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Breastfeeding challenges among adolescent mothers: a phenomenological study at the Korle Bu Teaching Hospital in Ghana

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ABSTRACT

Background The natural and best approach to give newborns the nutrients they need for healthy growth and development is through breast feeding. Breastfeeding rates fall more sharply with time for mothers under the age of 20 years.

Aim This study sought to explore the challenges experienced by adolescent mothers who visit the department of obstetrics and gynaecology of Korle Bu Teaching Hospital in Ghana.

Method This study employed a qualitative phenomenology design and collected data from adolescent mothers. Data were gathered with the aid of a semistructured in-depth interview guide from 13 breastfeeding adolescent mothers. Data for the study were analysed using content analysis. The study was conducted at the obstetrics and gynaecology department of Korle Bu Teaching Hospital, Ghana.

Findings Two major themes were generated from the study to be the challenges that confront adolescent breastfeeding mothers, and they are maternal factors of breastfeeding barriers and societal factors of breastfeeding barriers. Subcategories were generated for both themes during the process.

Conclusion and recommendation Training of pregnant adolescents during antenatal care visits on how to manage the inability to lactate, breastfeeding stress, painful and sore nipple, engorged breast, stigma from society will lessen their burden. Furthermore, training close family members and friends on how to be kind and support adolescent mothers during breast feeding is important. In-service training should be organised for health workers to enhance their knowledge and practice of approaching and guiding adolescent mothers on effective breast feeding and the provision of cubicles in public places where adolescent mothers can comfortably breastfeed.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Using the phenomenological study design allowed for the collection of enough information from adolescent mothers with common experiences to understand their perception of breast feeding.
⇒ The willingness of parents of adolescent mothers to grant parental assent allowed for the effective collection of data from mothers under 18 years.
⇒ The researchers were unable to solicit the challenges of breastfeeding mothers above 18 years, this could have clarified whether the challenges were unique to adolescent mothers or also apply to older mothers.
⇒ Our findings may have limited transferability to those adolescent mothers with more than one child since almost all our study participants were breast feeding for the first time.

INTRODUCTION

Breast feeding is the practice of providing a newborn with human milk, either directly from the breast or by expressing the milk from the breast and giving it to the child in a bottle.[1] Breast feeding can be initiated by every woman provided they have the requisite information, support from families, support from the healthcare system and society at large.[2] Additionally, breast feeding benefits a baby's emotional and intellectual growth in addition to their physical health.[3] It is estimated that about 800 000 deaths of children could be averted by exclusive breast feeding.[4] According to the study by Victora *et al*, universal breast feeding might cut the number of deaths among children under the age of 5 worldwide by 823 000 each year.[3] It is believed that keeping breast milk as a baby's main nutrition source lowers the risk of mortality among neonates and low birthweight babies.[5] Despite the numerous benefits of exclusive breast feeding, global evidence indicates that just one out of three infants is exclusively breastfed.[4]

Studies have shown that maternal age influences breastfeeding preferences and behaviours. For instance, it is documented in the literature that adolescents do not like to breastfeed.[6 7] Furthermore, mothers under 20 and over 40 years were more likely to violet exclusive breastfeeding principles as compared with mothers of other ages, and almost all mothers under 20 years could not

practise exclusive breast feeding since they introduced cottage cheese paste and egg yolk to their breastfeeding children earlier than recommended.[8]

A study by Corsack *et al* in the USA revealed that breastfeeding rates among adolescent mothers are still disproportionately low.[6] A study of African Australian experiences of teen mothers noticed that teen mothers were generally frowned on and observed to set bad examples to other teenagers as well as the community and this has negatively influenced their breastfeeding practices.[9] In South Africa, a study to explore the factors that influence exclusive breast feeding has concluded that exclusive breast feeding is not a common practice because breastfeeding mothers introduce solid foods and other infant formulas at the early stages of breast feeding.[10]

In Ghana, the exclusive breastfeeding rate among all women recorded in 2021 is 43.7% and many (61.1%) mothers breastfed their babies within the first hour of birth. Furthermore, a few (5.1%) of the breastfeeding mothers gave fluids to their children on the first day of birth. Also, many (66.4%) of the mothers started complementary feeding at 6 months and less than a quarter (22.0%) of them breastfed their babies 1 year and beyond. Additionally, a considerable number (40.4) of mothers feed their children on demand.[11] Premature introduction of porridges and water is a norm among breastfeeding women in Africa[12] In Ghana, most adolescent mothers go through challenges in ensuring exclusive breast feeding, however, data on breast feeding are not presented according to age group in Ghana.[13] Factors such as negative feelings, perceived self-inefficacy, disapproval of exclusive breast feeding by relatives, social myths among others were mentioned to contribute to poor practice of exclusive breast feeding among adolescent mothers.[14] Also, a qualitative study by Tampah-Naah *et al* in a rural community in Ghana revealed that breastfeeding mothers under 19 years were easily influenced negatively regarding breast feeding by their society.[15]

Globally, the World Health Assembly Resolution 65.6 of 2012 called on Ghana and other member countries to increase their rate of exclusive breast feeding in the first 6 months to at least 50%.[16] This policy encouraged all member countries to take actions that are cost-effective to achieve the above target. The Ministry of Health Ghana has formulated a national breastfeeding policy as a legal framework to promote breast feeding in the country. The policy is to compel health personnel to support, protect and encourage breast feeding in the country.[17] Although there have been the above interventions and other interventions such as interventions based on support from professionals and peers to increase the rate of exclusive breast feeding, the rate among adolescent mothers according to literature review has still not improved.[18] Once the challenges regarding breast feeding among adolescent mothers are better understood, problem-specific nursing interventions can be developed to facilitate the initiation and continuation of exclusive breast feeding among adolescent mothers. Therefore, the purpose of this study is to explore the challenges of adolescent mothers who attended postnatal services regarding breast feeding their infants.

