BMC Women's Health

RESEARCH

Open Access

Factors influencing abortion care-seeking outside of formal healthcare settings: lived experiences from Rwandan young women

Jean Pierre Ndayisenga[1,2,3*], Assumpta Yamuragiye[4], Abe Oudshoorn[2], Godfrey Katende[1,5], Aimable Nkurunziza[1,2,6,7], Olive Tengera[1], Jean Bosco Henri Hitayezu[1], Justine Bagirisano[1], Jeanne d' Arc Ayinkamiye[8] and Gilbert Uwitonze[9]

Abstract

Background Informal abortions, commonly known as unsafe abortions, refer to all induced abortions that occur outside of formal healthcare settings conducted without the assistance of a licensed, trained healthcare provider. Despite the legalization of safe induced abortion care services, informal abortions continue to be among the major causes of maternal mortality and morbidity among young women in Rwanda living in rural areas with limited or no access to safe abortion care services. The purpose of this qualitative study was to gain an in-depth understanding of the lived experience of seeking informal abortions from the perspective of young women in rural Rwanda and to identify the underlying factors for these women seeking abortion care services outside of the formal healthcare setting.

Methods This qualitative study was guided by a descriptive phenomenology in rural Rwanda, specifically in a selected district located in the Northern Province of Rwanda. Ten young women between 18 and 24 years of age, who had the experience of seeking informal abortion services from informal providers within the last eight years participated in audio-recorded, in-depth, face-to-face interviews. Collected data were analyzed using Colaizzi's (1978) seven steps of the phenomenological method.

Results The study found that young Rwandan women still seek unregulated abortions to end their unintended pregnancies due to limited access to or utilization of sexual reproductive health and rights services. Among the reasons for seeking abortion care services outside of the formal healthcare setting in Rwanda were sociocultural and economic factors and the stigma associated with terminating unintended pregnancies before marriage.

Conclusion In light of the findings of this study, the authors recommend the Ministry of Health and its stakeholders to expand access to comprehensive adolescent and youth-friendly reproductive health and reproductive rights while addressing the sociocultural stigma through public awareness and economic factors that play a big role in unregulated abortions rather than safe abortion care services.

Keywords Decision-making, Informal abortion, Unsafe abortion, Unregulated abortion, Young women, Outside of formal healthcare setting, Rwanda

*Correspondence:
Jean Pierre Ndayisenga
jndayise@uwo.ca

Full list of author information is available at the end of the article

© 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/.

Background

The World Health Organization (WHO) defines unsafe abortion as "the termination of unwanted pregnancy by persons lacking the necessary skills, or in the environment lacking minimal medical standards, or both" [1]. In contrast to unsafe abortions, abortions are described and classified as safe if they were carried out by a trained provider using any of the methods recommended by the WHO, such as medical abortion, dilation, and evacuation, or vacuum aspiration, depends which one was appropriate based on the pregnancy gestational age [2–5]. Based on the most recent WHO definition and guidelines, the spectrum of unsafe abortions used in this study represents two sub-categories: 'less safe abortions' and 'least safe abortions' [2, 3]. Less safe abortions include those performed by a trained provider but with an outdated method or any abortion performed with a safe method without adequate information or support from a trained individual [2, 3]. Least safe abortions are described as those provided by untrained individuals using dangerous methods, such as inserting foreign objects in the cervix and uterus, ingesting caustic products, or using traditional concoctions [2–4]. The literature indicated that most of unsafe induced abortions occur outside formal healthcare systems through self-managing abortion or by an unlicensed or informal provider using modifications, other dangerous substances, or foreign objects to open and dilate the cervix to terminate the unintended or unwanted pregnancy [6–8]. Thus, for the purpose of this study, authors will use the term informal abortion interchangeably with unsafe abortions to refer to all induced abortions that occur outside of formal healthcare systems (outside of formal healthcare settings) conducted without the assistance of a licensed, trained healthcare provider.

