medical college located in Western Maharashtra. The study setting provided a diverse representation of maternal experiences from both rural and urban backgrounds, allowing for a comprehensive assessment of breastfeeding-related factors in the region. Mothers living in Western Maharashtra who had given birth in the past and had at least one child aged between 0 to 5 years were included in study. The study was conducted over a period, from Dec 2024 to Sept 2025.

Sample Size: According to Ipsa Mohapatra et. al they reported in their study that the adequate to moderate awareness about breastfeed were 62.8% taking the proportion at 80% confidence interval with precision 5% the sample size will be 154. We round up our sample size to 200. Sample size calculated by WinPepi version 11.65.

Sampling Technique: A convenience sampling approach was utilized to select eligible participants from the designated study locations, based on their availability and willingness to participate.

Study Tool and Data Collection: Data was collected using a predesigned, pretested, semi-structured questionnaire. The questionnaire included sections on socio-demographic information, knowledge and awareness about breastfeeding, perception toward breastfeeding practices, and factors influencing these perceptions. Data collection was carried out through face-to-face interviews with participants, after obtaining informed written consent.

Statistical Analysis: The collected data was entered into Microsoft Excel and analysed using SPSS Version 27 software. Descriptive statistics such as frequencies and percentages were used to summarize the data. P-value of less than 0.05 was considered statistically significant.

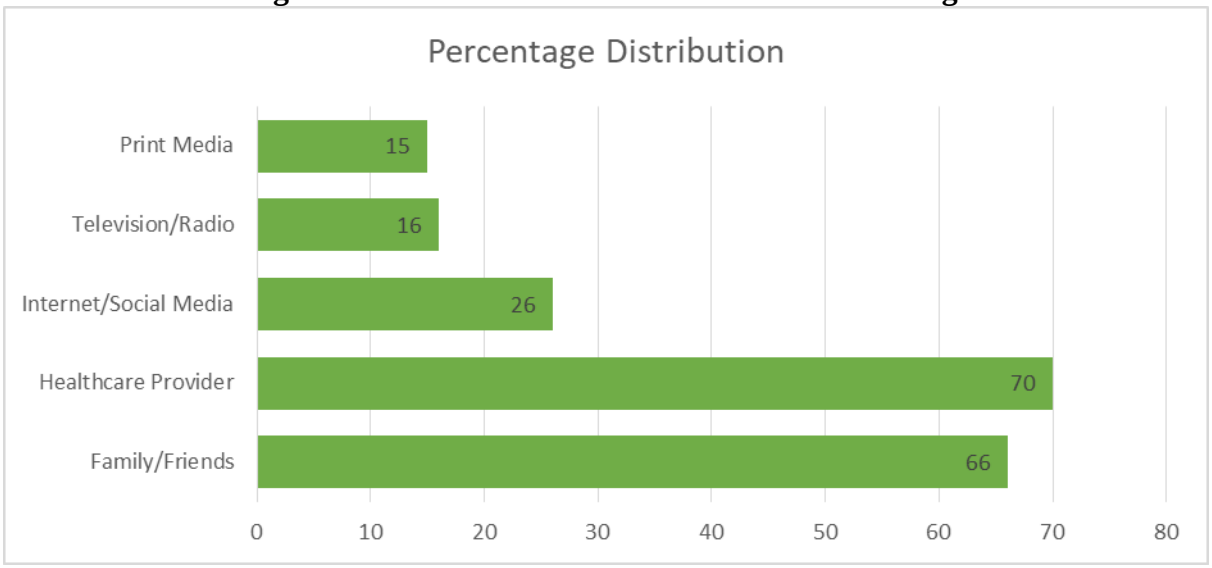
Results:

Table I: Socio-demographic Characteristics of Study Participants

Characteristic	Category	No. of Mothers	Percentage (%)
Age Group (in years)	20–24	82	41
	25–29	68	34
	30–34	40	20
	35–40	10	5
Residence	Rural	114	57
	Urban	86	43
Marital Status	Married	196	98
	Widowed	4	2
Type of Delivery	Vaginal	128	64
	Caesarean Section	72	36
Education	Secondary	88	44
	Primary	66	33
	Bachelor's Degree	30	15
	Illiterate	16	8
Occupation	Homemaker	166	83
	Employed	28	14
	Self-employed	6	3
Family Type	Nuclear	108	54
	Joint	92	46

The majority of postnatal mothers (41%) were aged between 20–24 years, followed by 34% in the 25–29 years category. Most mothers (57%) resided in rural areas. Large proportions (98%) were married. Regarding the type of delivery, 64% had vaginal delivery, while 36% had caesarean section. Forty-four precent had completed secondary education, 33% primary education, 15% had a bachelor's degree, and 8% were illiterate. The majority were homemakers (83%), with only 14% employed and 3% self-employed. Most families were nuclear (54%), while 46% were joint families. **(Table I)**

Figure I: Source of information about Breastfeeding.



