

Article information

Received:	26 February 2026
Review:	3 March to 20 March 2026
Revision	21 March to 28 March 2026
Accept:	8 April 2026
Published:	15 April, 2026
DOI:	https://doi.org/10.3126/ps.v24i1.92771
Available:	www.nepjol.info/index.php/ps

Knowledge, Practices, and Factors Influencing Exclusive Breastfeeding Among Slum Mothers in Kathmandu Valley

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Abstract

Feeding a baby only breast milk for 6 months of life refers to exclusive breastfeeding. It is essential for infants' growth, immunity, and mental health. However, literature shows that slum settlements follow the traditional way and remain unchanged. This paper explores knowledge, practices, and factors influencing exclusive breastfeeding in the context of the settlements of Kathmandu. The cross-sectional research design was used in the research. A quantitative dominant mixed-methods was employed. A survey questionnaire, with integrated open-ended questions, was used. One hundred forty-one mothers participated in the survey. Descriptive statistics and chi-square test were utilized to analyze the data. Finding shows that 94.3% mother were currently breastfeeding. 61% practiced exclusive breastfeeding 4-6 months. 62.4% used other supplement liquid. Although 57.4% had heard of exclusive breastfeeding. Among the 57.4 % have heard about exclusive breastfeeding, and 29.1% correctly know six months as recommended. Chi-square test result shows that, no statistically significant association between awareness and breastfeeding practices ($p>0.05$). Workload, perceived insufficient breast milk, family influence, hygiene- related difficulties, and limited support systems affected exclusive breastfeeding. Study concluded that awareness alone is insufficient to ensure recommended exclusive breastfeeding practice in slum settlements. Changing beliefs, enhancing awareness, and improving economic status contribute to improving exclusive breastfeeding.

Keywords: exclusive breastfeeding, urban slums, knowledge-practice gap

Introduction

Infant health is influenced by breastfeeding practices. Exclusive breastfeeding contributes to strengthening the infant's health. It indirectly contributes to lifetime health benefits. Thus, it is considered an important process by the professional health workers. All mothers may not have the same situation for exclusive breastfeeding for their infant. Exclusive breastfeeding for the first six months is essential for optimal infant growth, immunity, and maternal health (World Health Organization [WHO], 2020). Scientific evidence shows that breast milk alone provides sufficient energy, nutrients, and fluid intake and protects children from infections due to its immune components. Exclusive breastfeeding also provides many health benefits to mothers, including post-delivery recovery, protection against postpartum hemorrhage, birth spacing through locational amenorrhea, and reduced risks of breast and ovarian cancers (Victora et al., 2016).

Despite these evidenced benefits, exclusive breastfeeding is far from optimal globally. While breastfeeding is socially supported in Nepal, exclusive breastfeeding for the recommended duration could not be maintained. A nationally representative dataset from the Nepal Demographic and Health Survey (NDHS) 2022 showed that only 57.46% infants aged 0–5 months were exclusively breastfed in the past 24 hours prior to the survey (Singh et al., 2024). Rates decrease with the age of the infant. Though new national surveys can offer a helpful perspective on trends at the country level, they combine information across groups and do not sufficiently describe the specific social, cultural, and environmental conditions that shape infant-feeding practices in urban slum settings.

Breastfeeding in Nepal is more of a general practice than how strictly guidelines are adhered to. However, care personnel have been educating and convincing mothers to the idea that only breastfeeding is key. However, the use and duration of exclusive breastfeeding are affected by social, economic, cultural, and environmental conditions that vary across population groups. Mothers living in slum settlements face multiple intersecting challenges, including poor living conditions, food insecurity, inadequate maternal nutrition, limited access to clean water and sanitation, and limited access to healthcare services (Gautam & Basnet, 2020). These conditions constrain their ability to sustain exclusive breastfeeding for the recommended duration.