METHOD

Research team and reflexivity

The research team is made up of three nurses with one of them being a lecturer. They all have interest in maternal and child health. The lead author, MS, was a student for a membership programme in neonatal intensive care nursing. SK who has experience in qualitative research guided the lead author throughout this work. The lead author and LY who is a paediatric nurse specialist conducted the interviews. Both have experiences in conducting qualitative studies. All authors have postgraduate education in nursing. None of the authors work in the facility used for the study, and therefore, has no bearing with any participants personally and professionally.

Study design

This study employed a qualitative phenomenological design and collected data from adolescent mothers on their perspective of breastfeeding experiences. The Standard for Reporting Qualitative Research by O'Brien *et al* was used as a guide to present this paper.[19]

Setting and participants

The research was conducted at the Korle Bu Teaching Hospital's (KBTH) Department of Obstetrics and Gynaecology, where adolescent mothers were present. The obstetrics and gynaecology department provides 275 beds for obstetrics and 97 beds for gynaecology and the department is divided into five units. The department serves as a referral centre for the southern part of Ghana with over 10 million population size. Each of the five obstetrics units has a fixed antenatal clinic day for the unit.[20] The target group for this study comprises adolescent mothers between 15 and 19 years who had delivered and were receiving outpatient postnatal care with their babies and for mothers below 18 years, only those who received parental assent were recruited.

Sampling and data collection

Following ethical clearance from Korle Bu Institutional Review Board, permission was sought from the Departments of Obstetrics and Gynaecology units of KBTH. The researcher used the admission and discharge books in the ward or folders/records to trace the location of all adolescent mothers who met the inclusion criteria. The inclusion criteria were mothers between 15 and 19 years, receiving outpatient postnatal care with their babies, mothers under 18 years who gave their consent and had parental assent to participate in the study. Exclusion criteria were mothers between 15 and 19 years who had delivered and were severely ill and adolescent mothers with psychiatric conditions. Through the purposive sampling technique, the participants were selected.

Prospective participants were contacted physically at their various locations within the hospital and through telephone calls. Information about the study including the purpose, confidentiality and anonymity was discussed with the participants. Subsequently, appointments were scheduled by the researchers and participants according to the convenience of both participants and the researchers in terms of the time, date and place for each interview. Participants were reminded through physical contact and phone calls a day before the interview. At the agreed date, time and place of the interview mostly in the homes of participants, the purpose of the study was re-emphasised before the start of the interview and the participants were given another opportunity to decide whether to participate or not. Also, permission was sought from the participants to record the interviews after the rationale had been explained to them. Those who agreed to take part in the study were given a written consent form to sign or thumbprint as well as their parents/guardian for those under 18 years. The interviews were conducted face-to-face lasting between 30 and 40 min. The interviews were conducted in English for 10 participants and in 'Twi' a Ghanaian language for 3 participants. Data were collected from 13 participants adolescent mothers who met the inclusion criteria from 15 July 2019 to 30 August 2019. Data saturation was reached after interviewing the last participant. The semistructured interview guide contains open-ended questions and probes (see online supplemental file 1). These questions afforded mothers the opportunity to describe their experiences living alongside breast feeding their infants. Except when there was the need to probe, mothers were allowed enough time to express themselves without interruptions after each question was asked.

In the field, data were obtained via interviews and recorded by digital recorder. Non-verbal actions were documented by observation as field notes. Data were stored in a password-protected computer and kept under lock and key.

Trustworthiness

The trustworthiness of a qualitative study is described by terms such as credibility, transferability, dependability and confirmability.[21] To ensure credibility, the participants were recruited using purposive sampling to capture sufficient data to account for variations in the experiences of breastfeeding adolescent mothers, all details about the study were clearly explained to participants they confirmed that they understood, ample time was allowed for the participants to truly narrate their deep understanding of the phenomenon being studied. The responses of each participant were transcribed verbatim and translated in order not to lose any of the meaning of their narratives. The most suitable meaning units were used during the data analysis, the researchers ensured that categories and themes covered all relevant data. Representative quotations taking from the data set were used in the analysis. Transferability was ensured first by a thorough, robust description of the research design and setting. Second, researchers ensured the research could be applicable to other settings and the same findings were reflected in the similar study if conducted in the same settings. Data of this study are also dependable in the sense that the principles and criteria used in selecting participants and their characteristics were described in detail. Interviews were conducted and analysed till data were saturated and there were no known new themes that could be recognised. An audit trail, such as data from participants, interview recordings, raw data and field notes, was kept ensuring confirmability. Codes, subcategories and themes were confirmed by another researcher.

