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Perspectives of adolescent girls (10–19 years) in Mahama camp on factors affecting accessibility of contraceptive services in the camp in 2022

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Abstract

Background The Mahama camp was established in 2015 to accommodate displaced populations from different countries, including Burundi, the Democratic Republic of Congo, and Rwanda. The camp, located in Rwanda's Eastern Province, Kirehe District, spans 50 hectares and encompasses 18,360 households across 15 villages. The prevalence of adolescent pregnancy in the Mahama camp was alarming at the time of the study, despite multiple campaigns by the government and international partners, underscoring the complexity of the problem and the need for further research. This study identified factors influencing the accessibility of contraceptives for adolescent refugee girls in Mahama camp in 2022, from the perspective of girls aged 10–19, to inform the design of interventions based on insights gained from the social cognitive theory.

Methods We undertook in-depth interviews using a semi-structured guide with 19 adolescent girls aged 10–19 years. Participants were selected to represent diverse socio-demographic characteristics, including in-school and out-of-school girls, married and unmarried girls, and those who have or have not ever been pregnant. Data were analysed thematically using the Social Cognitive Theory to identify barriers and facilitators to accessing contraceptive services in the Mahama refugee camp.

Results Enablers of access to contraceptive services included free service provision and support from healthcare providers. Furthermore, community awareness campaigns, convenient service locations, and knowledge about contraception also played an important role. Barriers to access included cultural and religious norms, fear, and misconceptions, as well as camp-specific challenges such as limited funding, shortages of contraceptives, and too few service providers.

Conclusion Improving adolescents' access to contraceptive services in the Mahama Refugee Camp requires coordinated action among key stakeholders, including the government, international partners, and the Mahama camp community. All these stakeholders require a joint effort to ensure consistent availability of contraceptives at youth-friendly and safe service points, alongside expanded and amplified community awareness

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programs. Furthermore, it is essential to improve efforts to address the shortage of supplies and human resources. The shortage of healthcare workers and revising age-based legal restrictions would further improve adolescents' access to contraceptive services, which also need to be addressed.

Keywords Contraceptives, Adolescent refugee girls, Mahama camp, Unintended pregnancy, Social cognitive theory

Introduction

Access to contraceptive services by adolescents is a global health concern. In 2017, a WHO report estimated that about 23 million adolescents have unmet needs for modern contraception – exposing them to unintended pregnancy [1]. Reports from WHO also showed that 12 million adolescents aged 15–19 years give birth each year, mainly in low and middle-income countries; at least 10 million of these pregnancies were unintended [2]. Notably, adolescence encompasses several physical, cognitive, and behavioural changes that may lead to experimentation with sexual activities [3]. However, despite global commitments such as FP2020 and the 2030 Agenda for Sustainable Development, such as the SDG3 (health and well-being) and SDG5 (gender equality), countless women and adolescent girls are still left without access to modern contraceptives and comprehensive SRHR services [4]. Evidence has shown that beliefs, fear of side effects, misconceptions, providers' attitudes, restrictive laws, and social, cultural, and religious norms are common barriers restricting adolescents from accessing contraceptive services [5].

In Rwanda, 20% of adolescent females and 23% of teenage males (15–19 years) have sex, with an alarming 72% of those girls having an unmet need for modern methods of contraception [6]. Research in Rwanda has shown that a lack of knowledge on reproductive health, cultural beliefs, level of education, pressure, peer social media, and poverty are among the leading causes of teen pregnancy [7]. Although the role of poverty in the proliferation of teenage pregnancy is evident, Rwanda has recorded a significant growth in its GDP, from 7.3% in 2010 to 8.9% in 2015 [8]. This level of growth is expected to bring a positive change to the lives of adolescents, thereby reducing teenage pregnancy; however, statistics still show a 1% increase in adolescent pregnancy from 6.3% to 7.3% in the same period [9].

Contraceptive service is an evidence-based approach to prevent unintended pregnancy or family planning; however, there have been drawbacks in its utilization. Failure to access or effectively utilize contraceptive services has continued to fuel the increase in pregnancies among adolescents, predisposing them to consequences of school dropout, increased poor health outcomes, unmet economic needs, poor education, family conflict, life-threatening conditions, and even death [7].