Between 2010 and 2014, unsafe abortions were estimated at 45% of all abortions, and the majority of these unsafe abortions (97%) occurred in developing countries [1, 9]. In sub-Saharan Africa (SSA), where Rwanda is located, it is estimated that 520 women die for every 100,000 unsafe abortions [9]. Consequently, unsafe abortions significantly increase maternal mortality and morbidity among young women. According to WHO [1, 10], 4.7–13.2% of maternal deaths resulted from informal and unsafe abortions worldwide. Young women in Rwanda are those who are aged from 10 to 24 years old [11]. The majority of Rwandan young women live in rural areas with limited or lack of access to hospitals and other services compared to those living in urban areas [12]. Furthermore, research reveals spatial disparities in access to sexual and reproductive health and rights (SRHRs), including safe abortion, are not unique concerns to rural Rwandan young women but also affect many adolescents and young women from many other countries where abortion is legal. For example, studies from various countries, such as South Africa [13], Canada [14], the United States [15, 16], India [17], and Australia [18], show that women in rural areas face greater barriers to accessing abortion care than their urban counterparts because of factors, such as long distances, stigma, and other factors. This translates to why the rate of unsafe abortions among young women is higher in rural areas compared to urban [12] The Ipas Africa Alliance (IPAA) [19] reported that the lack of access to safe and legal abortion and legislation to facilitate this care causes young single or married women in Rwanda to risk their lives and health by seeking induced abortion services outside of the formal healthcare settings.

It is worth noting that safe-induced abortion procedures are performed in two main ways: surgical abortion, which involves the extraction of conception products from the uterus through suction or dilatation of the cervix and curettage [1]. The other method is medical abortion, which involves using pharmacological products such as misoprostol [1]. Contrary to safe abortion, those who attempt to perform informal abortions outside of the formal healthcare settings may do so safely with abortion drugs or through contraindicated procedures such as (1) ingestions of drugs or chemicals like ground-tree bark or its roots, detergents, quinine, and aloe vera, (2) vaginal insertion of lemon juice on vaginal suppository or the usage of sharp objects like a knitting needle, broken glass, and sticks [1, 9]. As highlighted by the WHO [1], these unsafe abortion procedures lead to a number of short-term and long-term complications, such as injury to the uterus, infections, heavy bleeding, chronic pain, infertility, and death. According to the WHO [20], there were an estimate of 47,000 maternal deaths in 2008 attributable to unsafe abortion worldwide, with nearly two-thirds of them occurring in the African continent.

Unsafe informal abortions are among the main causes of morbidity and mortality among women aged 15 to 19 years old in developing countries such as Rwanda [21]. Informal abortions among young women continue to be a significant human rights and public health issue [9, 11, 12, 19, 22]. However, few qualitative studies that explore the experiences of seeking abortions outside formal healthcare settings among young women in the Rwandan context do exist. Moreover, the topic itself is not popular among Rwandan academic scholars due to its sensitivity and stigmatization. Therefore, the current study's purpose was to gain an in-depth understanding of the lived experience of seeking informal abortions from the perspective of young women in rural Rwanda and to identify the underlying factors for these women seeking induced abortion care services outside of the formal healthcare system. According to Streubert and Carpenter [23], 'lived experience' refers to the experiences of the world of everyday life. Hearing this experience from the women

themselves helped us to understand the essence of seeking and having informal abortion care services outside formally known healthcare facilities. We addressed the following research questions: What are the diverse lived experiences of young women who have had informal abortions outside of formal healthcare settings in rural Rwanda? What are the underlying or driving factors for young women to seek informal abortion services outside of the formal healthcare facilities in rural Rwanda? It is believed that understanding the lived experience of young women who have experienced seeking informal abortion services in rural Rwanda is vital for planning safe abortion care services and raising awareness of the impact of having informal abortions on the well-being of young women. The findings may help in understanding the factors and circumstances surrounding seeking abortion care services outside of the formal healthcare system among young women, inform standards of care, inform policy development toward safe abortion, and identify the areas for further research. In addition, from the results of this study, preventive measures for informal or unsafe abortion could be elaborated. The overall goal is to reduce maternal morbidity and mortality related to informal abortion in developing countries such as Rwanda.

Methods

Study designs

Guided by Schutz's theory of social phenomenology [11, 12, 24] as a conceptual framework, this qualitative study followed a descriptive phenomenology method as developed originally by Husserl (1962). As explained by Colaizzi [26, 27] and Shosha [28], this method is appropriate for this study because little is known about the experience of young women seeking abortion care services outside of formal healthcare settings. Therefore, the descriptive phenomenological method was useful in exploring certain life experiences and describing the essence and structure of the phenomenon of interest [23, 25]. According to Colaizzi [26, 27], an individual's life experiences are shaped by his or her interactions with the environment and other people. In order to understand the phenomenon of interest, the life experiences of young women who have had informal abortions were analyzed.