Around 88% mothers reported that they had heard about the benefits of breastfeeding, while 12% had not. Mothers who were aware of breastfeeding benefits, most of them heard it from healthcare providers and family/friends. These two were the most frequently cited sources of information.

Other sources included internet/social media, television/radio, and print media. As this was a multiple-response question, many respondents selected more than one source**. (Figure I)**

Table II: Benefits of breastfeeding for baby, mother and family

Domain	Variable	Response	Frequency (n)	Percentage
Benefits for the Baby	Awareness of benefits for baby	Yes	180	90%
		No	20	10%
	Knowledge of benefits (Multiple Response)	Improved immunity	122	67.8% (of 180)
		Proper growth and development	158	87.8% (of 180)
		Bonding with the mother	74	41.1% (of 180)
		Reduce infections	56	31.1% (of 180)
Benefits for the Mother	Awareness of benefits for mother	Yes	124	62.00%
		No	76	38.00%
	Knowledge of benefits (Multiple Response)	Helps in postpartum weight loss	104	83.9% (of 124)
		Decreased risk of certain cancers	34	27.4% (of 124)
		Emotional bonding with the baby	64	51.6% (of 124)
Benefits for the Family	Awareness of benefits for family	Yes	74	37.00%
		No	126	63.00%
	Knowledge of benefits (Multiple Response)	Freely available	46	62.2% (of 74)
		Reduce hospital admission	74	100.0% (of 74)

Most mothers were aware of the baby's health benefits of breastfeeding, especially its role in proper development and immunity. Fewer mothers understood the maternal and familial benefits, highlighting an awareness gap.**(Table II)**

Table III: Challenges Faced by mother and Sources of Support during Breastfeeding

Category	Variable	Frequency (n)	Percentage
Challenges Faced	Difficulty with latching	18	9.00%
	Insufficient milk supply	54	27.00%
	Sore nipples	50	25.00%
	Lack of family support	4	2.00%
	No difficulty	74	37.00%
Sources of Support*	Family & Friends	48	24.00%
	Healthcare Provider	24	12.00%
	Husband	128	64.00%

Insufficient milk supply (27%) and sore nipples (25%) were the most common breastfeeding challenges reported, while 37% of mothers reported no difficulty. Support was mainly received from husbands (64%), followed by family and friends (24%) and healthcare providers (12%). (**Table III)**

Among the mothers surveyed, 82% did not give honey, water, sugar-syrup, or gutty to new-borns. Seventy per cent mothers were aware of colostrum, with 54% mothers considering it very important for a child's health. Regarding breastfeeding, 74% mothers viewed it as very important for a child's health, and 59% mothers knew the recommended duration for exclusive breastfeeding was 6 months. Most mothers (77%) knew breastfeeding should start as soon as possible after birth. For complementary feeding, 86% mothers knew it should begin after 6 months. In feeding practices, 35% mothers exclusively breastfed, while 28% mothers practiced mixed feeding. When

asked about breastfeeding in public, only 49% mothers found it acceptable. On breastfeeding duration, 45% mothers believed it should continue for 2 years. In all breastfed mothers, 39% mothers breastfed for 0-3 months and 33% mothers for more than 12 months.

Table IV: Association between Mother's Education and Occupation with Duration of Breastfeeding

Education of Mothers	**How long breastfeed your child**				
	6 months N=44	12 months N=66	2 years N=90	Grand Total N=200	p Value
Bachelor's degree	8(26.7)	4(13.3)	18(60)	30 (100)	0.022
Illiterate	4(25)	8(50)	4(25)	16(100)	
Primary Education	12(18.2)	36(54.5)	18(27.3)	66(100)	
Secondary Education	20(22.7)	18(20.5)	50(56.8)	88(100)	
Occupation of Mothers					
Employed	2(7.1)	22(78.6)	4(14.3)	28(100)	0.004
Homemaker	40(24.1)	42(25.5)	84(50.6)	166(100)	
Self-employed	2(33.3)	2(33.3)	2(33.3)	6(100)	

There was a statistically significant association between the mother's education level and the duration of breastfeeding (p = 0.022); mothers with a Bachelor's degree (60%) and secondary education (56.8%) were more likely to breastfeed for two years, while those with primary education (54.5%) and illiterate mothers (50%) predominantly breastfed for 12 months.

