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Exploring service providers' perspectives on facilitators and barriers to contraceptive uptake among women: implications for policy reform in Ghana

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Abstract

Objective Healthcare providers play essential roles in delivering contraceptive and family planning services globally. In Ghana, previous research on contraceptive uptake among women has predominantly focused on clients in rural populations, leaving urban contexts and the perception of healthcare providers relatively underexplored. This study investigated the beliefs of service providers–physicians, midwives, and nurses regarding contraceptive uptake among women in Ghana.

Method We performed a qualitative exploratory study involving twenty-eight in-depth interviews with family planning service providers in the Greater Accra Region of Ghana. Participants were purposively selected from two large district hospitals in Ghana's most populous region. The interviews were audio-recorded and transcribed following data saturation. The transcribed data were analyzed thematically and systematically categorized to identify themes and subthemes based on Anderson's Model of Health Service Utilization.

Results Our study found four themes and eleven subthemes. The first theme, predisposing factors, included three subthemes: knowledge and education, peer influence, and availability and accessibility. The second theme, need factors, comprised two subthemes: desired child spacing and psychological considerations. The third theme, enabling factors, comprised two subthemes: the capacity of service providers and systemic support. The fourth theme, barriers to contraceptive uptake, included four subthemes: partner dispute, misconceptions, economic restraints, and side effects.

Conclusion From the perspective of service providers, the uptake of contraceptives is shaped by a mix of predisposing, need, enabling, and contextual barriers. Factors like knowledge, education, peer influence, and accessibility influence awareness and the willingness to use contraceptives. Additionally, factors related to need, such as desired child spacing and psychological considerations, indicate women's reproductive goals and readiness. Factors like provider capacity and systemic support boost confidence and improve service delivery. Barriers such as partner disagreement, misconceptions, economic challenges, and side effects hinder uptake. Enhancing provider training,

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broadening health coverage, and fostering community education can lead to more equitable contraceptive use among women.

Keywords Facilitators, Barriers, Contraceptive, Uptake, Women, Urban, Perspectives, Healthcare providers, Ghana

Introduction

Contraceptive uptake among women in Ghana has fluctuated over the past four decades, with varying levels of prevalence across the regions within Ghana. Service providers, including midwives, counsellors, and doctors, play a critical role in the delivery of contraceptives and family planning counselling and services [1]. Their skills and attitudes can significantly influence women's decisions to use contraceptives, either by encouraging or hindering access to family planning services [2, 3]. Numerous studies have documented that service providers' skills and attitudes can either stimulate contraceptive use among women or constitute a barrier for those needing it [2–4]. A study on reproductive health in South Africa revealed that service providers are pivotal in the framework of making contraceptive and family planning services easily available to the public and providing the right education to enhance patronage [5]. Additionally, various studies conducted in Africa and Asia have identified socio-demographic factors such as age, education, marital status, number of children, urbanization, and spousal approval as key determinants of contraceptive use [6, 7].

Despite the growing awareness of the benefits of contraception, unmet family planning needs remain high in many African countries [8–10]. In 2012–2017, the average contraceptive use in Africa was reported at 23.9% – 28.5%, with Ghana recording a low prevalence of 17% across both public and private health facilities in peri-urban regions [11]. Although previous studies have investigated the factors influencing contraceptive uptake in rural areas and northern Ghana, less attention has been paid to uptake in urban settings where over 60% of the population resides [6, 8, 12]. In urban areas, modern contraception coverage rose from 31.2% in 2013 to 49.2% in 2022, although overall usage among women of reproductive age remained at 26.36% in 2024 [13]. Utilization varies across urban areas such as Greater Accra, with emergency contraception being most common among young, unmarried, and educated women [14]. Given this gap, the present assessment focused specifically on understanding contraceptive care within urban settings.

Moreover, while existing evidence largely prioritizes women's perceptions of contraceptive use, it often neglects the perspectives of healthcare service providers who play an equally critical role in shaping women's reproductive health choices [15–19]. Service providers such as midwives, doctors, and nurses are directly involved in counselling, guiding, and influencing women's decisions regarding contraceptive methods [20], making their viewpoints essential for understanding the broader dynamics of contraceptive uptake. Additionally, much of the extant research in Ghana focused on healthcare providers' perceptions has predominantly employed quantitative cross-sectional designs [21, 22], which, although valuable, fail to capture the nuanced, contextual, and experiential insights that qualitative inquiry can provide. Including the perspectives of service providers deepens the understanding of the institutional, structural, and interpersonal factors that facilitate or hinder the use of contraceptives. Therefore, this study explored the perspectives of service providers for firsthand insights into the barriers and facilitators of contraceptive uptake.

