

UTILIZATION OF ANTENATAL CARE SERVICES AMONG REFUGEE TEENAGE MOTHERS AT NAKIVALE REFUGEE SETTLEMENT IN WESTERN UGANDA. A PHENOMENOLOGICAL STUDY.

Simon Peter Ecodu^{a,*}, Dr. Benon Muhumuza^a, Lydia Rukundo^b, Assoc Prof Francis Kazibwe^c

^a*Department of Social Work and Social Administration, Bishop Stuart University, Mbarara*

^b*Medical Social Work Department, Mulago National Referral Hospital*

^c*Department of Public Health and Biomedical Sciences, Bishop Stuart University, Mbarara*

Abstract.

Introduction:

Antenatal care is crucial for positive pregnancy outcomes and is dependent on the timing and quality of care. It promotes health education and helps identify and manage maternal complications and risk factors. In Sub-Saharan Africa, pregnancy complications and childbirth are the leading cause of death for women aged 10-19. This study examined teenage mothers' experiences and perceptions of accessing and utilizing antenatal care services in the Nakivale refugee settlement, Isingiro district.

Methodology:

A phenomenological study was conducted on teenage mothers in Nakivale, using a snowball sampling method. Key informant interviews were conducted, lasting 45 minutes -1 hour. Ethical clearance was obtained from Bishop Stuart University REC and informed consent was obtained from participants. Data was analyzed thematically using Nvivo version 12.

Results: Teenage mothers face challenges utilizing antenatal care services including negative treatment from family and community members. However, positive feelings of responsibility alleviate stress, making early mothers more resilient.

Conclusions:

Access to ANC services is closely linked to its utilization, but societal discrimination against teenage mothers affects ANC utilization. Teenage-friendly spaces in Nakivale significantly influenced access and utilization of ANC services.

Recommendations:

The study suggests establishing customized ANC services for teenage mothers in the Nakivale refugee settlement, Isingiro district, to enhance access and utilization of ANC.

Keywords: Adolescence, Teenage mother, Antenatal care, Refugees, and Quality of care, Submitted: 2023-08-15 Accepted: 2023-08-28

1. INTRODUCTION.

Over 100 million people were displaced globally in the last decade, leaving 32.5 million refugees. Poor and middle-income countries bear the most displacement burden, with Uganda hosting over

*Corresponding author.
Email address: simonecodu@gmail.com (Simon Peter Ecodu)

1.4 million refugees¹ and 28,000 asylum seekers. Nakivale is the oldest refugee settlement camp in Uganda and Africa at large, and home to over 135,000 refugees and 400 asylum seekers^{2,3}. Government and non-governmental organizations (NGOs) provide basic humanitarian, education, and health services, including prenatal and antenatal care⁴.

Antenatal care (ANC) is care provided by skilled healthcare professionals to pregnant women until delivery^{5–7}. It helps in elevating health education and support for nutrition, cessation of substance abuse, uptake of family planning, recognition of danger signs, and birth preparedness^{8,9}. ANC provides a platform that enables health workers to screen, prevent, detect, and treat potential health complications that may arise in pregnant women^{10–12}; such as pregnancy-induced hypertension, malaria, and anemia which put at risk the life of both the mother and unborn baby^{11,13,14}.

Complications of pregnancy and childbirth, including unsafe abortions, obstructed labor, toxemia, hemorrhage, hypertension¹⁵, premature delivery, preeclampsia, and anemia among others, make teenage pregnancy one of the leading causes of death in refugee settings^{16,17} and significantly reduce the chances of continuing education, developing skills and finding paid work, thus creating a negative cycle of adverse health, economic and social outcomes¹⁸. In addition, infants of teenage mothers are more likely to die, have low birth weight, and experience long-term adverse health effects in comparison with infants of adult mothers¹⁹. Ensuring timely access to quality ANC services can significantly prevent maternal complications and manage pregnancy-related risks effectively²⁰. While maternal health indicators are dismal in most refugee settings, in Uganda efforts by the government and partners have led to several improvements²¹. Complete ANC delivery is at 82% while skilled delivery is at 94% in most refugee settlements in the country⁴.

A study in Nakivale revealed that less than 60% of mothers completed 8 ANC recommended visits, significantly lower than the national 20% attendance rate²² while modern contraceptive preva-

lence among teenage girls is 21.8%²³ with over 4,073 teenage pregnancies recorded in 2021²⁴. This has been attributed to negative perceptions and experiences in access and utilization of ANC services².

Refugee teenage girls face significant damage due to PTSD, legal status, limited family support, rape, and inadequate knowledge about ANC services in host countries²⁵. The poor access and utilization of ANC services among teenage mothers have predisposed them to pregnancy-related complications including, unsafe abortions, anemia, malaria, sexually transmitted infections, postpartum hemorrhage, and mental disorders²⁶. There is limited research on teenage mothers' experiences and perceptions of ANC services utilization in Nakivale refugee camps, creating a knowledge gap for policymakers, service providers, and consumers. This study explored teenage mothers' experiences in the utilization of ANC services in Nakivale refugee camp, Isingiro district.

2. METHODOLOGY.

2.1. Study design.

The study used a phenomenological approach to investigate teenage mothers' experiences and perceptions of ANC services utilization at the Nakivale refugee settlement, aiming to describe the phenomenon's nature²⁷. The researcher explored teenage mothers' experiences and perceptions of utilizing ANC services to gain a detailed understanding of their perspectives.

2.2. Study area/setting.

Nakivale Refugee Settlement Camp, located near the Tanzania border in Isingiro district, Uganda, is the oldest refugee settlement camp in the country. It covers over 185 square kilometers and currently houses over 135,000 refugees and 400 asylum seekers from various countries. The camp is divided into three administrative zones: Base Camp, Juru, and Rubondo. The administration is managed by the Office of the Prime Minister (OPM), with each zone represented by Refugee Welfare Council III³. Refugees in Nakivale receive free land for production and

livelihood assistance from UNHCR Implementing Partners like ALIGHT, Medical Teams International, Windle Trust Uganda, World Food Program, and Nsamizi. The settlement has four health centers, with Mbarara Regional Referral Hospital and Rwekubo H/C IV as the main referral points²⁹. Services include the outpatient department, community outreach activities such as immunization, sensitization and mobilization for ANC services, and system strengthening. Morbidity and mortality indicators are within a standard, with common diseases being malaria and respiratory tract infections³⁰. Data collection was done from 3rd February to 31st March 2023.

2.3. Study population.

Teenage mothers aged 13-19 years who received antenatal care from Nakivale refugee settlement camp.

2.4. Selection criteria.

2.4.1. Inclusion criteria;

Teenage mothers who were receiving care from any of the health centers at Nakivale refugee settlement that agreed to participate in the study were included.

2.4.2. Exclusion criteria;

Teenage mothers who were receiving care from the Nakivale refugee settlement but were not available at the time of data collection were excluded from the study.

2.5. Sample size determination.

The sample size was determined by the saturation principle, a point indicating when data collection and analysis produce no new information^{31,32}. Hence the researcher gathered data until new insights or properties no longer existed.

2.6. Sampling Procedure.

The study utilized snowball sampling to identify teenage mothers using ANC services at Nakivale refugee settlement camp. Snowball sampling is used when there is no pre-calculated list of target population details or when members are hesitant to contribute due to social stigma ²⁷. The

researcher, in consultation with a midwife, identified a teenage mother who assisted in identifying other teenage mothers utilizing ANC services at any of the four health centers in Nakivale refugee settlement camp.

2.7. Data collection tool.

Data was collected through semi-structured interviews, using an interview guide and key questions to explore participants' perspectives. The interviews allowed for exploration and divergence to explore deeper ideas or responses^{33,34}. The researcher utilized an interview format to guide participants to uncover important information. The interview guide linked to the study's purpose, and new questions arose from participants' answers. This approach allowed for the discovery and elaboration of relevant information.

2.8. Pilot interview.

This helped to refine the researcher's interviewing skills, including listening, reflecting, probing, paraphrasing, and summarizing³⁵. A pilot test ensures the validity of the research instrument before study³⁶, detects flaws early, and identifies areas for instrument adjustments as well as in terms of added value and credibility into the research^{37,38}. Three participants who met the inclusion criteria were interviewed in a pilot study. A qualitative research supervisor evaluated the researcher's interviewing skills and provided feedback. The validated interview guide remained unchanged, and the collected data was used for analysis.

