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Barriers to facility-based childbirth among Nigerian adolescents: A qualitative study

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Abstract

The fear of childbirth and access barriers to medical facilities constitute a substantial impediment to maternal and child health. This study examines childbirth-related fear and access barriers to maternity care among young adolescent girls, illuminating its influences and implications for facility-based deliveries. Employing a qualitative approach, the study conducted ten in-depth interviews and a focus group discussion involving young adolescent girls, including both mothers and pregnant individuals. Thematic analysis was employed to distill profound insights from this cohort. The phenomenological research method employed bolstered rigor and trustworthiness by discerning patterns and variations across participant responses. The analytical process was facilitated using ATLAS.ti qualitative software. Findings uncover factors contributing to childbirth-related fear and access constraints, including limited reproductive health education, cultural beliefs, societal stigmas, healthcare providers' judgement, disempowerment in decision-making, financial obstacles, and anticipation of caesarean section and its long-term effects on fertility. These substantially affected facility-based deliveries, leading to increased home births, delayed care seeking, heightened maternal and neonatal mortality, and constrained postpartum care access. There is need to address barriers posed by cultural norms and socioeconomic disparities, emphasizing the imperative of multifaceted approaches to mitigate childbirth-related restrictions.

Keywords: Fear; Childbirth; Access Challenges; Facility-based Delivery; Adolescent Girls

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1. Introduction

Childbirth is a natural and transformative event in a woman's life. It is a crucial component of reproductive health and has significant implications for both maternal and infant well-being (Bakhteh et al., 2024; Embleton et al., 2023; Khojasteh et al., 2022). Ensuring safe and skilled care during childbirth is vital to reducing maternal and neonatal mortality rates (Varnakioti et al., 2022; World Health Organization, 2023a). However, in many societies, particularly among young adolescent girls, fear of childbirth, distant health facility, non-respect for pregnant girls, societal beliefs surrounding delivery and lack of family support influence decision to seek delivery care in a health facility (Crooks et al., 2022; Mahdavi et al., 2022; Tembo et al., 2023). This fear of childbirth, known as tokophobia, (Takegata et al., 2023) and limited access to maternity care, also stem from various sources, including cultural norms, previous negative experiences, and community perceptions of childbirth (Lane, 2023; Lebni et al., 2021; Sharma et al., 2022). In the case of young adolescent girls, who may have limited exposure to childbirth and maternal health education (Zepro et al., 2023), these fears and access constraints can be particularly potent and contribute to their reluctance to deliver in a health facility (Iliyasu et al., 2023; Ossai et al., 2023).

In 2023, the world recorded 41.3 births per 1000 women (aged 15-19) (World Health Organization, 2023a). In developing countries, an estimated 12 million females aged 15 to 19 give birth each year (Sully et al., 2020). Sub-Saharan Africa has the highest estimated adolescent birth rate in the world, at 99.4 births per 1000 women, greatly above the global average (41.3 birth per 1000 women) (United Nations, 2022; World Health Organization, 2023a). Sub-Saharan Africa has 6.1 million childbirths among teenage girls aged 15-19 and 3.3 million childbirths among adolescents aged 10-14 (United Nations, 2022; World Health Organization, 2023a). Nigeria has the largest population in sub-Saharan Africa, with a projected 22.8% of the female population being adolescent girls aged 10-19 (UNFPA, 2023), and 12.2% of these adolescent girls having at least one child (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022).

Despite efforts to improve maternal and child health in Nigeria, the maternal mortality rate (1,047 deaths per 100 000 live births) (World Health Organization, 2023b), and infant mortality rate (70.6 per 1,000 live births) (United Nations, 2023) remain unacceptably high. The prevalence of home deliveries among adolescent girls (64.3%) persists (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022), owing largely to their overwhelming fear of the childbirth process, limited resources, and lack of access to medical facilities (Crooks et al., 2022; Olorunsaiye et al., 2022). About 65% of adolescent girls in Nigeria give birth without skilled attendants (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022), which is further amplified by societal norms and misconceptions (Michael et al., 2023). The lack of comprehensive reproductive health education and limited access to psychosocial support exacerbate this issue, perpetuating a cycle of fear-driven decisions, and restricted access to facility-based deliveries that result in adverse outcomes for both mothers and infants (Ako et al., 2023; Degge et al., 2022; Shaban and Almukhtar, 2023).