Refugee camps are potential high-risk locations for rape and sexual violence, especially among adolescent

girls. Rwanda has six refugee camps, with Mahama camp being the largest, accommodating over 45,000 refugees, of whom 49.9% are adolescents [10]. In the Mahama camp, an increase in teenage pregnancy has been observed, even though there are ongoing campaigns by the government and development partners aimed at reducing these pregnancies, showing the complexity of the issues and the need for more research [11]. A study conducted in Rwanda in Nyabiheke and Gihembe refugee camps showed that the prevalence of family planning uptake was only around 32% to 40% [12].

There were no studies that explored the perspective of adolescent girls accessing contraceptives in the Mahama camp when we did this study in 2022. Therefore, this study focused on identifying factors that influence the accessibility of contraceptives for adolescent refugee girls in Mahama camp from the perspective of girls aged 10–19 to inform the design of interventions based on insights gained from the social cognitive theory.

Theoretical framework: the Social Cognitive Theory (SCT)

This study draws on social cognitive theory, which outlines that learning happens in a social context with a dynamic interaction of people, environment, and behavior—allowing people to learn from their own experience and through observation of other people's experiences [13–16]. Interventions to change health behaviors, therefore, depend on identifying the positive and negative supports and detractors for each of these three factors [17].

Methods

Setting

The study was conducted at the Mahama Camp in Rwanda's Eastern Province. Various humanitarian organizations operated in the camp at the time of the study in 2022, including the United Nations High Commissioner for Refugees (UNHCR), ALIGHT, and Save the Children International (SCI). The camp had four service provision sites: two health centers and two Youth-Friendly Centers.

Research design

This study adopted a qualitative descriptive approach. We interviewed adolescent girls aged 10–19 years who lived in the Mahama camp during the study period, from May to August 2022. The in-depth interviews enabled us to explore and understand the barriers and facilitators of access to contraceptive services from the perspectives of this age group in the camp.

Sample and sampling

The study participants were purposively selected to include adolescent girls aged 10–19 years with varying socio-demographic characteristics, including those in- and out-of-school, married and unmarried, and those who have or have not ever been pregnant. Adolescents who had lived in the camp for more than 6 months and were able and willing to take part in this qualitative study were identified with the assistance of workers and development partners working in the camp. Given the researchers' lack of access to the entire camp population, interested study participants were selected from a list of beneficiaries of a civil society organization operating in the camp.

Data collection and procedure

The researchers developed a semi-structured interview guide based on the Social Cognitive Theory for this study. Before data collection, the interview guide was pretested. The framing of questions highlighted the interaction between individual, social, and environmental factors influencing adolescents' access to contraceptive services. Key SCT concepts, such as knowledge, outcome expectations, self-efficacy, observational learning, social norms, and environmental facilitators, were mapped to interview domains. The interview guide explored participants' knowledge and beliefs about contraception, including the perceived benefits and risks. Other domains, such as self-efficacy, were assessed by asking about adolescents' confidence in seeking services and their challenges in navigating access. Social influences were examined through discussions on family, peers, religious leaders, community norms, and exposure to peer educators as role models. The questions also focused on environmental factors, including service availability, affordability, location, privacy, youth-friendliness, and confidentiality. This approach ensured a comprehensive, theory-driven understanding of contraceptive access.

Using this interview guide, participants were interviewed in a private location provided by Save the Children. None of the staff were allowed to be present during the interviews to ensure confidentiality and privacy.

Informed consent

Informed consent forms were completed by participants aged 18 and above and by parents/guardians of adolescents aged 18 and below. These were obtained after the participants were given detailed information about the study. The IDIs were conducted in Kinyarwanda (the local language) via data collectors at a private location of their choice. The researchers also ensured consent to audio-record the interviews.

Two females who could communicate fluently in English and Kinyarwanda were recruited and underwent

the required training and orientation before data collection. The team also hired one transcriber/translator, who ensured the data was transcribed and translated accurately. One of the core research team members, a Kinyarwanda speaker, also checked the quality of the transcripts and translations.

Measures

This study focused on understanding adolescents' access to contraceptive services through a Social Cognitive Theory lens, which explores individual, social, and environmental determinants. Key measures included knowledge of contraceptives, beliefs about their use, perceived outcomes of use, and personal, social, and environmental influences. Social influences, including family, peers, community norms, and peer educators, were assessed. Ecological and structural factors included service availability, affordability, privacy, safety, confidentiality, and youth-friendliness. In addition, the interviews explored policy and legal issues and participants' perceived barriers and facilitators around those to provide a comprehensive understanding of factors shaping contraceptive accessibility among adolescent refugee girls in Mahama Camp.