Kathmandu Slum settlements represent high poverty rates, population density, inadequate infrastructure facilities, and limited access to services. People with slum conditions suffer from many issues related to health, hygiene and socio-economic status. While initiation of breastfeeding is high, many infants receive water, animal milk, formula, and/or complementary foods before the age of 6 months. Breastfeeding practices are also made complex by cultural beliefs, dependence on family advice and the perception of a lack of sufficient breast milk (Panthi et al., 2023). In many cases, mothers understand that breast milk is important but have incomplete knowledge regarding exclusive breastfeeding and its strict definition, including exclusion of water and other liquids.

Socio-economic constraints and limited support systems significantly affect mothers' ability to sustain exclusive breastfeeding in disadvantaged settings (Victora et al., 2016). Household workload, need to return to work early, and limited maternal nutrition reduce mothers' ability to practice exclusive breastfeeding consistently. Family members, particularly elders, often influence infant-feeding decisions. Advice from older family members may encourage early supplementation despite health recommendations. In addition, limited follow-up from health workers and weak community-level support systems reduce confidence and reinforcement needed to maintain exclusive breastfeeding.

Behavioral theories claim that awareness alone doesn't ensure change in human behavior. Planned behavior theory explains that intention is influenced by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). The workload and family influence on slum mothers may reduce perceived behavioral control, besides the positive attitude of mothers regarding exclusive breastfeeding. The social cognitive theory emphasizes that self-efficacy and environmental factors influence behavior shaping (Bandura, 1997). The slum mother might shape their behavior of exclusive breastfeeding as claimed by the social cognitive theory. Based on this theory, environmental reinforcement, poor support, fatigue, and stress reduce mothers' confidence in their ability to continue exclusive breastfeeding. The Health Belief Model advocates that perceived barriers, such as food insecurity and poor living conditions, influence breastfeeding behavior. Similarly, perceived milk insufficiency may compensate for perceived benefits. Therefore, exclusive breastfeeding behavior of mothers in slum settlements is shaped by the interaction of knowledge, social norms, environmental constraints, and access to support services.

The existing literature of scholarly research work describes breastfeeding obstacles in Nepal. The limited research evidence examines explicitly what slum-dwelling mothers know about exclusive breastfeeding regarding their daily practice of breastfeeding and what context-specific barriers prevent alignment with recommended guidelines in Kathmandu slum (Devkota et al., 2020). National surveys combine different population groups and do not provide a detailed understanding of mothers' lived experiences in marginalized urban settings. There is limited evidence explaining how mothers' knowledge, socio-economic realities, cultural influence, hygiene practices, and support systems interact in shaping exclusive breastfeeding practices in slum communities (Wasti et al., 2023). Therefore, multiple factors might be responsible for shaping exclusive breastfeeding behavior.

While previous studies in Nepal (e.g., Senghore et al., 2018; Wasti et al., 2023) have examined exclusive breastfeeding at the national level, little research has specifically examined urban slum settlements, where socio-economic and environmental constraints differ significantly. Therefore, this study provides context-specific evidence to better understand the knowledge–practice gap within marginalized urban populations. Exclusive breastfeeding is considered important because it contributes to the development of the infant's mental and immune system. Exclusive breastfeeding practices remain as an issue across different population groups. The slum settlements' mothers of Kathmandu face socio-economic hardship, poor living conditions, food insecurity, heavy household workload, cultural

influence, and limited support systems. While breastfeeding as a general practice is socially accepted. The gap between mothers' awareness, suggestions of health care, and mothers' real practices of exclusive breastfeeding. Existing national data do not sufficiently explain how knowledge, lived conditions, and contextual barriers interact to shape exclusive breastfeeding practices among slum-dwelling mothers. The absence of clear literature regarding slum-specific, context-grounded evidence constitutes a research gap that requires systematic investigation. Accordingly, this study aims to examine the association between awareness and exclusive breastfeeding practices, as well as the socio-economic and contextual factors influencing such practices in slum settlements of Kathmandu Valley. This paper is guided by questions concerning the level of awareness and knowledge of exclusive breastfeeding among mothers in slum settlements of Kathmandu Valley, the breastfeeding practices they adopt, the socio-economic, cultural, and environmental factors influencing these practices, and whether there is an association between awareness and exclusive breastfeeding practices.