The consequences of the fear of childbirth and lack of access to facility-based deliveries are far-reaching. Adolescent girls who forego skilled care during childbirth face increased risks of complications, maternal morbidity, and neonatal mortality (Alex-Ojei et al., 2023; Obonyo et al., 2023; Shaban and Almukhtar, 2023). This not only threatens the health and well-being of young mothers but also perpetuates the cycle of intergenerational health disparities, hindering the overall progress towards achieving sustainable

development goals related to maternal and child health (Folayan et al., 2022; United Nations, 2023). While some studies have explored the fear of childbirth and access to health care in various contexts (Ahinkorah et al., 2023; Lebni et al., 2021), there is a lack of in-depth qualitative research specifically focusing on the experiences and perceptions of young adolescent girls in Nigeria. Research also often overlooks the active participation of young adolescent girls in shaping interventions and policies (Amoadu et al., 2022; National Population Commission (NPC) [Nigeria] and ICF, 2019). Involving their voices and perspectives in the research process can lead to more contextually relevant and effective strategies to address fear and access barriers to skilled care to promote facility-based deliveries.

In the light of this, tackling the fear of childbirth and access challenges to facility-based deliveries among young adolescent girls in Nigeria necessitates a comprehensive and context-specific approach. The current study examines the underlying cultural, social, and psychological factors contributing to this fear and lack of access to facility-based deliveries. By understanding the interplay between fear, access challenges, cultural beliefs, and facility-based deliveries, stakeholders can design targeted strategies that empower young adolescent girls to make informed decisions, seek skilled care, and ultimately improve maternal and neonatal health outcomes.

This study hinges on the lens of cultural competence and social identity theories. Cultural competence theory emphasizes the importance of healthcare providers understanding and respecting cultural beliefs and practices to provide effective care for diverse populations (Britni, 2017). In this context, the deeply ingrained cultural beliefs and practices related to childbirth in the study communities, such as attributing safe deliveries to divine intervention and associating delivery complications with malevolent forces, highlight the need for healthcare providers to be culturally competent (Musiwa et al., 2024). Failure to recognize and respect these cultural beliefs could lead to misunderstandings and distrust, further hindering adolescent girls' utilization of facility-based care (Chekero, 2024). Social identity theory, on the other hand, posits that individuals categorize themselves and others into various social groups and may internalize stereotypes associated with those groups (Islam, 2014). In this study, adolescent girls perceive themselves as part of a stigmatized group due to the social stigma surrounding adolescent pregnancy. This perception influences their healthcare-seeking behaviors, as they fear judgment from healthcare providers, peers, and community members (Oluseye et al., 2024). Healthcare providers must understand and address these social identities and stereotypes to provide inclusive and effective care for adolescent girls in Nigeria (Woodson et al., 2024).

2. Materials and methods

2.1. Study setting

This study was conducted in Southern Iman of Etinan in Akwa Ibom State, Nigeria comprising thirty communities. The state is bordered by the Atlantic Ocean, Cross River State, Rivers State and Abia State. It lies between latitudes 4o31 and 5o31 North and longitudes 7o35 and 8o25 East, with an estimated population of 7,200,000 (Akwa Ibom State Government, 2023). The rural settings of the State are characterized by poorly constructed housing and roads, non-hygienic environment associated with poor access to running water and sanitation, and insufficient health facilities. A lot of informal healthcare providers operate freely in the setting (Michael et al., 2023). Two in every four women deliver at home in the state (National Bureau of Statistics

(NBS) and United Nations Children's Fund (UNICEF), 2022). About 57% of the women in the state received delivery assistant from traditional birth attendants (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022). Because child marriage is currently frowned upon in the area, the majority of young adolescent mothers in the setting became pregnant out of wedlock. In the state, approximately 10.2% of girls have a child before aged 16 (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022). Attending facility-based delivery for childbirth in the setting incurs fees. Distant health facilities are common in the area, with some settlements completely devoid of medical facilities. According to national data, 74.3% of women aged 15 to 49 in the state do not use any form of contraception. Over 94% of adolescent females in the setting lack access to contraceptive methods to prevent pregnancy (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022). In the state, the net attendance rate for girls in primary school is 85.8%, 70.9% in junior secondary, and 72.5% in senior secondary. Adolescent mothers or pregnant adolescents are more in rural settings (17.3%) than in urban areas (3.9%) (National Bureau of Statistics (NBS) and United Nations Children's Fund (UNICEF), 2022). In general, the research community discourages early pregnancy in adolescent girls (Michael et al., 2023). Akwa Ibom State was chosen as the study setting because it has one of the highest proportions of adolescent childbearing in Nigeria. See Figure 1 for a map of the study area and selected communities.