Data analysis

The five steps of content analysis according to Graneheim and Lundman were used to analyse collected data.[22] The first step of the analysis started with the researcher playing audio recordings to listen to them and transcribe all verbatim into English and 'Twi'. The 'Twi' transcript was translated into English. Researchers thoroughly and severally read transcribed data to achieve immersion and understanding the data. Second, the data were divided into meaning units, condensed and coded. Another researcher confirmed the coding. Third, the codes were compared looking at the similarities and differences and then sorted into categories accordingly. These tentative categories called the manifest content were confirmed by another team member. In the fourth step, the researchers discussed and revised the tentative categories into its latent content. The fifth step saw the condensation of the latent content of the categories into themes. All the authors confirmed the themes.

Patient and public involvement

Neither patients nor the public were engaged in the conception, design, conduct, reporting or dissemination of this study.

RESULT

Demographic characteristics

Table 1 presents the summary of 13 mothers who are adolescents and participated in the study. Out of the 13, 7 of them were interviewed in their various homes in the Accra metropolis while 6 were interviewed in a quiet office provided by the hospital. The mothers were between the ages of 15 and 19 years. The age range for their infants was between 7 weeks and 18 months. Except for one adolescent mother, all the mothers were unmarried and stayed with their relatives. Four adolescent mothers were petty traders, two were sewing apprentices, one salesperson and one a house help while five were not engaged in any job. They all initiated breast feeding on the same day of giving birth to their babies except one adolescent mother who started breast feeding a day after birth. Two adolescent mothers stopped breast feeding when their babies were 5 months. 11 adolescent mothers were still breast feeding with their babies within the ages

Table 1 Sociodemographic characteristics of participants

Characteristics of participants	Frequency (n=13)	%
Mother's age		
15	1	7.7
16	1	7.7
17	2	15.4
18	3	23.0
19	6	46.2
Marital status		
Married	1	7.7
Single	12	92.3
Maternal level of education		
No formal education	3	23.1
Junior high school	10	76.9
Parity		
One child	12	92.3
Two children	1	7.7
Occupation		
Petty trade	4	30,7
Salesperson	1	7.7
House help	1	7.7
Sowing apprentice	2	15.4
Unemployed	5	38.5
Baby's age in months		
1	2	15.4
3	1	7.7
5	2	15.4
6	4	30.7
7	1	7.7
9	1	7.7
11	1	7.7
18	1	7.7

of 1–9 months. 10 mothers had formal education up to junior high school. One of the mothers had two children with the rest having only one child.

Themes

The result of this study yielded two major themes and eight subthemes: maternal factors of breastfeeding barriers (impairment in breastmilk production, wardrobe and movement limitations, breastfeeding stress and physiological barriers to breast feeding) and societal factors of breastfeeding barriers (stigmatisation, untoward attitude of friends, untoward family attitude and hostile attitudes of health workers). Online supplemental table 2 presents the themes, subcategories, codes and quotes. They are explained below.

Maternal factors of breastfeeding challenges

Breastmilk production impairment

Some adolescent mothers expressed their challenges to breast feeding as related to their inability to produce breastmilk. Some could not produce breastmilk at all while others produced little not enough to satisfy their babies. With all these challenges adolescent mothers added that they lacked the knowledge of how to manage the situation. They expressed themselves as follows:

> I worry a lot, I don't understand why my breast milk is not coming, I think about it a lot and I have tried a lot of things to make it come but still that one makes me uncomfortable' Mother R1, age 19.

> For me, my main problem is the milk in fact it does not come. Sometimes I want to do the breast and put down for him when am going but I don't get enough. Mother R1, age 19

> …not everybody has milk to do exclusive and they didn't teach us the other side if is not coming what should you do. Mother R8, age 18

Wardrobe and movement limitations

The women treasured going out, and many of them said breastfeeding made them feel trapped and could not go out to do the things they wanted to do. Others said old dresses must be replaced because they are not convenient to wear as a breastfeeding mother and buying new clothes implies financial inconvenience too as indicated in the following expressions:

> …inconvenience of how you dress up so because of that you can't wear all your dresses and have to go and buy new shirts Mother R10, age 15.

> …then you can't go anywhere like that because there are some places you will not feel comfortable to breastfeed Mother R6, age 18

Breastfeeding stress

Most mothers complained that breast feeding was so stressful and hence they could not practise it properly. They complained that they needed to wake up in the middle of the night to breastfeed, lack of rest because of breastfeeding, stopping work to breastfeed and sometimes staying through-out the night to breastfeed. Some have these to say:

> In the middle of the night you must wake up and give breast milk and is stressful and you are tired. Mother R11, age 19

> Sometimes you get tired and need to rest a while, but the baby will have to be breastfeed. You need to be there for the baby so that is the most disadvantage thing about breastfeeding. Mother R7, age 19

> Sometimes is painful because you are busy doing something and your baby too is crying, you have to stop that thing you are doing and come and give her the breast to suck before. Mother R2, age 19.