Objectives of the Study

The study was conducted based on the following objectives.

1. To identify the level of awareness and knowledge among slum mothers regarding the benefits and recommended practices of exclusive breastfeeding.
2. To assess the breastfeeding practices currently adopted by mothers in slum areas, including the duration of exclusive breastfeeding and complementary feeding practices.
3. To identify socio-economic, cultural, and environmental factors influencing exclusive breastfeeding practices among slum mothers in Kathmandu Valley.

Literature Review and Theoretical Framework

Under this heading empirical study findings and related theoretical lens are analyzed.

Exclusive Breastfeeding as a Public Health Practice

Referring to the importance of the first six months in infant feeding, it is widely accepted that they should be exclusively breastfed since this is so beneficial for optimal infant growth, immunity, and maternal health (World Health Organization [WHO], 2020). Breast milk is capable of providing all necessary nutrients as well as safeguarding infants from infections thanks to immune components. There is proof which suggests that improved breastfeeding practices lowers infant illnesses and death, more so in third world countries (Victora et al., 2016). As well exclusive breastfeeding has an impact on maternal recovery and lowers risks of certain diseases.

The established benefits of exclusive breastfeeding are emphasized worldwide for the better health of infants. Breastfeeding initiation is nearly universal; however, sustaining exclusive breastfeeding for the recommended six months continues to present challenges in different contexts of Nepal, such as slum areas.

Early introduction of water, animal milk, formula, and complementary foods remains common (Adhikari et al., 2021), and such a practice exists till now. This pattern indicates that breastfeeding as a socially accepted norm. But it does not necessarily translate into adherence to exclusive breastfeeding guidelines. National survey data highlights aggregate trends but does not sufficiently explain contextual variations within marginalized urban settlements. In urban slums, structural and environmental conditions differ markedly from the national average, necessitating a focused contextual examination.

Socio-Economic and Contextual Determinants in Slum Settings

Slum settlements are categorized by poverty, food insecurity, high population density, poor sanitation, and limited access to healthcare services (Devkota et al., 2020; Gautam & Basnet, 2020). These structural conditions influence maternal health behavior. These mental health behaviors include exclusive breastfeeding. Socio-economic hardship constrains mothers' ability to sustain exclusive breastfeeding. Limited maternal nutrition, heavy household workload, and early return to work reduce the ability to maintain recommended practices. Although awareness of breastfeeding benefits may exist, environmental constraints moderate behavioral implementation.

Social and cultural factors cause women to discontinue exclusive breastfeeding, especially in the first six months. Norms advice from the elderly in society can prompt early supplementation.

Within households, decision-making could be collective and hence override individual intentions. Observance of exclusive breastfeeding among women in slum areas is a combination of personal knowledge and social order. Previous research indicates that structural barriers, social influences, and inadequate institutional support systems shape feeding behaviors. Nonetheless, there are hardly any empirical studies that specifically look into how those determinants play out within slum settlements in Kathmandu.

Knowledge Practice Gap in Exclusive Breastfeeding

Regarding exclusive breastfeeding, mothers possess awareness but a comprehensive understanding of exclusive breastfeeding, particularly regarding strict duration and exclusion of water and other liquids (Senghore et al., 2018). This situation occurs in marginalized groups of people and geographically disadvantaged groups. Fragmented knowledge contributes to inconsistent practices. The single knowledge level awareness doesn't work properly in applying in behavior. The facts show that, even when mothers recognize benefits, perceived insufficient breast milk, fatigue, workload, and social pressure contribute to early introduction of complementary foods (Panthi et al., 2023). Therefore, awareness alone can't shape the behavior. The gap between the acquired knowledge and practice indicates that behavioral outcomes are shaped by contextual barriers and perceived control rather than information. Support systems within marginalized communities also appear fragmented. Mothers who receive counseling from healthcare providers, follow-up mechanisms, and community-level reinforcement at a limited level. Without strong support and a variety of motivations, awareness may not translate into lasting

