RESEARCH Open Access

Assessing the experiences of teenage mothers in accessing healthcare in Rwanda



Delphine Mizero^{1*}, Marie Immaculee Dusingize¹, Axel Shimwa¹, Alima Uwimana¹, Tsion Yohannes Waka² and Rex Wong^{3,4}

Abstract

Teen mothers are more susceptible to the negative consequences of pregnancy, due to system-wide and sociocultural barriers to accessing needed services, posing higher pregnancy complications and health risks to the babies and mothers. Understanding their lived experience can inform context-specific health programs and interventions that address their needs and improve the health outcomes. Twenty-three women who had delivered her first child before the age of 18 years were interviewed using semi-structured interview guide. The transcripts were coded, categorized and summarized into four major themes: 1) Many pregnant teen girls were disadvantaged by the system from accessing the healthcare services, 2) Although being judged, many found the health care services positive and important, 3) Faced financial difficulty in accessing health services, despite most medical services are covered by community based health insurance, 4) Health care services focuses mostly on the medical health of pregnancy, the social and psychological needs were mostly not available. The study highlighted the gap in providing mental health services, financial support to the teen mothers as part of a comprehensive health services. Some of them consulted health services for the first time with and did not return for follow up if perceived the services was bad. More sensitive and targeted materials and ANC services can be offered to this unique group of clients. More acceptance training to the health care providers and the public is needed. For health facilities, there is a need to also check their psychological wellbeing when seeking ANC services. Online or mobile phone-based mental health interventions may provide some solutions to the issue. Government should re-evaluate the health insurance system to avoid unintentional exclusion of this group of population. Policy to facilitate men to take responsibilities on teen pregnancy issue is needed.

Keywords Teenage pregnancy, Women of reproductive age, Adolescent health, Health access, Sexual and reproductive health

Delphine Mizero

delphine.mizero@student.ughe.org

Introduction

One of the overarching goals of Healthy People 2020 is to eliminate disparities and achieve health equity (Office of Health Promotion and Disease Prevention, [41]). Vulnerable populations, including teenagers, often face health disparities due to system-wide barriers to accessing needed services and making healthy choices (Office of Health Promotion and Disease Prevention, [41]).

Teenage pregnancy is a global health issue but is disproportionately affecting low and middle-income countries (LIMC). About 95% of births among



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

^{*}Correspondence:

¹ School of Medicine, University of Global Health Equity, Kigali, Rwanda

 $^{^{\}rm 2}$ Center for Gender Equity, University of Global Health Equity, Kigali, Rwanda

 $^{^{\}rm 3}$ Institute of Global Health, University of Global Health Equity, Kigali, Rwanda

⁴ School of Public Health, Yale University, New Haven, USA

adolescents occur in LMIC (UNFPA. [52]). Socioculturally, teen pregnancy is being discriminated against by many communities. In countries where abortion is illegal or when hygiene conditions and equipment are insufficient, teenage pregnancy may lead to unsafe abortion (National Institute of Statistics of Rwanda (NISR) [Rwanda], Ministry of Health (MOH) [Rwanda] ICF International. [33]). Rwanda had an estimated population of 13 million in 2022, with 51.5% female, 26.01% at reproductive age, and 11.3% were female teenagers (National Institute of Statistics of Rwanda (NISR), [35]). The teenage pregnancy rate, however, has recently increased from 4.1% in 2005 to 7.3% in 2015 (National Institute of Statistics of Rwanda (NISR), Ministry of Health (MOH) [Rwanda], [34]). Annually around 3.9 million teenage women undergo unsafe abortions and about 70,000 died (UNFPA. [53]). Due to their physiological age and many socio-economic factors, teenagers are more susceptible to the negative consequences of pregnancy, posing higher pregnancy complications and health risks to the babies and mothers (Ertem, Saka, Ceylan, Değer, & Çiftçi, [13] (Loto et al. [28]; , UNFPA. [53]),). Although many studies have shown effective sex communication between parents and their adolescents could help reduce teen risky sexual behaviors, lack of accurate information remain an issue (Velavan and Velavan [55]), Sevilla, Sanabria, Orcasita, Palma, [50]; (Harris et al. [20]), Burgess, Dziegielewski, Green, [6]). Teen pregnancy is also associated with stigma and discrimination, school dropout, fewer job opportunities, and lower financial security in their later lives (Brace et al. [4]; , da Coelho and C., Pinheiro, R. T., Silva, R. A., Quevedo, L. de Á., Souza, L. D. de M., Castelli, R. D., ... Pinheiro, K. A. T. [8]; , Ganchimeg et al. [17]; , UNFPA. [53]), indicating the need of socio-economic support for them.

Previous studies, including those conducted in Rwanda, have investigated the list of possible risk factors contributing to teenage pregnancies (Ajala [1]; , Christofides et al. [7]), Kanku & Marsh, 24; (Moni et al. [32]; , Neal et al. [36]; , Odimegwu [40]; , Okigbo et al. [42]; , Rutaremwa [44]), Parker [43]; Glasier, Gülmezoğlu, Schmid, Moreno, Van Look, [19]). Addressing such complex issues and enabling teen mothers to become productive members of the society could not be achieved by simply focusing on prevention. Thus, it is important to understand the lived experience of pregnant teens. Accordingly, this study was conducted to document the healthcare experience of teenagers during their pregnancy in order to inform context-specific health programs and interventions that address the topic of teenage pregnancy.