Setting

This study was conducted in rural Rwanda, specifically in one selected district located in the Northern Province of Rwanda. The rationale for the district selection is that the majority of young women, aged from 10 to 24 years, who experience unintended pregnancies live in rural areas with a lack of or limited access to safe abortion care services [5, 16, 17]. Conducting this study in one selected district from the Northern Province of Rwanda assisted in maximizing the recruitment of the target sample.

Recruitment and sampling strategies

Since having induced abortions outside of the formal healthcare system has legal implications in Rwanda, and the topic is regarded as sensitive and taboo in most of Rwanda's communities, the young women with experiences of seeking informal abortions, in this case, are considered a hard-to-reach population [30] The stigma and vulnerability of some young women who have had informal abortions in the Rwandan context made the recruiting and sampling of eligible participants very challenging. Therefore, after obtaining ethical approval from the University of Rwanda, College of Medicine and Health Sciences Institutional Review Board (No33/CMHS IRB/2022) and permission from study setting officials, recruitment flyers containing a brief study description and contact information were posted in public areas including village offices, near to churches, and markets' entrance areas, and invited anyone interested to participate in the study based on inclusion criteria to contact the research team.

Only young women recruited for the study were those aged 18–24 years, had an informal abortion in the previous eight years, lived in rural district within the Northern province of Rwanda. Those aged less than 18 years were excluded as they could not sign the consent on their own. Those who met these inclusion criteria were encouraged to contact the research team for more information about this study by way of a letter of information, including answers to their questions and concerns, as well as assistance in planning convenient times and locations for individual interviews in light of their availability.

To identify and select information-rich cases for this study, the researcher used a criterion purposive sampling in combination with snowball sampling that helped to select and identify the young women with the experiences of seeking abortions outside of formal healthcare settings [31, 32]. Many Rwandan young women learn and get information about how and where to seek for informal abortion from their friends. Snowball sampling was used by asking early participant to share study information with any other young women in their network or from their villages who had informal induced abortion. This study included ten women who have had informal induced abortions, which was confirmed to be the final sample size after data saturation (Table 1). Research team members determined data saturation after confirming that there was no new information beyond evolving themes from analysis being reported by subsequent participants [33, 34].

Data collection

A field interview guide (Appendix A) comprised of semi-structured, open-ended questions was used to conduct in-depth face-to-face interviews with participants lasting

Table 1 Participants' demographic characteristics

Variables	Frequency $n = 29$	%
Participants' age		
18	2	20
19	2	20
21	2	20
22	1	10
23	1	10
24	2	20
Religion		
Christians	10	100
Muslims	0	0
others	0	0
Occupation		
Farmers	7	70
Students	2	20
Jobless	1	10
The pregnancy they self-induced		
First	8	80
Second	1	10
Third	1	10

60 to 90 min. According to Polit and Beck [33, 34], semi-structured interviews are used when a researcher does not want to constrain the discussion to predetermined questions because the topic is complex or experiences are potentially diverse. In order to facilitate easy communication between interviewer and interviewee, the interview guide was translated into Kinyarwanda (Appendix A, Colum B). Upon receiving the participants' consent, all interviews were audiotaped to capture data as accurately as possible. In this context, the interviewers encouraged the informants to talk freely and tell their experiences using their own words. The interview guide (Appendix A) included probing questions to elicit more in-depth information. Demographic information (Appendix B) was also gathered to describe the sample (Table 1).

Data analysis

The audio-recorded interviews were transcribed verbatim by the research team members who were involved in that collection to ensure data integrity. The Kinyarwanda version of all transcripts were translated into English prior to analysis by the research team members who collected data and double-checked by the principal investigator (PI), who is fluent in Kinyarwanda and English. The transcripts were analyzed following Colaizzi's [27] seven steps phenomenological methods cited in Polit and Beck [33].

Step one involved reading all transcripts from participants' recorded interviews transcribed and translated into English to acquire a feeling for the whole content of the entire transcript [27]. In this initial step, the research team used enough time to read each transcript and re-read it again in order to gain a general sense of the whole content.