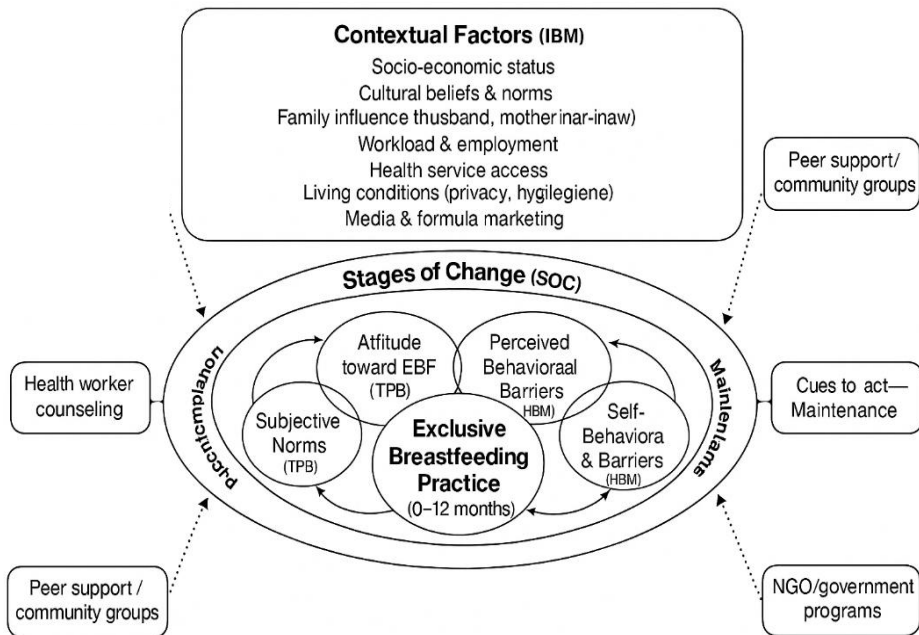
practice. Individually, the findings contribute insights into the dynamics of exclusive breastfeeding in slum settings, taking into account how partial knowledge, socioeconomic conditions, social culture, environment, and institutions interact. Collectively, they suggest that exclusive breastfeeding behavior in the slum settings is an outcome of the interaction of various knowledge, structures and processes at individual and contextual levels that need to be captured within a conceptual framework that explicitly considers the individual and contextual determinants.

Theoretical Framework

Theories related to human behavior and influencing factors regarding human behavior were reviewed as the theoretical foundation of this study. The main focus of the study is on understanding the breastfeeding behavior of mothers at settlements. Individual, social, and environmental factors influence the breastfeeding behavior of mothers in slum settlements, which is considered a complex behavior regarding the exclusion of breastfeeding.

Figure 1

Theoretical Framework



This study considered theory of Planned Behavior, social Cognitive Theory, Health Belief Model and Integrated Behavioral Model as theoretical base. Planned behavior theory states that intention is influenced by attitude subjective norms made by concern and behavioral control (Ajzen, 1991). In the context of Slum context traditional belief followed by elder stand as subjective norms. Even when mothers of slum settlement hold positive attitudes toward exclusive breastfeeding, subjective

norms from elders and family members may encourage early supplementation and using additional food. Perceive behavior indicates how does mother feel regarding work load, resources available and suitable environment for breast feeding. Thus, perceived behavioral control may be reduced due to workload, fatigue, and limited resources in the slum context. Social Cognitive Theory emphasizes self-efficacy and environmental reinforcement (Bandura, 1997). This theory highlighted that a mother's confidence improves and sustains exclusive breastfeeding despite the barriers and external influences. The poverty-limited support and weak reinforcement factors reduce self-efficacy. The Health Belief Model explains behavior in terms of perceived benefits and perceived barriers (Rosenstock et al., 1988). Thus, the mother's confidence is very important in sustaining exclusive breastfeeding.