Objective

This study explored the experiences and challenges faced by teenage mothers in accessing healthcare services in Rwanda.

Materials and Methods

Setting

The study was conducted at the Nyampinga Ushoboye organization in Rwanda. It is a nonprofit organization founded in 2014, with the aims to prevent teenage pregnancies, new HIV infections, and empower teen mothers with tailored training and skills, as well as provide income-generating activities to promote economic independence and well-being. As of the time the study was conducted, the organization had 152 beneficiaries who were pregnant when they were teens (Newtimes [37]).

Design

A qualitative study using a phenomenological approach was utilized to understand the human experience from the participants' personal perspectives through indepth-interviews (IDI) (Knaack and Knaack [26]).

Sample

A combination of purposive and snowball sampling methods was used to recruit beneficiaries from the partnering organization (Nyampinga Ushoboye) until theoretical saturation. Women who were 18 years old and above and had experienced pregnancy and delivered her first child before the age of 18 years were our target populations. Women who fulfil the criteria and currently living with their child were included as samples.

Data collection procedures

The recruitment took place between May and June 2022. The partnering organization first contacted its beneficiaries who fulfil the selection criteria and explained the purposes of the study. Members who agreed to take part in the study were referred to the research team for the interviews. The research team to set up appointments according to the participants' convenient time and location.

Prior to the interview, consent to conduct and record the interviews was sought after a detailed explanation of the study. To avoid the possibility that the participants felt coerced to participate due to their relationship with the partnering organization, the interviews were conducted without the presence of the partnering organization. The interviews were conducted at a private location. Detailed interview notes were taken by

the data collector if participants declined to be audio recorded. All interviews were conducted in Kinyarwanda (the local language) as preferred by the participants. Each interview lasted approximately 40 min.

Data collection tools

A semi-structured interview guide was developed to facilitate the interview. The interview guide contains 11 main questions, covering the different experiences and challenges faced by participants surrounding their perceptions of change in life, experience with access to health services, socio-economic support, and coping mechanisms. The data collection tool was developed in English, translated into Kinyarwanda and back translated into English for validation. It was pre-tested on 9 female adolescents before actual administration.

Data collectors

The interviews were conducted by data collectors who are fluent in English and Kinyarwanda and have qualitative data experience. A two-day training was provided by the research team to the data collectors on the study's objectives, the consent process, ethical considerations, how to conduct interviews, and power dynamics in research. Only female data collectors were used in this study due to the sensitivity nature of the topic.

Measure

The key measures of this study were the self-reported experiences, challenges in accessing healthcare and support received during their teen pregnancy and care of their children.

Data management and analysis

The audio recordings were transcribed and translated to English before analysis. De-identified transcripts were read by all authors independently then together to create the codebook. Then each member read independently the same transcripts, using the codebook to code the transcript, then met as a team to resolve any discrepancies through discussion and revision of the definition of the codes. The PIs coded all transcripts inductively and iteratively to finalize on the codebook. The transcripts were then coded based on the codebook, first independently then as a group to refine discrepancies. The coded transcripts were grouped into categories, then themes. Representative excerpts were included in the findings.

Results

Twenty-three in-depth interviews were conducted. The participants came from six different districts in Rwanda. In the time of the study, all participants had delivered

their first child when they were at the age between 14 and 19 years.

Four major themes related to their health care experiences emerged: 1) Many pregnant teen girls were disadvantaged by the system from accessing the healthcare services, 2) Although being judged, many found the health care services positive and important, 3) Faced financial difficulty in accessing health services, despite most medical services are covered by community based health insurance (Mutuelle de sante), 4) Health care services focuses mostly on the medical health of pregnancy, the social and psychological needs were mostly not available.

Theme 1. Many pregnant teen girls were disadvantaged by the system from accessing the healthcare services

Pre-marital pregnancy was seen as a disgrace to the family mainly influenced by the culture and as a consequence, many of the participants were disowned by their families at various levels. In addition to that, many were also being denied by the men who impregnated them, leaving them to handle the pregnancy almost without any support under the scrutiny of the society.

While this kind of social stigma exists almost all around the world, an extra layer of challenges is faced by pregnant teenage women without husbands in accessing health care in Rwanda. For example, one participant mentioned that when accessing pregnancy tests and prenatal healthcare, the system requires her to be accompanied by her husbands or to have some approval papers from the local community leaders if the husband is not present. Without the presence of the husband, she was judged, insulted and denied when trying to get such papers – creating a hurdle for her to access healthcare.