Figure 1. Map showing the study communities (Michael et al., 2024)

2.2. Study design

The study adopted a phenomenological approach (Husserl, 1970), focusing on the lived experiences of adolescent girls to comprehend the essence of their feelings and the significance they attributed to experiences related to the fear of childbirth and access to healthcare. This approach proved highly effective for delving into the intricate nuances of human experience, specifically the fear of childbirth (Nilsson and Lundgren, 2009; Olsen et al., 2022). Through qualitative research, the study conducted a profound exploration of the lived experiences, perspectives, and beliefs of young adolescent girls concerning their access to maternal care and the impact of fear of childbirth on their decisions regarding facility-based deliveries. This approach enabled the study to capture the multifaceted experiences of these young girls. In line with the principles of phenomenology, the researchers conscientiously suspended own preconceived ideas, biases, and judgments, a process referred to as "bracketing," to maintain an open and impartial perspective throughout the study (Chan et al., 2013). The writing of this manuscript adhered to the guidelines provided by the Standards for Reporting Qualitative Research (SRQR) (O'Brien et al., 2014), ensuring the study's rigor and transparency.

2.3. Participant recruitment and sampling

Purposive sampling was used to select participants who met the inclusion criteria of being young adolescent girls (aged below 16) who had experienced childbirth or were pregnant. Ten in-depth interviews and one focus group discussion were conducted among every pregnant adolescent girl. The World Health Organization framework classified young people aged 10-16 as young adolescents, and especially vulnerable in maternal health research (Mangiaterra et al., 2008; World Health Organization, 2006). These participants' age range was chosen because the study intended to examine childbirth among the most vulnerable population. Participants were recruited from both rural and sub-urban settings to capture diverse perspectives. Efforts were made to ensure representation from various socioeconomic strata. Traditional birth attendant associations, non-governmental organisations aiming to protect adolescent sexual and reproductive health rights, and community women associations helped identify ever-pregnant adolescents in the study area for interviews. Following that, ever-pregnant girls identified other ever-pregnant adolescents for recruitment using a referral snowball technique. The participant recruitment was halted when no new information, idea, or pattern was obtained from the participants (Fusch and Ness, 2015; Mapp, 2008).

2.4. Data collection methods

Data were collected through in-depth unstructured interviews and focus group discussions. Unstructured interviews allowed participants to share their personal experiences. It allowed one-on-one interviews to allow participants to share their thoughts and experiences openly. The focus group discussion facilitated exploration of shared cultural and societal influences. It encouraged interaction and peer-to-peer sharing. Interviews and discussions were conducted in the participants' preferred languages (English or local language) and were audio-recorded with their consent. Each interview and focus group session lasted 45-60 minutes. The Interview and discussion guides developed covered topics such as experiences of childbirth, facility-based deliveries, barriers to accessing maternity care, cultural influences, consequences, and coping strategies. Examples of questions asked were: "Have you ever felt challenges related to your childbirth? If yes, could you describe what specific aspects of childbirth you found challenging?", "What do you think are the reasons behind

your childbirth challenges?", "What factors impacted your decisions about where and how to give birth? "What factors, play a role in whether or not you choose to deliver in a health facility?", "Can you describe any instances that led to a decision to have a home birth rather than delivering in a health facility?", and "What are the main challenges you faced accessing facility-based deliveries?" The researchers ensured the emotional and psychological well-being of the young participants by creating a supportive and non-judgmental environment during the interviews. Trained interviewers used empathetic communication techniques, provided reassurance, and offered access to psychological support services for participants who experienced distress during the discussions. Additionally, the researchers maintained strict confidentiality to protect the participants' privacy and foster a sense of safety throughout the study.

2.5. Data processing and analysis

Thematic analysis was used to analyze qualitative data. The analysis involved several iterative steps, including data familiarization, coding, identification of themes, and interpretation (Vaismoradi et al., 2013). The phenomenological qualitative method was employed to ensure rigor and trustworthiness. The method focused on exploring and understanding participants' lived experiences, uncovering the meaning and essence of those phenomena (such as fear of childbirth and access barriers to facility-based delivery) as they were perceived by the participants (Alase, 2017). The researchers acknowledged and set aside preconceived notions and biases to approach the data with an open mind, gained familiarity with the participant's descriptions, identified meaningful statements, and summarized the meanings into codes. Similar codes were grouped into themes, codes and themes were compared across participants to establish patterns and variations. The coding identified recurring themes related to childbirth experiences, access to health facilities, and consequences, and influencing factors. Quotes from participants were used to illustrate key points. Interviews conducted in the local language (Ibibio) were transcribed by experts and afterwards translated into English. ATLAS.ti qualitative software was used for the analysis. Participants' engagement was achieved through inviting participants to review and validate findings in a workshop to ensure data accuracy and authenticity. As the primary researcher is an indigene of the study area, this aided in resolving any potential issues connected with reflexivity and positionality and avoiding unbiased interpretation of findings.