2.9. Data collection procedure.

The study participants were identified by the researcher in consultation with a midwife working at the ANC clinic at Nyarugugu HC III in Nakivale Refugee settlement. The researcher would then be referred to other teenage mothers (who meet the inclusion criteria) by the first participant(s) who had already participated in the study. Data was collected by the researcher himself with the help of research assistants for translation where and when necessary. The researcher carefully selected a neutral venue for participant

interviews in consultation with the unit manager, to avoid noise and technical glitches. Participants were invited in advance to avoid missing scheduled appointments.

2.9.1. The interviews.

The researcher introduced the study topic, objectives, and informed consent form to participants, building rapport and trust. Participants were asked to sign informed consent forms, and participant codes were used to ensure confidentiality. In-depth face-to-face interviews were conducted to gather information on teenage mothers' experiences with utilization of ANC services. Data was captured using a digital voice recorder, and open-ended questions were asked in an informal, conversational manner. Participants were interviewed in their preferred language.

2.10. Validity of the study.

Validity was ensured by following the four principles of trustworthiness described by Lincoln and Guba (1985)³⁹. Guba's model was used for the trustworthiness of qualitative research to establish and maintain overall trustworthiness. The model has been used extensively by qualitative researchers.

2.11. Credibility.

Trustworthiness was ensured by selecting participants who met inclusion criteria and following the interview guide. An accurate understanding of questions and research objectives was ensured. Credibility was applied to ensure truth value. Data assurance was established through peer debriefing and member checks. Member checking involved rephrasing and summarizing during interviews, while peer debriefing involved reviewing transcripts with the supervisor.

2.12. Transferability.

Transferability refers to the analogy of generalizing and the ability to relate the findings to other contexts or other participants²⁷. Generalization was not the aim of this qualitative research, but to gain a detailed understanding of the participants' lived experience.

2.13. Dependability.

Dependability refers to the likelihood of similar results if the study was repeated^{40,41}. The researcher maintained a detailed audit trail, stored raw data, and engaged a supervisor to ensure accurate participant information capture. Interview details were recorded, documented, and sent for verification.

2.14. Confirmability.

This ensures data accuracy, significance, and importance, ensuring participant information is accurately represented and not influenced by the researcher's imagination^{33,40}. The researcher ensured data safety and grounded findings and interpretations using verbatim participant quotations for further analysis.

2.15. Data management and analysis.

Interviews were recorded using a digital recorder, transcribed verbatim in MSWord, and analyzed using the six-step model for descriptive data analysis. A wide margin was left for coding and categorization^{27,35,42}. The study involved data collection, engagement with the data, coding of data extracts, categorical aggregation using NVivo Version 12, and developing themes. The data was transcribed manually and keywords identified to represent codes. The researcher analyzed the collected data through interviews, interpreting it to the larger meaning of categories and linking it to the study questions. The resulting themes were presented in a detailed picture of the analyzed data.

2.16. Ethical considerations.

The study protocol was approved by Bishop Stuart University's Research Ethics Committee under BSU-REC-2022-47. Permission for data collection at Nakivale Refugee Settlement was obtained from the Office of the Prime Minister and the settlement Commandant, and health facility clearance from the Administration. Participants signed informed consent forms, were assured of confidentiality through using participant codes, and had the right to withdraw at any time.

3. STUDY RESULTS.

3.1. *Theme 1.1 Demographic Characteristics of the Respondents.*

Twenty-one out of the twenty-five teenage mothers who were approached consented and participated in the study that involved key informant interviews. The other four were unable to participate in the study because they relocated back to their countries of origin before the date scheduled for the interview to take place.

The majority of respondents had low levels of education, with 23.8% never attending school and 46.7% having primary education. This affects teenage mothers' decision-making and access to ANC services, as they lack ANC knowledge. Uneducated mothers are less likely to attend the recommended 8 ANC visits compared to their higher-educated peers. The majority of study participants (81%) were unemployed, with only 19% employed. This increases dependency on parents, spouses, and other caregivers for ANC services, predisposing them to poverty, stress, and depression for teenage mothers.

71.4% of respondents were single, while 28.6% were married. Single teenage mothers face discrimination and rejection, potentially hindering access to ANC services in community health facilities. Most respondents (81.0%) lived with parents/relatives, while 19% lived alone. Teenage mothers with family support are more likely to access and use ANC services. 42.9% of respondents traveled over 3 km while 33.3% traveled 5 km to access ANC services at a health facility, limiting teenage mothers' access due to fatigue and exhaustion.

3.2. *Theme 1. Teenage Mother's Awareness of Antenatal Care.*

Most respondents were knowledgeable about antenatal care, understanding its purpose and expected services at ANC clinics.

"Antenatal care is treatment given to all expectant mothers by the nurses in the hospital. Sometimes, treatment is given by the VHTs and the skilled traditional birth attendants" Said "A" 16 years old.

"Antenatal care is treatment given to a woman who is going to give birth to a baby after 9 months, the treatment is always given by the nurses and doctors who work at the Health center" — a 16-year-old participant.

"This is treatment given by qualified nurses and midwives to women and girls who are pregnant before they can safely give birth" 17-year-old

"I think ANC is a form of care given to a pregnant mother by the midwife before giving birth to her baby, such as counseling, routine tests, and medical examination" 15-year-old participant.

Teenage mothers' awareness of ANC and its components significantly impacts their health-seeking behavior. Those with information about ANC were more likely to seek and utilize available services.

3.2.1. *Subtheme 1.1. ANC services are offered to teenage mothers.*

Most participants received multiple ANC services from the clinic, and most were aware of two or more services offered.

"The doctor recommended me for a scan and thereafter, many things were determined; such as my general health condition, the position of the baby, the expected date of delivery, and my weight, and the nurse also tested me for malaria and HIV" 17-year-old

"The mothers who visit the clinic are examined by the midwife and several tests are given such as Malaria tests, HIV/AIDS, and they also test for other infections" 15-Year-old.

"They do very many things such as womb examination where they massage the womb of the pregnant woman, they also test for malaria, HIV/AIDS, baby weight and blood pressure. By the way, they also tested me for blood sugar and the nurse gave me a vaccine for tetanus" 17-year-old

"Very many things were determined when I went for check-ups such as my health condition, the position of the baby, and my weight" 16-year-old

"I received a lot of support when I was pregnant, they tested me for blood pressure and blood sugar levels, they also tested me for malaria and other

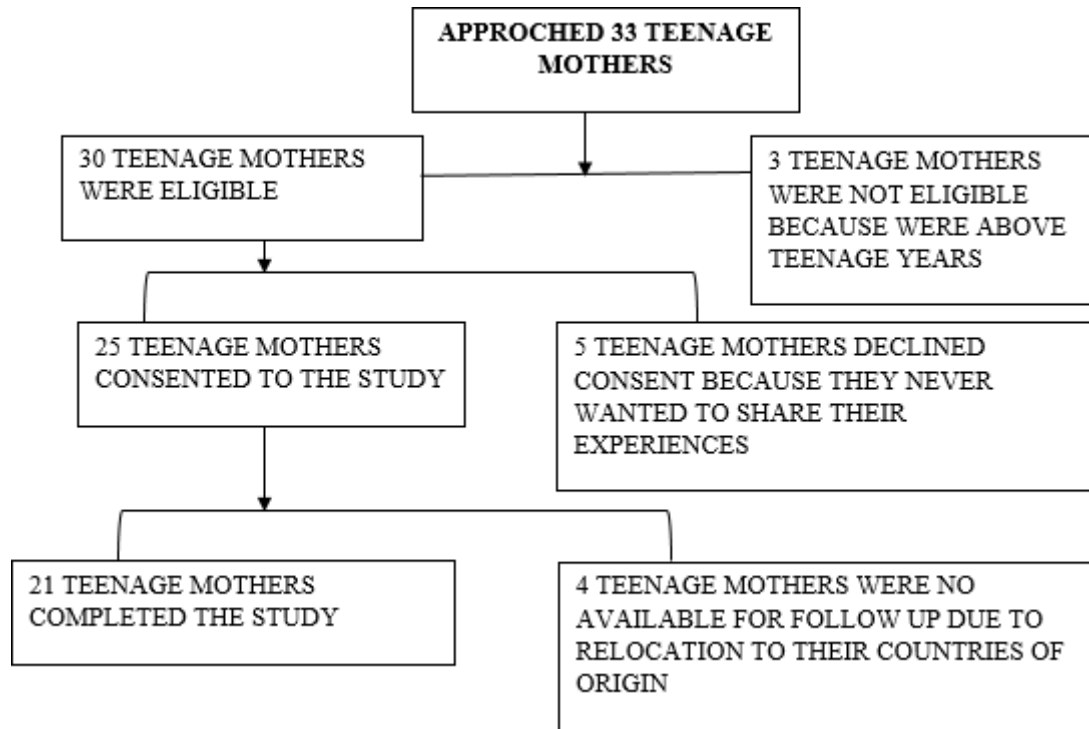


Figure 1: Number of individuals at each stage of study.

infections, they checked for the weight of the baby, they tested me for HIV and I was also given food supplements and iron for the health of my baby” 17-year-old

Teenage mothers who received one or two ANC services were more likely to seek more ANC services and the counseling sessions are significant in motivating the teenage mothers to have more ANC visits as recommended by WHO.