Sometimes you need to stay throughout the night so maybe around 3am before she falls asleep, and it makes you tired. Mother R13, age 16

Physiological barriers

One challenge that was common with all these mothers was pain in the breast which interrupted effective breast feeding. Some experienced pain due to engorged breast, biting of the nipple by the baby or sore nipples due to wrong positioning of the infant. The level of pain affected the rate at which they breastfed, and sometimes the rate of breast feeding was reduced due to excessive pain in the breast. This is how they narrated it:

Because this is my first time, at times when the child is doing the suckling, I feel pain at the nipple. Is like the child wants to take everything and I don't feel comfortable with that. Mother R10, age 15

Sometimes it hurts, your nipples are sore …but you have to give them breast to suck. Mother R6, age 18

From the beginning the baby will suck and the breast will become sore and is painful. Mother R4, age 16

The breastmilk will be in the breast plenty and then it will be painful. I didn't know that one will be painful like that. Mother R4, age 16

Like when you are giving your child the breastmilk sometimes, he uses his gum to bite you and is very painful. Mother R12, age 19

Societal factors of breastfeeding challenges

Stigmatisation

The adolescent mothers, in expressing their challenges mentioned that they were stigmatised against in many ways and forms. This had a negative effect on their breastfeeding habits as some of them found it difficult to start breast feeding and even to continue afterward. Breast feeding in public was a specific situation in which adolescent mothers recounted how they felt, such as shameful of their younger age, exposing their breast during breast feeding and shame related to first-time breast feeding. They expressed themselves as seen in the following quotes.

…but when I started breastfeeding, I was feeling so shy because I haven't done some before. Mother R7, age 19

Sometimes when you are outside and you want to give the baby the breast you are ashamed like people will be looking at you, at your breast…so giving the breast to the baby outside is a problem. Mother R1, age 19

I feel unhappy because as an adolescent, I am not supposed to give birth so when breastfeeding the child, thoughts just come into my mind and I will say that as young as I am, I am also breastfeeding and it makes me feel uncomfortable Mother R10, age 15.

Some said they were accused verbally because of their younger ages and some because of the smell of breastmilk on their clothing. Furthermore, others said people pointed accusing fingers at them. Their expressions are illustrated below:

People say a small girl giving birth who asked you to give birth, is your own problem. Mother R3, age 18

…they point hands that this small girl having child when they see me give the breast to the child. It makes me feel bad. Mother R5, age 17

When you breastfeed and the breastmilk is on you, you walk around and people complain that the scent of the breastmilk is bad and that you are smelling Mother R11, age 19.

Untoward attitude of friends

Adolescent mothers were disappointed in not receiving support from their peers. They complained that their friends deserted them when they gave birth and that those who stayed around advised them to feed babies with food. This is what they had to say:

As for friends…they don't care, they will say that if the breast is not coming just give the baby food the baby is hungry. They even say that the formula is not enough I need to give the baby koko so that the baby can eat and be satisfied Mother R1, age 19.

Friends, they all ran away when I gave birth, so they don't support me Mother R3, age 19.

Untoward family attitude of exclusive breast feeding

Participants invariably described a situation where family members such as mothers-in-law and elderly women believed that babies must be given food and water as top-up in addition to breast milk even before the first 6 months. It is, therefore, difficult as seen in some narratives below to continue breast feeding exclusively when asked to do otherwise:

My family, they decided not to do it for six months, they say I should give her water. If they do, I will not shout, I only say ok. That is what my grandmother and aunties tell me. Mother R9, age 19

…as for me because of my mother in-law, I wanted to do the six months first. then she started giving her light soup, food in addition to the breastmilk. Mother R12, age 19

Hostile attitudes of health workers

Participants stated the unpolite behaviours of some health workers as challenges that they were facing. They said they were confronted with insults and shouting as narrated below:

When you go to weighing even the baby is hungry then you want to give the baby milk formula then they are shouting at you when they say you should do exclusive you didn't hear. Mother R1, age 19

No support from health professionals they even insult you that they have not asked you to give birth. Mother R5, age 17

DISCUSSION

Some studies have documented the fact that adolescent mothers are confronted with numerous challenges regarding breast feeding.[23 24]

The study has shown that adolescent mothers have breastfeeding challenges related to their inability to produce breastmilk. The early struggles with breastmilk supply got their infants hungry causing them to cry excessively which compelled other mothers to feed their infants with formula instead of the ideal breastmilk. Some mothers could not produce breastmilk at all while others produced but not enough to satisfy their babies. Mothers said that they did not have enough knowledge of breastmilk production, especially what to do when there is no breastmilk. The finding of this study is in accordance with other studies conducted in South Africa and Canada[25 26] which confirmed adolescent mothers cited insufficient breastmilk and lack of breastmilk production as their reasons for not breast feeding. Despite several mothers receiving basic breastfeeding education from childbirth class, others reported a lack of adequate information on the challenges of breast feeding and without the requisite skills needed to sustain breast feeding.[23] Their lack of knowledge on infant care such as breast feeding increased their reliance on others, including healthcare providers.