Without strong support and a variety of motivations, awareness may not translate into lasting practice. Individually, the findings contribute insights into the dynamics of exclusive breastfeeding in slum settings, taking into account how partial knowledge, socioeconomic conditions, social culture, environment, and institutions interact. Collectively, they suggest that exclusive breastfeeding behavior in the slum settings is an outcome of the interaction of various knowledge, structures, and processes at individual and contextual levels that need to be captured within a conceptual framework that explicitly considers the individual and contextual determinants. As shown in Figure 1, exclusive breastfeeding practice is influenced by interrelated individual, social, and structural factors operating within slum environments.

Methods

This study employed a quantitative-dominant mixed-method cross-sectional design. This design is useful for describing the existing situation of exclusive breastfeeding practices and related factors among mothers residing in slum settlements of the Kathmandu Valley. The cross-sectional design enabled identification of interrelationships among variables based on survey responses and participants' views. Therefore, a cross-sectional design was used to conduct the study. The study used the mixed method approach. Quantitative data constituted the primary source of evidence. The qualitative responses were used to support and contextualize quantitative findings.

The study considered two slum communities. One was the Bishnumati River in Kathmandu Metropolitan City, Samakhushi (Ward No. 29), and another was Tankeshwor (Ward No. 13). People of these slum areas live in crowded conditions. They are facing poverty, struggling with limited access to clean water, sustenance, health care, and infrastructure. From the preliminary study, challenges like exclusive breastfeeding and other maternal and child health practices are shaped by the difficult context in this area. Therefore, these settlements were chosen purposively. This area was suitable to attain the objective of the research.

The study population consisted of breastfeeding mothers with children under one year of age residing. A pilot survey was conducted for the possibility of research. The heal volunteer and community representative was participated in pilot survey.

Yamane's (1967) formula, with a margin of error of 0.05, resulted in a required sample of 137 participants. A total of 141 mothers participated in the study. The qualitative component did not involve a separate sample; open-ended responses were obtained from the same participants included in the quantitative survey. These processes ensure the statistical oppression for research. Data were collected using a structured survey questionnaire integrated with selected open-ended questions. The survey items include knowledge and awareness of exclusive breastfeeding. Similarly, it includes breastfeeding, hygiene, socioeconomic status, and culture. The questionnaire was tested among ten breastfeeding mothers in a similar slum area in Bhaktapur district. Based on pilot findings, revisions were made to improve clarity and contextual relevance. Therefore, it was essential that this questionnaire is useful. Data were collected through face-to-face interviews using hard copy questionnaires. Oral consent was obtained prior to participation. In cases where respondents had limited literacy, responses were recorded according to participants' statements. Open-ended responses were documented during the same data collection process.

Data were coded and entered into SPSS for analysis. Descriptive statistics (frequencies, percentages) were used to analyze the data. These statistical tools were used to describe respondents' characteristics, knowledge, practices, hygiene conditions, and support systems. Chi-square tests were conducted to assess associations between selected variables and breastfeeding practices. Qualitative responses were interpreted alongside quantitative findings to provide contextual explanation.

Ethical standards were maintained throughout the study. Participation was voluntary. Respondents were informed that they could withdraw at any time without facing any consequences. The details of the address were not disclosed. Confidentiality and privacy were safeguarded, and findings were presented only in aggregate form to ensure anonymity. Care was taken to conduct the study respectfully within the slum communities so that no physical, psychological, or social distress was caused.

For language clarity and grammatical refinement, Grammarly software was used during the final stage of manuscript preparation. The software was applied solely for improving grammar, clarity, and readability. The content, interpretation, analysis, and conclusions of the study are entirely the responsibility of the author. The use of language-editing software did not influence the research design, data collection, analysis, or substantive content of the study.

Ethical approval for this study was obtained from the Department of Health and Physical Education, Mahendra Ratna Campus, TU, as part of the approval process for the thesis research. Permission to conduct the study was also obtained from the concerned municipal authorities of Kathmandu Metropolitan City. The study adhered to ethical principles, including voluntary participation, informed consent, confidentiality, and anonymity of respondents. Participants were informed about the purpose of the study and their right to withdraw at any stage without any consequences. Oral consent was obtained prior to data collection due to varying literacy levels among respondents. All information collected was used solely for academic purposes and maintained with strict confidentiality.