2.6. Enhancing trustworthiness in the study

To enhance the trustworthiness of this study, various measures were implemented, including credibility, transferability, dependability, and confirmability (Creswell, 2014; Risenga and Mboweni, 2022). Credibility was established through in-depth and extended interactions with the study participants. These conversations were recorded, with participants consents, to ensure accuracy and facilitate thorough analysis. To enhance transferability, comprehensive background information about the participants and the study setting was provided. This enables readers to assess the applicability of the study's findings to other contexts. Dependability was ensured by transparently describing the research methods employed. Field notes were cross-referenced with voice recordings to guarantee consistency and reliability. Data was verified against the recorded responses to validate the study's findings. Confirmability was maintained by involving two independent researchers in both data collection and analysis. This external perspective helped verify interpretations, data accuracy, and the soundness of conclusions. Detailed descriptions of each research stage, coupled with explanations and justifications, were documented through voice recordings and verbal quotes

obtained during unstructured individual interviews, serving as evidence confirming the study's authenticity and credibility (Creswell, 2014; O'Brien et al., 2014).

2.7. Ethical considerations

Ethical approval was obtained from the University of Ibadan Research Ethics Committee (UI /SSHEC /201 / 8/ 0005). Written informed consent was obtained from all participants, and their parents/guardians, ensuring their rights to autonomy, privacy, and confidentiality were respected. All participants were provided with adequate information about the research objectives and their roles. The instruments were written and shared in both English and the research area's native language (Ibibio). When working with the adolescents, precautions were made to safeguard their comfort and emotional well-being. The girls were provided transportation, the opportunity to debrief with a support person, and the freedom to withdraw from the study at any time or skip any questions without penalty. Female research assistants conducted the interviews. The interviews were held in a secure, confidential, and quiet setting so that participants could freely express themselves without fear of being overheard. Their parents or legal guardians completed and signed a section of the informed consent form that read, "I am the parent/legal guardian of the adolescent girl participant, and I consent to their participation in this study." Because the study recognised that the adolescents were minors who had become or were about to become parents, it addressed the power dynamics in this setting methodically by obtaining assents from the adolescents. All other necessary precautions were also followed to reduce the possibility of harm and distress during data collection and processing.

3. Results

3.1. Participants' socio-demographic characteristics

The study included 17 adolescent girls aged 11 to 16 who were either pregnant or mothers at the time of the survey. This included one focus group and ten in-depth interviews. Six of the in-depth interviews were conducted with rural adolescents, whereas four were conducted with suburban adolescents. The participants' educational levels ranged from none to secondary school. Table 1 shows the socio-demographic characteristics of the participants.

Table 1. Participants' information

No of participants (N=17)	Interview type	Community	Residence	Age range (years)	Education
7	FGD, 1	Nkana/Ikot Obio Eka	Rural/Suburban	12-16	1 No formal education 2 Primary school 2 Junior Secondary 2 Senior secondary
1	IDI, 1	Ikot Etok	Rural	12	Primary school

Table 1. *Cont.*

No of participants (N=17)	Interview type	Community	Residence	Age range (years)	Education
1	IDI, 2	Anyam Efa	Suburban	11	No formal education
1	IDI, 3	Mbioto II	Suburban	13	No formal education
1	IDI, 4	Oniong	Suburban	15	Primary school
1	IDI, 5	Afaha Urua Essien	Rural	14	Primary school
1	IDI, 6	Ikot Mfon	Rural	16	Senior secondary
1	IDI, 7	Iwo Etor	Rural	14	Primary school
1	IDI, 8	Ikot Ukpong	Rural	16	Junior secondary
1	IDI, 9	Ikot Ibok	Rural	13	Primary school
1	IDI, 10	Ikot Inyang	Suburban	15	No formal education

Note: FGD – focus group discussion; IDI – in-depth interview

3.2. Factors contributing to fear of childbirth and access challenges to facility-based deliveries among the adolescent girls

Theme one revealed the factors that contributed to fear of childbirth and access challenges to facility-based deliveries among young adolescent girls who were mothers or pregnant in the study area.

3.2.1. Lack of reproductive health education, awareness and access

Interviews conducted with the adolescent girls who were either mothers or pregnant revealed that the girls lacked access to comprehensive knowledge about maternal health, birthing process, potential complications, and the importance of skilled care during delivery. This lack of information led to limited access to maternity care, and heightened anxiety among the adolescents stopping most adolescent girls from seeking facility-based care for prenatal, delivery and postnatal services.