Experiences of teenage mothers towards accessing ANC services

3.3. Theme 2. Experience of Reactions from Parents, Community, and Caretakers.

Parents and caretakers were disappointed when their teenage daughter was pregnant, as it was perceived as a burden on their limited resources. Teenage mothers also feared the community’s perception of seeing them going for ANC services which demotivated them from seeking more ANC services.

3.3.1. Subtheme 2.1 Reaction from Parents.

“I was rejected by my parents, they did not want to be called grandparents because they are also still producing, and none of them has ever escorted me to the hospital for ANC” (15 years old).

“I was ignored by both my caretakers and my community members because I had failed to study and instead got pregnant” (17 years old).

“My grandmother did not want to be burdened with another responsibility of escorting me to the hospital for ANC, she did not want me to embarrass her with my pregnancy” (18 years old).

“My father chased me from home and said that I wasted his money paying school fees”. 14-year-old participant.

3.3.2. Subtheme 2.2 Community Reaction.

Some of the study participants testified that the reaction from the community was very hostile towards them including their friends and this in a way demoralized them from going for ANC.

“My friends and schoolmates made fun of my pregnancy and I felt ashamed and embarrassed because I had dropped out of school, this made me

Table 1: **Demographic characteristics of respondents.**

Variable	Frequency (%)
Age	
13 – 14	5 (23.8)
15 – 16	9 (42.9)
17 – 18	7 (33.3)
Education	
Never went to school	5 (23.8)
Primary	10 (47.6)
Secondary	6 (28.6)
Occupation	
Employed	4 (19.0)
Unemployed	17 (81.0)
Religion	
Christian	16 (76.2)
Muslim	5 (23.8)
Marital status	
Married	6 (28.6)
Single	15 (71.4)
Parity	
Primiparous	14 (66.7)
Multiparous	7 (33.3)
Who does she Live with	
Lives with Boyfriend/husband	4 (19.0)
Lives with parents/relatives	11 (52.4)
Lives alone	6 (28.6)
Distance to the nearest Health Center	
1 – 2 Km	5 (23.8)
3 – 4 Km	9 (42.9)
5Km +	7 (33.3)

fear going to the hospital for ANC because I did not want to meet them on the way” (14- years old).

“My community members disrespect me because I got pregnant at my age, they always make fun of me when I am going for checkups at the hospital” (16- years old).

“Some parents stopped me from associating with their children to avoid spoiling their daughters” (17- years old).

“I was chased away from school when the matron and school nurse found that I was pregnant” 14-year-old participant.

3.3.3. **Subtheme 2.3 Family support.**

Most study participants reported insufficient family support for accessing ANC services, with some being abandoned by their boyfriends after pregnancy news. The situation was worse for those without parents and caretakers.

“My boyfriend ran away and abandoned me here at the camp and I had no one to escort me to the hospital for ANC” 16-year-old Participant.

“My mother could not manage to escort me to the hospital every time because it was too far and she had to remain home to prepare lunch for my siblings”. 17-Year-old participant.

“I don't have a mother or even a father and

I was raped by my caretaker, so I did not have any support from anyone except some of our neighbors” 14-Year-old respondent.

Some study participants testified that they had received some support from the family members, one who was married received support from the husband. The VHTs also provided some kind of support to teenage mothers in accessing ANC services.

“When I started having labor pains, the VHT escorted me on foot up to the hospital for examination by the midwife” 17-year-old participant

“I did not have anyone to motivate me but our VHT convinced me to go to the hospital for ANC” 15-year-old participant

“I can easily walk and sometimes, my husband escorts me with his motorcycle so I find it easy to reach the hospital”. 18-year-old participant

“My husband has always escorted me to the hospital whenever I request him and sometimes, he reminds me when I am to go to the hospital for a checkup” 18-year-old participant

“My sisters have been very supportive of me because they always escort me to go to the hospital and they even remind me when we are to again to the hospital for a checkup “. 17-year-old participant.

3.4. Theme 3. Challenges faced when accessing Antenatal care services.

Participants faced challenges in accessing ANC services, including extended distances, unplanned pregnancies, and lack of transport.

3.4.1. Subtheme 3.1 Distance to the facility.

Most of the respondents mentioned that they walked long distances from their places of residence to the health center to access ANC services.

“I used to walk for over 5Kms to the hospital and I could sweat and get very weak by the time of reaching the hospital”. (17-Year-old participant).

“It is very difficult to access the treatment for pregnant mothers because it is very far away and you have to walk for a very long distance, you get very tired on the way, and yet you have no money for transport”. (16-year-old participant).

“Distance is the biggest challenge that we face in accessing ANC services. Most people stay very far away from the hospital and we have to walk for a very long distance” (18-year-old)

The long distances to the health facility have the potential to discourage teenage mothers from seeking ANC services for fear of fatigue and exhaustion from trekking for long journeys to the hospital amidst limited family support.

3.4.2. Sub-theme 3.2. Unplanned pregnancy.

All the participants mentioned that they did not plan for their first pregnancy. Most participants did not even know that they were pregnant until they were tested for pregnancy at the health facility.

“I was not ready to become pregnant because it happened when I was still at school” 16-year-old participant”. 15-year-old

“I didn't want to get pregnant but it just happened by mistake”. 17 years old

“I never wanted to get pregnant because I did not want to be discriminated against by my friends and neighbors”. 18 years old

“I never wanted to get pregnant but I was raped by my caretaker, he even chased me away from his home when I became pregnant” 14 years old.

This implies that most teenage mothers had unexpected and unplanned pregnancies and this presents several challenges to the teenage mother and their babies.

3.4.3. Sub-theme 3.3. Limited knowledge.

Most of the study participants had limited knowledge of pregnancy and antenatal care. As such, they all needed support from parents and close relatives to be able to access and utilize the available ANC services.

“The major problem we face is the lack of knowledge about pregnancy, most of us get pregnant when we are not even aware of it”. 16-year-old participant

“As refugees, we don't know how these hospitals operate, we don't know what to do and what to expect when you are pregnant, and for me, it

was worse since I did not even know that I was pregnant". 17-year-old.

3.4.4. Sub-theme 3.4 Economic constraints.

Participants also mentioned that they did not have the financial resources to facilitate their transport to the hospital, purchase some drugs at private clinics, upkeep for themselves and the babies, and purchase basic needs.

"We also don't have enough money to take care of ourselves and our babies since we rely on cash transfers given by Hunger fighters and NRC". 16-year-old

"Sometimes, the nurses tell us to go and buy some drugs which most of us cannot afford to buy since we don't have money". 15-Year-old participant.

"I don't have money for transport to the hospital so I always have to walk on foot to the hospital". 16-year-old participant.

"I don't have money to take care of myself and even my dad does not have money to take care of me and my sisters and brother". 16-year-old participant

3.5. Perceptions of teenage mothers towards access of ANC services.

3.5.1. Theme 4. Expected ANC Services at the health facility.

Study participants expected Mama Kits, malaria tests, free treatment services, health education, family planning, mosquito nets, and adequate staffing. The mama Kits include essential supplies for childbirth, including sterile gloves, plastic sheets, cord ligatures, razor blades, tetracycline, cotton, soap, and sanitary pads.