This study revealed that adolescent mothers were not happy because of the restrictions breast feeding has put them into such as limited choice of clothing and movement. The adolescents in their developmental stage like to socialise but the situation of breast feeding does not give them that chance hence they stated that breast feeding left them feeling confined and cannot go out to do the things they wanted to do. Others said old dresses must be replaced because they are not convenient to wear as breastfeeding mothers and buying new clothes implies financial inconvenience too. Mothers are restricted from going out because they go through the hustle of looking for an appropriate place to breastfeed which comes with inconveniences. It is similarly recorded in a study among Latino adolescent mothers who were breast feeding. According to the mothers they were not able to go out because of a lack of a convenient place to breastfeed their babies and breast feeding in a public restroom came with embarrassment.[27] A study in Accra, Ghana has shown that almost all its participants advocated for the usage of private places when breast feeding in public.[28] Some breastfeeding mothers said they could not even attend parties again because of breast feeding and that was a source of worry for them.[29] One of the biggest challenges for newly breastfeeding mothers is finding new clothing that is appropriate for breast feeding and identifying them as new mothers which equally comes with financial implications, their inability to get appropriate clothing for breast feeding has a negative impact on them.[30]

The findings of this study show that most mothers complained of stressful breast feeding, hence they could not practise it properly. They complained that they needed to breastfeed throughout the day, wake up in the middle of the night to breastfeed, lack of rest because of breast feeding, stop working to breastfeed and sometimes stay throughout the night to breastfeed. Similarly, Monteiro *et al* identified anxiety and tiredness as problems presented by adolescent breastfeeding mothers in Brazil.[31] In Ghana, mothers equally complained that breast feeding was stressful most especially when combined with work[32] while in Gambia, some mothers complained about headaches due to stressful breast feeding and lack of enough sleep both day and night.[33] Furthermore, Leerlooijer *et al* in a meta-synthesis on 15 qualitative studies on adolescent breast feeding described the breastfeeding experiences of an adolescent mother as engrossing because of the findings of self-sacrifice they had to make and the life adaptation that breast feeding requires.[34] Stress experienced by adolescent mothers could negatively impact their ability to continue breast feeding.[25]

The findings of this study have further shown that one challenge that was common with adolescent mothers was pain in the breast which interrupted effective breast feeding. Some experienced pain due to engorged breast, biting of the nipple by the baby or sore nipples due to wrong positioning of the infant. The level of pain affected the rate at which they breastfed, sometimes the rate of breast feeding was reduced due to excessive pain in the breast. Adolescent mothers lack knowledge on the management of nipple pain in the initial stages of breast feeding and consider the pain as normal while breast feeding. Similarly, some studies have demonstrated the association between painful nipples and the number of times mothers breastfeed and they advised that it is crucial for a health professional to assist in the prevention and management of common difficulties during breast feeding such as nipple pain, breast engorgement, breast infections and low milk production to improve on the effectiveness and frequency of breast feeding.[23 25]

This study revealed that breastfeeding adolescent mothers experience shame and embarrassment, especially in the initial stages of breast feeding. Breast feeding in public was a specific context in which the adolescent mothers described feeling as shameful of their younger age, exposing their breast during breast feeding, and shame related to first-time breast feeding. Similarly, a study among breastfeeding adolescent mothers in California found that adolescent mothers expressed shame related to breast feeding in public and breast feeding at a younger age. The mothers equally expressed the shame related to showing breast outside because it is seen as something sexual. Some were shameful of the look of passersby when breast feeding.[35] Furthermore, studies conducted in South Africa and Ghana stated that because of the changes in societal norms in Africa, mothers feel

shame about breast feeding in public. This has resulted in mothers trying to cover their breast during breastfeed.[28 36] However, some studies instead of shame related to breast feeding have recorded shame related to adolescent mothers stopping breast feeding. Their shame is related to the consequences of the stoppage of breast feeding such as babies falling sick frequently and limited attachment to mothers. Mothers expressed regret for stopping breastfeeding early.[37]

The adolescent mothers, in expressing their challenges, equally mentioned that they were stigmatised in many ways and forms. Some said they were accused verbally because of their younger ages and some because of the smell of breastmilk on their clothing. Furthermore, others said people pointed accusing fingers at them. This affected their breastfeeding habits as some of them found it exceedingly difficult to breastfeed in public. It is also consistent with a qualitative evaluation of adolescent mothers in Uganda which indicated that adolescent mothering is popularly linked to irresponsibility. In view of this, young mothers reported experiencing stigma and discrimination because of being teenage mothers.[34] On the contrary, Manion *et al* demonstrated a decrease in public embarrassment of breast feeding as those mothers attended more meetings on infant nutrition education which was a support intervention group organised by interprofessionals to increase and sustain breast feeding among mothers.[38] Understanding of adolescent mothers on the importance of breast feeding both to the infant and mother will motivate them to breastfeed their babies.[23 39] It could be said that with interventions such as education and counselling, embarrassment and shame could be reduced among mothers who feed their infants in public and particularly adolescent mothers.