"You cannot get to the point of giving birth without taking a test. It was a challenge even just to test for pregnancy, it required me to have the paper from the village local government. I was a teen, it was very difficult for me as a young girl, to go to leader to say that I want the paper that allows me to be tested for the pregnancy and that I have no husband. As a girl in such an abnormal life it was even a shame for me to say that I was pregnant [without a husband]." < GH001 >>

"The first time I went there [health center], they asked me where my husband was, of course I answered that I don't have one. They immediately told me to leave and come back with the justification from the village leader for not having a husband. I had to go." << MU003>>

In addition, Rwanda citizens are required to purchase Community-Based Health Insurance (CBHI)—a national health insurance system for the public healthcare. Each household purchases CBHI for their family members. In Rwanda, people under the age of 16 do not have national identity cards. Thus individuals who are not married or under the age of 16 must register under their family units. When individuals are disowned by their families, in this case, most of our study participants, they would not be getting CBHI through the families. And if they do not have husbands, they could not purchase CBHI at all. Without any social support, either from the men who impregnated them or from their own families, they were systematically disadvantaged from accessing health care.

"My family had refused to register me on their social category, so my baby and I could not get community health insurance. When we were sick, we would go to the community health worker and to pharmacy to buy medicines." < MU009 >>

"I had no CBHI, I did not go to the health facility, not even once, I only went there when I was going to deliver." << MU006>>

"When I went to the health centre it was late, I had to pay the price for the delay. That time I had no community health insurance (Mutuelle)" < GH001>>

Some also mentioned that even when they were able to pay for the services, people were judgemental, making them feel guilty or unworthy. They were surprised as they were expecting the nurses at the health centre to be understanding, instead of stigmatizing them and being harsh on them.

"I went there once. The nurses were intimidating me, asking me who got me pregnant. They harassed and abused me, so I decided to not go back there anymore." << MU008>>

"The first time I went to the hospital, the woman that hosted me was from my local community. She tortured me and abused me. I did not go there." << MU002>>

"I remember the first time I went to the hospital; they asked me who impregnated me. I said that "no one". They harshly said, 'did that baby come from a tree?' I told them I don't have a husband. They laughed at me." < < MU001 >>

"The health care provider at first refused to serve

me, she said to me, 'You young girl, what were you thinking when you got pregnant, what came into you mind? what happened to you?' I sat down and cried; it was the saddest day that I had ever experienced in my life." < < BU001 >>

Not only were they stigmatized by healthcare providers, but they were also judged by other mothers. Adult married mothers at ANC clinics would continuously judge them, attributing their pre-marital pregnancy to their own indecent behaviours. Moreover, most of the advice and education materials provided at the ANC had married couples as the target audiences, teen mothers did not feel included or relevant in those group education. They felt discouraged and stopped attending the subsequent ANC consultations unless they were sick or experienced medical issues.

"The way they give advice to pregnant women, was for women who have husbands; when they are teaching, they seem to be talking to the woman and the spouse—the two people. So as a single mother, I felt not concerned." < GH001 >>

Theme 2. Although sometimes being judged, many teenage mothers found the health care services positive

Overall, the majority of the teenage mothers interviewed reported and expressed their appreciation in receiving good health care services, as well as advice on their pregnancy.

"Going to the health centre helped to acquire new skills that I did not have. The health care provider told me that laying down flat, back on the bed that is not allowed for a pregnant mother, they also told me that I should not take alcohol while I am pregnant and advised to eat a balanced diet, so it helped me to learn what can help my baby to grow healthy in the womb". < NY001 >>

"It was really helpful because they [health care providers] discovered that my baby is wrong positioned in my womb then they decided to operate me." << MU005 >>.

"They [health care providers] gave all the services about check-ups and when I am sick, I could also take my kid for vaccinations or when sick." < GT003 >>

One dominant contributor to the positive experience was the community health workers (CHW). CHWs are a tier of health care providers who live in the community they serve and receive some levels of training in providing basic health care. Since they live in the same

community, there are more accessible and often can extend more personal health care services to vulnerable populations. The CHWs played a huge role in their pregnancy journey.

Many of our respondents expressed the support, help and encouragement they had received from the CHW. From encouraging them to seek ANC services or health care services in general, to accompanying them throughout the pregnancy.

"The first time I went at the hospital, I was with a community health worker." << BT001>>

"Community health worker found that I had Malaria, gave me medications other than coartem because I was pregnant. She told me that she would be helping me because my family had rejected me." < MU009 >>

"They [CHWs] treated me and my baby well" << KA001>>

Some health care providers even took initiative to create groups for teen mothers, to provide them a safe space to get emotional, physical and financial support from their colleagues who share the same concern. These were not institutional efforts, and the participants were particularly grateful for these initiatives. They had helped them to reintegrate into the community and to recover from the psychological trauma.

"There is a place where we meet every Thursday. There are people who come and talk to us, and share our experiences amongst ourselves as well, what we went through. Sometimes we are so down and so worried, but when we meet and share our sad stories you realize that you are not alone and that makes you feel better." << BT003>>

"We talked about the importance of following the appointments for ANC service visits, eating balanced diet. They also advised us not to be lonely, not to feel desperate, because when you lose hope, your child is also born in such mood." << BU002 >>

Theme 3. Teenage mothers faced financial difficulty in accessing health services, despite most medical services are covered by CBHI

Teen mothers faced both short- and long-term financial hardships which impacted their ability to access healthcare services.