"I expected to be given mama kits during my ANC visits at the health facility" (17 years old).

"I expect to receive free counseling on pregnancy care and hygiene as well as free testing for malaria and HIV at the health facility" (16 years old).

"I expect to receive a proper examination by the nurses/midwives and the doctors in a private room" (18 years old).

"I expect to receive health education and counseling on how to care for the baby and nutrition

so that I and my baby don't fall sick anyhow" (17 years old).

"I expect the health facility to be giving family planning advice to the young girls to prevent unwanted pregnancies" (15-year-old participant).

"Mothers should be given mosquito nets and medicine for free" (17 years old).

3.5.2. Subtheme 4.1 Option of Abortion.

Two participants attempted abortion for fear of parents' reactions and school dropout but failed. Most girls carry out abortions without the knowledge of their caregivers moreover abortion isn't legalized in Uganda.

"I wanted to have an abortion because I did not want my parents to know that I was pregnant and even they would chase me out of school". 16-year-old participant.

"I thought of an option for abortion because I did not want to be embarrassed and ashamed, I did not even want to become a mother at my young age". 17-year-old participant.

3.5.3. Subtheme 4.2. Beliefs.

Three participants believed that they needed the support of their partners and family in accessing the available ANC services while one partner believed that ANC was only for the adult – elderly women.

"I cannot go to the hospital for a checkup without my boyfriend because he is the one who impregnated me, he must come and escort me because the baby will be ours together" 17-year-old participant.

"I believe that it is good for a pregnant girl to see the doctor regularly for the health of the baby and pregnant mother but, the family members should also be supportive and the nurses should treat us well" an 18-year-old participant.

"In my country, pregnant girls are not allowed to go to the hospital because they will not be treated very well by the nurses and also, ANC services are only for mature women" 16-year-old participant.

3.6. Experiences of teenage mothers in the Utilization of ANC services.

3.6.1. Theme 5. Feelings towards ANC uptake and motherhood.

Some study participants expressed their joy of being mothers though some of them regretted ever getting pregnant.

3.6.2. Subtheme 5.1 Feelings of being a young mother.

Some of the participants expressed positivity about being young mothers. Some expressed their joy as mothers while others were excited about soon becoming mothers.

"I feel good because am going to be called a mother," a 15-year-old participant.

"I feel good because I have a child and I can send him to get for me something in the house". 17-year-old

"I feel good because my child will call me mummy and I will be happy about that," 18-year-old participant

"I feel good because I am now a mother of two". 18-year-old participant

Some of the study participants said that it was disappointing, shaming, and embarrassing to have a baby and be called a mother at a very young age.

"I feel embarrassed whenever people laugh at me while I'm carrying my baby because people will laugh at me," a 16-year-old participant.

"I feel ashamed because my schoolmates laugh at me whenever I meet them when I am going for a checkup at the health facility," 19-year-old participant.

"I feel ashamed in the community because of the pregnancy though I have hope of getting the baby," 17-year-old participant.

3.6.3. Subtheme: 5.2. First sight of the baby.

The majority of study participants confessed that they had no regrets over carrying their pregnancy to term. The fear, shame, and embarrassment vanished upon seeing their first borne.

"I was excited to see my baby alive, I did not know I would make it out of the theater" (17 years old).

"I was so glad and relieved and I had no regrets over having my baby born alive and healthy," (18 years old).

"I am so happy to have a baby because there are people out yearning for children but they cannot have yet they have all the money" (17 years old).

"I am happy to have my baby girl, at least God has replaced my sister who died in the war" (16 years old).

3.7. Theme 6. Care provided by the health workers.

Some of the study participants felt that they were very well taken care of by the health workers i.e., nurses, midwives, and the doctors.

"The health workers are very friendly, especially the doctor who examines us". 17-year-old

"I always receive a lot of care when I go to the hospital to see the doctor, even the nurses treat me very well". 15-year-old.

"The midwife welcomed me and made me feel very comfortable when I went to see her at the hospital". 14-year-old.

3.7.1. Subtheme 6.1. Discrimination.

Two study participants reported that they faced a lot of discrimination at the ANC clinic and this made them feel bad.

"I feel discriminated against when I go to the hospital because the nurses first want to attend to older mothers". 16-year-old participant

"Some nurses do not care about teenage girls because they think that we are younger than the older mothers who have also come for treatment". 17-year-old

3.7.2. Subtheme: 6.2. Ward sharing.

Respondents felt ashamed and embarrassed when mixed with older women seeking ANC services in the same ward, compromising the need for teenage mothers to be treated with respect for privacy.

"The nurses mix us with old women who are like our mothers and we feel ashamed of being seen

with a big stomach when we are not married". 17-year-old participant

"I was examined in the same room with old mothers and I was ashamed to undress when old women were looking at me". 15-year-old

"Mixing teenage girls with the older mothers even makes things worse because sometimes we feel ashamed to be seen struggling in the same line with the older mothers". 16-year-old.

"They mix us in the same room with the old mothers, and even examine us in the same rooms on the same beds". 18-year-old

3.7.3. Subtheme: 6.3. Behavior of health workers.

Study participants also mentioned that some health workers were rude and asked some shameful questions which made the teenage mothers feel ashamed and embarrassed.

"Some nurses are rude towards the teenage mothers for not coming with husbands for ANC yet most girls are not yet married and this is embarrassing". 17-year-old.

"The midwife asked me why I was pregnant when I was still very young and I felt bad". 16-year-old participant

"Some nurses are very rude because they keep yelling and shouting at the pregnant girls who are giving birth". (18-year-old)

"The nurse shouted at me for coming late to the hospital and yet I came from very far away without any transport means". (15-year-old).

3.8. Theme: 7. Availability of ANC health services.

The majority of respondents reported that the ANC services were readily available. These included the drugs for pregnant mothers, nutrition supplements as well as the Mama Kits.

"I was given all the drugs because they did not tell me to buy any from the clinic". 16-year-old

"I was given a mosquito net for free and this saved me a lot of money". 17-year-old

"The midwife always carries out all the tests on me whenever I go to the health facility for a checkup". 18-year-old

"The nurses are always available at the hospital and are always ready to treat us whenever we go for a checkup". 18-year-old.

3.8.1. Subtheme: 7.1. Time taken in attending to clients.

Some respondents reported that some health workers always delay attending to the mothers attending ANC services at the health facility. Few maternity beds and drug stockouts were also reported.

"The doctor delays come on duty and yet there are very many mothers waiting to see the doctor". 16-year-old participant

"The doctor could come late and we would have to wait for so long before being attended to". (17-year-old participant)

"Some nurses tell us that drugs are out of stock and they write for us drugs to buy from the private clinics". (15-year-old)

"There are very few beds for pregnant women who want to give birth". (17-year-old).

3.8.2. Subtheme 7.2. Appointments with the health care workers.

All respondents reported that the appointment dates for ANC were always predetermined for all expectant mothers.

"The health workers always write the date for the next appointment on my ANC card". (17-year-old).

"I always visit the midwife on the appointment date written on my card, so I can easily remember". (18-year-old participant)

"We have routine appointments with the health workers every month, so it is automatic". 16-year-old.

3.9. Theme: 8.1. Effects of ANC services.

The majority of participants reported that they felt the side effects of the medication given to them, especially during the first three months of the pregnancy.

"I felt like vomiting and I became very weak after swallowing the drugs given by the nurse". (16-year-old participant).

"Loss of appetite and vomiting has been a major problem to me ever since I started going to the hospital to see the doctors". (17-year-old participant).

"I felt a lot of stomach pain after swallowing the drugs I received from the hospital". (15-year-old participant).

I vomited severely when I was three months pregnant and there was a drug that would make me feel very sleepy and exhausted". (18-Year-old participant).

3.9.1. Subtheme: 8.2. Stress.

Some study participants reported that they experienced a lot of stress during pregnancy and in caring for the baby.

"I feel stressed because I dropped out of school because of this pregnancy". 14-year-old

"I am stressed by my caretaker who always shouts at me for being lazy yet I am pregnant". (17-year-old participant)

"My friends discriminate against me and my neighbors laugh at me as a failure, this stresses me so much". (16-year-old participant).

"I feel a lot of stress in caring for the baby like who to feed, clothing the child and medication of the baby" (19-year-old participant).