Given the aforementioned, Andersen's Model of Health Services Utilization [12] offers a robust framework for analyzing the factors that influence contraceptive use. The model's three key components—'predisposing factors', 'enabling factors', and 'need factors'—can help identify the conditions that either promote or inhibit uptake of contraceptive services [23, 24]. Compared to other behavioral models, Andersen's Model is particularly suited for this study as it has been widely validated in reproductive health research and provides a structured and evidence-based approach to understanding the complex drivers of health-seeking behavior. Additionally, the model enables this study to explore the perspectives of healthcare professionals based on their lived experiences with regards to contraceptive delivery.

'Predisposing factors' refer to sociodemographic characteristics of individuals that influence their likelihood of using contraceptives [25]. In the Ghanaian context, predisposing factors include women's age, marital status, educational level, and socioeconomic status [26]. Cultural attitudes, gender norms and religious beliefs may also promote or hinder contraceptive uptake [26].

'Enabling factors' include resources and support systems that facilitate or limit access to contraceptive services [27]. In Ghana, the availability of contraceptive methods, affordability, and accessibility of healthcare facilities constitute the key enabling factors [28]. Here, the role of healthcare providers in offering contraceptive counselling and the existence of government or private programmes that provide contraceptive services free of charge or at subsidized rates would be potentially important enabling factors.

'Need factors' are driven by an individual's perceived or actual need for healthcare, such as concerns about reproductive health [27]. These include women's desire to prevent pregnancy, manage family size, or address

reproductive health issues [28]. Factors such as previous childbirth, desire for birth spacing, and health risks associated with pregnancy can influence women's motivation to use contraception.

This assessment aims to explore providers' perspectives on contraceptive care using the Andersen model. The model explains how predisposing, enabling, and need factors shape these perspectives, thereby highlighting barriers and facilitators within the delivery system and demonstrating the value of the analytical framework for interpreting the findings.

Methods

Study design

This study employed a qualitative exploratory approach focusing on exploring and understanding the perspectives of individual service providers and the opinions they form regarding contraceptive uptake. Exploratory research is a methodological approach that investigates research questions that have not been extensively examined [29]. In this study, it was appropriate to use this approach because the perceptions of healthcare professionals regarding contraceptive uptake remain underexplored in urban Ghana, warranting an open-ended inquiry to generate an in-depth understanding and new insights. The goal was to uncover the essence of these experiences and provide a detailed description of how service providers perceive and interpret the factors that influence contraceptive use in their respective health facilities and districts.

Study setting

The study was conducted in the Ledzokuku-Krowor Municipal Assembly (LEKMA) and Ga West Municipality (Amasaman). These sites were selected as they constituted two of the most densely populated in the Greater Accra Region of Ghana [30, 31]. Dense populations often correlate with increased demand for health services, including reproductive health services such as contraception [32]. Adding to this, these districts are known to host major public health facilities, thus making them very much ideal locations for exploring diverse experiences related to contraceptive service provision [30, 31].

Sample size and sampling strategy

In determining the sample size in qualitative studies, data saturation is a key concern. Data saturation can be seen as the point in the research process when no new information is discovered in data analysis [33]. Few authors offer empirically based advice regarding when saturation is likely to be reached. For instance, a study suggested that 6 to 12 interviews should be sufficient to reach saturation with a relatively homogenous population [33]. Other studies have also recommended that a sample size range of 4 to 12 participants is likely sufficient when selected from homogenous populations and 12 to 30 participants when selected from heterogeneous populations [34, 35]. Based on this recommendation, this study targeted 20–30 participants.

Data saturation was assessed through iterative coding. By the twenty-fifth interview, no new codes emerged, and three additional interviews confirmed this repetition. Data saturation was achieved at a sample size of 28. Accordingly, a total of 28 healthcare providers participated in this study, comprising 23 from LEKMA Hospital and 5 from Amasaman General Hospital. The difference in sample sizes stemmed from LEKMA Hospital's larger workforce and higher patient volume, which facilitated greater access to eligible and willing participants. Amasaman Hospital had a reduced number of available staff attributed to its smaller size and the unavailability of willing participants. A detailed summary of the participants' characteristics is presented in Table 1.

In selecting the participants, a purposive sampling strategy was used [36], where participants were selected based on their direct involvement in the delivery of

Table 1 Participants' demographics

Demographic Variable	Categories	Frequency (*n*)	Percentage (%)
Age Range (years)	25–34	6	21.4%
	35–44	10	35.7%
	45 and above	12	42.9%
Gender	Male	10	35.7%
	Female	18	64.3%
Highest Education Level	Bachelor's Degree	15	53.6%
	Postgraduate Degree	13	46.4%
Years of Experience	2–5 years	5	17.9%
	6–10 years	17	60.7%
	More than 10 years	6	21.4%
Professional Role	Nurse/Midwife	9	32.1%
	Physician/Medical Officer	14	50.0%
	Community Health Nurse	5	17.9%

reproductive health and family planning services. This ensured that the data collected reflected a comprehensive understanding of factors that influence contraceptive uptake from the viewpoint of healthcare professionals.