For survival, some of the teen mothers had temporary jobs and wages before their pregnancy. Some were fired because they were deemed unable to continue yielding the needed productivity, others had to quit jobs that had become extremely tiring. Even after delivery they rarely have such employment opportunities, for they cannot be allowed to work with their babies and there is no one they could leave the babies with.

"No one would give me job while I'm pregnant" << BT001 >>

"The job that I have is working in brick making and is temporary... The job is complicated, It's a struggle for survivor" << MU008>>

Other teen mothers relied on their parents' financial assistance prior to their pregnancy. Most of their families were already poor and were unable to provide for the new baby in addition to the mother. Some of the respondents' parents had yet to accept the situation. Some refused to support them, and others chased them out of their homes.

"I started living in the abandoned old houses. Occasionally, someone may pity me and help me. It was worse when I am sick because I could not easily afford medication." < GT004 >>

Some of the teen mothers also expected some financial assistance from the men who impregnated them to help them in raising the babies. However, most of the fathers failed to meet their responsibilities, with some fledding away and leaving the teen mothers to navigate the whole journey on their own.

"...the child father had called asking me where I was, I answered him that I was at home, he requested me to meet him, I was still pregnant, so because he had other many children, he wanted to have me killed, he did not want someone to know that he had a child in Kigali also." < MU009 >>

"when I told who impregnated me, he blocked me on telephone, his phone was unavailable. After few days, I went at his home place, her mother was telling him to marry me. Because I felt that his parents were supporting me, I thought everything will be okay, so I went back home. I did not go the file the case in leadership, because they would have not caught him anyway, as he run away to Uganda. I first thought of doing abortion, but because my pregnancy was more than 1 month, I did not do so." < BT001 >>

Their financial hardships extended to their health care experience, even for those that had CBHI. Those who were enrolled in the CBHI program found it difficult to cover all their maternity expenses as the insurance

only covered 90% of the costs. For those without CBHI, accessing healthcare services was a significant challenge as they could not afford to pay for them. Consequently, these financial hardships resulted in many of the teenage mothers delaying seeking healthcare services when they or their babies fell ill, even leading to being discharged prematurely from hospitals to minimize expenses.

"My mom has already paid insurance, the medication was easy to afford, I would only pay 220RWF" << MU005 >>

"My family paid for my insurance, but they didn't pay for my child. My child has no CBHI. I take my child to the hospital when I have money on me, but most of the times I don't... and I have to buy medications from the pharmacy for the child." < BT003 >>

"Life is not good, life is complicated, there are things we need, but we cannot afford, sometimes I get hungry and do not find food... When the child got sick, it was complicated because I had no means of paying for the child health care service. There were times even my family ran out of money. The child got to the point of being hospitalized, the medical bill had increased significantly. When the health care provider told me that the child was getting better, I decided to leave the hospital immediately." < NY001 >>

"I didn't get enough money to buy food for the babies." << BT002>>

Theme 4. Health care services focuses mostly on the medical health of pregnancy, the social, and psychological needs were mostly not available

The services provided at the health center often focused only on the medical and physical aspects of the mothers and their babies. Many respondents, however, expressed that they were facing a lot of mental health issues related to the pregnancy. The majority expressed that they experienced some signs of severe depression, such as losing interest in their daily activities, feeling isolated yet not wanting to interact with others socially, having trouble sleeping, or having negative or suicidal thoughts. Most of them went through that at the same time when their families and friends had already given up on them and the society was criticizing them. Their mental health was at the most vulnerable status and the need to support them at this critical stage was obvious, yet the gap in the healthcare system has left their mental health issues unaddressed.

"Pregnancy made my life worse; it made me

depressed; it made me lose any hope... I thought of leaving my home because I was not fine at home."<< MU004>>

< I was depressed due to the unwanted pregnancy.</p>
There is nothing you can do but to accept to deliver the baby as the time goes on." < GT004 > >

"I would just remain inside the locked house and drink beer. And hope it could end like that." << MU002>>

Discussion

The primary aim of this study was to identify the major interconnected themes related to the health care seeking experience of teen mothers during their pregnancy in Rwanda. The four overarching themes emerged were related to the challenges in accessing healthcare services due to the overall system, the judgement they faced at various levels, the financial difficulties, and the need of mental health support.

The data collected in the study represented a sample teen mothers' views and experience. To a larger extent, the results showed how unprepared the society as well as the teenagers themselves were when it comes to teenage pregnancy.