> *"It was my first time getting pregnant. I was not told that the hospital was the best place to get pregnancy and birth care. Despite the fact that I am aware of hospital care for patients, I was not ill during my pregnancy." (IDI, 3).*

> *"I didn't see the point in going to the primary health care centre. The community's traditional birth attendant was competent enough to conduct regular checkups until I delivered" (IDI, 6).*

> *"Because the health care centre is distant from my community and the road trip is unsafe, I was taken to a neighbouring traditional birth attendant for delivery support when I went into labour late at night." (FGD, 1).*

"My grandma is a traditional midwife, and she cared for me during my pregnancy and delivery. She has also helped many young and old ladies could not access clinic or hospital in our village give birth." (IDI, 9).

3.2.2. Cultural beliefs and traditions

Discussion with the adolescent girls revealed that the communities involved in the study have deeply ingrained cultural beliefs and practices surrounding childbirth. They attributed safe delivery to God and complications during delivery to witchcraft and the devil. The traditional rituals and practices, while intended to provide support and protection, sometimes contribute to limited access to maternity care, and fear about delivering in a health facility. Some adolescents were delivered by church midwives who were unskilled or untrained as traditional birth attendants. In the study context, the difference between church midwives and traditional birth attendants was that church midwives worked in church premises whereas traditional birth attendants worked in their homes.

"Because my pregnancy was unplanned, I did not give birth in a hospital. That is, becoming pregnant as a young girl before reaching marriageable age was a sin and an abomination. To experience God's mercy and intervention, I had to deliver in our church with the help of our [unskilled] midwife from our church. Our pastor's wife is our church's midwife." (IDI, 5)

"In this community, there are many witches and wizards who target pregnant women and girls. We must get closer to God in order to overcome them and survive through labour. So, I gave birth with the help of our church [unskilled] midwife. She has the ability to see visions and send out demons." (FGD, 1).

"When the baby refuses to come out, the hospital does not offer us medicines to open our vagina for delivery, especially because we are still very young girls rather, it does cesarean section. Traditional birth attendants use magical herbs and concoctions to force our vagina open and allow the baby to come out during delivery." (IDI, 8).

3.2.3. Social stigma and healthcare provider judgement

Interviews with the participants disclosed that adolescent pregnancy carries social stigma in the study area. Young girls fear judgment from healthcare providers, peers, and community members, leading them to avoid seeking care in a health facility. The quotations from the adolescent girls clearly show that the young pregnant adolescents did not feel safe or respected in childcare facilities, hence they actively chose to go to traditional birth attendants instead. This necessitates a more in-depth consideration of young girls' care beyond biomedical maternity care, to care for them as a person.

"Because we were pregnant out of wedlock, the health workers at the health care clinic did not offer us proper treatment. They looked down on us and mistreated us in order to set a good example for others and avoid adolescent pregnancy in the community. My friend and I stopped

going to the clinic as a result of their conduct. We liked the traditional birth attendant, who showed us love and care during our pregnancy and delivery." (FGD, 1),

"Every time we went to the health centre, people in the community would laugh at us. Because the health centre is on the main route... I did not go to the health centre after being mocked three times. I had to begin going to a traditional birth attendant home that was closer to my house. I delivered in the traditional birth attendant's home." (IDI, 6).

"After my initial dislike for being pregnant, only my parents and immediate family members showed me love. My friends and neighbours were quite rude. My close friends' parents warned them to stay away from me because I was pregnant. They think I was a mischievous child. Because I was afraid and ashamed of myself, I couldn't go to the health centre for any care or delivery." (IDI, 1).

3.2.4. Fear of caesarean section, and its long-term impacts on fertility

Interviews conducted with the adolescent girls revealed that the anticipation of caesarean section during childbirth and its impacts on fertility led to anxiety among the adolescent girls. Stories of traumatic birthing experiences shared by older women within the community also further amplify these fears. The adolescent girls were afraid of having a caesarean section, which they believed was associated with adolescent delivery in hospitals, since they considered that because they were too young to appropriately push during labour, doctors would submit them to a caesarean section to shorten the delivery time. More so, the adolescent girls found the likelihood of their future husbands preferring high fertility and the unpleasant behaviour of health personnel as linked factors that could have caused more trauma if they had chosen facility-based delivery.

"My aunt told me that childbirth is associated with severe pain, especially when it involves a girl of my age. She informed me that if I was unable to push successfully during labour, the nurse or doctor at the hospital would perform a caesarean section to force the baby out. I couldn't bear the pain of having a caesarean section, so I was recommended to give birth at the home of a traditional birth attendant." (FGD, 1)

"Unlike hospitals, traditional birth attendants do not perform caesarean sections and instead rely on mystical plants and massaging to force the baby out of the womb if labour is prolonged." (IDI,10)

"I doubt the health workers would have cared for me through a caesarean section birth because they were unfriendly during antenatal care. They would have made me feel more pain during a caesarean section delivery because I am a pregnant adolescent, which was why I did not intend to deliver in a health centre." (IDI, 7).

