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Breastfeeding Needs in Adolescent Mothers A systematic review Atefeh Yas, 1 Fatemeh Z. Karimi, 2,3 *Talat Khadivzadeh 2,3

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Abstract

Adolescent mothers face numerous challenges while breastfeeding. The purpose of the study was to assess the breastfeeding needs of adolescent mothers. Two researchers independently searched the databases Web of Science, PubMed, Scopus, Cochrane Library, SID, and Magiran. The initial search yielded 2290 studies, of which 41 were eventually included in this systematic review. Breastfeeding requirements of adolescent mothers were categorized into eight categories: 1. Social support from health care providers, partners, and families; 2. School support for breastfeeding mothers, 3. Receiving breastfeeding counseling based on cultural sensitivities, 4. Educational assistance from health providers for adolescent mothers' families 5. Changing harmful cultural values and judgments about adolescent mothers' breastfeeding, 6. Additional home or outpatient visits in the days following hospital discharge; 7. Peer support and peer counseling, 8. Economic needs. To promote breastfeeding, policymakers and healthcare providers ought to devise specifically tailored programs and interventions to cater to the specific requirements of mothers.

Keywords: Breastfeeding; Adolescent Mothers; Infant Feeding; Need; Qualitative Study.

Introduction

Providing breast milk is the most effective method to ensure infants receive the necessary nutrients for optimal growth. Moreover, breastfeeding provides numerous benefits for infants by promoting their overall health and reducing the risk of developing several chronic diseases. Breastfed infants have a reduction in acute otitis, gastroenteritis, severe respiratory tract infections, atopic dermatitis, asthma, obesity, type 1 and 2 diabetes, childhood leukemia, SIDS, and necrotizing enterocolitis. ^{1,2} The World Health Organization (WHO) recommends exclusive breastfeeding for the first six months of life, followed by complementary foods, and continued breastfeeding until the child reaches the age of two years. ^{3,4}

Breastfeeding mothers are affected by a variety of factors, one of which is the mother's age.⁵ As per various studies, the rate of exclusive breastfeeding among adolescent mothers is lower than that of adult mothers, with a prevalence of 22% in Canadian adolescent mothers compared to 51% in adult mothers. In Thailand, 19% of adolescent mothers and 17.3% of adolescent mothers⁸ in Bangladesh continue exclusively breastfeeding until six months. At three months, 19.3% of mothers aged 20 years in the United States exclusively breastfed their infants. 9,10 Adolescent mothers face numerous changes and challenges while pregnant and breastfeeding. These mothers must adjust to adult social roles, physical changes associated with puberty, and raising an infant. Most of these mothers are in poor social and economic circumstances and face numerous physical, mental, social, and spiritual challenges, such as depression, anxiety, low selfefficacy, lack of self-confidence, and multiple responsibilities. Taking care of their children and breastfeeding becomes a struggle for adolescent mothers as they encounter these obstacles. 11,12 A mother in adolescence is also associated with several adverse health consequences. ¹³ Evidence indicates that adolescents have a higher rate of obstetric complications and a higher rate of lowbirth-weight infants, exposing their infants to disease and mortality risk. 14,15 Breast milk is the best nutrition for infants because it protects them from numerous diseases and strengthens their sensory and cognitive development.¹⁶

The World Health Organization also referred to adolescent mothers' breastfeeding as "feeding in exceptionally challenging circumstances," classifying them as high-risk mothers. ¹⁷ Therefore, it

is essential to understand their breastfeeding requirements to promote breastfeeding in this group of mothers so that health policies and interventions can be designed to their needs. No systematic review study that examines all facets of the breastfeeding requirements of adolescent mothers in qualitative studies was discovered, according to the research team's searches. Determining the breastfeeding needs of adolescent mothers in qualitative studies carried out in low, middle, and high-income countries was the aim of the current systematic review, which was conducted in light of the significance of recognizing these mothers' breastfeeding needs.