Result and Discussion

This section presents the study's findings based on data collected from 141 breastfeeding mothers residing in selected slum settlements in the Kathmandu Valley. The results are organized according to the objectives of the study. First, the socio-demographic characteristics of the respondents are presented. This is followed by findings on awareness and knowledge of exclusive breastfeeding, breastfeeding practices, factors influencing exclusive breastfeeding, hygiene-related practices, support and educational exposure, and an association analysis between selected variables.

Socio-Demographic Characteristics

The majority of respondents were aged between 25 and 30 years (39.7%) and 30 and 35 years (39.0%). Nearly half (47.5%) had completed secondary education, and 31.2% had higher education. Most respondents were laborers (48.2%) or housewives (34.8%). Almost half (47.5%) reported a monthly household income between NPR 10,000 and 20,000.

Table 1

Socio-Demographic Characteristics of Respondents (N = 141)

Variable	Category	n	%
Age	20–25	30	21.3
	25–30	56	39.7
	30–35	55	39.0
Education	Primary	30	21.3
	Secondary	67	47.5
	Higher	44	31.2
Occupation	Housewife	49	34.8
	Laborer	68	48.2
Monthly Income	<10,000	28	19.9
	10–20,000	67	47.5

The findings indicate that respondents were predominantly from low socio-economic backgrounds.

Knowledge and Understanding of Exclusive Breastfeeding

The findings indicate that 57.4% of respondents reported having heard of exclusive breastfeeding. However, accurate understanding of the recommended six-month duration was limited, as only 29.1% correctly identified six months as the recommended period. A substantial proportion (70.2%) believed exclusive breastfeeding should continue beyond six months. This discrepancy between awareness and correct knowledge suggests that exposure to information does not necessarily translate into conceptual clarity.

Table 2*Knowledge of Recommended Duration of Exclusive Breastfeeding (N = 141)*

Duration Identified	n	%
Less than 6 months	1	0.7
6 months	41	29.1
More than 6 months	99	70.2

The findings highlight a gap between mothers' familiarity with the phrase *exclusive breastfeeding* and their precise. The understanding of its clinical and public health definition. Awareness tends to be broad and generalized rather than aligned with official guidelines. The majority of mothers recognize that breastfeeding is beneficial. There is uncertainty about the strict exclusion of water and other liquids during the first six months. There is fragmentation in breastfeeding beliefs and practices. This fragmented knowledge has important consequences for practice. Within the framework of the Theory of Planned Behavior (Ajzen, 1991), knowledge shapes attitudes but does not alone determine intention or behavior. This result shows that there is a gap between awareness and practice in behavior. They know its importance but are unable to recognize the correct practice and its benefits. They are guided by the experience of others' practices.

The experience, social beliefs and norms, attitudes, and perceived control influence behavioral practices. Lack of knowledge and poor behavioral intention work as influencing factors in exclusive breastfeeding behaviors. The unclear understanding of the six-month rule of breastfeeding creates problematic conditions regarding exclusive breastfeeding. The Health Belief Model (Rosenstock et al., 1988) claims that perceptions of susceptibility, severity, benefits, and barriers drive the behavior regarding suggested behavior. Human perception is unstable and changes according to the environment and experience. This perception influences breastfeeding behavior. This situation is caused by the fact that health-related knowledge remains cognitive but not in behavioral application. This study found this type of pattern regarding breastfeeding. The result shows that mothers' knowledge of the recommended duration and importance of breastfeeding does not occur as well as understanding. This finding aligns with the prior studies' finding that mothers lack a comprehensive understanding of the exclusive breastfeeding principle and recommended duration (Senghore et al., 2018; Adhikari et al., 2021). Thus, Mothers understanding remains partial and inconsistent. This understanding hinders the behavioral application of breastfeeding.

The influence of informal information circulation shapes the mothers understanding of breastfeeding practices. The knowledge transmitted through peer network and family members. Then the formal awareness structured health education channel and their information becomes ineffective. Consequently, the exclusive breastfeeding definition in community limited in narrower meaning. This meaning focused only breastfeeding for six months. But it does not cover the meaning it is act

of feeding breast milk for first six months without inclusion of other liquids. This dilution of meaning provides a plausible explanation for the observed inconsistency between general awareness and strict adherence to recommended practices.