"We will only have two or three children by caesarean section. What if our future husbands want to have additional kids? They would not marry us if they knew we had given birth by caesarean section. I chose traditional birth attendants to avoid this." (FGD, 1).

3.2.5. Financial barriers and lack of autonomy in decision-making

Limited financial resources and lack of control in decision making prevented the adolescent girls from accessing healthcare facilities for childbirth. The inability of their family to afford costs of health care and fear of incurring high costs deterred them from seeking skilled care services. Interactions with the adolescent girls during focus group and in-depth interviews also revealed that they were disempowered and had limited decision-making authority regarding their birthing choices. This lack of control contributed to feelings of fear and helplessness, and limited access to facility-based deliveries.

> *"I wanted to give birth in a hospital, but I didn't have the money. My parents also did not have enough money to cover the cost of delivery. I had to give birth with the help of our church midwife, who is not a professional midwife." (IDI, 2).*

> *"I couldn't make a decision about where to deliver my baby on my own. My parents and aunts made the decision. They all agreed that I should have my baby at the traditional birth attendant home." (FGD, 1).*

> *"Even though I didn't enjoy the traditional birth attendant's home since it was dirty, I had no choice because that was the only option given to me. My guardians made this decision because they could not pay the hospital fee (FGD, 1).*

> *"Traditional birth attendants and religious midwives will assist during delivery even if you don't have money right away to pay later, but hospitals will not admit you for delivery if you don't have money." (IDI, 5).*

3.3. Consequences on facility-based deliveries

The fear of childbirth and lack of access to maternity care among young adolescent girls have several negative consequences for facility-based deliveries.

3.3.1. Increased home births without skilled care

Traditional birth attendants or unskilled church midwives were chosen by the young adolescent girls because they were accessible, available, cost effective, supportive, or the only alternative they and their families felt they had. These options eventually resulted in complications for some research participants, who needed to be transferred to medical health facilities for delivery due to complications.

> *"As you can see, we're here for a checkup at our traditional birth attendant house, and we'll all deliver here." Some of us who are closer to our time of delivery live here." (FGD, 1).*

> *"My church [unskilled] midwife assisted me throughout my delivery. The midwife resides on the church grounds and attends to pregnant ladies all hours of the day and night." (IDI, 10).*

"Traditional birth attendants in my community helped me give birth. I had a few complications during delivery, but I was able to give birth after a long labour." (IDI, 4).

3.3.2. Delayed care-seeking and planned referral pathway

Some adolescents received relevant and planned referral pathway from their traditional birth attendants on delivery following checkups. However, fear, limited resources and access to healthcare centres compelled most of the adolescent girls to postpone seeking care until complications arose, increasing the likelihood of adverse outcomes for both mother and baby.

"The traditional birth attendant provided all of my prenatal care till delivery. I was finally hurried to the hospital for delivery after nearly dying at the traditional birth attendant care, with much blood spilling out of my body." (IDI, 8).

"During my pregnancy, I was always seeing our church midwife for frequent check-ups. My brother returned home in the last month of the pregnancy and discovered that I had not been visiting the health centre for antenatal care, and my foot was already highly swollen without medical attention, so I started going to the clinic." (FGD, 1).

"I didn't need to go to the health centre because I knew a traditional birth attendant near us had been successful in assisting with delivery. I had to go to the health centre for delivery after the traditional birth attendant advised me that due to the position of my baby in the womb, I should go to the hospital." (IDI, 9).

3.3.3. Maternal and neonatal mortality

Participants also identified that delivering outside a health facility, especially without skilled attendants, heightens the risk of maternal and neonatal mortality due to potential complications. Some of the young adolescent girls lost their babies during pregnancy, while some almost lost their lives in the process. Approximately 6.1 percent of the adolescents stated that one of their teenage friends died during a non-facility-based delivery in the community.

"My baby died during delivery at a traditional birth attendant home. The baby was born, but he was already dead owing to the prolonged labour." (IDI, 1).

"My adolescent friend died while giving birth. She was rushed to the hospital from her traditional birth attendant's home, but it was too late." (FGD, 1).

"My friend died during childbirth, and the baby she delivered died two days later. Her [unskilled] church midwife assisted her." (IDI, 6).