Materials and Methods

The preferred reporting items for systematic reviews and meta-analyses (PRISMA) were used to perform and write the current systematic review study. The 2009 PRISMA statement was designed to assist systematic reviewers in reporting the review's motivation, the authors' methods, and their findings in a transparent manner. An update to the guideline is necessary due to developments in systematic review terminology and methodology over the past ten years. The PRISMA 2020 statement, which replaced the 2009 statement, entails new reporting guidance that reflects improvements in methods to identify, evaluate, and synthesize studies. ¹⁸

Data sources, search strategy

Two researchers independently reviewed articles in both Persian and English that were written with a qualitative approach associated with the objective of the study up until December 2022. Web of Science, Pub Med, Scopus, and the Cochrane Library databases were searched for English language articles, and SID and Magiran databases were searched for Persian language articles. The key phrases comprised a combination of the following terms or their MESH counterparts, which were combined with AND, OR: breastfeeding, lactation, infant feeding, teenage mothers, adolescent mothers, young mothers, needs, and qualitative study. All the databases indicated were manually searched to retrieve the articles using the pertinent keywords. In addition, the reference sections of the relevant articles were manually examined using an electronic search to discover overlooked interventions.

Eligibility criteria

The inclusion criteria included qualitative and mixed-method studies that addressed the breastfeeding requirements of adolescent mothers with full-term, healthy newborns. The exclusion criteria included case reports, review studies, letters to the editor, systematic reviews, studies with unrelated data, quantitative studies, and lack of access to the full text of the articles. Ethnography, phenomenology, grounded theory, qualitative descriptive research, and qualitative content analysis are a few qualitative study methods frequently used in the medical and nursing sciences.¹⁹

Ethnography is the literal writing of culture, and it refers to a direct description of a community, group, or culture. Data are gathered while working in the field through participant observation, field note-taking, interviews with key informants, and document collection. Phenomenology is an approach to philosophy and a well-known qualitative research methodology. Its goal is to describe specific phenomena of daily experience as lived experience to comprehend its fundamental structure (Essence). A systematic approach to studying social processes is grounded theory (GT). Its origins are in sociology, specifically in symbolic interactionism. The development or modification of theory is the goal of the GT. In qualitative descriptions (QD), the What, Who, and Where of the experiences are the main focus. The core or foundation of QD differs from other varieties of qualitative research in that its primary focus is descriptive rather than interpretive. Qualitative content analysis is a research technique for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying categories, themes, or patterns.¹⁹

Study selection and data collection process

Studies identified in the electronic databases were sent to Endnote X8 for screening, determining, and removing duplicates. Studies found in the electronic databases were sent to endnote X8 for duplication removal, screening, and assessment. To choose the studies, two researchers (AY, FZK) independently evaluated the titles, abstracts, and keywords of the articles, as well as their eligibility criteria. In the second step, the complete text of the selected publications was independently examined by two researchers (AY, FZK), and any disagreements were resolved by discussion with the third author (TKH). The search strategy led to the inclusion

of 41 studies in this review. The process is summarized in the PRISMA flow diagram (Figure 1). Extracted data included the author's name, year of publication, country, type of qualitative approach, the title of the article, and the type of breastfeeding that needs to be reported in the article, which was conducted independently by two researchers (AY, FZK) (Table 1).

Evaluation of the quality of studies

The Critical Appraisal Skills Program for Qualitative Studies checklist (CASP) was used to assess the quality of the studies. ²⁰ This tool evaluates all articles using qualitative methodology using a variety of approaches, and it is used for quality assessment in health and social carerelated qualitative evidence synthesis. ²¹ The CASP checklist used in this study consisted of ten different items, including the following: aims, methodology, data collection process, reflexivity, and ethical considerations, analytical process, findings, and the value placed on the research. Two researchers independently assessed the quality of the studies (AY, FZK). Because CASP does not have a ranking system, it was decided to assign a score of zero for "no," one for "can't say," and two for "yes" to facilitate grading of the studies. The score range is between zero and 20. In the current research, all retrieved articles scored 15 or higher. The results of the all studies were valid and research design of all studies were appropriate to address the aims of the research.