Data management and analysis

All the interviews were recorded, transcribed, and translated from Kinyarwanda to English. These transcripts were initially coded deductively based on core SCT concepts and organized into broad categories reflecting individual cognitive factors (e.g., beliefs, misconceptions, perceived risks), social influences (e.g., stigma, peer and provider support, community norms), and environmental conditions (e.g., service availability, cost, privacy, policy constraints).

The researchers undertook inductive coding to accommodate new themes that emerged from the data and were not anticipated by the theory. All the coded transcripts were reviewed and grouped into themes, and representative quotes were included in the findings. All coding was done using Dedoose software version 9.

Ethical considerations

The study was approved by the University of Global Health Equity IRB and the Mahama camp officials under reference number *UGHE-IRB/2022/017*.

Results

Participant characteristics

Nineteen in-depth interviews were analyzed for this research article. All the adolescents were females with a median age of 17 (range:10–19). Four of the adolescent refugee girls interviewed were teen mothers, while one was pregnant. 31.58% of the adolescents had

Table 1 Demographic characteristics of adolescents

Characteristics		Adolescent
Sample		19
Age	Median	17
	Range	10–19
Education level	Primary	6 (31.6%)
	Secondary	13 (68.4%)
	Tertiary	0

Table 2 Five overarching themes emerged from the analysis

Theme 1	The availability of quality service provision enabled access to contraceptive use by adolescent girls in Mahama Camp
Theme 2	Service provision setting promoted accessibility of contraceptives by adolescent girls in the Mahama camp
Theme 3	Cultural and social norms, beliefs, and attitudes of parents and community members negatively affected the accessibility of contraceptives among adolescents in Mahama Camp
Theme 4	Adolescent refugee girls' knowledge of contraceptive services available in the camp promoted access to contraceptives
Theme 5	Adolescent girls face limited access to contraceptive services in the camp due to stockouts in the facilities

completed primary education, and 68.42% had completed secondary education. A majority of the refugees in the camp are from Burundi, with a small minority coming from the Democratic Republic of Congo. Older adolescents (15–17) arrived in the camp as children at the peak of the Burundi crisis between 2015 and 2017, while younger adolescents (10–14) were likely born in the camp.

The primary languages spoken in the camp at the time of the study were Kinyarwanda and Kirundi, which are the national languages of Rwanda and Burundi, followed by Swahili. The interviews were conducted in Kinyarwanda, with translation provided by one of the adolescents from the camp.

As shown in Table 1 below, our sample consisted of 19 adolescents aged 10–19, with a median age of 17. Most participants hold secondary-level education, while a smaller group (31.6%) has primary-level education.

Our findings are organized into the following overarching themes (Table 2), which are discussed in detail in the sections below.

Theme 1. The availability of quality service provision enabled access to contraceptive use by adolescent girls in the Mahama camp

According to the WHO quality of care standards, quality SRH service provision is the delivery of care that is safe, effective, timely, efficient, equitable, and people-centered, enabling individuals to achieve the highest possible standard of SRHR. A range of sexual reproductive health

(SRH) preventive and responsive services were available in the camp, including condoms, emergency pills, birth control pills, injections, implants, and intrauterine devices from both the Youth Friendly Centre and Health Centre. These specific aspects of service were mentioned as enablers for them to access services, and these are the non-requirement for parental consent, support and guidance, and awareness-raising sessions.

Consent from parents or guardians is not a requirement for adolescents to access services.

Participants indicated that access to pregnancy prevention services in the camp is provided for adolescent refugee girls without consent from their parents/guardians, which is unique, as consent is mandatory in the rest of Rwanda.

"Services are free of charge, and to get the services, there is no need to ask for permission from your parents or camp officials. When you arrive at the health centre, you tell them what you need, and they provide it easily. For the youth, you can come here to the youth centre" (Female Adolescent 018)

One of the participants explained how she ended up pregnant because she was not in the camp when she needed pregnancy prevention services and could not afford the service elsewhere.

"At that time, because I was not in the camp, I had no access to those services; and health providers who were with us had first aid materials for injured people. At the place where I went to look for them (contraceptives), they charged me 15,000Rwf" (Female Adolescent 003)

Sufficient support from health workers and peer educators

Participants described that the support and guidance provided by health workers and peer educators had helped them access pregnancy prevention services. They were encouraged to go to the health/youth centre because they trusted the health care worker and could confide in them. The friendly and competent peer educators also facilitated access to contraceptive services.