3.3.4. Limited access to postpartum care

Lack of information, access, and health professional engagement together with fear of facility-based deliveries also resulted in missed opportunities for postpartum care, including essential vaccinations, maternal health check-ups, and family planning services.

> *"I did not receive any immunisation for my baby after delivery since I was unaware that I needed to take my baby to the health centre for immunisation… After two months, my baby was immunised at the health centre." (IDI, 3).*

> *"As an inexperienced mother, I was not given any immunisations. The church midwife just gave me instructions on what to eat, how to use warm water pressure, and how to breastfeed." (FGD, 1).*

> *"My baby was immunised after three months of birth during a health outreach by the local health care centre." (IDI, 8).*

4. Discussion

The study revealed that adolescent girls who were either mothers or pregnant had access barriers, and inadequate knowledge about maternal health, the birthing process, and the importance of skilled care during delivery. These access and knowledge gaps contributed to increased anxiety and apprehension, which hindered their utilization of facility-based prenatal, delivery, and postnatal services. The theoretical lens through which we can view this issue is the Health Belief Model (Rosenstock, 1974), which suggests that individuals' perceived barriers, benefits, and threats influence their health-related decisions. In this context, limited knowledge and access act as barriers that deter adolescent girls from seeking facility-based care. This finding aligns with studies conducted in Iran (Lebni et al., 2021), Kenya (Embleton et al., 2023), Ethiopia (Zepro et al., 2023), Ghana (Amoadu et al., 2022), and Nigeria (Dongas and Amzat, 2022), emphasizing the pivotal role of access to comprehensive information in enhancing the reproductive health of adolescent girls.

The study unveiled deeply ingrained cultural beliefs and practices related to childbirth in the study communities. Participants attributed safe deliveries to divine intervention while associating delivery complications with malevolent forces like witchcraft and the devil. While these traditional rituals were intended to provide support and protection, they sometimes exacerbated fear and uneasiness regarding healthcare facility deliveries. The findings resonate with research conducted in India (Sharma et al., 2022) and Japan (Takegata et al., 2023), which highlight the role of socio-cultural backgrounds in shaping the fear of childbirth. In contrast to the current study findings, research in Bangladesh showed that while some cultural beliefs persisted around childbirth, particularly in rural areas, the influence of these beliefs on healthcare-seeking behaviour was minimal. Most adolescents were willing to seek facility-based care if it was accessible and affordable (Begum and Hamid, 2023; Salam et al 2024). These studies contrast with our findings by indicating that cultural beliefs might not always be a significant barrier to facility-based childbirth. They suggest that other factors, such as access and affordability, play a more critical role in shaping healthcare-seeking behaviour. The study's theoretical foundation can be expanded by considering cultural competence

theory (Britni, 2017), which emphasizes the importance of healthcare providers understanding and respecting cultural beliefs and practices to provide effective care for diverse populations.

Adolescent pregnancy was found to carry a significant social stigma within the study area. Young girls feared judgment from healthcare providers, peers, and community members, leading them to avoid seeking care at healthcare facilities. This stigma was further compounded by the anticipation of pain, caesarean sections, and concerns about childbirth complications. The adolescent girls exhibit trepidation toward undergoing a caesarean section, believing this procedure to be associated with adolescent deliveries in hospitals. They perceive themselves as too young to effectively manage labor, leading them to assume that doctors might opt for a caesarean section to expedite the delivery process. The assumption among adolescent girls that their future spouses may prioritize high fertility in marriage, contributed to barrier in accessing healthcare. They believe that caesarean section will limit their future childbirth. This fear can be analyzed through the lens of social identity theory (Islam, 2014), which posits that individuals categorize themselves and others into various social groups and may internalize stereotypes associated with those groups. In this context, adolescent girls perceive themselves as part of a stigmatized group, influencing their healthcare-seeking behaviours. A Ugandan study revealed that the absence of parental support dissuades adolescents from availing themselves of reproductive healthcare services (Vuamaiku et al., 2023). A Cameroonian study indicated that prenatal tears were prevalent among pregnant adolescents, while caesarean sections were more frequent among adult women (Ako et al., 2023).

Limited financial resources were identified as a significant barrier to accessing healthcare facilities for childbirth. The lack of access, choice, and the fear of incurring substantial costs discouraged adolescent girls from seeking skilled care. This financial constraint can be viewed through the lens of structural violence (Lee, 2019), a theoretical perspective that underscores how societal structures and inequalities perpetuate violence and harm to marginalized groups. In this case, financial limitations are a form of structural violence that disproportionately affects adolescent girls, limiting their autonomy and choices in reproductive healthcare. A corresponding study in China identified the lack of financial capacity as a determining factor in the fear of childbirth among college students (Xu et al., 2023). In Ghana (Amoadu et al., 2022) and Ethiopia (Baraki and Thupayagale-Tshweneagae, 2023), poverty was identified as a catalyst for adolescent pregnancy. A Haitian study discovered that the fear of exorbitant costs deterred adolescents from choosing hospital births (Philibert and Lapierre, 2022).