"It's hard and stressful to have a child at this age because I was not prepared for the child". (16-year-old participant)

Perceptions of teenage mothers towards Utilization of ANC services in Nakivale refugee settlement camp, Isingiro district.

3.10. Theme: 9. Benefits of ANC services.

Study participants viewed ANC as beneficial for monitoring mother's health, preventing stillbirths, and improving regular tests for expectant mothers.

3.10.1. Subtheme 9.1. Monitoring mother's health condition.

Two respondents said that ANC helps in monitoring the health condition of the mother before birth.

"It helps in determining the mothers' health condition and enables health workers to address

the concerns before it's too late ". (18-year-old participant)

"It helps in preventing infections to the mother and the baby". (18-year-old participant)

3.10.2. Subtheme: 9.2. Guards against pregnancy complications.

Participants noted that ANC plays a vital role in enhancing a healthy and safe delivery of the mother for better outcomes for both mother and child.

"It helps a mother to deliver a healthy baby at the right time without any complications". (18-year-old participant).

"It helps to prevent abortion and miscarriage since infections are discovered and treated as soon as they occur. (17 years old participant).

"ANC is good because it helps the mother to deliver normally without having an operation". (17-year-old participant).

"The mother is given enough treatment to prevent miscarriage". (16-year-old participant).

"It helps the mother to avoid over bleeding at birth". (15-year-old participant)

3.10.3. Sub theme: 9.3. Regular Investigations.

ANC allows mothers to test for various health conditions, preventing mother-to-child transmission, determining the baby's health, and assessing the mother's health, according to respondents.

"I think it is good for a pregnant girl to go to see the doctor in the hospital because they can test you for very many things and they even check the health of the baby who is in the womb". 16-year-old participant.

"It helps to prevent transmission of infections from the mother to the baby". 18-Year-old

"The mother can get tested for HIV/AIDs and other conditions which may harm the baby inside the mother's womb". 17-year-old

3.11. Theme 10. Myths about delivery.

A respondent admitted to being told she would not deliver normally without her husband accompanying her to a health facility. This could be

a trick used by men to lure abandoned pregnant girls into sex while escorting them for birth.

"My neighbor tells me that if I go to the hospital for delivery without the husband, I will fail to push". 16-year-old.

3.12. Theme 11: Suggestions on Improving Access to ANC services.

Respondents emphasized the need for village ambulances to ease transport challenges, community outreaches, and empowerment of VHTs to support pregnant teenage girls and promote community sensitization.

3.12.1. Subtheme 11.1. Motorcycle ambulance.

Respondents suggest motorcycle ambulances could alleviate transport challenges for teenage mothers by allowing them to access health facilities without long treks.

"The government should bring motorcycle ambulance to the community to carry pregnant mothers to the hospital". 17-year-old

"Motorcycle ambulance should be introduced to transport mothers to deliver in the health facility". (16-year-old participant)

"The government should introduce motorcycle ambulance to save mothers from walking long distances, this will save a life". (18-year-old participant)

3.12.2. Subtheme 11.2. Empowerment of VHTs.

Study participants suggested the training of VHTs with skills and competencies to handle basic ANC services. Possibly because the VHTs are always in close contact with the community members.

"The government should distribute the drugs with VHTs so that pregnant girls can easily access them. Without necessarily going to the health facility". 17-year-old

"The government should train VHTs with basic knowledge on care for teenage mothers is a good thing". 15-year-old.

3.12.3. Subtheme 11.3. Community outreaches.

Study participants proposed for the scaling up of community outreach programs by health workers for community sensitization on ANC access and uptake. This will help in disseminating knowledge to teenage mothers about available ANC services.

"The nurses should carry out community outreaches for teenage mothers who stay very far away thus bringing the services closer to the mothers". (16-year-old participant)

"Health workers should encourage teenage mothers should also learn to exercise regularly to be able to deliver the baby normally". 18-year-old.

3.12.4. Subtheme 11.4. Creation of more health facilities.

. respondent suggested the need for more health facilities in the community. This would help in reducing overcrowding and also bring the ANC services nearer the community.

"The government should construct more health centers for the community to easily access the services". 18-year-old participant.

3.13. Theme 12. Strategies to enhance the utilization of ANC services.

Most respondents suggested the need to establish teenage-friendly corners, handle teenage mothers with respect and dignity, and avoid mixing teenage girls with old mothers in the same ward.

"The nurses should treat teenage mothers with respect and dignity to enable us to feel loved and valued". (18-year-old participant).

"The health workers should set aside specific days for attending to the teenage mothers to avoid mixing up with the old women". 17-year-old

"The government should construct a theatre for operating teenage mothers and avoid transporting them to other distant health facilities for operation". 17-year-old.

"They should start youth-friendly corners for the teenage mothers utilizing ANC services". 15-Year-old.

Teenage mothers require dignity and respect during and after accessing ANC services to boost self-esteem and encourage ANC attendance.

4. DISCUSSION.

4.1. Experiences and perceptions of teenage mothers towards the access to antenatal care services at Nakivale refugee settlement.

Teenage mothers faced challenges accessing ANC services, including financial autonomy, distance, and transport, which are determinants for uptake. This finding aligns with studies in Tanzania 43 Ghana, Kenya and Malawi 44, and Zimbabwe 45. All these coupled with unplanned pregnancies exacerbate the hesitance of teenage mothers to seek ANC services in refugee settlements.

Teenage mothers reported being abandoned by parents, caretakers, and boyfriends post-pregnancy, particularly in child-headed households. Similarly, a study in Zambia found limited parental support for adolescent mothers attending ANC, limiting access and utilization of ANC services due to a lack of a supportive family environment 46,47.

This study's results show that married teenage mothers and those living with parents received support for accessing ANC services. Family members reminded them of appointments and provided transportation. Similarly, a study in Ghana, reported that teenage mothers with family and partner support were more likely to access and utilize ANC services 48.

Teenage mothers expressed joy in motherhood as responsible community members, taking responsibility for their babies and achieving what some elders couldn't. This aligns with a study in Eastern Uganda 49, Ghana 50, and Australia among the African-born refugees 51. Such positive experiences boost ANC service access and uptake due to perceived benefits.

Motherhood brings mixed emotions and experiences, including stress, inability to care for the baby, and limited family support. This is exacerbated by rejection from community members and peers, limiting access to ANC services. Similarly,

study findings from Ethiopia revealed that Family and community support are crucial for promoting self-esteem and school resumption among teenage mothers. 51.

The study found a strong correlation between teenage refugee mothers' knowledge and access to ANC services. Most participants understood ANC as a form of care provided by qualified health workers before birth. They also recognized the importance of ANC components like health education, regular maternal checkups, and immunization. Similarly, study findings in Pakistan revealed that awareness was crucial for access and utilization of ANC among females of child-bearing age in a suburban community in Lahore. 52,53

This study found out that teenage mothers were aware of ANC's benefits in preventing pregnancy-related comorbidities like anemia, hypertension, and abortion, influencing their choice to seek ANC services. This is in agreement with similar studies in Ghana where it was reported that ANC offers a comprehensive package for preventing pregnancy complications, improving outcomes for mother and child, and influencing health-seeking behavior 56,57.

4.2. Experiences and perceptions of teenage mothers towards Utilization of antenatal care services at Nakivale refugee settlement.

This study result revealed that participants experienced discrimination at the health facility, with some health workers prioritizing older women seeking ANC over teenage mothers due to their perceived youth. A similar study in Ghana reported that participants felt that they were being discriminated against by healthcare providers especially when they gave priority to older couples despite their reporting late 46,47. Studies in Zambia showed that adolescent mothers were disappointed with health workers' rude communication, negatively impacting their health-seeking behavior and potentially causing low ANC uptake 11.

This study results show that the community negatively perceives adolescent pregnancy, leading to rejection from parents, caregivers, and

peers. Parents view it as a burden, while the community views pregnant girls as failures for dropping out of school and wasting school fees. These findings are similar to studies conducted in Ghana^{12,56} and among adolescent girls in Eastern Uganda⁴⁹.

Teenage mothers who have experienced rejection may have low self-esteem, stress, and depression, limiting their desire to seek ANC services. The community's soft spot for pregnancy after marriage leads to negativity towards deviations from this norm, affecting their self-esteem and inclination towards ANC services. This is also confirmed by ^{22,51,58} studies among African Australian teenage mothers. This partly explains why Nakivale has the lowest 1st-trimester attendance rate in the country, with 20% of mothers attending, and less than 60% completing the minimum 8 recommended ANC visits by delivery ²⁸.