The CBHI was introduced in 1999 in Rwanda as a vehicle to achieve universal access to health care (MINE-COFIN, [31]). It is available to all Rwanda citizens, especially for those working in the informal sector [ILO Social Protection, [21]; Lu, Chin, Lewandowski, Basinga, Hirschhorn, ... & Binagwaho, [29]). CBHI has achieved remarkable accomplishment towards effective universal health care and has made Rwanda the most advanced country in Africa regarding universal health care [(Evans et al. [15];, Lagomarsino et al. [27];, Saksena et al. [47]),Binagwaho, Farmer, Nsanzimana, Karema, Gasana, de Dieu Ngirabega,... & Drobac, [3]; (Makaka et al. [30]),Nyandekwe, Nzayirambaho, & Kakoma, [39]; (Sanogo et al. [48])). However, this study reviewed some gaps within the system.

Many participants highlighted a challenge in accessing health care services for themselves and their babies due to inaccessible community-based health insurance. The current CBHI system focuses on household registration as a unit. Teens who were disowned by their families have no means of registering and eventually being left off by the system. The Rwandan government needs to reevaluate the existing CBHI system so that this vulnerable group has more autonomy in purchasing health insurance, instead of being completely dependent on the decision of the head of household.

One participant mentioned about the requirement of an authorization letter from village heads also created an extra layer of challenges for teen mothers to access health care. We could not verify the magnitude of this issue, nor could find out the origin or actual rationale for such practice. However, the execution of such practice could be a barrier itself. According to General Medical Council (General [18]) of United Kingdom, the patient confidentiality is an essential part of good care and must be respected. This confidentiality applies to both adults as well as to children or young persons. While fully supporting the principle of confidentiality and privacy must be respected, we also recognize many habits and preferences about privacy and confidentiality is often culturally informed (Estroff and Walker [14]). It would be easy, yet risky, to recommend eliminating the practice of acquiring authorization letter from village heads, without fully investigating and understanding the rationale behind that traditional practice. Further study to understand the implication is needed. Another barrier to access to healthcare was specifically related to this age group of our study participants. In Rwanda, the legal age to be get an identity card is 16 years old (NIDA [38]). Without the identity card, pregnant teen under the age of 16 would not be able to access any government services.

At the services delivery level, ANC is typically and traditionally offered to couples expecting babies – as that's the assumed clienteles. It is understandable that the materials were all catered to such audiences. As this study results have reviewed, this group of patients were left out from the services, either due to the materials were not relevant or appliable to their situations. There is a need for the health programs to update and modify the information, training, and materials to become more diversified and inclusive.

As indicated in many previous studies, teens with pre-marital pregnancy often faced stigma (Atuyambe et al. [2]; , Dlamini [10]; , Ellis-Sloan and Ellis-Sloan [12]; , Jones et al. [23]; , SmithBattle [51]; , Wiemann et al. [56]). Our study results showed the stigma they faced came from many sources - from being disowned by their family members, to being judged by health care providers and other pregnant women at the health facilities. All these have created a sense of both guilt and shame to these teens. In addition to the abandonment from their parents, many were also abandoned by the men impregnated them. Many studies have suggested sensitivity trainings should be provided to health care providers to various clinical situations (Douglas [11]; , Senanayake et al. [49]), Isano, Yohannes, Igihozo, Ndatinya, Wong, [22]). It is arguably that such training would not be sufficient unless it is extended to the larger community. Acceptance is not only limited to the teens, but also to their families. Many families disowned the teens as the pre-marital pregnancy brought shame and disgrace to the families (Ruzibiza and Ruzibiza [45]), Saim, Dufåker, Ghazinour, [46]). Such abandonment at a time when they needed family support the most, subsequently caused many challenges to both the teen mothers and babies in receiving proper health care.

Many of our participants also mentioned that the men impregnated them were no longer in any part of their lives. The act of fleeing from the responsibility directly put the teen girls in all kinds of hardships from social stigma to financial burden. Further investigation is required to identify appropriate interventions. Potentially, a multipronged solution including education, policy and punishment, would be needed if sexual coercion was involved.

Getting pregnant at a young age can be scary for women, especially if they were not married. Many teen mothers found the CHW helpful, as they provided them support, encouragement and accompaniment to seek care at health facilities. The actions of CHWs were greatly appreciated by the participants. Such best practice should be promoted. At the same time, many respondents mentioned that they did not go back to the health facilities after the poor treatment they had received during the first treatment; highlighting the importance of how health care providers' attitude could affect the potential health outcome of the teen mothers, regardless the quality of services. Health care providers awareness on this must be enhanced.

The study results also highlighted a few aspects of supports were missing in the care of teen mothers. The findings showed that teen mothers face numerous challenges that place demands not only on their physical health, but also on their mental wellness. The need for mental health support for most mothers was not addressed at most health services. The positive experience of our respondents from the peer support group served as an example of the importance of providing them a venue to discuss freely, feel accepted, share experience and know they are not alone (Bunting et al. [5]; , Klima and Klima [25]). Such practice should be encouraged or even institutionalized by health facilities. Mental health currently is not part of the maternal services and should be considered to be incorporated as a routine service. Mental health wellness should be routinely checked at the ANC. In addition, family and community are important sources of social support (Evans, Katz, Fulginiti, Taussig, [16]). Further supporting the importance of sensitivity training to the larger community in promoting acceptance. The need of providing them with a sense of acceptance, socialization, and stability are important (DeVito and DeVito [9]).