Data collection procedures

Data was collected through face-to-face semi-structured interviews. This was guided by a protocol developed from an extensive review of relevant literature. To ensure clarity, coherence, and consistency, the interview guide was pretested with five healthcare providers who possessed similar characteristics to those in the main study population. Feedback from the pretest informed minor revisions in question wording and sequence to enhance understanding and flow before the main data collection commenced. This pretest data was not included in the final data for analysis.

Prior to each interview, participants were consecutively coded, with the first 23 (LEK 1–23) corresponding to LEKMA Hospital and the subsequent 5 (AMA 24–28) from Amasaman General Hospital. They were given an information sheet explaining the purpose of the study, the interview procedures, potential risks and benefits, and the voluntary nature of participation. The information sheet also assured participants of confidentiality and anonymity. Each participant was given adequate time to read the document and ask questions for clarification. After confirming their willingness to participate, written informed consent was obtained before the interview began.

Interviews were conducted in private offices within the hospital premises to ensure comfort and confidentiality. Each session lasted approximately 25 to 30 min and was audio-recorded with participants' permission. The interviews began with introductory questions designed to gather demographic information about the participants. These included questions such as: "Can you briefly describe your current role and responsibilities in this facility?" and "How long have you been providing reproductive health or family planning services?" These initial questions helped to build rapport and contextualize participants' responses.

After obtaining demographic information, the interviews progressed to the main thematic areas of the study. The questions were organized around five sub-themes: contraceptive preferences, factors influencing the choice of contraceptives, barriers to contraceptive uptake, recommended measures to increase contraceptive uptake, and challenges faced by service providers. Participants were asked questions such as: "What contraceptive methods are most preferred by women in your catchment area, and why?"; "What factors influence women's decisions to adopt or reject certain contraceptive methods?"; "What barriers do women face when seeking contraceptive services?"; "What strategies would you suggest to improve contraceptive uptake among women?"; and "What challenges do you encounter as a healthcare provider in promoting contraceptive use?"

Follow-up questions were used to explore depth and clarity based on participants' initial responses. Examples include: "Can you expand on that experience?"; "What do you believe contributes to that challenge?"; "How do you typically react in those situations?"; "Could you provide an example?"; and "Do you think this is relevant for most women you work with?" The follow-ups prompted participants to share more in-depth and nuanced accounts of their perspectives and experiences.

Data analysis

All interviews were audio-recorded and supplemented with detailed field notes to capture contextual and non-verbal cues. Recordings were manually transcribed verbatim in Microsoft Word and cross-checked with audio files and notes to ensure accuracy and completeness. Verified transcripts were imported into NVivo 12.2 for systematic coding, categorization, and data retrieval. The analysis followed Braun and Clarke's six-phase framework of thematic analysis [37]. In Phase one, the researcher familiarized with the data through repeated reading of transcripts and noting initial ideas. Phase two involved generating initial codes by identifying meaningful text segments relevant to the research objectives. Phase three focused on collating related codes into potential themes and subthemes. Phase four entailed reviewing and refining these themes to ensure they accurately reflected the data. Phase five involved defining and naming the themes to capture their core meanings. In Phase six, the report was produced by integrating vivid participant quotations to illustrate each theme. We independently conducted coding and theme development, and any discrepancies were resolved through consensus and reference to the recorded interview.

Rigor and trustworthiness

This study upheld rigor by adhering to Lincoln and Guba's criteria for trustworthiness, which encompass credibility, transferability, dependability, and confirmability, achieved through systematic and transparent methods during data collection and analysis [38].

Credibility can be seen as the confidence in the 'truth' of the findings [38]. In this study credibility was established by building rapport and trust with participants before and during interviews, fostering honest and detailed responses [39]. The interviews took place in private settings at health facilities, enabling participants to express themselves openly. During the interviews, participants' responses were restated and clarified through member checking to ensure their views were accurately

captured. The research team held several discussions during coding to confirm that the emerging themes accurately represented participants' accounts.

Transferability shows that the findings have applicability in other contexts [38]. This was attained by providing thorough contextual descriptions of the study sites, participant characteristics, and the data collection process [40]. This detailed description offers enough context for other researchers or practitioners to assess the applicability of the findings to similar healthcare settings in Ghana or related environments.

Dependability show that the findings are consistent and could be repeated [38]. This was achieved through the maintenance of a thorough audit trail [39]. All steps, including the development of the interview guide, participant recruitment, data transcription and translation, and theme generation, were systematically documented. Two researchers conducted coding independently, employing a constant comparison approach. They discussed any discrepancies until they reached a consensus.

Confirmability is the degree of neutrality or the extent to which the findings of a study are shaped by the participants and not researcher's bias or interest [38]. To achieve this, we maintained field notes and reflexive memos to document their assumptions, observations, and decisions throughout the research process. We held peer debriefing sessions to ensure that our interpretations were based on the data and not swayed by personal biases. The presentation of findings relied heavily on direct quotations from participants, showcasing that interpretations were grounded in their authentic voices.