Throughout the second step, the research team reviewed the transcripts and extracted meaningful statements [27]. For this second step, the research team worked together, and for each transcript, meaningful units or statements that were related to the phenomenon under this study were extracted. This was done by recording extracted statements on separate sheets and noting their lines and page numbers. After extracting the meaningful statements from transcripts, the research team members compared their work to reach a consensus.

Step three: The third step involved formulating the meaning of the significant statements extracted from the text [27]. This was achieved by underlying each meaningful unit and similar statements that were coded in one category depending on how they were reflecting an in-depth descriptive. In addition, research team members compared the formulated meaning with the original meanings to maintain the consistency of descriptions.

The fourth step of our data analysis was to organize the formulated meaning into clusters of themes [27]. After agreeing on formulated meanings, the research team initiated and grouped all formulated meanings into categories reflecting the same structure of clusters of themes. Then, each cluster of themes was coded to include all formulated meanings related to that group of meanings. Next, groups of clusters of themes that reflect specific information were combined to form a distinctive theme construct. Later, research team members compared their clusters of themes and verified the accuracy of the general thematic map along with assistance from the expert researcher in descriptive phenomenology research.

Step five: The findings of the study were integrated into a comprehensive description of the phenomenon under study [27]. At this step, all emergent themes were defined into an exhaustive description by extracting the whole structure of the phenomenon "lived experience of young women who had informal abortion". Afterward, the research team collaborated with an expert researcher-mentor who reviewed the findings in terms of richness and completeness. This helped to provide a sufficient description and confirm that the exhaustive, which reflects this study's phenomenon. Lastly, a validation of this exhaustive description was confirmed with the team mentor, who is an expert in qualitative methodology.

The sixth step consists of formulating of an exhaustive description of the phenomenon under study in as unequivocal a statement of identification as possible [27]. At this step, the research team engaged in in process of revising and refining the findings, which helped to eliminate misused or redundant descriptions. Researchers

applied some amendments to generate comprehensive relationships between clusters and their extracted themes, as well as eliminating some ambiguous structures from the descriptions.

Step seven consisted of asking participants about the findings thus far as a final validating step [27]. This step helped validate the study findings by using 'the member checking' technique [35, 36]. Seven out of the ten participants who were able to respond to the telephone call were contacted by the team members who collected data in collaboration with the PI to get their views on the study results. By taking this step, it was an opportunity to give power to our participants to see and confirm that their experiences and stories were accurately reflected in this study's findings. This validation step showed our participant that their experiences were taken seriously and contributed to a broader understanding of the phenomenon of our interest. Here, the research team members were able to verify, confirm, and modify the emerging findings of this study; any quotes, narratives, or code categories not presenting their experiences or negatively presenting their narrative stories have been removed from the findings presented in this manuscript, and any meanings that are not captured have also been added. This step provided an opportunity to ask and consider if any of the experiences or reasons for seeking abortion care services outside of formal healthcare settings shared by others also applied to their situation.

Approaches for creating trustworthiness

To ensure the trustworthiness of the research findings from this study, the research team used four evaluative criteria for rigor in qualitative research, including credibility, transferability, dependability, and confirmability [37, 38]. We established credibility through prolonged engagement with study participants and the development of an interview guide based on existing literature. The credibility was further enhanced by employing experienced data collectors in qualitative research and midwifery, incorporating field notes into the data analysis, holding regular team meetings, and member checking. For dependability, we maintained an audit trail and utilized team coding. Confirmability was achieved through reflexivity and regular debriefing meetings. Finally, transferability was ensured by employing purposive sampling.

Ethical considerations

Ethical approval was being sought from UR-CMHS-IRB (Approval No:333/CMHS IRR/2022). Informed written consent was obtained from all eligible participants. For confidentiality, the researcher communicated with the participants directly without involving another intermediate person like local leaders or community health workers. When contacted by interested participants, the researcher informed them about the study's purpose, responded to their concerns, reassured their confidentiality, and the voluntary nature of their participation. A letter of information about this study was provided to each participant before deciding to start the interview session, and they were clearly informed that identifying information would be kept private. Furthermore, to ensure privacy, the participant guided the researcher in choosing a comfortable environment and place for the interview. The anonymity of all participants was reassured and preserved, and all written transcripts and digital recordings of interviews from all interviewees were assigned alphanumeric codes. Participants were given the opportunity to debrief and received a debriefing statement at the conclusion statement. The debriefing statements informed the participants about the potential emotional effects of participating in this research study, which elicits sensitive information. The researcher assessed any safety issues at the end of the interview, and participants were given the opportunity to reflect upon the interview itself if desired. As abortion itself is a very sensitive topic, the researcher had a pre-established plan of how referrals for at least one or two local mental health professionals would be provided, when necessary, in the debriefing statement.