Fear and limited access led to unattended home births or reliance on traditional birth attendants, resulting in suboptimal care and increased risks of maternal and neonatal complications. Delayed care-seeking was also a common outcome, increasing the likelihood of adverse maternal and neonatal outcomes. This issue can be explored through the Andersen Behavioral Model, which identifies predisposing, enabling, and need factors that influence healthcare utilization (Andersen, 1995). In this context, the fear and limited access serve as barriers (enabling factors) that affect healthcare utilization, while the need for timely care is evident in the delayed care-seeking behaviour. A prior study in Nigeria recognized the practice of seeking assistance from traditional birth attendants and unskilled church midwives as common (Michael et al., 2021). A parallel Haitian study identified delays in seeking care among pregnant adolescent girls (Philibert and Lapierre, 2022). As a way out, an Iranian study, with a non-judgement attitude towards adolescents, recommended employing cognitive-behavioral therapy to alleviate the fear of childbirth among adolescent girls (Khojasteh et al., 2022).

A United States study also advocated for trauma-informed care to enhance access and the well-being of teenage girls (Johnson-Agbakwu et al., 2023).

Delivering outside a healthcare facility, particularly without skilled attendants, was found to accentuate the risk of maternal and neonatal mortality due to potential complications. The study also highlighted missed opportunities for postpartum care, including vital vaccinations, maternal health check-ups, and family planning services. This can be viewed through the perspective of the life course theory (Hutchison, 2011), which emphasizes the cumulative impact of early life experiences on health outcomes later in life. In this context, the adverse experiences and missed opportunities during adolescent pregnancy and childbirth can have long-term consequences for the health and well-being of these young girls. An Iraqi study among adolescent mothers revealed a connection between complications—such as fear, preterm labor, abruptio placenta, anemia—and neonatal deaths in the context of adolescent childbearing (Shaban and Almukhtar, 2023). A Malawian study indicated that socio-cultural factors and a lack of support from family and healthcare providers exacerbated access constraint, fear and postnatal depression among adolescent mothers following delivery (Tembo et al., 2023).

4.1. Strengths and limitations

This qualitative study offers an in-depth exploration of the fear of childbirth and access barriers to maternity care among young adolescent girls. It provides rich insights into cultural, social, and psychological factors influencing facility-based deliveries. By engaging diverse participants and employing rigorous thematic analysis, the study provides targeted interventions for improving maternal and neonatal health outcomes. The limitations are that this study is confined to a specific geographical region and may not fully capture the variability of experiences across sub-Saharan Africa. The qualitative nature limits generalizability, which could be addressed in future study by using a quantitative method with a larger sample size. The study also limited participation to rural and suburban settings, excluding pregnant adolescents from urban areas. Despite these limitations, the study's findings contribute valuable context-specific knowledge to address the complex issue of fear and access to facility-based deliveries among young adolescent girls.

5. Conclusion

Efforts to reduce fear of childbirth and limited access to care, to encourage facility-based deliveries among young adolescent girls should include specialized education about childbirth, involving community leaders and members, families, and women with positive experiences. Providing psychological support, empowering girls to make informed decisions, addressing financial barriers, reducing healthcare providers' judgement, harmful cultural norms, and encouraging pregnant adolescents to have a family member or advocate accompany them to a facility to support and advocate for them are crucial. Policymakers should invest in improving accessibility to healthcare facilities by providing affordable transportation options and reducing financial barriers through subsidies or health insurance schemes for adolescents. Training healthcare providers in cultural competence can help them understand and respect traditional beliefs, reducing fear and mistrust among young girls. Additionally, establishing adolescent-friendly healthcare services with a non-judgmental, supportive approach can mitigate the social stigma associated with adolescent pregnancy and encourage timely utilization of prenatal, delivery, and postnatal care. This multifaceted approach aims to enhance maternal and neonatal

health by dispelling myths, boosting confidence, and ensuring access to safe care. By combining education, community engagement, psychosocial assistance, and empowerment, we can create a safer, more positive birthing environment for young mothers and their infants, ultimately improving the prospects of future generations.

Conflict of interest

The author declares that there is no conflict of interest in relation to this paper, as well as the published research results, including the financial aspects of conducting the research, obtaining and using its results, as well as any non-financial personal relationships.

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Data availability

Data will be made available on reasonable request.

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