Ethical considerations

Ethical approval for this study was granted by the Ghana Health Service Ethics Committee (GHS-ERC 002/01/21). To maintain confidentiality, the participants' identities were anonymized, and pseudonyms, along with number codes, were used throughout the study. Recorded interviews and written reports ensured that no identifying information was disclosed.

Results

Understanding the demographics of participants was essential for contextualizing the findings of this study. The participants generally had over two years of working experience in their current positions, and they all attained a minimum of a tertiary-level qualification with a bachelor's degree. These demographics are summarized in Table 1 below.

As observed in Table 2, four themes emerged from the analysis, underpinned by the constructs of Andersen's Model of Health Services Utilization [12] and contextual barriers affecting contraceptive uptake in Ghana. The first theme, predisposing factors, included three subthemes: knowledge and education, influence of peers, and availability and accessibility. These subthemes indicated how understanding, social interaction, and accessibility influence women's uptake of contraceptives. The second theme, need factors, comprised two subthemes: number and spacing of children and psychological considerations. This issue highlights how women's reproductive objectives and mental well-being shape women's choices about contraception uptake. The third theme, enabling Factors, comprised two subthemes: the capacity of service providers and systemic support. These elucidate how professional expertise, financial resources, and institutional frameworks promote contraceptive utilization. The fourth theme, barriers to contraceptive uptake, included four subthemes: partner disagreement, misconceptions about contraceptives, economic constraints, and side effects of contraceptives. This issue illustrates the social, economic, and psychological obstacles that impede the regular utilization of contraceptive services. Table 2 delineates the themes, subthemes, codes, and meaning units that emerged from the analysis.

Predisposing factors of contraceptive uptake

This theme of predisposing factors encompass women's age, marital status, educational level, and socioeconomic status. Cultural attitudes, gender norms, and religious beliefs may also influence or obstruct contraceptive uptake.

Knowledge and education

Education is considered an essential determinant of contraceptive use. Of the 23 participants at LEKMA and five participants at Amasaman, 15 and four respectively indicated that education is the foremost factor that influences the uptake of contraceptives. The participants stressed that unlike in the past when people shied away from contraceptive and family planning services in general, education on the subject in contemporary times has caused more people to patronize contraceptives. Specifically, family planning service providers share the following views:

> *At first they(women) do not have much understanding about family planning and contraceptive use, but now they are patronizing it because they have much understanding of its use. I think this is as a result of education on the subject that women have received (LEK-1)*
>
> *I will say patronage of family planning is better than before because of education. Years ago, most people in this community didn't know much about it but now they have accepted it and they are doing it (LEK-5)*

Table 2 Thematic summary on contraceptive uptake among women in LEKMA and Amasaman Municipalities

Themes	Subthemes	Codes	Meaning Units
Predisposing Factors	Knowledge and Education	Awareness through education	Education at outpatient units, antenatal, and child welfare clinics improves contraceptive understanding and acceptance.
		Health education as an enabler	Health workers and nursing students routinely deliver talks to women on family planning and contraceptives.
		Misinformation deters uptake	Misleading information from social media and TV programs causes fear of infertility and fibroids.
	Influence of Peers	Peer pressure and informal counselling	Friends influence contraceptive choices through shared experiences and myths.
		Reliance on peers instead of professionals	Young women feel shy to visit hospitals and instead seek advice from friends.
	Availability and Accessibility	Distance and cost barriers	Women struggle to access services due to long travel distances and transport costs.
		Limited facility hours	Facilities not operating on weekends or 24 h restrict service access.
		Service shortages	Long-term and permanent contraceptives often unavailable, requiring referrals.
		Alternative access points	Women prefer roadside pharmacies for convenience, though counselling quality is low.
Need Factors	Number and Spacing of Children	Desired family size and birth spacing	Women use contraceptives to delay childbirth, manage spacing, or complete their education.
		Spousal approval	Some women require or seek husband's consent before using contraceptives.
	Psychological Considerations (Peace of Mind)	Avoidance of unintended pregnancy	Women use contraceptives to prevent psychological distress associated with unwanted pregnancies.
		Emotional stability	Unmarried or young women use contraception to feel secure and maintain peace of mind.
		Socioeconomic pressure	Fear of financial hardship during pregnancy or stigma from society motivates use of contraceptives among young women.
Enabling Factors	Capacity of Service Providers	Presence of trained caregivers Professional counselling and service delivery Quality assurance in contraceptive provision	Well trained caregivers should be stationed in every pharmacy to ensure that professional advice and services are provided.
	Systemic Support	Financial support	Financial assistance would support women's inability to access contraceptives.
		NHIS coverage	NHIS should cover the cost of contraceptive services.
Barriers to Contraceptive Uptake	Partner Disagreement	Male disapproval	Men's religious and cultural views prevent partners from accessing contraceptives.
	Misconceptions about Contraceptives	Myths and misinformation	Misconceptions about infertility, fibroids, bleeding, and obesity discourage use. Negative media messages and false claims from herbal drug sellers spread fear.
	Economic Constraints	Influence of media and herbal vendors Poverty and unemployment	Financial hardship restricts access to services and transportation.
	Side Effects of Contraceptives	Fear of health complications	Perceived side effects like weight gain, bleeding, or infertility deter continued use.