Financial challenge is not only a common barrier for teen mothers to access health services, but to achieve overall health in general. Caring for their newborns with virtually no financial means was challenging. Even if they had access to CBHI, they still faced difficulties in paying for the remaining 10% designed by the system on items not covered. In addition to health care cost, they also need to meet the basic needs of their infant as well as theirs, including food and shelter. Government should consider incorporating more financial supports and career opportunities to this particular group of citizens not only to ensure they can access health services, but also optimize their development as well as their children's.

Despite the physiologic immaturity of the girls, the stigma they faced from different aspects of the society, the financial hardship, they managed to carry their pregnancies to term and did not resort to abortion. Showcasing how resilient they could be. They represent a group of citizen who could be productive members of the society if proper investment and support are provided. Evidence has shown investments in the health, education, and development of the young people can have long term benefits throughout their lifetime for the individuals as well as the society for a strong national polity and economy (UNICEF [54]).

Limitations

This research provides data for understanding the experiences and challenges faced by teenage mothers when seeking health services in Rwanda. However, it is a qualitative study, its results are not mean to generalize and represent all teenage mothers' experience in Rwanda.

The study also has a potential selection bias, since the participants were contacted through an NGO, making them to be more likely to already have better access to healthcare services compared to those who are not supported by any NGO. And we could not eliminate the possibility of recall bias.

Conclusion

Teen mothers face numerous challenges in accessing health services. Understanding the lived healthcare experiences of teen mothers can provide significant insights to develop future programs and support for improving health outcomes and support systems for young mothers. It highlights the necessity for tailored healthcare services that address the unique physical, emotional, and social needs of teenage mothers. The findings suggested that current healthcare provisions often fall short in providing comprehensive and empathetic care, leading to feelings of stigmatization and inadequate support among teen mothers. By

understanding these lived experiences, policymakers and healthcare providers can develop more inclusive and supportive strategies, such as enhanced education, counseling services, and community-based support, to improve the overall health and well-being of teen mothers and their children.

The study highlighted the gap in providing mental health services, financial support to the teen mothers as part of a comprehensive health services. Holistic solutions to the problems can only be found through the coordinated effort of a multidisciplinary and intersectoral approach. Most teen mothers were struggling to deal with their pregnancy; they were unprepared for the transition to motherhood. Their pregnancy also put their family and social support to test. These mothers consulted for the first time with anxiety, and if perceived the services was bad, will not return for other services, which can put their health as well as their children's health in jeopardy. More acceptance training to the health care providers and the public is needed. For health facilities, there is a need to also check their psychological wellbeing when seeking ANC services. More sensitive and targeted materials and ANC services can be offered to this unique group of clients. Online or mobile phone-based mental health interventions may provide some solutions to the issue. Government should re-evaluate the health insurance system to avoid unintentional exclusion of this group of population. Policy to facilitate men to take responsibilities on teen pregnancy issue is needed.

Acknowledgements

The authors would like to thank all participants for providing us insightful information, and Nyampinga Ushoboye for their support in this study.

Authors' contributions

AS, MID, DM, AU conceptualized the study. AS, MID, DM, AU, TY, RW contributed to the proposal development. All authors contributed to the data collection, data analysis, and manuscript development, as well as approved the final manuscript.

Funding

The authors received no funding for this work.

Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author [MD] on reasonable request.

Declarations

Ethics approval and consent to participate

The study was approved by the University of Global Health Equity's Institutional Review Board (UGHE-IRB/2021/045). Prior to data collection, participants gave their signed consent after detailed explanation of what research would entail.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 26 July 2023 Accepted: 12 August 2024 Published online: 26 August 2024