This scenario implies that knowledge dissemination strategies need to extend than terminological meaning. The prioritized action need to include conceptual clarity, repeated reinforcements and contextual relevant explanation. The exclusive breast feeding become poor without depth understanding and awareness of mothers.

Exclusive Breastfeeding Practices and Contextual Determinants

Regarding breastfeeding, 94.3 % mothers reported that they are correctly breastfeeding their infant aged less than six months. The accepted that they do not strictly follow the rule of exclusive breast feeding due to their lack of wider in-depth knowledge. The result shows that 61.0% mothers practice breast-feeding during four to six months. Moreover, 62.4 % mothers used other supplement and feed mother milk. In similar case, 57.4 % mother use other supplement before 6 months

Table 3

Exclusive Breastfeeding Practices (N = 141)

Indicator	n	%
Currently breastfeeding	133	94.3
Practiced EBF 4–6 months	86	61.0
Receiving other liquids/foods	88	62.4
Introduced complementary foods before 6 months	81	57.4
Reported insufficient milk	72	51.1

Chi-square analysis revealed no statistically significant association between awareness and breastfeeding practice ($p > .05$), indicating that awareness alone did not significantly predict exclusive breastfeeding behavior. The study further examined factors influencing exclusive breastfeeding practices. Descriptive findings indicated that socio-economic constraints, maternal workload, family influence, perceived insufficient breast milk, and limited support systems were the most commonly reported factors affecting exclusive breastfeeding practices among respondents

Table 4

Association Between Awareness and Practice

Variables	χ^2	df	p
Awareness \times Supplementation	0.364	1	.546
Awareness \times Frequency	0.003	1	.956

This statistical insignificant association shows that there is gap between knowledge of exclusive breastfeeding and its real application in behavior. The chi-square result regarding the relationship among socio-demographic variables and exclusive breastfeeding practices is insignificant ($p > 0.05$). This result implies the limitations of information-based knowledge in the context of slum mother. Thus, structural and social factors do not support exclusive breastfeeding.

The Theory of Planned Behavior provides a useful framework for understanding breastfeeding practices in this context. Mothers have positive attitudes toward breastfeeding at a level above average. However, subjective norms, especially advice from elders and family members, may encourage early supplementation. Therefore, the social and cultural environment motivates the mothers to use supplements early. This finding is supported by the considered framework (Ajzen, 1991). In collectivist settings, these social influences can override individual intentions. As a result, breastfeeding decisions are socially embedded rather than purely individual. Perceived behavioral control is also a key factor. Slum environments are marked by poverty, heavy workloads, and poor maternal nutrition. These conditions limit mothers' ability to sustain exclusive breastfeeding. Even when intention exists, environmental constraints reduce control. Therefore, behavior reflects perceived feasibility rather than attitude alone (Ajzen, 1991). This indicates that breastfeeding practices are shaped by social and cultural context. The social norms and environmental constraints required reform for implementing the exclusive breastfeeding.

Social Cognitive Theory (Bandura, 1997) emphasizes self-efficacy and environmental reinforcement. The findings supported by this theory were that mothers do not have confidence in breastfeeding. Therefore, they do not apply the rule of breastfeeding. The high proportion of mothers reporting insufficient breast milk leads to the use of supplements. Mothers perceive insufficient breast milk for their infant. Perceived milk insufficiency do not reflect physiological inadequacy. It is the symptoms of low self-efficacy due to the result of fatigue, stress, and social comparison. Thus, when mothers perceive that their milk is insufficient for their infant, they search for another way. This environment forces to use supplement. The supplementation becomes a coping strategy rather than a medically informed decision. The Health Belief Model further elucidates the dominance of perceived barriers in resource-constrained settings. Food insecurity, inadequate maternal nutrition, limited rest, and restricted access to healthcare pose structural challenges for applying the exclusive breastfeeding. Mothers can not apply guidelines of exclusive breast feeding due to the perceived behavior shaped from the socio-cultural environment. The Integrated Behavioral Model suggest that environmental constraints influence the intention behavior. The limited privacy, sanitation challenges and economic instability are faced by the slum mothers. These contextual

behavioral devotions and perceived knowledge sustained exclusive breast feeding becomes difficult to maintain.