Every year patronage of contraceptives increases. Patronage decreased sometime ago, but now it is increasing simply because we have intensified health education on contraceptives and family planning services. We normally talk to women in the mornings at the main OPD and antenatal clinic on the subject and also task our nursing students to go to the wards, child welfare clinic, and labour ward, and give them talks every morning on contraceptive use and family planning (AMA-25)

Although education is the main driver of contraceptive use among women, misinformation can deter people from using contraception. Two participants from LEKMA noted the following.

Patronage was very good but for some time now it has been reduced because people on some social media platforms started giving all forms of information concerning family planning which was not true. Some say that the use of contraceptives causes

fibroids and infertility, and people tend to believe what they see and hear from just any person without going to the health facility to do a proper inquiry (LEK-2)

…At first, people brought their adolescent girls to family planning, but now they do not come because of the wrong information and education they receive, and they are alarmed that their daughters will be unable to give birth if they take contraceptives. Some of these were on some TV programs, unfortunately (LEK-3)

Influences of peers

According to participants, contraceptive use is partly influenced by friends who advise other women on contraceptives and their effects based on their personal experience, hearsay, or myths.

When the Women come, you have to find out from them what they know, what they want, why they prefer a particular contraceptive to the other; it emerges that either a friend told them this one does this or that, so they come here with these ideas already (LEK-12)

Most of the people who patronize contraceptives are young single people, and most of them feel too shy to come to the hospital to solicit professional counselling. As a result, they confide in friends who often feed them with information on contraceptives and the ones they believe work well (LEK-2)

Availability and accessibility

The participants highlighted that contraceptive uptake depends heavily on the availability and accessibility of contraceptive services. They noted that some women were hesitant to seek these services at hospitals due to challenges such as long distances, financial difficulties, and feelings of shyness. To address these issues, participants suggested establishing additional Community Health Planning and Services (CHPS) zones in specific areas within the two municipalities, to make it easier for women to access contraceptives and family planning services.

They also emphasized that door-to-door services could encourage women to confidently use contraception while having their questions addressed in a comfortable setting. However, participants pointed out that many women preferred obtaining contraceptives from roadside pharmacies because of convenience. This raised concerns about the lack of comprehensive counseling and the quality of care provided in such settings. To improve both the availability and accessibility of contraception service quality, participants proposed training community pharmacy attendants to offer better support and guidance for women seeking contraceptive services.

Some women indicated they find it difficult coming to the general hospital to receive contraceptive or family planning services because of distance, and lack of funds for transport. They propose door-to-door services or the opening of community outlets that provide family planning services. (LEK-3)

Another significant issue is that we do not operate on weekends, nor do we offer 24-hour services. This limits access for individuals who are unable to seek family planning services during the week, thereby disadvantaging those with limited weekday availability (LEK-16)

There are times when some clients demand long-term or permanent contraceptives, but we don't have the permanent ones, so we direct them to a different health facility (AMA-24)

Shortages in certain contraceptive types (e.g., long-term ones and permanent methods) and limited healthcare facilities hamper effective service delivery, which requires referral to other centres.

Concerns have been raised by the women concerning limited health facilities in the municipalities offering family planning services (LEK-12)

Most times the facility runs out of these contraceptives especially the patronised one (injectables) and we have to refer clients to other facilities which they are mostly reluctant to go (AMA 26)

Need factors of contraceptive uptake

This theme of need factors is influenced by an individual's perceived or actual requirement for healthcare, such as concerns about reproductive health. Factors like previous childbirth, the desire for birth spacing, and health risks linked to pregnancy can affect women's motivation to use contraception.

Number and spacing of children

Another factor that influences the uptake of contraceptives among women is the number of children they have, their children's ages, and their decision on whether to have more children.

The decision on the number of children to have does influence contraceptive uptake. Specifically, what normally influences women is that they may have more children with shorter intervals, they cannot

cope with many children, or they are students who wish to finish school before having children (LEK-1) Most of the people who patronize the contraceptives are young people and some are not ready to have children in the short term so they opt for contraceptives to prolong the time to have children (AMA-25) Some people want to have contraception to delay pregnancy, but may want to seek permission from their husband before doing it (LEK-14)

Psychological considerations (Peace of mind)

Family planning service providers indicated that having an unwanted pregnancy or child could be traumatizing. To this end, young unmarried couples who cohabitate usually patronize contraceptive services to avoid having children. Those who are even married and do not want to give birth again also demand contraceptive services to have peace of mind.