The adolescent mothers in this study were disappointed in not receiving support from their peers. They complained that their friends deserted them when they gave birth and that those who stayed around advised them to feed their babies with food. Studies have similarly shown that these same friends that are a source of help can influence the adolescent mother negatively.[40 41] In Uganda, it is reported that most adolescents who became pregnant were neglected by their friends.[42] The negative influence of friends is stronger than even that of family members and the support from friends and peers of the adolescent mother contributes positively to the breast feeding practices of the adolescent mother.[43] Public or individual education for the peers of adolescent breastfeeding mothers will have a greater positive influence on the breastfeeding habit of the mothers. Contrary to the findings of this study, another research has shown that adolescent peers supported and motivated one another during breast feeding, but this was found among peers in similar situations of breast feeding.[44] Receiving support from a colleague adolescent not in the same situation as breast feeding is almost impossible. Those friends labelled as distractive or unsupportive are those inexperienced in breast feeding hence proposes adolescent mothers feed their babies with food.[26] Getting close friends of adolescent mothers to be part of antinatal and or postnatal education on breast feeding can improve the breastfeeding practices of adolescent mothers.

The adolescent mothers invariably described a situation where some family members such as mothers-in-law and elderly women believed that babies must be given food and water as a top-up in addition to breast milk even before the first 6 months. Similarly, a study conducted in periurban district in Ghana has reported that mothers could not practise exclusive breast feeding because of opposing forces from their spouses and family members.[45] Furthermore, the fears of the adolescent mother regarding the child not gaining weight on exclusive breast feeding makes it difficult to resist the demand of the family of giving food and water to their babies.[46] It is, therefore, difficult for adolescent mothers to continue breast feeding exclusively when asked to do otherwise by family members. Training close family members of adolescent mothers during antinatal and postnatal care on how to be good and supportive of adolescent mothers during breast feeding will further promote exclusive breast feeding.

The result of this study has shown that adolescent mothers were confronted with unpolite behaviours of some health workers as challenges. They complained that they were shouted at and insulted by healthcare practitioners. Similarly, a study in the West Gonja district of Ghana has indicated that adolescents have refused to seek reproductive health services because of perceived negative attitude of healthcare providers.[47] The inability of healthcare practitioners to demonstrate a cheerful outlook towards adolescent mothers who seek care can be due to inadequate knowledge or poor attitude.[46] To curb this menace among healthcare practitioners, to improve exclusive breast feeding among adolescent mothers, it is necessary to provide education for healthcare practices that will target increasing their knowledge and improving their attitude towards assisting adolescent mothers during breast feeding.

Strengths and limitations of the study

This study is the first research to explore the challenges of adolescent mothers in the setting and has provided rich information on adolescent mothers' breastfeeding challenges from the perspective of the participants. Information provided by this study bridges the knowledge gap in this area and provides a resource for policy formulation, clinical practice and development of interventions that will aim at reducing the challenges faced by adolescent mothers during breast feeding. However, the study is limited by some factors. It did not include older mothers so it is not clear if the findings are unique to adolescent mothers in Ghana or if they are also true for older women. Some mothers who met the inclusion criteria declined to grand interview the researchers when they were informed that they were going to be recorded, as they were not comfortable with their voices and experiences being

recorded. The experiences of these mothers if shared were going to enrich the study.

Conclusion, implication for practice, policy and recommendations

Adolescent mothers who are breastfeeding encounter barriers related to themselves as mothers and barriers caused by the society they live in. Some of the challenges they face are breastmilk production impairment, wardrobe and movement limitations, breastfeeding stress, stigma from themselves and the society, and untoward and hostile attitude of some friends, family and healthcare practitioners. These challenges depict the experiences adolescents go through in their efforts to breastfeed their infants. Despite the existence of breastfeeding policies in Ghana to ensure exclusive breast feeding, the adolescent mother still experiences challenges that hinders their effort to exclusively breastfeed. The findings have implications for policy interventions. Existing policies on breast feeding need amendments to take into consideration these challenges faced by adolescent mothers. The implementation of these policies needs to be reviewed to ensure effective practice of exclusive breast feeding by adolescent mothers. Researchers are encouraged to develop and evaluate the effectiveness of new breastfeeding interventions that take into consideration the plight of breastfeeding adolescent mothers, their friends, family and health professionals. Furthermore, the researchers recommend training adolescent mothers during antenatal care visits on how to manage inability to lactate, breastfeeding stress, painful and sore nipple, engorged breast, stigma from society, and the life of the breastfeeding mother. Furthermore, training close family members and friends on how to be kind and supportive to adolescent mothers during breast feeding will further promote exclusive breast feeding. In-service training be organised for health workers to enhance their knowledge and practice of approaching and guiding adolescent mothers on effective breast feeding. The researchers recommend the provision of breastfeeding cubicles at public places where adolescent mothers can comfortably breastfeed their infants to limit refusal to breastfeed due to embarrassment.