Results

In the initial search, 2290 studies were retrieved from various databases, of which 2053 were excluded due to duplication, 237 studies were examined for abstracts and titles, 149 studies were excluded due to not being related, 88 studies were deemed eligible and their full text was reviewed, and finally 41 studies were included in this systematic review (Figure 1).. The articles were published between 2000 and 2022. Ten articles were published in the United States, ²²⁻³¹ eight in the United Kingdom, ³²⁻³⁹ five in Canada, ⁴⁰⁻⁴⁴ five in Brazil, ⁴⁵⁻⁴⁹ three in Indonesia, ⁵⁰⁻⁵² two in Thailand, ^{11,53} two in Ghana, ^{54,55} two in South Africa, ^{56,57} one in Iran, ⁵⁸ one in Iceland, ⁵⁹ one in Belgium, ⁶⁰ and one in Australia (Table 1). Age range of breastfeeding mothers in all studies was 12-18 year.

After reviewing the study findings, the different breastfeeding needs of adolescent mothers were classified into the following eight categories: 1. Social support from health care providers,

partners, and families; 2. School support for breastfeeding mothers; 3. Receiving breastfeeding counseling based on cultural sensitivities; 4. Educational assistance from health providers for adolescent mothers' families 5; Changing harmful cultural values and judgments about adolescent mothers' breastfeeding; 6. Additional home or outpatient visits in the days following hospital discharge; 7. Peer support and peer counseling; 8. Economic needs.

Social support from health care providers, partners, and families: To overcome the physical and psychological challenges of breastfeeding, mothers require assistance from their families, sexual partners, and healthcare providers. 11,40,45,52 Access to health centers and guidance from healthcare professionals is imperative for these mothers. Before and after the delivery, they require support and suggestions to ensure their well-being and address any challenges they may face during breastfeeding. 23,37,39,42,46,47,61 Moreover, the support of family members, particularly their mothers, is crucial for these new moms during the postpartum period and breastfeeding. 34,49,55,61 The supportive needs reported by adolescent mothers encompass emotional support, self-esteem enhancement, practical assistance, informative resources, and dependable support networks. 24,35,43

Emotional support: Emotional support entails expressing empathy, providing consolation, and attentively listening to someone. Adolescent mothers require healthcare providers and families to reassure them about their breastfeeding experiences, empathize with them, and listen to their problems and needs. Esteem support: Breastfeeding and appropriately tending to their child requires adolescent mothers to cultivate self-worth, believe in themselves, and refrain from criticizing their abilities as mothers. Instrumental support: Receiving instrumental assistance during breastfeeding involves obtaining tangible and practical aid. Adolescent mothers require monitoring from healthcare professionals to address their breastfeeding concerns through effective practical guidance. Educational and informational support: Adolescent mothers need to assess their breastfeeding knowledge and receive accurate information regarding the benefits of breast milk for infants, techniques for breastfeeding, and solutions for resolving any breastfeeding difficulties. 22,23,40,44,46,48,50,52,58,60,61 Network support: To overcome the responsibilities of caring for the infant and breastfeeding, adolescent mothers require network support from family, friends, sexual partners, and healthcare providers. 26,36,38,53

School support for breastfeeding mothers: The project aimed to support adolescent mothers in their pursuit of education following childbirth. Additionally, it offers a storage facility to store their expressed milk while they attend school. These mothers require consistent guidelines regarding the timeline for returning to school after childbirth and the availability of appropriate childcare facilities. ^{22,25,30,32,41,44,47,53,56,57}

Additional home or outpatient visits in the days following hospital discharge: This implies that adolescent mothers will have an additional visit either at their residence or at a medical facility shortly after their hospital discharge. This additional visit will provide them with practical assistance and facilitate their ability to nurse their infants.²²

Educational assistance from health providers for adolescent mothers' families: Due to their lack of independence, adolescent mothers have limited control over determining their baby's nutritional needs. Within the household, grandmothers make the decisions, and adolescent mothers have complete confidence in their judgment, adhering to their advice. Adolescent mothers believe grandmothers have more experience and wisdom in caring for and nursing babies, so they defer to them for advice and support. To ensure proper nourishment for the baby, grandmothers should acquire knowledge of breastfeeding and receive education on the subject. 11,56

Changing harmful cultural values and judgments about adolescent mothers' breastfeeding:

Adolescent mothers' experiences with local cultures regarding breastfeeding and infant feeding methods and the social judgments they face in society are referred to as "cultural values" and "judgments." According to some studies, adolescent mothers' breastfeeding methods are influenced by local cultures and the judgment of other members of society. According to several studies, adolescent mothers mentioned that the cultural practices in their community and the judgments of others affect their breastfeeding methods. 25-28,34,41 Adolescent mothers often feel obligated to breastfeed, regardless of their personal preferences, due to cultural values, wrong attitudes, and judgments of other people and health professionals. According to adolescent

mothers, they frequently receive unwanted remarks and societal stigma from strangers when breastfeeding their babies in public.^{47,52,61}

Peer support and peer counseling: Peer assistance and counsel are necessary for adolescent mothers during postpartum and breastfeeding. They have a greater comfort level when conversing with friends rather than professionals.^{25,43}

Receiving breastfeeding counseling based on cultural sensitivities: It is crucial for healthcare providers to establish strong communication channels with adolescent mothers and have a deep comprehension of the obstacles they face while breastfeeding, ensuring appropriate support. When offering breastfeeding training and counseling, healthcare providers must acknowledge and respect an individual's cultural background and sensitivities to ensure that the support is fitting and considerate.³²

Economic needs: Due to insufficient parental funds, teenage mothers require financial assistance to afford essential items such as medication, groceries, personal belongings, and transportation. Thus, it becomes necessary for these young mothers to seek employment to cover their expenses and provide for their children.⁴⁴

Discussion

The objective of this study was to determine the type of assistance that adolescent mothers require regarding breastfeeding. Information was gathered by summarizing 41 studies. The study's findings revealed eight different categories of breastfeeding needs among adolescent mothers. The need for social support from family, sexual partners, friends, and medical professionals during breastfeeding is one of the needs of adolescent mothers. The difficulties of puberty, the ensuing psychological and physical changes, and adolescent mothers' ignorance of infant care and breastfeeding all contribute to their increased dependence on others. ^{54,62,63} For mothers from Indonesia and the United States, support from family and friends, particularly parents, is essential for initiating and continuing breastfeeding. Successful breastfeeding necessitates the support of family members, the provision of accurate information, motivation, and the establishment of friendships for these mothers. ^{31,64,65}

Adolescent mothers from Thailand who receive assistance from their families are more inclined to initiate and maintain breastfeeding their children for some time. In both America and England, adequate maternal grandmother support fosters effective parenting and adolescent adaptation to the maternal role, which simultaneously influences the benefits of breastfeeding. Support from a sexual partner is additionally recognized as a significant facilitator of breastfeeding continuation in adolescent mothers. According to research from Ghana, Hawaii, and Indonesia, sexual partners' verbal encouragement and participation in breastfeeding are associated with mothers' ability, confidence, and self-esteem to breastfeed. 27,55,67,68

Adolescent mothers require continuous support from healthcare professionals to overcome barriers to breastfeeding. ^{24,35} Formal support in the early postpartum period is beneficial for increasing knowledge, skills, self-confidence, and a sense of empowerment in adolescent mothers while breastfeeding, as well as providing a supportive setting in which to learn to breastfeed. ^{55,69,70} Ingram et al. (2008) discovered that young Somali and Afro-Caribbean women had minimal knowledge of the benefits of breast milk. ⁷¹ The absence of practical breastfeeding knowledge can lead to dissatisfaction, diminished self-assurance, and therefore, an early initiation of milk powder. ^{37,44} According to a survey of 53 adolescent mothers in Virginia, most mothers did not receive adequate information about the benefits of breastfeeding after giving birth. ⁷² According to the findings of a US study conducted by Wambach and Koehn (2004), adolescent mothers should be informed about breastfeeding misconceptions. Common misconceptions include the idea that breastfeeding is related to breast size, or that breastfeeding causes a mother's breasts to sag. ⁷³

Another need for breastfeeding adolescent mothers is educational support provided by health professionals to the adolescent mothers' households. Because adolescent mothers lack independence, they may live with family members, and their breastfeeding practice is impacted by grandparents' and other family members' ideas and knowledge. ^{25,63,74} Despite receiving adequate breastfeeding guidance from healthcare professionals, adolescent mothers in South Africa and Thailand were unable to breastfeed because grandmothers applied their opinions on

how to feed the infant. ^{11,56} For instance, according to 67% of Brazilian grandmothers, feeding infants younger than six months old should occur, even though doing so raises the possibility of diseases like diarrhea, which can leave a child weak, malnourished, and even critically ill. ⁷⁵ Adolescent mothers in Thailand usually abandon exclusive breastfeeding when faced with family conflicts related to infant feeding. ⁷⁶