Contraceptives are mostly used by single individuals because they believe that, as they are not married, using a contraceptive that prevents pregnancy for up to three years gives them peace of mind. It allows them to feel relaxed and confident that they won't get pregnant after having sexual intercourse (LEK-3) Most of those who patronise our services are young girls who have dropped out of school just to work extra to support themselves, they want these contraceptives to prevent teenage pregnancy because their partners do not want condoms and they are also not ready for childbearing (AMA 27)

Enabling factors of contraceptive uptake

This theme emphasizes the essential facilitating factors in influencing women's access to and use of contraceptive services. It illustrates the structural and institutional circumstances within the healthcare system and the wider socioeconomic milieu that either promote or obstruct contraceptive adoption. Two subthemes arose within this construct: the capacity of service providers and systemic support.

Capacity of service providers

This subtheme underscores the importance of the competence, professionalism, and reliability of health workers in encouraging contraceptive use. The findings indicate that the presence of trained caregivers, professional counselling, and adherence to quality assurance standards collectively enhance women's confidence in contraceptive services. As one clinical participant explained, women feel more at ease and are more likely to return when attended to by knowledgeable and respectful providers:

Honestly what helps a lot is if there are trained people who are there. When a woman walks in and sees someone who obviously knows about family planning and can talk to her in a respectful manner, she immediately relaxes…If every chemist had at least one trained person in attendance at all times, women would feel confident in going to seek advice and in starting a method (AMA-27)

Similarly, another participant from LEKMA hospital highlighted the critical role of professional counselling in addressing misconceptions and enhancing method continuation:

The professional counselling is essential…When a woman comes to us for contraceptives she has usually quite a number of questions, fears, or sometimes wrong information about them. I have noticed that women who receive thorough counselling hardly discontinue or change suddenly because they know what to expect. The quality of the talk is everything, not just to provide them with the product (LEK-11)

Another participant from LEKMA corroborated that:

One of the things which will encourage women to use contraceptives is when they are sure of the quality of what we have. If they come today and we serve them well, and when they return next month they get the same treatment, they acquire confidence in the system. We make sure our services are constant, discreet, trustworthy. Even the manner in which we keep and handle the contraceptives builds up trust. When women are assured that what they are being offered is safe and that it is dealt with in a professional manner, they are more likely to use. it and recommend it to others. (LEK-19)

Systemic support

This subtheme reflects broader structural enablers and constraints within the healthcare system, particularly the influence of financial limitations and the gaps in the National Health Insurance Scheme (NHIS). financial hardship and the absence of NHIS coverage for contraceptive services were found to be major deterrents. As the participants explained:

The cost is a very great problem to lots of women, especially to the women in the low-income areas. Some of them are very eager to use contraceptives, but the fare to and from their home alone prevents them. Others tell us that if the cost of the commodities, or the reviews to the doctor were less or covered by the NHIS, it would be a great help (LEK-23)

Sometimes the challenge is not about awareness or willingness, but about the system itself. When commodities are out of stock or the facility lacks funds to restock, we lose women who come back later and are told to return another time. These gaps make them lose trust in the system. If the government could ensure a constant supply and subsidize services through NHIS, more women would remain consistent users (AMA-28)

These perceptions demonstrate that while provider competence builds trust at the service level, systemic and financial and institutional support mechanisms such as health insurance coverage are necessary to sustain and expand contraceptive access equitably.

Barriers to contraceptive uptake

Promoting the uptake of contraceptives among women in the two districts is predicated not only on understanding the factors that influence contraceptive uptake but also on the barriers that may inhibit uptake. Four subthemes emerged, namely: partner disagreement, misconceptions about contraceptives, economic constrains and side effects of previously used contraceptives.

Partner disagreement

Disagreement from partners is a major factor impeding contraceptive uptake among women.

Most of the time the men don't want their wives or girlfriends to patronize family planning services because of religious reasons or their desire to have many children. But there are instances where the women go behind their partners to patronise family planning services without informing their partners (AMA-28)

Sometimes, the husbands are not supportive when it comes to the uptake of contraceptives, so the women secretly come to take it to space their children or determine the number of children to have (LEK 6)

Misconceptions about contraceptives

Misconceptions are among the factors that influence the uptake of contraceptives. There are instances where people form a mistaken idea about contraceptive use, which influences their decisions on contraceptive use. These misconceptions are based on side effects, hearsay from friends and other myths. Below are some of the participants' views on how misconceptions influence contraceptive uptake.