"It's just that it stays between the doctor and me." (Female Adolescent 008)

"Yes, we appreciate those services because the health provider welcomes you at no cost and they start by talking to you to know if you really want to get the service and then serve everyone who comes to access them. Service providers do not complicate the situations for the clients" (Female Adolescent 010)

"There are staff in charge who are called peer educators who help adolescent girls to access every service provided at the youth centres. Even when you are in a rush, they help you to be served rapidly." (Female Adolescent 013)

Community outreach and awareness-raising programs were frequently organized in the camp

Adolescent SRH in the camp is promoted by peer educators from the leading SRH providers, namely Save the Children and Alight. Using this model, organizations deploy two trained peer educators per village who disseminate SRH information and raise awareness of available services through community outreach. This results in effective referral of adolescents to health and youth centres for comprehensive pregnancy prevention services and qualified clinical support.

"Save the Children and ARC (Alight) teach us. They have peer educators who go around in the camp teaching, and they provide books from which you can read about family planning methods." (Female Adolescent 003)

"Peer educators and community health workers from Save the Children and Alight (former ARC) are facilitating access to the services. They usually work within the community, providing teachings and condoms" (Female Adolescent 019)

"When you go and tell Peer Educators what you have done (unprotected sex), they take you to the youth centre to meet a health provider who provides advice and medications. All of this is done in a single day. And they work every day except during the weekend" (Female Adolescent 002)

Theme 2: Service provision setting promoted the accessibility of contraceptives by adolescent girls in the Mahama camp.

The study revealed adolescent participants' preference for the use of youth centers for accessing contraceptives over traditional health facilities. This preference is primarily driven by the centres' less crowded environments, which adolescents report reduces their feelings of stigma and improves privacy. This facilitates easier and more discreet access to contraception.

Setting and location of health centres and youth centres

The youth centres were located in hidden areas; this gave adolescents some privacy, as they were less likely to be seen entering the centres, thereby increasing their willingness to access these services comfortably.

"The location we visit to get those services is hidden, and you do not find many people there, unlike the

health centre. When you come, you can enter without waiting" (Female Adolescent 004)

"This place is hidden, and not many people can see them (service users)." (Female Adolescent 010)

In addition, due to the high demand for healthcare services at the two health centres in the Mahama camp, the queues are always long. Our participants said they were discouraged from accessing contraceptives at health centres due to long waiting times. The youth centres, on the other hand, serve only adolescents and are always ready to provide them with services.

"When you go to the health centre, you line up, and you can return home without getting the services because there are many people. However, at the youth centre, they serve you immediately, and you can get the service either from Save the Children or from ARC (Alight)" (Female Adolescent 013)

Theme 3. Cultural and social norms, beliefs, and attitudes of parents and community members negatively affected the accessibility of contraceptives among adolescents in the Mahama camp.

Adolescents feel ashamed to access contraceptive services

Many adolescent girls do not access pregnancy prevention services directly from health care workers at the health centre, as these services are mostly considered to be for married people. Adolescent girls are afraid of being labelled as "loose" by friends, parents, and the community.

"There is a shame. A girl worries about what people are going to say about her if they see her coming from Save The Children [Youth Centre]." (Female Adolescent 002)

"I did not look for these services even though I knew they were available because I was thinking that it is shameful for young girls to do that, and I was thinking these services are for married women" (Female Adolescent 006)

Religious and cultural beliefs affect adolescent girls' access to pregnancy prevention services.

Residents in the Mahama community mainly were Christians (Pentecostal and Catholic denominations) and Muslims during the time of this study. These two religions do not support premarital sex and the use of contraceptives. Some participants expressed that having sexual intercourse, as well as using any method of pregnancy prevention services, is considered a sin against their religious and cultural beliefs. Adolescents who engage in such acts are immoral. These religious and cultural beliefs are

environmental barriers to adolescents' access to contraceptives in the Mahama camp.

"... due to religious belief, which says that family planning is a sin." (Female Adolescent 006)

"It is not right; when you have sex, you are wrong, and it is a sin." (Female Adolescent 010)

"It is a sin, and it is not appropriate. It is immoral, and you can get pregnant, and it is not good to sleep with someone you are not married to." (Female Adolescent 020)

Fear and misconceptions concerning contraceptives amongst adolescent girls

Misconceptions and misinformation about contraceptives are prevalent in the camp. Some adolescent girls believe that long-term use of contraceptives can lead to infertility or deadly illnesses. In contrast, some do not believe family planning methods are effective, making them afraid of using contraceptives.