A significant number of employed mothers breastfed for 12 months (78.6%), with very few continuing up to 2 years (14.3%). In contrast, homemakers showed a higher tendency (50.6%) to breastfeed for 2 years. Self-employed mothers were equally distributed across all durations.

These findings suggest that higher education levels and being a homemaker are associated with longer breastfeeding duration. The data emphasizes the potential influence of socio-educational and occupational factors on maternal breastfeeding practices. **(Table IV)**

Discussion:

Our study findings reveal a good level of awareness, though some knowledge gaps and variations in practices persist, especially in the duration of exclusive breastfeeding, different challenges faced, and social acceptance of breastfeeding in public. We found that the majority of mothers had heard about the benefits of breastfeeding but their knowledge regarding maternal and familial benefits was limited. This aligns with the findings of Vijayalakshmi et al. (2015)[3] who observed that although awareness of breastfeeding was high, comprehensive knowledge was lacking, particularly regarding maternal health advantages.

Most mothers were aware of the benefits of breastfeeding for infants. This is consistent with studies like those by Kamath et al. (2016)[4] and Girish et al. (2013)[5] , which highlight that mothers primarily recognize infant-related advantages. However, awareness of maternal (62%) and family-related (37%) benefits was significantly low. Similar trends were reported by Ambike et al. (2017)[6] and Premlata et al.[7], indicating a persistent knowledge gap in these domains.

Sources of information were predominantly healthcare providers and family members, underscoring the continued importance of interpersonal communication. This supports findings from Mohapatra and Roy (2018)[8], where antenatal counselling played an important role in influencing positive perceptions toward breastfeeding.

Despite high awareness, one third of mothers practiced exclusive breastfeeding and these findings correlated to the study conducted in Rajasthan by Premlata et al.[7], where exclusive breastfeeding was suboptimal due to misconceptions and socio-cultural practices. Challenges such as perceived insufficient milk and sore nipples were common findings that are in line with study of Sanjay V Wagh et al.[9] indicating a widespread need for breastfeeding support services.

An encouraging finding was that most of the mothers refrained from giving prelacteal feeds like honey or sugar syrup—an indicator of improved awareness. Furthermore, 70% were aware of colostrum, with over half recognizing its importance, reflecting gradual success in health education campaigns. However, only 59% correctly identified the recommended duration for exclusive breastfeeding, suggesting room for improvement in conveying WHO guidelines effectively.

Higher education levels were associated with longer breastfeeding practices, which resembles with findings from Minhas and Sharma (2021)[10] and Joshi et al. (2019)[11] .

Occupation was another important factor—homemaker mothers tended to breastfeed longer than employed mothers. This is likely due to time constraints and workplace-related barriers faced by working women, as echoed in the studies by and Hulugappa (2018)[12] .These findings point to the necessity of supportive work environments and maternity leave policies that encourage continued breastfeeding.

Public breastfeeding remained a concern, with only some of mothers finding it acceptable. This indicates societal stigma, which can hinder mothers from breastfeeding outside their homes, particularly in public spaces. Addressing such cultural barriers is essential for promoting breastfeeding as a normative practice.

Strength and Limitations:

Our study yields a data on the present breastfeeding awareness and perception of mothers in Western Maharashtra, incorporating perspectives from both urban and rural residents. The convenience sampling of participants is a limitation of this study, potentially affecting generalizability beyond our region. Moreover, the findings on breastfeeding awareness and perception represent a single postpartum time point and do not illustrate changes over time.

Conclusion:

The study revealed a disparity in knowledge about breastfeeding benefits. A mother's education and occupation significantly influenced duration of breastfeeding. Despite knowing best practices, mothers faced nipple soreness and low milk concerns. This highlights the need for better counselling, maternal/family awareness, workplace support, and family involvement for longer breastfeeding.

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