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Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Ethical clearance was granted by the Korle Bu Institutional Review Board (ID- KBTH-STC/IRB/00048/2019) on 25 June 2019 prior to the study. Permission was also sought from the Departments of Obstetrics and Gynaecology of KBTH before the commencement of the study and informed consent was sought from the adolescent mothers before the interview. The researchers informed the participants fully about the aims, methods and benefits of the research granting of voluntary concern and maintaining the right of withdrawal. Anonymity of the participants was important and was ensured by not collecting or allowing them to indicate their names, identifying data or other traceable details on the consent form or the interview. Confidentiality and the right of withdrawal were explained to the participants. Those who agreed to take part in the study were given a written consent form to sign or thumbprint as well as the parents/guardian for those under 18 years. They were also protected against physical and/or psychological harm by allowing them to relax and express emotional concerns about the study and interviewing participants in safe and private environments. The immediate benefits for the participants were that of education on breast feeding. By studying the influences and challenges involved in adolescent mothers' breastfeeding experience, recommendations were made based on the findings. No risk was recorded of any mother during participation in the study.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article or uploaded as online supplemental information.

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REFERENCES

1 National Institute of Child Health & Human Development. Breastfeeding. 2021. Available: http://www.nichd.nih.gov/health/topics/Breastfeeding/(top)
2 Ghana Health Service. Newborn care programme. 2017. Available: www.ghanahealthservice.o/newborn/progracat.php?ghsid=3&ghscid=76
3 Victora CG, Bahl R, Barros AJD, *et al*. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet* 2016;387:475–90.
4 World Health Organization. Increasing breastfeeding could save 800000 children and US$ 300 billion every year, 2018. Available: https://www.who.int/maternal_child_adolescent/news_events/news/2016/exclusive-breastfeeding/en/
5 Juharji H, Albalawi K, Aldwaighri M, *et al*. Impact of Breastfeeding on low birthweight infants, weight disorders in infants, and child development. *Cureus* 2022;14:e32894.
6 Corsack C, Wallenborn JT, Harley KG, *et al*. Parental Cohabitation and Breastfeeding outcomes among United States adolescent mothers. *Breastfeed Med* 2022;17:72–8.
7 Kitano N, Nomura K, Kido M, *et al*. Combined effects of maternal age and parity on successful initiation of exclusive Breastfeeding. *Prev Med Rep* 2016;3:121–6.
8 Moiseeva KE, Dimitry I, Alekseeva AV, *et al*. Influence of mother's age on infant child's nutrition. *Archivos Venezolanos de Farmacologia y Terapeutica* 2020;39:215–24.
9 Ngum Chi Watts MC, Liamputtong P, Mcmichael C. Early motherhood: a qualitative study exploring the experiences of African Australia teenage mothers in greater Melbourne, Australia. *BMC Public Health* 2015;15:873–7.