Findings

Profile of respondents

This phenomenology study included young women between 18 and 24 years of age. Of the 10 participants, the youngest was 18; other participants were aged 18 ($n=1$), 19 ($n=2$), 21($n=2$), 22($n=1$), 23($n=1$), and 24($n=2$). All of the participants were Christians. Regarding their occupations, 7 participants were farmers, two identified as students, and one identified herself as jobless. The pregnancy they induced and aborted was the first for most participants ($n=8$), while it was the third for one participant and the second for another participant.

Themes

Two main themes with their sub-themes were constructed from the data analysis describing why some young rural Rwandan women still seek informal induced abortion outside of formal healthcare settings:1) limited access and utilization of sexual and reproductive health and rights (SRHRs); and 2) sociocultural and economic factors.

Theme one: limited access and utilization of SRHRs

This theme speaks to participants' responses to what eventually led to deciding to seek informal induced abortions to end their unintended pregnancy. Three sub-themes linked to accessibility-related factors are connected to this theme, including lack of confidential and youth-friendly abortion care services, limited access

to comprehensive sexual health education, legal restriction and procedural barriers to safe abortion, and inappropriate abortion care spaces in healthcare facilities.

Lack of confidential and youth-friendly abortion care services

Respondents highlighted how they became pregnant unintentionally, and the only available option for them to manage these unintended pregnancies was to find hidden ways to overcome stigma and other challenges they faced. From the data analysis, all participants had unintended pregnancies, indicating at the micro level a lack of youth-friendly services to provide support regarding contraceptive use, sexuality education, or safe abortion services. Three young women, for instance, described their reasons for terminating unintended pregnancies through induced informal abortion and their experiences of seeking these abortion services outside the formal healthcare system. In their shared stories, two of them explained that they became pregnant after having unprotected consensual sexual activities with their close relatives, while the third one claimed to become pregnant following sexual assault by a cousin-brother. Even though these circumstances led to unintended pregnancies, they felt pressured to seek informal abortion services secretly due to the lack of access to a confidential and trustful supportive system or person. As noted from their expressions, these three young women share the commonality of not having access to safe abortion services in healthcare facilities that can assure confidentiality and protect them from the stigma surrounding abortion, as well as shield their families from legal consequences, as indicated by their expressions. Another young woman's experience illustrates the difficulty of seeking abortion care in rural areas, highlighting the challenges of confidentiality and the lack of youth-friendly services, which influenced her decision to seek an abortion outside formal healthcare settings, as shared in the following quote:

> *I used to use contraceptives, but I forgot the last time I received the injection, and I ended up not renewing the contraception method and got pregnant with someone I didn't know. I wondered how to keep a pregnancy from a man I could not remember because, as a sex worker, I slept with many men. I decided to abort, and I could not go to any hospital. I could not explain all of my stories to the healthcare providers as I did not trust them. My option was to take care of myself and find somewhere else I could get the service in a hidden way. P10.*

Five of the participants mentioned that they chose an informal induced abortion in a hidden manner due to a lack of trust and confidentiality in some service providers working in the nearest formal healthcare settings.

> *I did not trust anyone among the providers working in my community. When I went to buy medications to induce abortion, I did not tell them that I was buying drugs for myself; rather, I told them it was for a friend. I lied to them for fear of calling my parents or letting other people know that I was pregnant. Even though those selling drugs were not professionals, I could not trust them. I was not sure if they could keep my secret. (P10)*
> *There are more than one reason I decided to resolve the problem of my unintended pregnancy through abortion. First, the one who impregnated me was a close biological family member. I did not want anyone to know that, and I did not know what to do other than terminate the pregnancy in a hidden way. P03.*

Due to concerns about confidentiality, many young women choose to seek abortion services outside of formal healthcare settings in secret ways since disclosing their information or their decision to terminate their pregnancy with others, including healthcare providers, could adversely affect their social status and how they are viewed as sexual workers within their community, according to one young woman.in the following quote:

> *Huum, you have no idea how people, including those working in healthcare settings, are talkative. You tell them about your private life, and they start to divulge all your information. I prefer to keep all my information to myself. Imagine If I had told someone that I was pregnant, I could find all people in the village know about my pregnancy, and I could lose all my values and be considered a sex worker. P04.*

Limited access to comprehensive sexual health education

Some young girls had unintended pregnancies due to misinformation and limited knowledge of the menstruation cycle and other knowledge related to sexuality in general. One participant said, *"The main challenge young girls like me face is the lack of where they would find relevant information about sexuality and how we can access safe and affordable abortion services. An informed person cannot be mistaken easily as I did"* P03. The same participant added that: "*Menstruation cycle calculation and the calendar method of controlling birth failed for me; I would also like to know about emergency contraceptives. I would not have had an unwanted pregnancy if I had reliable information*"P03. Another participant stated:

> *I shared my worries about the probable pregnancy with my uncle's wife. The wife told me it is impossible to get pregnant when the sexual intercourse did not*

last at least one hour or beyond. She advised me to be patient and wait for the following month. Unfortunately, I waited in vain. So, I concluded that I got pregnant. P04.

Another participant mentioned:

To be honest, sexual education is like taboo in our community; neither my parents nor my elementary school teachers explained reproductive health clearly to me. I followed what my peers said about the calculation of menstrual cycles and the calendar method of controlling births; I would also like to know about emergency contraceptives and what I could do that time I become pregnant unintentionally. (P01)

Legal restrictions and procedural barriers on safe abortion

Even though the abortion law was changed and amended in 2018, the legal restrictions and legal process challenges, and negative experiences to safe abortion influence decision-making in seeking abortion care services outside of formal healthcare systems. The Rwandan ministerial order number 002/MOH/2019 of 08/04/2019 determines the grounds for abortion, including pregnancy as a result of rape, when the pregnant person is a child, pregnancy after being subjected to forced marriage, incest, and when the pregnancy puts at risk the health of the pregnant person or fetus [39]. Acknowledging that women seeking safe abortions in the Rwandan context pass through a long process as they must show an identity card and prove that they meet eligibility requirements, prove that they are of mature age, and sometimes required to disclose their sexual partners. To avoid overwhelming legal process and procedure, one young woman stated:

I unintentionally became pregnant at 17 years. wasn't ready to keep it, but I was also not comfortable going to the health facility in my village, and the district hospital could not serve me without a reference from my nearest health center. I knew I'd have to prove that I was pregnant, and that meant revealing everything—about the person who did this to me, my cousin. I wasn't ready for that. I feared that the healthcare providers would judge me harshly and, even worse, report my cousin to the authorities for getting me pregnant when I was underage. The legal process seemed endless and overwhelming…, So I turned to that person [informal abortion provider],. gave me some products to use….; I kept everything private and avoided the legal and social repercussions. PO6.

Additionally, some young women explained how the long process and fulfilling the requirements of becoming eligible for safe abortion, such as physicians' confirmations that abortion is necessary to protect a woman's life, rape, incest, forced marriages, and fetal impairments, is tiresome. Consequently, some young women, when consulting a health facility to seek safe abortion, were requested to have an identity card or other different paperwork, and when they went to administrative authorities, they were told to come back as sometimes the offices were closed. After realizing that the process takes too long, they gave up and ended up having informal abortions in informal sectors. One participant shared how she tried to initiate the process of seeking safe abortion care services; unfortunately, the process was tiresome:

When I started to think I got pregnant, I met a health professional at the health centre. I told them the story about how my uncle raped me and that I was a student in senior two. I only had my student ID and did not have an official ID. They asked to look for all the needed official documents, including national ID, to be helped. There were some challenges. My name was recorded wrongly in documents, and I did not have my mother's ID number. I struggled to find the executive secretary to give me what was needed". The executive secretary gave me an appointment to return the following Friday; when I went there, the doors were closed, and I decided to do not to continue going back and forth and decided to look for an alternative way of inducing abortion." I asked for information from a friend. She knew how to get the pills from a non-healthcare professional who sells them". P02.