"When I went for family planning services, people told me that it would make me look bad, that I would be killed by the implant, or that I could even get pregnant while using the implant." (Female Adolescent 003).

" People say that you can become infertile and unable to have children after you stop using family planning services." (Female Adolescent 020)

"... they [other girls] are afraid of becoming barren, that they will develop illnesses they did not have before or give birth to children with disabilities or malformations, all due to family planning services" (Female Adolescent 004)

Theme 4. Adolescent refugee girls' knowledge of contraceptive services available in the camp promoted access to contraceptives

Having knowledge of pregnancy prevention methods is a critical step to accessing the services. Many of the participants demonstrated some level of understanding of contraceptives and their uses. Adolescents in the camp shared that they have the necessary information about contraceptives, which would help their decision about accessing contraceptives.

"There are injections, implants, pills, and most adolescents use condoms" (Female Adolescent 015)

"If I fail to abstain, I can use a condom or have an injection or pills, or implants for 5 or 3 years." (Female Adolescent 004)

Theme 5. Adolescent girls face limited access to contraceptive services in the camp when facilities run out of contraceptives

Shortage of contraceptive services

Adolescent girls noted that there were times when Youth Centres and Health facilities ran out of contraceptives, by the time this study was conducted in 2022. This created challenges in their access to services.

"There are times when you are told that condoms are not available when you need them." (Female Adolescent 012)

There are not enough health workers providing services

The availability of skilled human resources is an essential factor for the effective and efficient delivery of health services. Some adolescents felt that the shortage of health-care workers affected the quality of the services they received.

"We are not satisfied with the services because the providers are few." (Female Adolescent 019)

Discussion

This study used the Social Cognitive Theory (SCT) as a framework to explore determinants of contraceptive access for adolescent girls in the Mahama Camp in 2022. This framework allowed us to focus on the interplay of personal factors, social influences, and structural issues affecting contraceptive access in the camp for these adolescent girls. It revealed that access is not just affected by service availability but by the interplay of factors, including adolescents' beliefs, social norms, and the presence of a supportive or restrictive environment.

One of the factors that affects access to contraceptive services is the camp communities and interviewees' understanding of acceptable sexual conduct, which is abstinence. Community views led to adolescents' discomfort in accessing contraceptive services, as it could indicate their sexual engagement, and what the community would perceive as an immoral behaviour. These lead to negative outcome expectations, as adolescents foresee social punishments, shame, gossip, or stigma. These outcomes also limit adolescents' inclination to use contraceptives, despite the availability of services. The notion that some contraceptive options are only available for married women also affected adolescents' entitlement and inclination to use the available services. As the literature indicates, the presence of various cultural paradigms advocating abstinence in different contexts that affect access is acquired through observation and social engagement [5]. From the standpoint of Social Cognitive Theory (SCT), it is essential to address such norms and environmental determinants that seem to influence

an individual's action, understanding, and behaviour through the mechanism of reciprocal determinism. These convictions may place adolescent females who choose not to refrain from sexual activity at an increased risk for unintended pregnancies and sexually transmitted infections due to postponements or omissions in the utilization of contraceptive methods.

Our study also revealed participants' misunderstandings about contraceptive use as an obstacle to accessing services. Some participants noted that contraceptive use could lead to serious health issues such as cancer and infertility. Such perceived misconceptions could surpass the perceived benefits of using contraceptives. Even though some teenagers showed understanding of the various forms of contraception, their capacity to act on this knowledge was hampered by fear brought on by false information. This research revealed a disconnect between acquiring new information and behaviour change, suggesting that awareness-raising initiatives should focus on knowledge as well as on addressing underlying myths and anxieties. This also emphasizes the importance of improving teenagers' behaviour using reliable information sources and relatable messengers.