During counseling, some individuals may be unaware of the facts, but the myths they've heard in their communities often lead to skepticism about contraceptive use. It's essential to clarify these misconceptions to help clients make informed decisions (LEK-10)

Some clients have formed wrong perceptions about contraceptives; some had heard they will become infertile for the rest of their lives, develop fibroids, bleed to death, become obese, etc., and because of that, they do not want to patronize contraceptives. What we normally do is more counselling for such people, explain things to them and quash the wrong and mistaken ideas from their minds (LEK-11)

They have a lot of misconceptions going on, from the radio to the TV stations there is one guy called A, who keeps on spreading bad rumours about family planning services. Sometimes, people who are selling their herbal drugs will tell you family planning will cause fibroids among other things and these discourage people from using contraceptives (LEK-8)

Economic constrains

Economic factors, including unemployment, low income, and financial constraints, have been identified as significant influences on contraceptive uptake among women, as perceived by healthcare providers. Financial challenges are recognized as barriers to accessing contraceptives, with many women unable to afford them despite their relatively low cost.

Income inequality is notably pronounced in densely populated areas such as LEKMA and Amasaman, where a significant proportion of women are impoverished, unemployed, and either dependent on their partners or engaged in multiple sexual relationships. Due to their low socioeconomic status, some women lack the financial resources to purchase contraceptives or cover transportation costs to healthcare facilities for professional guidance on contraceptive use. Consequently, they often rely on advice from peers, utilize concoctions from unlicensed drug sellers or purchase contraceptives from pharmacies without seeking professional consultation.

family planning is not that expensive, but the issue is most of these women are so poor to the extent that, transportation to the health facility is even a challenge for them (LEK-15)

I don't think economic or financial constraint is a major challenge that affects the uptake of contraceptives. This is because family planning is not expensive, however, most of these unemployed young women could hardly afford it, even to moving to the facility for the service is an issue (AMA-25)

Subsidizing costs and integrating contraceptive services into the National Health Insurance Scheme (NHIS) could alleviate financial barriers. The two communities studied were densely populated and had significant levels of poverty. Participants noted that some women suggested that the National Health Insurance Scheme (NHIS) should cover family planning services.

> *Family planning services are not that expensive. Thus, they are affordable. However, the NHIS does not cover the cost, so we sell all forms of contraceptives unless there is a promotion or donation by an NGO (LEK-8)*

Side effects of previously used contraceptives

According to the providers, common minor side effects, including abnormal bleeding, weight gain, or weight loss, have alarmed other women and discouraged them from patronizing contraceptives.

> *Many of these women have attempted using one contraceptive method or another; however, experiencing discomfort or minor side effects often discourages them from seeking further counseling or clarification at the facility. Additionally, they tend to share these negative experiences with others, which further discourages other women from using contraceptives (LEK-10)*

Discussion

This study examined healthcare providers' perspectives on contraceptive uptake among women in urban Ghana using Andersen's Model of Health Services Utilization [41]. Findings are discussed under four thematic areas: predisposing factors of contraceptive uptake, enabling factors of contraceptive uptake, need factors of contraceptive uptake among women, and barriers of contraceptive uptake among women.

Predisposing factors of contraceptive uptake emerged prominently in the study. Education and counselling, as well as influence from peers, were found to be predisposing factors to contraceptive use among women. This theme was also reported in a study by D'Souza et al. [42] who focused on a systematic review of varying literature on contraception uptake. It is evident from the results that public health education regarding the benefits and proper use of contraceptives can promote contraceptive uptake among women. However, when education focuses predominantly on the few undesirable side effects of contraceptives rather than the benefits, it engenders apprehension and reluctance to use contraceptives. This aligns with findings from previous studies that reported the 'fear of side-effects" among the key reasons for non-contraceptive use [8, 43–45]. From our study, most women who utilize contraceptives are young and single, which is consistent with findings reported in a study in Nigeria [46]. It is therefore recommended that education on contraceptives should be introduced to young people, preferably at school, to equip them with essential knowledge on contraceptives and alleviate their concerns arising from potential associated misconceptions and myths. Such educational empowerment would aid in preventing teenage pregnancies, which are prevalent in these communities and have kept many young females out of school. This public health awareness and educational engagement would potentially be most effective if led by service providers from health facilities, consistent with findings that information from community sources may often be inaccurate and discouraging [47]. The findings further suggest that national adolescent reproductive health strategies should incorporate school-based contraceptive literacy programmes. This recommendation aligns with another study that identified education as a predisposing factor influencing contraceptive use among women [48].