Shifting cultural norms and judgments is one of the needs of adolescent mothers during breastfeeding. Examples of behaviors that prevent breastfeeding initiation include giving the infant special foods or liquids or delaying early feedings. Studies in India and Kenya show that people believe that infants should not be given colostrum or water during the first week of life to prevent jaundice. 77,78

Further research conducted in Thailand and Brazil revealed that the social stigma associated with being an adolescent mother and the judgments made by others about her ability to breastfeed make breastfeeding challenging and complex, particularly in public settings. ^{47,52} The results of a systematic review conducted by MacGregor and Hughes (2010) adolescent mothers frequently encounter challenges in breastfeeding due to concerns about judgment and potential embarrassment, resulting in decreased self-assurance. ⁷⁹ Utilizing mass communication tools to educate the public and alter societal attitudes toward adolescent mothers can alleviate the stigma that exists in society.

Peer support and peer counseling were another requirement of adolescent mothers while breastfeeding. Adolescent mothers who have formal or informal relationships with their peers are more likely to succeed in exclusively breastfeeding their infants. Even supportive friends who may lack knowledge about breastfeeding play a crucial role in boosting confidence and sustaining adolescent mothers' commitment to breastfeeding.^{25,80}

It is often crucial to provide adolescent mothers with tailored support and counseling on breastfeeding based on their cultural and individual backgrounds. Breastfeeding support is crucial for assisting adolescent mothers in discussing their feelings and worries regarding their infant's feeding. Gaining insight into the individual requirements of adolescent mothers, offering

them emotional support, and enhancing their self-esteem is imperative. Encouraging them to breastfeed presents a valuable opportunity to foster a strong connection between mother and baby. ³² Healthcare professionals conducting breastfeeding counseling sessions should display empathy and respect toward the individual requirements of each adolescent mother while also acknowledging and valuing their cultural beliefs. ^{81,82}

While breastfeeding, adolescent mothers require assistance from their educational institution. Collaboration between the education and health departments is needed to assist adolescent mothers in continuing their education while also breastfeeding. Their responsibility is to ensure that these mothers breastfeed their infants exclusively and receive the necessary support to return to school. S6,83 In the United States, Canada, and South Africa, the lack of school support for adolescent mothers during breastfeeding led to the discontinuation of exclusive breastfeeding. A4,57,84 To facilitate the return of adolescent mothers to school after giving birth, a kindergarten can be opened next to several schools in a city to care for their children, and the cost of child care can also be waived. Adolescent mothers in this scenario have the option of leaving their children at the facility while they attend school. Teachers can provide knowledge to adolescent mothers through online platforms or in-person interactions.

Adolescent mothers require financial support during breastfeeding. These adolescent mothers experienced poverty and economic needs due to a lack of academic qualifications for specific job positions, a lack of financial support from their impoverished parents, a lack of funds to initiate a small business, or a struggle to secure employment due to pregnancy or having a child, which poses obstacles to their employment prospects. ⁴⁴ Training in earning skills such as farming and handicrafts can thus be an option for improving the economic status of these mothers. ⁸⁵ It is significant to mention that if the adolescent mother has financial means, her access to food will increase. Also, because the mother is growing older, breastfeeding will not deplete the mother's body reserves, and the mother can safely breastfeed. ⁸⁶ Furthermore, if the adolescent mother has financial means, she will not have to work, giving her more time to fulfill her motherly responsibilities.

The focus of this study was to examine various research that contribute to our understanding of adolescent mothers' breastfeeding needs, which is the study's strength. The findings of this study may not apply to poorer countries because most of the included studies were conducted in developed and high-income countries, which is a limitation of the present study.