Adolescents in this study identified environmental obstacles that limited access to contraceptive services, such as shortages of healthcare staff and stockouts of contraceptives, in addition to personal views. These obstacles are examples of SCT environmental determinants that restrict opportunities to engage in desired health behaviours. The lack of resources or providers hindered teenagers' ability to achieve their objectives, even when they were motivated to seek services. These difficulties in low-resource environments are widely known [18, 19]. Reducing stockouts has been suggested by strengthening supply chain systems through better logistical management, sufficient financing, and improved staff capacity. Although participants did not specifically link these shortages to broader financial dynamics, it is conceivable that national, regional, and international financing trends influenced the observed service interruptions. SRH service delivery has been shown to be disrupted elsewhere, particularly due to donor funding decreases following the reinstatement of the Global Gag Rule in 2017 and resource diversion during the COVID-19 pandemic [20]. The service environment in Mahama Camp is likely shaped by these contextual factors, which also interact with person-level access determinants.

A shortage of healthcare professionals exacerbated access issues. In SCT, the environment in which behaviour occurs is constrained by a lack of human resources, which reduces service availability on weekends and lengthens wait times. Techniques such as task shifting, increased health worker production, and healthcare

worker retention have been used in other contexts to address similar issues and may be applicable here.

The study found a number of helpful characteristics that made it easier for teenagers to obtain contraceptive treatments in spite of these obstacles. Many participants showed that they were knowledgeable about contraceptive techniques, mainly because of community awareness efforts and peer educators. By providing teenagers with accurate knowledge and sympathetic role models, these interventions under SCT promote observational learning and improve behavioural competence. In particular, peer educators were crucial in dispelling myths and directing teenagers to the right resources.

One of the most critical environmental enablers was the availability of youth-friendly facilities and helpful service providers. Services that were free, private, and provided in environments that reduced visibility and waiting times were highly valued by adolescents. These characteristics boosted teenagers' self-efficacy to seek help and decreased expected stigma. Adolescents' comfort and desire to use contraceptives were heavily influenced by privacy and secrecy, which is consistent with prior research. Adolescents could seek treatment without fear in safe places developed by youth centres with anti-stigma programs and kind staff.

Free contraceptive services were also found to be a powerful incentive for access, especially considering the restricted financial resources of teenagers living in refugee environments and by promoting service use and normalizing access to contraception among teenagers, social support from peer educators and service providers further reinforced favourable behaviours. According to SCT, various types of assistance serve as positive reinforcers that boost self-esteem and maintain health-seeking behaviour.

In general, the combination of structural factors, social norms, and personal beliefs influenced adolescents' access to contraceptive services in the Mahama camp in 2022. To improve access, treatments must simultaneously address multiple levels, reflecting the reciprocal determinism principle of SCT. While youth-friendly, private treatment settings can boost self-efficacy and lessen stigma, community outreach and awareness-raising can change attitudes and expectations for results. To help teenagers put their intentions into practice, it is also crucial to ensure steady commodity availability and sufficient staffing.

Conclusion

Improving access to contraceptives among adolescent refugee girls in Mahama Camp would go a long way in reducing the prevalence of unwanted pregnancies. However, for this to be done, there is a need for research-based interventions that match the adolescent refugee

girls' needs. Such studies as this one are important in validating the voices of adolescents who are the end users of services.

The study has shown a broad spectrum of barriers and enabling factors influencing the accessibility of contraceptives among adolescent girls in the camp. For local camp administrators and service providers in the area, such as UNHCR, Alight, Save the Children, and relevant government offices, such studies on access and barriers will help them optimize their services and further strengthen their youth-friendly service models. This study showed that interventions to break the barriers and improve accessibility of pregnancy prevention services amongst adolescents must cut across individual, community, and health system levels. There should be a joint effort by all stakeholders, including health workers, civil society organizations operating in the camps, and responsible government organs, to ensure that contraceptives are constantly available at the service points while amplifying community awareness programs where the community is educated on the need for contraceptive use among adolescents. An understanding of the need for contraceptive use among adolescents would help to reduce shame and stigma for adolescents who use contraceptives.

It is also essential for the government to support non-governmental organizations in the camp by providing additional health workers. This can start with training more community volunteers and mobilizers to support the limited number of health workers in the camp. This will invariably create jobs for some refugees in the camp.

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Authors' contributions

ACU, LM, and AM read the transcripts and analyzed the data. They jointly wrote the different sections of the report. TY reviewed and edited the full report. All authors read and approved the final manuscript.

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Data availability

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with the Declaration of Helsinki and approved by the University of Global Health Equity Institutional Review Board on April 19, 2022, with reference number UGHE-IRB/2022/017.

Consent for publication

Consent and assent were duly received from participants prior to data collection. All consent and assent forms are stored appropriately and will be made available for further referencing when required.

Competing interests

The authors declare no competing interests.

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