Findings show that exclusive breastfeeding practice is poor in the context of slum settlements. This finding supports prior research findings that breastfeeding is influenced by factors other than their awareness (Panthi et al., 2023). Therefore, the cognition doesn't work for handling and practicing the gained knowledge. The deviation from awareness of practice occurs due to limited support systems and socio-economic conditions. These socio-demographic variables and their role in shaping breastfeeding behavior were also identified by prior research (Devkota et al., 2020; Gautam & Basnet, 2020). These factors contribute as unseen factors for shaping breastfeeding behaviors. Regarding this context, the study shows that awareness alone does not predict behavior in a slum setting. This finding aligns with prior research such as Devkota et al. (2020). Thus, the gap between knowledge and practice remains unchanged.

The majority of slum mothers reported that they do not sufficiently apply the exclusive breastfeeding. This behavior occurs due to a perceived insufficient function as a socially structured explanation. Hence, mothers who internalize the belief that their milk supply is inadequate remain unchanged until health professionals provide reassurance regarding the general amount and time of breastfeeding.

Findings highlight the dynamic interplay among cognitive, social, and structural determinants that shape exclusive breastfeeding. The result shows that exclusive breastfeeding is influenced by a constellation of internal factors. These factors are socio-economic constraints, maternal workload, intra-household dynamics and mothers' perception of insufficient breast milk. The exclusive breastfeeding in slum settlements is shaped by multilayered determinants. This multi-level approach includes operating at the individual, household, and community levels. This aligns with socio-ecological perspectives that conceptualize health behavior as the outcome of interactions among personal beliefs, social influence, and cultural conditions. Thus, factors related to socio-ecological perspectives influence exclusive breastfeeding behavior. The findings highlighted that maternal workload, familial expectations, and limited social and institutional support play a role as barriers to maintaining exclusive breastfeeding.

Conclusion

This study looked at what mothers living in Kathmandu Valley's slum communities know about exclusive breastfeeding, how they practice it, and the challenges they face in their daily lives. The results show that while almost all mothers begin breastfeeding, sticking to the full six months of exclusive breastfeeding is far less consistent. Many mothers have heard of exclusive breastfeeding, but fewer fully understand the guideline that babies should receive only breast milk—without water or other liquids for the first six months. Importantly, the analysis shows that simply being aware of the term does not guarantee that mothers will follow the practice.

The gap between knowledge and practice is shaped by many factors: poverty, family pressures, worries about not producing enough milk, heavy

household responsibilities, and limited support from health institutions. Behavior is influenced not just by what mothers know, but also by social expectations, confidence in their ability to breastfeed, and the realities of their environment. These findings echo theories such as the Theory of Planned Behavior, Social Cognitive Theory, the Health Belief Model, and the Integrated Behavioral Model, all of which highlight the interaction between personal beliefs and structural conditions. In this context, exclusive breastfeeding is not simply an individual choice; it is a behavior deeply embedded in social and structural realities.

Improving exclusive breastfeeding in slum communities will require more than awareness campaigns. Sustainable change means tackling the barriers mothers face, building their confidence, involving family members, and strengthening community-level support systems. By focusing on both behavior and context, this study adds slum-specific evidence to the broader literature and underscores the need for maternal and child health strategies that combine education with structural support.

Acknowledgement

This article is based on the thesis work completed for the degree of Master of Education (M.Ed.) in Health Education from Mahendra Ratna Campus. The author expresses sincere gratitude to the faculty members and supervisors for their continuous guidance and support during the study.

Ethical approval for the research: Not applicable

Consent for publication: Not applicable

Conflict of interest: The author declares no conflict of interest.

Ethical conduct of research: This paper is written ethically

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