References

- Ajala, A. O. (2014). Factors associated with teenage pregnancy and fertility in Nigeria. ISSN, 5(2), 2222–1700. Retrieved from www.iiste.org
- Atuyambe L, Mirembe F, Tumwesigye NM, Annika J, Kirumira EK, Faxelid E. Adolescent and adult first time mothers' health seeking practices during pregnancy and early motherhood in Wakiso district, central Uganda. Reprod Health. 2008;5:1–11.
- 3. Binagwaho A, Farmer P. E, Nsanzimana S, Karema C, Gasana M, de Dieu Ngirabega J, Drobac P. C. Rwanda 20 years on: investing in life. Lancet. 2014;384(9940):371–5.
- Brace AM, Hall M, Eatman J, Tucker N. Social, Economic and Health Costs of Unintended Teen Pregnancy: The Circle of Care Intervention Program in Troup County, Georgia. Journal of the Georgia Public Health Association. 2008;1(1):33–46.
- Bunting L, McAuley C. Research review: Teenage pregnancy and motherhood: The contribution of support. Child Fam Soc Work. 2004;9(2):207–15.
- Burgess V, Dziegielewski SF, Green CE. Improving comfort about sex communication between parents and their adolescents: Practicebased research within a teen sexuality group. Brief Treat Crisis Interv. 2005;5(4):379
- Christofides N. J., Jewkes R. K, Dunkle K. L, McCarty F, Jama Shai N, Nduna M, Sterk C. Risk factors for unplanned and unwanted teenage pregnancies occurring over two years of follow-up among a cohort of young South African women. Glob Health Action. 2014;7:23719. https://doi.org/ 10.3402/gha.yz.23719.
- da Coelho FM, C., Pinheiro, R. T., Silva, R. A., Quevedo, L. de Á., Souza, L. D. de M., Castelli, R. D., ... Pinheiro, K. A. T. Major depressive disorder during teenage pregnancy: Socio-demographic, obstetric and psychosocial correlates. Rev Bras Psiquiatr. 2013;35(1):51–6. https://doi.org/10.1016/j.rbp. 2012.03.006.
- DeVito J. How adolescent mothers feel about becoming a parent. J Perinat Educ. 2010;19(2):25.
- Dlamini LS. The problems of teenage mothers in the southern Hho-Hho region of Swaziland (Doctoral dissertation). 2002;2000(82):101.
- Douglas JM Jr, Fenton KA. Understanding sexual health and its role in more effective prevention programs. Public Health Rep. 2013;128(2Suppl 1):1–4
- Ellis-Sloan K. Teenage mothers, stigma and their 'presentations of self'. Sociological Research Online. 2014;19(1):16–28.
- Ertem M, Saka G, Ceylan A, Değer V, Çiftçi S. The factors associated with adolescent marriages and outcomes of adolescent pregnancies in Mardin Turkey. J Comp Fam Stud. 2008;39(2):229–39.
- 14. Estroff SE, Walker RL. Confidentiality: concealing "things shameful to be spoken about." The virtual mentor: VM. 2012;14(9):733.
- 15. Evans DB, Etienne C. Health systems financing and the path to universal coverage. Bull World Health Organ. 2010;88:402–3.
- Evans R, Katz CC, Fulginiti A, Taussig H. Sources and types of social supports and their association with mental health symptoms and life satisfaction among young adults with a history of out-of-home care. Children. 2022;9(4):520.
- Ganchimeg T, Ota E, Morisaki N, Laopaiboon M, Lumbiganon P, Zhang J, Mori R. Pregnancy and childbirth outcomes among adolescent mothers: a World Health Organization multicountry study. BJOG: An International Journal of Obstetrics and Gynaecology. 2014;121(1):40–8. https://doi.org/ 10.1111/1471-0528.12630.
- General Medical Council (2023). Principles of confidentiality. Accessed in May 2023: https://www.gmc-uk.org/ethical-guidance/ethical-guidancefor-doctors/0-18-years/principles-of-confidentiality
- Glasier A, Gülmezoglu A M, Schmid G P, Moreno C G, Van Look P F. Sexual and reproductive health: a matter of life and death. Lancet. 2006;368(9547):1595–607.
- 20. Harris MB, Franklin C. Evidence-based life skills interventions for pregnant adolescents in school settings. In: Roberts AR, Yeager KR, editors. Evidence-based practice manual: Research and outcome measures in the health and human services. New York: Oxford; 2004. p. 312–23.