Recommendation

Policymakers in the health system should pay attention to these mothers' breastfeeding needs and design the necessary programs and interventions to meet those needs. The Ministry of Education should enact the necessary policies and laws to encourage mothers to return to school. It is suggested that NGOs provide financial assistance to adolescent mothers. It is suggested that future studies design and implement the necessary interventions based on the current research findings to address the breastfeeding needs of adolescent mothers.

Conclusion

According to the current study's findings, teenage mothers require a variety of factors to ensure successful breastfeeding. Their family, partners, friends, and healthcare providers play a vital role in providing the necessary support for breastfeeding success. Furthermore, they must change cultural values and social stigma associated with being an adolescent mother, so supportive efforts should be made to support breastfeeding in public, reduce the stigma associated with parenting adolescents, and create a culture in which breastfeeding is accepted as a norm for all mothers. These mothers require assistance from the school to return to school after giving birth and exclusively breastfeed their babies. The current study's findings reveal that healthcare providers should improve adolescent mothers' breastfeeding training and knowledge to help them breastfeed more effectively.

Authors' Contribution

AY and FZK collected the data and drafted the manuscript. TKH critically reviewed and edited the original manuscript. All authors revised the manuscript and approved the final version.

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Conflict of Interest

The authors declare no conflict of interest.

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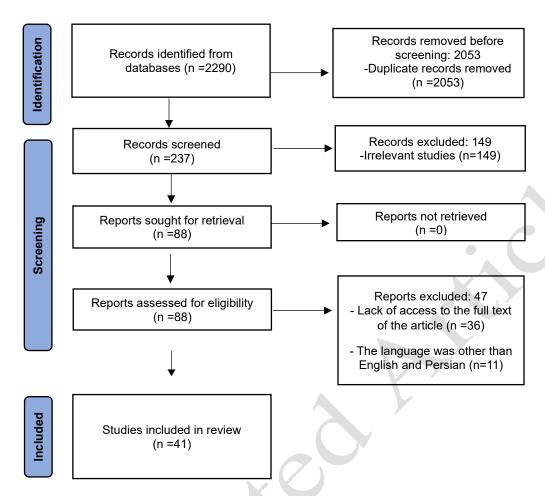


Figure 1: PRISMA 2020 Flow diagram of the studies identified in the systematic review

Table 1: Characteristics of 41 articles included in study

Row	Author	Year	Design study	Country	Study title	Type of needs	CASP
							score
1	Patricia R.	2000	Qualitative	USA	African-American and Latina Adolescent	- Changing cultural values and judgments	16
	Hannon (28)		descriptive		Mothers' Infant Feeding Decisions and	-Educational and skills needs about	
			study		Breastfeeding Practices: A Qualitative Study	breastfeeding	
2	Fiona Dykes	2003	Qualitative	United	Adolescent Mothers and Breastfeeding:	Social support from health providers, partners	17
	(35)		exploratory	Kingdom	Experiences and Support Needs—An	and grand mothers	
			study		Exploratory Study		
3	Alison Nelson	2005	Grounded	Canada	The Breastfeeding Experiences of Canadian	-Social support from health providers	18
	(42)		theory		Teenage Mothers		
4	Victoria Hall	2006	Qualitative	United	Breastfeeding support for adolescent mothers:	- Social support	18
	Moran (33)		descriptive	Kingdom	similarities and differences in the approach of		
			study		midwives and qualified breastfeeding		
					supporters		
5	Angela Arthur	2007	Phenomenology	England	Teenage mothers' experiences of	Social support from health providers and	17
	(36)				maternity services: a qualitative study	family	
6	Lynn	2008	Qualitative	USA	Determinants of Infant-Feeding Choice Among	- Social support from health providers,	16
	Morrison (27)		study		Young Women in Hilo, Hawaii	partners and grand mothers	
					/	- Changing cultural values and judgments	
7	Karen A.	2009	Qualitative	USA	Breastfeeding Experiences of Urban	-Educational and skills needs about	16
	Wambach (29)		descriptive		Adolescent Mothers	breastfeeding	
			study			-Schools support	
8	Antonia M.	2009	Qualitative	Island	Adolescent attitudes, beliefs and concerns	-Educational and skills needs about	16
	Nelson (59)		exploratory		regarding breastfeeding	breastfeeding	
			study			-Social support from health providers	