This study results revealed that teenage mothers felt uncomfortable and embarrassed sharing the same ward with older women, leading to low self-esteem and difficulty in participating in sensitive ANC discussions alongside their elders. This finding is similar to the studies in Ecuador ²⁰; Moreover, traditional African morals prohibit teenage unmarried girls from getting pregnant. ²⁶

Study results show that some teenage mothers attempted abortion possibly due to negative attitudes from friends, family, and community disapproval but they were not successful. This is in agreement with similar studies in Ghana^{59,60} and Malaysia⁶¹. More so, Governments enforce restrictive abortion procurement laws to reduce maternal and neonatal mortality. ⁶².

Findings of this study revealed that Participants scheduled appointments with health workers, but were dissatisfied with delays. Many had long waiting hours, partly due to the large number of patients seeking ANC services. Some nurses/midwives preferred to attend to old mothers before teenage mothers. This finding corresponds with other studies elsewhere^{6,11,63,64}.

This study results revealed that perceived benefits of ANC, such as preventing birth complications, providing regular investigations, and monitoring mother and child conditions before birth,

significantly influence access and utilization of ANC services. This finding aligns with other studies^{63,65}

The study results revealed that teenage mothers were primarily concerned about the absence of youth-friendly corners, as they were mixed with older women in the same ward. This caused shame and embarrassment for the participants. Additionally, appointments were scheduled for all pregnant mothers, regardless of age, without a specific date designated for teenage mothers. This finding resonates well with other studies ^{66–68}.

Teenage refugee mothers face social economic vulnerabilities, limiting access to ANC services. Study results revealed that the use of motorcycle ambulances and increasing health workers' outreach visits for community sanitization to improve transportation and reduce stigma were found to help improve access to ANC services. This finding is similar to a study in Eastern Uganda⁴⁹, Ghana⁵⁰, and Iran²².

5. CONCLUSIONS.

Conclusions: Teenage refugee mothers' access to antenatal care (ANC) is closely linked to their utilization in Nakivale refugee settlements. Discrimination towards them is common, but the presence of teenage-friendly spaces significantly influences their access and utilization. Awareness of ANC's importance in preventing comorbid conditions is crucial for reducing maternal and child mortality.

6. LIMITATIONS.

The study faced financial constraints that prevented us from using more than one refugee settlement for the study due to limited budget.

7. RECOMMENDATIONS.

The study emphasizes the urgent need for government and non-state actors to design and implement adolescent-friendly antenatal care (ANC) services. Integrating health education for older women to support pregnant adolescents can improve antenatal care quality and increase access

and utilization by teenage mothers. Addressing social economic determinants is crucial for empowerment and preventing unwanted pregnancies. Community awareness campaigns should be scaled up in Nakivale refugee settlements to improve maternal and child health outcomes. Further research on teenage fathers' experiences with postnatal care services is also needed.

These results cannot be generalized to other refugee settings because the main aim of this study was to gain a deeper understanding of teenage mothers' experiences in the utilization of ANC services in the context of the Nakivale refugee settlement. More so, living conditions differ from one refugee setting to another.

8. Funding.

This study was self-funded to fulfill the academic requirement.

9. Conflict of interest.

There was no conflict of interest from the start to the end of this study.

10. Acknowledgement.

I would like to acknowledge my supervisors; Assoc Prof. Francis Kazibwe, Dr. Benon Muhumuza, Ms Lydia Rukundo, and the entire Bishop Stuart University fraternity for their support towards my education career.

11. LIST OF ABBREVIATIONS.

AIDS:	Acquired immunodeficiency virus
ANC:	Antenatal Care
BSU:	Bishop Stuart University.
DHMIS:	District Health Management Information System
HC:	Health Center
HIV:	Human immunodeficiency virus
IDHMIS:	Isingiro District Health Management Information System
NGOs:	Non-government Organizations.
OPM:	Office of the Prime Minister
PTSD:	Post Traumatic Stress Disorder.

REC:	Research and Ethics Committee
SDGs:	Sustainable Development Goals
UBOS:	Uganda Bureau of Statistics
UDHS:	Uganda Demographic Health Survey
UN:	United Nations

12. Publisher details:

Publisher: Student's Journal of Health Research (SJHR)
(ISSN 2709-9997) Online
Category: Non-Governmental & Non-profit Organization
Email: studentsjournal2020@gmail.com
WhatsApp: +256775434261
Location: Wisdom Centre, P.O.BOX. 148, Uganda, East Africa.



13. REFERENCES.

- 100 million people forcibly displaced | UNHCR [Internet]. [cited 2023 Jun 16]. Available from: <https://www.unhcr.org/refugee-statistics/insights/explainers/100-million-forcibly-displaced.html>
- Bukuluki PMW, Kisaakye P, Wandiembe SP, Kiwujja V, Kajungu C, Mugwanya W, et al. Utilization of sexual and reproductive health services among young people in refugee settings in Uganda. *Front Reprod Heal.* 2023;5:1077761.
- Refugee Management – Office of the Prime Minister – A Coordinated, Responsive and Accountable Government for Socio-Economic Transformation [Internet]. [cited 2023 Jul 23]. Available from: <https://opm.go.ug/refugees/>

4. UNHCR. UNHCR. Uganda Refug Response Monit Settl Fact Sheet Nakivale January 2018. 2018; Fact sheet.
5. Jones E, Lattof SR, Coast E. Interventions to provide culturally-appropriate maternity care services: Factors affecting implementation. *BMC Pregnancy Childbirth* [Internet]. 2017 Aug 31 [cited 2023 May 2];17(1):1–10. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-017-1449-7>
6. Apolot RR, Tetui M, Nyachwo EB, Waldman L, Morgan R, Aanyu C, et al. Maternal health challenges experienced by adolescents; could community scorecards address them? A case study of Kibuku District– Uganda. *Int J Equity Health* [Internet]. 2020 Dec 1 [cited 2023 May 2];19(1):1–12. Available from: <https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-020-01267-4>
7. Ali N, Elbarazi I, Alabboud S, Al-Maskari F, Loney T, Ahmed LA. Antenatal Care Initiation Among Pregnant Women in the United Arab Emirates: The Mutaba'ah Study. *Front public Heal* [Internet]. 2020 Jun;8. Available from: <https://pubmed.ncbi.nlm.nih.gov/32596198/>
8. Konje ET, Magoma MTN, Hatfield J, Kuhn S, Sauve RS, Dewey DM. Missed opportunities in antenatal care for improving the health of pregnant women and newborns in Geita district, Northwest Tanzania. *BMC Pregnancy Childbirth* [Internet]. 2018 Oct 5 [cited 2023 May 2];18(1):1–13. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-018-2014-8>
9. WHO recommendations on antenatal care for a positive pregnancy experience.
10. National Academies of Sciences Engineering, Health M, of Behavioral MDD, Sciences S, on Children Youth, on Assessing Health Outcomes by Birth Settings FC, et al. Systemic Influences on Outcomes in Pregnancy and Childbirth. *Birth Settings Am* [Internet]. 2020 Feb; Available from: <https://www.ncbi.nlm.nih.gov/sites/books/NBK555488/>
11. Bwalya BC, Sitali D, Baboo KS, Zulu JM. Experiences of antenatal care among pregnant adolescents at Kanyama and Matero clinics in Lusaka district, Zambia. *Reprod Health* [Internet]. 2018 Jul 9 [cited 2023 May 3];15(1):1–8. Available from: <https://link.springer.com/articles/10.1186/s12978-018-0565-9>
12. Haruna U, Dandeebo G, Galaa SZ. Improving Access and Utilization of Maternal Healthcare Services through Focused Antenatal Care in Rural Ghana: A Qualitative Study. *Adv Public Heal*. 2019;2019.
13. Bhutta ZA, Das JK, Bahl R, Lawn JE, Salam RA, Paul VK, et al. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? *Lancet*. 2014 Jul 26;384(9940):347–70.
14. Keerthi G, Abirami MS. Analysis of Complications for Expectant Women and Comparative Study of Maternal Mortality in India. *Eur J Mol Clin Med* [Internet]. 2021 Mar 23 [cited 2023 May 2];8(3):1481–91. Available from: https://ejmcm.com/article_10017.html
15. Yadav K, Namdeo A, Bhargava M. A RETROSPECTIVE AND PROSPECTIVE STUDY OF MATERNAL MORTALITY IN A RURAL TERTIARY CARE HOSPITAL OF CENTRAL INDIA. *Indian J Community Heal* [Internet]. 2013 Mar 31 [cited 2023 May 2];25(1):16–21. Available from: <http://www.iapsmupuk.org/journal/index.php/IJCH/article/view/282>
16. UNICEF. Child Poverty and Deprivation in Refugee-Hosting Areas Evidence from Uganda. Kampala, Uganda United Nations Children's Fund. United Nations Child Fund. 2020;
17. Downe S, Finlayson K, Tunçalp, Metin Gülmezoglu A. What matters to women: A systematic scoping review to identify the processes and outcomes of antenatal care provision that are important to healthy pregnant women. *BJOG* [Internet]. 2016 Mar;123(4):529–39. Available from: <https://pubmed.ncbi.nlm.nih.gov/26701735/>

18. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, Gemmill A, et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the un maternal mortality estimation inter-agency group. *Lancet*. 2016 Jan 30;387(10017):462–74.
19. Ali N, Elbarazi I, Alabboud S, Al-Maskari F, Loney T, Ahmed LA. Antenatal Care Initiation Among Pregnant Women in the United Arab Emirates: The Mutaba'ah Study. *Front Public Heal*. 2020 Jun 11;8:211.
20. Moyano N, Granados R, Durán CA, Galarza C. Self-Esteem, Attitudes toward Love, and Sexual Assertiveness among Pregnant Adolescents. *Int J Environ Res Public Heal* 2021, Vol 18, Page 1270 [Internet]. 2021 Jan 31 [cited 2023 May 3];18(3):1270. Available from: <https://www.mdpi.com/1660-4601/18/3/1270/htm>
21. Komakech H, Lubogo D, Nabiwemba E, Orach CG. Essential newborn care practices and determinants amongst mothers of infants aged 0–6 months in refugee settlements, Adjumani district, west Nile, Uganda. *PLoS One* [Internet]. 2020 [cited 2023 May 3];15(4):e0231970. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0231970>
22. Mangeli M, Sc; M, Rayyani M, Cheraghi MA, Tirgari B. Exploring the Challenges of Adolescent Mothers From Their Life Experiences in the Transition to Motherhood: A Qualitative Study. *J Fam Reprod Heal* [Internet]. 2017 Sep [cited 2023 Jun 15];11(3):165. Available from: [/pmc/articles/PMC6045691/](https://pubmed.ncbi.nlm.nih.gov/30890170/)
23. Ivanova O, Rai M, Mlahagwa W, Tumuhairwe J, Bakuli A, Nyakato VN, et al. A cross-sectional mixed-methods study of sexual and reproductive health knowledge, experiences and access to services among refugee adolescent girls in the Nakivale refugee settlement, Uganda. *Reprod Health* [Internet]. 2019 Mar 19 [cited 2023 Jun 16];16(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/30890170/>
24. Isingiro turns to community workers to curb early child pregnancies [Internet]. [cited 2023 May 3]. Available from: <https://www.independent.co.ug/isingiro-turns-to-community-workers-to-curb-early-child-pregnancies/>
25. Bukuluki P, Kisaakye P, Mwenyango H, Palattiyil G. Adolescent sexual behavior in a refugee setting in Uganda. *Reprod Health* [Internet]. 2021 Dec 1 [cited 2023 Jun 12];18(1):1–11. Available from: <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-021-01181-0>
26. Bain LE, Zweekhorst MBM, Amoakoh-Coleman M, Muftugil-Yalcin S, Omolade AIO, Becquet R, et al. To keep or not to keep? Decision making in adolescent pregnancies in Jamestown, Ghana. *PLoS One* [Internet]. 2019 Sep 1 [cited 2023 Jun 15];14(9). Available from: [/pmc/articles/PMC6726415/](https://pubmed.ncbi.nlm.nih.gov/30890170/)
27. Forman J, Creswell JW, Damschroder L, Kowalski CP, Krein SL. Qualitative research methods: Key features and insights gained from use in infection prevention research. *Am J Infect Control*. 2008 Dec 1;36(10):764–71.
28. Document - Uganda Country Refugee Response Plan 2019-2020 [Internet]. [cited 2023 Jun 16]. Available from: <https://data.unhcr.org/en/documents/details/67314>
29. THE NATIONAL STRATEGY TO END CHILD MARRIAGE AND TEENAGE PREGNANCY “A SOCIETY FREE OF CHILD MARRIAGE AND TEENAGE PREGNANCY” THE REPUBLIC OF UGANDA. 2022;
30. Phommachanh S, Essink DR, Jansen M, Broerse JEW, Wright P, Mayxay M. Improvement of Quality of Antenatal Care (ANC) Service Provision at the Public Health Facilities in Lao PDR: Perspective and Experiences of Supply and Demand Sides. *BMC Pregnancy Childbirth* [Internet]. 2019 Jul 22 [cited 2023 Jun 16];19(1):1–13. Available from: <https://bmcpregnancychild>

- birth.biomedcentral.com/articles/10.1186/s12884-019-2345-0
31. Braun V, Clarke V. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. <https://doi.org/10.1080/2159676X.2019.1704846> [Internet]. 2019;13(2):201–16. Available from: <https://www.tandfonline.com/doi/abs/10.1080/2159676X.2019.1704846>
 32. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant*. 2018 Jul 1;52(4):1893–907.
 33. Britten N. Qualitative research: qualitative interviews in medical research. *Bmj*. 1995;311(6999):251–3.
 34. Roulston K, Choi M. Qualitative interviews. *SAGE Handb Qual data Collect*. 2018;233–49.
 35. Phd AA, Khan N, Latif Khan R, Aziz A, Info A. THE POTENTIAL USES OF PILOT STUDY IN QUALITATIVE RESEARCH The Developmental Epidemiology of Poly-Victimization View project Pilot Study in Qualitative Research View project THE POTENTIAL USES OF PILOT STUDY IN QUALITATIVE RESEARCH. *J Res Rev Soc Sci Pakistan* [Internet]. [cited 2023 Jul 23];3(1):2020–750. Available from: <https://www.researchgate.net/publication/357203566>
 36. Preparing for Interview Research: The Interview Protocol Refinement Framework - CORE Reader [Internet]. [cited 2023 Jul 23]. Available from: <https://core.ac.uk/reader/51086870>
 37. Appendix: Qualitative Interview Design – Howdy or Hello? Technical and Professional Communication [Internet]. [cited 2023 Jul 23]. Available from: <https://pressbooks.library.tamu.edu/howdyorhello/back-matter/appendix-qualitative-interview-design/>
 38. Turner DW. Qualitative interview design: A practical guide for novice investigators. *Qual Rep*. 2010;15(3):754–60.
 39. Rigor or Reliability and Validity in Qualitative Research: P... : Dimensions of Critical Care Nursing [Internet]. [cited 2023 Jul 23]. Available from: https://journals.lww.com/ccnjournal/Fulltext/2017/07000/Rigor_or_Reliability_and_Validity_in_Qualitative.6.aspx
 40. Ambrosio L, Hislop-Lennie K, Serrano-Fuentes N, Driessens C, Portillo MC. First validation study of the living with long-term conditions scale (LwLTCs) among English-speaking population living with Parkinson's disease. *Health Qual Life Outcomes*. 2023 Dec;21(1):69.
 41. Koo TK, Li MY. A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. *J Chiropr Med*. 2016 Jun 1;15(2):155–63.
 42. Turner DW. Qualitative interview design: A practical guide for novice investigators. *Qual Rep*. 2010;15(3):754–60.
 43. Hackett K, Lenters L, Vandermorris A, Lafleur C, Newton S, Ndeki S, et al. How can the engagement of adolescents in antenatal care be enhanced? Learning from the perspectives of young mothers in Ghana and Tanzania. *BMC Pregnancy Childbirth* [Internet]. 2019 May 23 [cited 2023 May 3];19(1):1–12. Available from: <https://link.springer.com/articles/10.1186/s12884-019-2326-3>
 44. Pell C, Meñaca A, Were F, Afrah NA, Chatio S, Manda-Taylor L, et al. Factors Affecting Antenatal Care Attendance: Results from Qualitative Studies in Ghana, Kenya and Malawi. *PLoS One* [Internet]. 2013 Jan 15 [cited 2023 May 3];8(1):e53747. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0053747>
 45. No Title. 2015;
 46. Bwalya BC, Sitali D, Baboo KS, Zulu JM. Experiences of antenatal care among pregnant adolescents at Kanyama and Matero clinics in Lusaka district, Zambia. *Reprod Health* [Internet]. 2018 Jul 9 [cited 2023 May 2];15(1):1–8. Available from: <https://link.sp>