- ILO Social Protection. Rwanda. Promulgation de la loi N° 62/2007 du 30/12/2007 portant création, organisation, fonctionnement et gestion des mutuelles de santé Accessed March 2023 at https://www.social-protection.org/gimi/gess/ShowRessource.action?ressource.ressourceld=18046
- 22. Isano S, Yohannes T, Igihozo G, Ndatinya GI, Wong R. A qualitative study to explore the healthcare-seeking experiences of men who have sex with men (MSM) and transgender women (TGW) in Rwanda. BMC Health Serv Res. 2023;23(1):291.
- 23. Jones C, Whitfield C, Seymour J, Hayter M. 'Other girls': A qualitative exploration of teenage mothers' views on teen pregnancy in contemporaries. Sex Cult. 2019;23(3):760–73.
- Kanku RT, Marsh. August). Attitudes, perceptions and understanding amongst teenagers regarding teenage pregnancy, sexuality and contraception in Taung. South African Family Practice. 2015;52:563–72. https:// doi.org/10.1080/20786204.2010.10874048.
- Klima CS. Centering pregnancy: a model for pregnant adolescents. J Midwifery Womens Health. 2003;48(3):220–5.
- 26. Knaack P. Phenomenological research. West J Nurs Res. 1984;6(1):107-14.
- Lagomarsino G, Garabrant A, Adyas A, Muga R, Otoo N. Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. The Lancet. 2012;380(9845):933–43.
- Loto OM, Ezechi OC, Kalu BKE, Loto AB, Ezechi LO, Ogunniyi SO. Poor obstetric performance of teenagers: is it age-or quality of care-related? J Obstet Gynaecol. 2004;24(4):395–8.
- Lu C, Chin B, Lewandowski J. L, Basinga P, Hirschhorn L. R, Hill K, Binagwaho A. Towards universal health coverage: an evaluation of Rwanda Mutuelles in its first eight years. PLoS One. 2012;7(6):e39282.
- Makaka A, Breen S, Binagwaho A. Universal health coverage in Rwanda: a report of innovations to increase enrolment in community-based health insurance. The Lancet. 2012;380:57.
- 31. MINECOFIN, Government of Rwanda, RWANDA VISION 2050. Accessed on Feb 2023. https://vision2050.minecofin.gov.rw/
- Moni SA, Nair MKC, Devi RS. Pregnancy among unmarried adolescents and young adults. Journal of Obstetrics and Gynecology of India. 2013;63(1):49–54. https://doi.org/10.1007/s13224-012-0244-7.
- National Institute of Statistics of Rwanda (NISR) [Rwanda], Ministry of Health (MOH) [Rwanda] ICF International. Rwanda demographic and health survey. 2014–1 2016. [Google Scholar]
- National Institute of Statistics of Rwanda (NISR), Ministry of Health (MOH) [Rwanda], & I. I. (2015). Rwanda Demographic and Health Survey 2014–15 Final Report. Rockville, Maryland, USA: NISR, MOH, and ICF International.
- National Institute of Statistics of Rwanda (NISR). (2023). The Fifth Rwanda Population and Housing Census, Main Indicators Report. NISR. https:// www.statistics.gov.rw/datasource/171
- Neal SE, Chandra-Mouli V, Chou D. Adolescent first births in East Africa: disaggregating characteristics, trends and determinants. Reprod Health. 2015;12(1):13. https://doi.org/10.1186/1742-4755-12-13.
- Newtimes, (2019). Available at: https://www.newtimes.co.rw/news/featu red-guaranty-trust-bank-rwanda-plc-donates-sewing-machines-womennyampinga-ushoboye
- NIDA, 2023. Accessed on May 2023, at https://www.nida.gov.rw/services/application-for-id#:~:text=The%20Rwandan%20identity%20card%20is,in%20NIDA%20database%20(NPR).&text=%2D%20A%20document%20proving%20her%2Fhis,identity%20certificate%2C%20identity%20card
- 39. Nyandekwe M, Nzayirambaho M, Kakoma J. B. Universal health coverage in Rwanda: dream or reality. Pan Afr Med. 2014;17:232.
- Odimegwu, C., & Mkwananzi, S. (2016). Factors associated with teen pregnancy in sub-Saharan Africa: a multi-country cross-sectional study: original research article. African Journal of Reproductive Health, 20(3), 94–107. Retrieved from http://journals.co.za/content/ajrh/20/3/EJC19 5767
- 41. Office of Health Promotion and Disease Prevention. HealthyPeople 2020: Social determinants of health. n.d. Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=39
- Okigbo CC, Speizer IS. Determinants of Sexual Activity and Pregnancy among Unmarried Young Women in Urban Kenya: A Cross-Sectional Study. PLoS ONE. 2015;10(6).
- 43. Parker R. Sexuality, culture, and power in HIV/AIDS research. Annual review of anthropology. 2001;30(1):163–79.

- Rutaremwa G. Factors Associated with Adolescent Pregnancy and Fertility in Uganda: Analysis of the 2011 Demographic and Health Survey Data. American Journal of Sociological Research. 2013;3(2):30–5.
- Ruzibiza Y. 'They are a shame to the community. ..'stigma, school attendance, solitude and resilience among pregnant teenagers and teenage mothers in Mahama refugee camp. Rwanda Global public health. 2021;16(5):763–74.
- 46. Saim NJ, Dufåker M, Ghazinour M. Teenagers' experiences of pregnancy and the parents' and partners' reactions: a Malaysian perspective. Journal of Family Violence. 2014;29:465–72.
- Saksena P, Antunes AF, Xu K, Musango L, Carrin G. Mutual health insurance in Rwanda: evidence on access to care and financial risk protection. Health Policy. 2011;99(3):203–9.
- 48. Sanogo NDA, Fantaye AW, Yaya S. Universal health coverage and facilitation of equitable access to care in Africa. Front Public Health. 2019;7:102.
- 49. Senanayake P, Faulkner KM. Unplanned teenage pregnancy. Best Pract Res Clin Obstet Gynaecol. 2003;17(1):117–29.
- Sevilla TM, Sanabria JP, Orcasita LT, Palma DM. Consistencies and discrepancies in communication between parents and teenage children about sexuality. Paidéia (Ribeirão Preto). 2016;26:139–47.
- 51. SmithBattle L. I. Reducing the stigmatization of teen mothers. MCN Am J Matern Child Nurs. 2013;38(4):235–41.
- 52. UNFPA. (2013a). ADOLESCENT PREGNANCY: A Review of the Evidence.
- UNFPA. (2013b). Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy. State of the World Population 2013.
- 54. UNICEF (2023). Global Development Commons. Accessed May 2023, at https://gdc.unicef.org/resource/future-worlds-children
- Velavan J. A family physician's journey in exploring sexual health perceptions and needs in a boarding school community. Journal of Family Medicine and Primary Care. 2020;9(1):395.
- Wiemann CM, Rickert VI, Berenson AB, Volk RJ. Are pregnant adolescents stigmatized by pregnancy? J Adolesc Health. 2005;36(4):352–e1.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.