10 Makwela MS, Mashaba RG, Ntimana CB, *et al*. Barriers and Enablers to exclusive Breastfeeding by mothers in Polokwane, South Africa. *Front Glob Womens Health* 2024;5:1209784.
11 Appiah PK, Amu H, Osei E, *et al*. Breastfeeding and weaning practices among mothers in Ghana: A population-based cross-sectional study. *PLoS One* 2021;16:e0259442.
12 Adokiya MN, Bukari M, Ndago JA, *et al*. Exclusive Breastfeeding among beneficiaries of a nutrition Enhancement programme and its associated factors in Ghana. *PLoS ONE* 2023;18:e0286546.
13 Acheampong AK, Ganga-Limando M, Aziato L. Perceived Enablers of exclusive Breastfeeding by teenage mothers in Ghana. *S Afr Fam Pract* 2020;62:1–5.
14 Acheampong AK, Ganga-Limando M, Aziato L. Qualitative exploration of perceived barriers of exclusive Breastfeeding among pregnant teenagers in the greater Accra region of Ghana. *BMC Public Health* 2022;22:1885.
15 Tampah-Naah AM, Kumi-Kyereme A, Amo-Adjei J. Maternal challenges of exclusive Breastfeeding and complementary feeding in Ghana. *PLoS One* 2019;14:e0215285.
16 World Health Organization. Global Nutrition Targets 2025 Breastfeeding Policy Brief, 2014. Available: https://www.who.int/publications-detail-redirect/WHO-NMH-NHD-14.7
17 Ghana, Breastfeeding Promotion Regulation, 2000. Available: https://extranet.who.int/nutrition/gina/sites/default/filesstore/GHA%202000%20Breastfeeding%20Promotion%20Regulations_0.pdf
18 Kanhadilok S, McGrath JM. An integrative review of factors influencing Breastfeeding in adolescent mothers. *J Perinat Educ* 2015;24:119–27.
19 O'Brien BC, Harris IB, Beckman TJ, *et al*. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med* 2014;89:1245–51.
20 Korle-Bu Teaching Hospital. Obstetrics and Gynaecology. 2023. Available: https://kbth.gov.gh/departments-centres/obstetrics-gynaecology-department-2/
21 Polit DF, Beck TC. *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*. 9th edn. J.P. Lippincott, 2018. Available: https://www.amazon.com/Essentials-Nursing-Research-Appraising-Evidence/dp/1496351290
22 Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures, and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105–12.
23 SmithBattle L, Phengnum W, Punsuwun S. Navigating a Minefield: meta-synthesis of teen mothers' Breastfeeding experience. *Am J Mat Child Nurs* 2020;45:145–54.
24 Nuampa S, Tilokskulchai F, Patil CL, *et al*. Factors related to exclusive Breastfeeding in Thai adolescent mothers: concept mapping approach. *Matern Child Nutr* 2019;15:e12714.
25 Pillay S, Sibanda W, Ghuman MR, *et al*. Infant feeding practices of teenage mothers attending a well-baby clinic in a public hospital in South Africa. *South African J Clin Nutrit* 2018;31:14–9.
26 Nesbitt SA, Campbell KA, Jack SM, *et al*. Canadian adolescent mothers' perceptions of influences on Breastfeeding decisions: A qualitative descriptive study. *BMC Pregnancy Childbirth* 2012;12:1–14.
27 Hauck YL, Kuliukas L, Gallagher L, *et al*. Helpful and challenging aspects of Breastfeeding in public for women living in Australia, Ireland, and Sweden: a cross-sectional study. *Int Breastfeed J* 2020;15:38.
28 Coomson JB, Aryeetey R. Perception and practice of Breastfeeding in public in an urban community in Accra, Ghana. *Int Breastfeed J* 2018;13:18.
29 Shariat M, Abedinia N, Hamad A. Why are Breastfeeding rates declining in Iran? A qualitative study on three centers in Tehran. *Zanco J Med Sci* 2022;26:38–48.
30 Brown V, Hodges N. An exploration of dress and identity among new mothers: the implications of Breastfeeding for clothing choice. *Fashion, Style Popular Culture* 2019;6:225–41.
31 Monteiro JCS, Dias FA, Stefanello J, *et al*. Breastfeeding among Brazilian adolescents: practice and needs. *Midwifery* 2014;30:359–63.
32 Stumbitz B, Kyei A, Lewis S, *et al*. In: *Maternity protection, and workers with family responsibilities in the formal and informal economy of Ghana practices, gaps, and measures for improvement*. Geneva, Switzerland: International Labour Organization, 2017. Available: https://link.springer.com/article/10.1186/s12905-023-02163-z
33 Sosseh SAL, Barrow A, Lu ZJ. Cultural beliefs, attitudes, and perceptions of lactating mothers on exclusive Breastfeeding in the Gambia: an Ethnographic study. *BMC Womens Health* 2023;23:18.
34 Leerlooijer JN, Bos AE, Ruiter RA, *et al*. Qualitative evaluation of the teenage mothers project in Uganda: a community-based empowerment intervention for unmarried teenage mothers. *BMC Public Health* 2013;13:1471–2458.
35 Chopel A, Soto D, Joiner B, *et al*. Multilevel factors influencing young mothers' Breastfeeding: a qualitative CBPR study. *J Hum Lact* 2019;35:301–17.
36 Modjadji P, Seabela ES, Ntuli B, *et al*. Beliefs and norms influencing initiation and sustenance of exclusive Breastfeeding: experiences of mothers in primary health care facilities in Ermelo, South Africa. *Int J Environ Res Public Health* 2023;20:1–17.
37 Nuampa S, Chanprapaph P, Tilokskulchai F, *et al*. Breastfeeding challenges among Thai adolescent mothers: hidden Breastfeeding discontinuation experiences. *JHR* 2022;36:12–22.
38 Manion A, Wideman M, Tutlewski A. Breastfeeding attitudes among adolescent mothers attending a nutrition Breastfeeding support group. *CNS* 2018;6:28.
39 Khonsung P, Yimyam S, Xuto P, *et al*. Factors predicting exclusive Breastfeeding among Thai adolescent mothers at 6-months postpartum. *Pac Rim Int J Nurs Res Thail* 2021;25:34–47.
40 Godbout JM, Goldsberry WN, Franklin TE. Factors associated with infant feeding choices in the adolescent population. *J Hum Lact* 2016;32:642–7.
41 Muelbert M, Giugliani ERJ. Factors associated with the maintenance of Breastfeeding for 6, 12, and 24 months in adolescent mothers. *BMC Public Health* 2018;18:675.
42 Chemutai V, Nteziyaremye J, Wandabwa GJ. Lived experiences of adolescent mothers attending Mbale regional referral hospital: a phenomenological study. *Obstet Gynecol Int* 2020;2020:8897709.
43 Hunter L, Magill-Cuerden J, McCourt C. Disempowered, passive, and isolated: how teenage mothers' postnatal inpatient experiences in the UK impact on the initiation and continuation of Breastfeeding. *Matern Child Nutr* 2015;11:47–58.
44 Edinger JM, Fairbanks KN. Facilitators and Barriers to Breastfeeding Success in Adolescent Mothers: An Integrative Review. Bethel University, Master's thesis, 2018. Available: https://spark.bethel.edu/etd/793
45 Mensah KA, Acheampong E, Anokye FO, *et al*. Factors influencing the practice of exclusive Breastfeeding among nursing mothers in a Peri-urban District of Ghana. *BMC Res Notes* 2017;10:466.
46 Čatipović M, Puharić Z, Puharić D, *et al*. Behaviour, attitudes and knowledge of Healthcare workers on Breastfeeding. *Children (Basel)* 2022;9:1–12.
47 Kyilleh JM, Tabong P-N, Konlaan BB. Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices: a qualitative study in the West Gonja district in northern region, Ghana. *BMC Int Health Hum Rights* 2018;18:6.