- ringer.com/articles/10.1186/s12978-018-0565-9
47. Mwebesa E, Kagaayi J, Ssebageraka A, Nakafeero M, Ssenkusu JM, Guwatudde D, et al. Effect of four or more antenatal care visits on facility delivery and early postnatal care services utilization in Uganda: a propensity score-matched analysis. *BMC Pregnancy Childbirth* [Internet]. 2022 Dec 1 [cited 2023 Jun 13];22(1):1–9. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-021-04354-8>
 48. Abuosi AA, Anaba EA. Barriers to access to and use of adolescent health services in Ghana. *J Heal Res*. 2019 Apr 25;33(3):197–207.
 49. Chemutai V, Nteziyaremye J, Wandabwa GJ. Lived Experiences of Adolescent Mothers Attending Mbale Regional Referral Hospital: A Phenomenological Study. 2020 [cited 2023 May 3]; Available from: <https://doi.org/10.1155/2020/8897709>
 50. Konadu Gyesaw NY, Ankomah A. Experiences of pregnancy and motherhood among teenage mothers in a suburb of Accra, Ghana: A qualitative study. *Int J Womens Health* [Internet]. 2013 Nov 12 [cited 2023 May 3];5(1):773–80. Available from: <https://www.tandfonline.com/action/journalInformation?journalCode=djwh20>
 51. Ngum Chi Watts MC, Liamputtong P, McMichael C. Early motherhood: A qualitative study exploring the experiences of African Australian teenage mothers in greater Melbourne, Australia. *BMC Public Health* [Internet]. 2015 Sep 10 [cited 2023 May 3];15(1):1–11. Available from: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-015-2215-2>
 52. Ali N, Elbarazi I, Alabboud S, Al-Maskari F, Loney T, Ahmed LA. Antenatal Care Initiation Among Pregnant Women in the United Arab Emirates: The Mutaba'ah Study. *Front public Heal* [Internet]. 2020 Jun 11 [cited 2023 May 2];8. Available from: <https://pubmed.ncbi.nlm.nih.gov/32596198>
 53. Decker MR, Latimore AD, Yasutake S, Haviland M, Ahmed S, Blum RW, et al. Gender-based violence against adolescent and young adult women in low- and middle-income countries. *J Adolesc Heal*. 2015 Feb 1;56(2):188–96.
 54. Amponsah-Tabi S, Dassah ET, Asubonteng GO, Ankobea F, Annan JJK, Senu E, et al. An assessment of the quality of antenatal care and pregnancy outcomes in a tertiary hospital in Ghana. *PLoS One* [Internet]. 2022 Oct 1 [cited 2023 Jun 15];17(10). Available from: [/pmc/articles/PMC9555636/](https://pmc/articles/PMC9555636/)
 55. Kuhnt J, Vollmer S. Antenatal care services and its implications for vital and health outcomes of children: evidence from 193 surveys in 69 low-income and middle-income countries. *BMJ Open* [Internet]. 2017 Nov 1 [cited 2023 Jun 12];7(11). Available from: [/pmc/articles/PMC5695442/](https://pmc/articles/PMC5695442/)
 56. Jonas K, Crutzen R, Van Den Borne B, Sewpaul R, Reddy P. Teenage pregnancy rates and associations with other health risk behaviors: A three-wave cross-sectional study among South African school-going adolescents. *Reprod Health* [Internet]. 2016 May 4 [cited 2023 May 3];13(1):1–14. Available from: <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-016-0170-8>
 57. Boateng AA, Botchwey COA, Adatorvor BA, Baidoo MA, Boakye DS, Boateng R. A phenomenological study on recurrent teenage pregnancies in effutu municipality-Ghana. the experiences of teenage mothers. *BMC Public Health* [Internet]. 2023 Dec;23(1):1–10. Available from: <https://bmcpublihealth.biomedcentral.com/articles/10.1186/s12889-023-15074-3>
 58. Konadu Gyesaw NY, Ankomah A. Experiences of pregnancy and motherhood among teenage mothers in a suburb of Accra, Ghana: A qualitative study. *Int J Womens Health* [Internet]. 2013 Nov;5(1):773–80. Available from: <https://www.tandfonline.com/action/journalInformation?journalCode=>

- djwh20
59. Idris IB, Bin Sulaiman SK, Hod R, Khazaei H, Abdullah NN. A Qualitative Study to Explore the Determinants of Risky Sexual Behaviors and Pregnancy among Female Adolescents in Sabah, Malaysia. *Obstet Gynecol Int* [Internet]. 2022 [cited 2023 Jun 13];2022. Available from: [/pmc/articles/PMC9722311/](https://pubmed.ncbi.nlm.nih.gov/39722311/)
60. Kagaha A, Manderson L. Power, policy and abortion care in Uganda. *Health Policy Plan* [Internet]. 2021 Mar 26 [cited 2023 May 3];36(2):187–95. Available from: <https://academic.oup.com/heapol/article/36/2/187/6042984>
61. Bakesiima R, Cleeve A, Larsson E, Tumwine JK, Ndeezi G, Danielsson KG, et al. Modern contraceptive use among female refugee adolescents in northern Uganda: Prevalence and associated factors. *Reprod Health* [Internet]. 2020 May;17(1):1–9. Available from: <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-020-00921-y>
62. Bukuluki PMW, Kisaakye P, Wandiembe SP, Kiwujja V, Kajungu C, Mugwanya W, et al. Utilization of sexual and reproductive health services among young people in refugee settings in Uganda. *Front Reprod Heal* [Internet]. 2023 Feb 24 [cited 2023 May 2];5:1077761. Available from: [/pmc/articles/PMC9998478/](https://pubmed.ncbi.nlm.nih.gov/41077761/)
63. Rukundo GZ, Abaasa C, Natukunda PB, Allain D. Parents' and caretakers' perceptions and concerns about the accessibility of antenatal services by pregnant teenagers in Mbarara Municipality, Uganda. *Midwifery*. 2019 May 1;72:74–9.
64. Ivanova O, Rai M, Mlahagwa W, Tumuhairwe J, Bakuli A, Nyakato VN, et al. A cross-sectional mixed-methods study of sexual and reproductive health knowledge, experiences and access to services among refugee adolescent girls in the Nakivale refugee settlement, Uganda. *Reprod Heal* 2019 161 [Internet]. 2019 Mar 19 [cited 2023 May 3];16(1):1–11. Available from: <https://link.springer.com/articles/10.1186/s12978-019-0698-5>
65. Morrison J, Giri R, Arjyal A, Kharel C, Harris-Fry H, James P, et al. Addressing anemia in pregnancy in rural plains Nepal: A qualitative, formative study. *Matern Child Nutr* [Internet]. 2021 Jul 1 [cited 2023 May 2];17(S1):e13170. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/mcn.13170>
66. Nabugoomu J, Seruwagi GK, Hanning R. What can be done to reduce the prevalence of teen pregnancy in rural Eastern Uganda?: Multi-stakeholder perceptions. *Reprod Health* [Internet]. 2020 Aug 31 [cited 2023 Jun 13];17(1):1–12. Available from: <https://reproductive-health-journal.biomedcentral.com/articles/10.1186/s12978-020-00984-x>

Author biography

Simon Peter Ecodu Social Work student, Bishop Stuart University, Mbarara, Department of Social Work and Social Administration

Dr. Benon Muhumuza Senior Lecturer, Bishop Stuart University, Mbarara, Department of Social Work and Social Administration

Lydia Rukundo Social Worker, Mulago National Referral Hospital, Medical Social Work Department

Assoc Prof Francis Kazibwe Assoc Prof Senior Lecturer, Bishop Stuart University, Mbarara, Department of Public Health and Biomedical Sciences