The study also revealed that enabling factors of contraceptive uptake were just as important as the predisposing factors. Factors such as the capabilities of service providers and systemic support greatly shaped women's access to and use of contraceptive services. Participants highlighted the importance of well-trained health providers and professional counselling in delivering quality contraceptive services and facilitating informed decision-making. This finding is consistent with the observations in rural parts of Pakistan, such as Sindh, where service providers' competence and respectful counselling practices increase clients' trust and their willingness to use contraceptives [49]. Similarly in Ethiopia, studies show that women's satisfaction with family planning services was closely linked to provider skills and interpersonal communication, highlighting the importance of service quality in contraceptive use [50, 51]. The current findings also underscore systemic challenges, including financial constraints and deficiencies in the National Health Insurance Scheme (NHIS), which hinder women's access to affordable contraceptives. This aligns with findings in Nigeria, where cost-related barriers continue to hinder modern contraceptive use among low-income women [52]. Additionally, research has established that socioeconomic differences greatly influence contraceptive use, with wealthier women having greater access and continued usage [42]. This shows that provider capacity and financial accessibility are interconnected factors that influence contraceptive uptake. This highlights the necessity for integrated policy strategies that improve professional training, broaden NHIS coverage to encompass family planning services, and reduce economic obstacles to guarantee equitable access for all women.

With regard to need factors, the study found that the need for contraceptives often stems from women's and couples' family planning goals, including child spacing and limiting family size. This emphasizes the importance of aligning contraceptive counseling with women's reproductive intentions, the desire to plan family size, and spacing of children as reported by Foster et al. [53]. Again, psychological considerations such as the desire to avoid unintended pregnancies and the associated stress underscore the importance of contraceptives for many women. This resonates with a previous study on the psychological aspects of contraception and unintended pregnancy, which identified women who experienced unintended pregnancies as being at a higher risk of postpartum depression [54]. Women's desire to avoid such psychological distress explains their need to use contraceptives. It would therefore be beneficial for reproductive health programs to tailor contraceptive services around individual reproductive goals and integrate psychological support for women facing pregnancy-related anxiety.

Finally, this study identified barriers to contraceptive uptake. These barriers include informal support and partner disagreement, misconceptions, and fear of side effects. Partner disagreement or opposition, often rooted in cultural or religious beliefs, poses a significant barrier to contraceptive use [55, 56]. Previous studies indicate that male involvement in family planning can positively influence contraceptive uptake [57, 58]. Strategies to engage men in family planning education are crucial. Fear of side effects and misconceptions about contraceptives deters many women. Research indicates that addressing these concerns through accurate information and counseling can improve contraceptive use [45]. As a result, gender-inclusive community-based education programs that consider both men and women could help counter misinformation and promote shared decision-making in family planning.

These findings offer critical insights into the multifaceted factors influencing contraceptive uptake in urban Ghana, as viewed by frontline healthcare providers. By shifting the lens from clients to service providers, the research fills a significant gap in the literature, particularly in low and middle-income urban settings where such perspectives are often overlooked. The findings highlight the dual role of public education as both a facilitator and barrier, emphasizing the importance of accurate, context-sensitive communication strategies. This work has the potential to inform more effective, provider-informed family planning policies and interventions, ultimately enhancing reproductive autonomy and healthcare outcomes for women in similar urban contexts globally.

Conclusion

The use of contraceptives among Ghanaian women living in urban areas is influenced by various factors, including predisposing, need, enabling, and barriers. Factors such as education, peer influence, and accessibility shape awareness and initial willingness to use contraceptives. In contrast, need factors like desired child spacing and psychological considerations affect ongoing use. Key factors, such as provider expertise and systemic backing, boost confidence and improve service quality. Nonetheless, challenges like partner disagreement, misunderstandings, financial limitations, and side effects continue to exist. As a result, enhancing counselling, public education, provider training, and incorporating contraceptive services into the National Health Insurance Scheme can boost uptake and ensure continuity.

Implications for future research

The study calls for context-specific, community-based interventions to enhance contraceptive uptake. Future research should explore these factors across different regions to inform targeted policies. Addressing misconceptions, improving accessibility, and enhancing service quality are crucial for better maternal and child health outcomes, and this study provides valuable insights for policy and intervention reforms. Future research could broaden the scope to include women seeking advice from alternative sources, enriching the understanding of contraceptive uptake across different population segments.

Strengths and limitations of the study

This study is limited by its focus on the perspectives of service providers about women who seek family planning and contraceptive counselling from health facilities and not those of the contraceptive service users. However, it offers valuable insights into the experiences of those actively engaging women on contraception healthcare services. Additionally, more than half of the study participants were medical doctors, despite midwives and community health nurses being the principal providers of contraception and family planning services in Ghana. As a result, the study missed the opportunity to capture more in-depth perspectives from these frontline providers, highlighting the need for future research to focus more on their experiences and insights.

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Author contributions

BT, and SPE co-designed the study and participated in proposal writing. BT led the data collection. BT, and SPE performed the data analysis and review. BT and SPE drafted the initial manuscript. SPE is responsible for correspondence. All authors participated in manuscript writing and review and have approved the final manuscript for submission.

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Data availability
The data that support the findings of this study are available from the corresponding author, [SPE], upon reasonable request.

Declarations

Ethical approval
for this study was granted by the Ghana Health Service Ethics Committee (GHS-ERC 002/01/21). Written informed consent/assent was also given by each participant and we confirm that the study was performed in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

Competing interests
The authors declare no competing interests.

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