9	Isabelle	2010	Qualitative	Belgium	Adolescent mothers' perspectives regarding	-Educational and skills needs about 18	
	Aujoulat		exploratory		their own psychosocial and health needs: A	breastfeeding	
	(60)		study		qualitative exploratory study in Belgium	A (/)	
10	Christine	2011	Mixed Methods	USA	Infant feeding experiences among teen	- Extra home	19
	M		study		mothers in North Carolina: Findings from a	- School support form breastfeeding mothers	
11	Laur	ren 2011	Qualitative	USA	Exploring barriers to exclusive breastfeeding	-Schools support	16
	Hansen	(30)	descriptive		among adolescent Latina women	-Family support	
12	Paige H	all 2012	Qualitative	USA	Early breastfeeding experiences of adolescent	-Educational and skills needs about breastfeeding	18
	Smith		prospective		mothers: a qualitative prospective study	- Social support from health providers and partner	
	Silitii		study		momers a quantum opposition of the	200-m support from from pro facts and parties	
13	Sherry	A 2012	Qualitative	Canada	Canadian adolescent mothers' perceptions of	-Social support	18
	Nesbitt	(40)	descriptive		influences on breastfeeding decisions: a	-Educational and skills needs about breastfeeding	
14	Nikki Kee	ene 2013	Qualitative	USA	Describing Adolescent Breastfeeding	- Changing cultural values and judgments	15
	Woods	(26)	study		Environments Through Focus Groups	-Social support from health providers	
					in an Urban Community		
15	Louise	2013	Qualitative	United	But is it a normal thing? Teenage mothers'	-Educational and skills needs about breastfeeding	15
	Condon (34))	descriptive	Kingdom	experiences of breastfeeding promotion and	- Changing cultural values and judgments about	
			study		support	breastfeeding of adolescent mothers	
16	Ryo	ko 2014	Qualitative	USA	Adolescents' Needs for Nurses' Support	-Social support from health providers	18
	Pentecost	(24)	content analysis		When Initiating Breastfeeding		
17	Jo Bettis	on 2014	Phenomenology	England	Health visitors' perceptions of encouraging	Educational and skills needs about breastfeeding	17
		(37)			and supporting teenage mothers to breastfeed	-Social support from health providers	
18	Lou	ise 2014	Qualitative	England	Supporting teenage mothers to initiate	-Social support from health providers	16
	Hunter	(38)	study		breastfeeding and developing a support		
					intervention to increase breastfeeding rates in		
19	J.C.S.	2014	Mixed-Method	Brazil	Breast feeding among Brazilian adolescents:	-Social support from health providers, partner and	17
	Montairo (4	45)			Practice and needs	family	

20	Verônica de	2014	Qualitative	Brazil	Influence of social support networks for	-Social support from health providers, partner,	18
	Azevedo		exploratory		adolescent breastfeeding Mothers in the	family	
21	Louise	2015	Qualitative	England	Disempowered, passive and isolated: how	-Social support from health providers	15
	Hunter (39)		study		teenage mothers' postnatal inpatient		
					experiences in the UK impact on the initiation		
22	Kristy M.		Qualitative	Canada	A qualitative study exploring perceived	-Educational and skills needs about breastfeeding	18
	Hackett (41)	2015	descriptive		barriers to infant feeding and caregiving	Schools support	
			study		among adolescent girls and young women	- Changing cultural values and judgments	
23	Amanda	2016	Qualitative	Brazil	Breastfeeding exclusive breastfeeding:	-Educational and skills needs about breastfeeding	16
	Cordeiro		descriptive		interruption of causes in mothers of teens	-Support and flexibility at work and school	
	Oliveira (47)		study		perception	- Changing cultural values and judgments about	
24	Silvana	2016	Qualitative	Brazil	Breastfeeding: factors affecting the early	-Educational and skills needs about breastfeeding	17
	Souza (48)		study		weaning between adolescent mothers		
25	Beverly	2017	Qualitative	USA	Human Milk Provision Experiences, Goals,	- Social Support from health providers and grand	18
	Rossman (31)		study		and Outcomes for Teen Mothers with Low-	mothers	
					Birth-Weight	-Educational and skills needs about breastfeeding	
26	Rosann	2017	Qualitative	Canada	Factors influencing the breastfeeding	Social and emotional support from health	18
	Edwards (43)		content analysis		Practices of young mothers living in a	providers and peers.	
					Maternity shelter: A Qualitative Study		
27	Lurian de	2017	Qualitative	Brazil	Support received by adolescent mothers in the	-Educational and skills needs about breastfeeding	16
	Bairros		descriptive		maternal breastfeeding process	- Social support from health providers, partner and	
	Tamara (46)		study			family	
28	Massoumeh	2017	Qualitative	Iran	Exploring the challenges of adolescent	-Educational and skills needs about breastfeeding	18
	Mangeli (58)		content		mothers from their life experiences in the	-Social support	
			analycic		transition to motherhood		

29	Josephine	2018	Qualitative	Canada	Needs and barriers of teen mothers in rural	-Schools support	17
	Nabugoomu		descriptive		eastern Uganda: stakeholders' perceptions	-Educational and skills needs about breastfeeding	
	(44)		study		regarding maternal/child nutrition and health	-Economic needs	
30	Sasitara	2018	Qualitative	Thailand	Breastfeeding Experiences among Thai	-Social support from family and health providers	18
	Nuampa (53)		descriptive		Adolescent Mothers: A Descriptive	-Schools support	
			Study		Qualitative Study	- Changing cultural values and judgments	
31	Ngcwalisa	2018	Qualitative	South	Autonomy and infant feeding decision making	- Support from health providers for family of	18
	Amanda		longitudinal	Africa	among teenage mothers in a rural and urban	adolescent mothers	
- 22	Iama (56)	2010	design	****	setting in KwaZulu-Natal South Africa	-School support form breastfeeding mothers	10
32	Alison	2019	Qualitative	USA	Multilevel Factors Influencing Young	-Peer support and peer counseling	19
	Chopel (25)		prospective		Mothers' Breastfeeding: A Qualitative	-Schools support	
			study		CBPR Study	- Changing cultural values and judgments	
33	Erfina	2019	Phenomenology	Indonesia	Exploring Indonesian adolescent women's	-Educational and skills needs about breastfeeding	19
	Erfinaa (51)				healthcare needs as they transition to	- Social support from health providers	
					motherhood: A qualitative study		
34	Thongmixay	2020	Qualitative	South	Isolation: The experience of adolescent	School support form breastfeeding mothers	16
	(57)		study	Africa	motherhood		
35	Kimberly	2020	Qualitative	United	Healthcare practitioner relationships, cultural	-Receiving breastfeeding counseling based on the	18
	Jamiea (32)		study	Kingdom	health capital and breastfeeding support for	cultural sensitivities	
36	Sasitara	2020	Qualitative	Thailand	Breastfeeding challenges among Thai	-Support from health providers for family of	17
	Nuampa (11)		descriptive		adolescent mothers: hidden breastfeeding	adolescent mothers	
37	Angela K.	2020	Qualitative	Ghana	Perceived enablers of exclusive breastfeeding	-Social supports from health providers and family	18
	Acheampong		exploratory		by teenage mothers in Ghana	- Educational and skills needs about breastfeeding	
	(54)		study				
38	Wulan	2021	Phenomenology	Indonesia	Qualitative Study of Breastfeeding Practice	-Social support from health providers, partner,	17
	Wijaya (50)		Y		Experiences of Teenager Mothers	family	

39	Andari Wuri	2021	Qualitative	Indonesia	A Qualitative Study on the Breastfeeding	-Educational and skills needs about breastfeeding	18
	Astuti (52)		exploratory		Experiences of Young Mothers	- Social support from family, partner and peers	
			study			- Changing destructive cultural values	
40	Reuben	2021	Phenomenology	Ghana	Childcare practices among teenage mothers in	-Social support from health providers, partner,	18
	Foster				Ghana: a qualitative study using the ecological	family	
41	Christa	2022	Qualitative	Australia	Experiences of young Australian mothers	-Social support from health providers and peer	19
	Buckland (61)		Study		with infant feeding	-Educational and skills needs about breastfeeding	
						- Changing cultural values and judgments	