Inappropriate abortion care spaces in healthcare facilities

Inappropriate abortion care spaces in healthcare settings mentioned by participants were related to how, in hospitals or healthcare settings, where patients with different conditions, like having a mother who gave birth and a young woman who had an abortion, are placed together in the same room. Participants worried that this lack of postabortion care room, lack of privacy, and fear of compromised confidentiality led many rural young women to avoiding formal health facilities, and seek for clandestine abortions instead.

When I was hospitalized because I had severe bleeding, I had told my mum that it was a heavy menstruation. Unfortunately, one nurse came and asked me about the abortion and my mum was there and I did not want her to know that I had an abortion. That was the main reason I had self-induced abor-

> *tion at home. I did not want to come to the hospital for fear that some healthcare providers can say that. Unfortunately, I had severe bleeding and was taken to hospital despite not wanting to come. Again, they put you in the same room as those who gave birth, making you feel frustrated. P01.*

Theme two: Sociocultural and economic factors

This second theme had two sub-themes related to socioeconomic and cultural factors influencing the decision-making of seeking abortion care services outside the formal healthcare system: (1) economic challenges and (2) stigma and social norms.

Economic challenges

Many respondents ($n=7$) discussed how extreme poverty led them to consent to unsafe sex, leading to unintended pregnancies. In this regard, one young woman shared:

> *Despite living in terrible conditions, finding food was a challenge; I used to welcome every man who came to me; some gave me thousand Rwandan francs, some less, and I consented to sexual activity with them due to extreme poverty, which resulted in an unwanted pregnancy, which I terminated in secret. P10.*

Poverty-related vulnerability was a central challenge for the majority of participants. Also, the fear of an unpromising future and the inability to raise the child, and parenting burdens were the most common factors associated with the decision to end the pregnancy in an unsafe way, as shared by one young woman: *"due to poverty in the family, some young girls like me consent to sexual activities to get money to feed the family, and when I unintentionally became pregnant, I decided to look for clandestine abortion"* P02. The same participant also added, *"I already have two children; to have the third would be too much burden for me"* P02. In the context of poverty, participants highlighted that keeping their unintended pregnancies could be an added socioeconomic burden to their families; one participant noted:

> *Getting pregnant was mostly due to our family's bad condition of poverty. The mother was too poor to be able to cater for all her children. Specifically on my side, when I got pregnant, I could not keep it and added another burden to the family. I ended my pregnancy and did not want anyone to know about my decision. P05.*

Stigma and social norms

When asked about factors that led them to informal abortion, seven of the participants discussed how they were frustrated, fearing appearing in pregnant in public places with all the stigma around having a pregnancy as an unmarried person in the Rwandan culture, as noted by one participant: "*I secretly aborted my unexpected pregnancy out of fear that my parents would chase both of us away or mistreat me like my sister who was humiliated as consequence of her unplanned pregnancy*" P09. Similarly, to the issue of stigma, another young woman shared:

> *I thought about the frustration I would get if I kept my pregnancy and how everyone would look at me in public places. I was also thinking about my parents, who could stigmatize me, and I decided to end my pregnancy. P01.*

Others related their decisions to seek for clandestine abortion services to avoid family rejections and abandonment that could be associated with keeping their unintended pregnancies and how they would be pushed away from their families if they were to decide to keep the pregnancies.

> *I could see how they used to insult my elder sister, chasing her out, and how my parents were unhappy with her unintended pregnancy, and I imagine myself in the same situation. I said it would not work for me and decided to end my pregnancy. I thought if it happened for my parents to know that I was also pregnant, they would make suicide because they were unfortunate to see my sister pregnant. They could also kill both of us. P09.*

Furthermore, two of the participants decided to end their pregnancies for fear of dropping out of school if they would keep the pregnancy until giving birth. According to most respondents, keeping the pregnancy would make them lose value and feel humiliated and lose the social standing and trust their parents and society in general had in them. One participant commented:

> *When a girl become pregnant at home you become worthless, everyone looks at you like you are nothing, even a five-year child can treat you like you are not a person. You lose your value and become like life will not come back. You are considered like a sinner in the neighborhood; they constantly talk about you, and you become a subject of conversation. You feel like you have to stay home and hide yourself. When I thought about all of these that would happen to me, I decided to end my pregnancy, and I could not tell anybody about my decision. P10.*

Discussion

Informal abortion continues to occur despite the legalization of abortion care in Rwanda. However, the challenge persists in Rwanda and other contexts, especially SSA [40]. Such informal abortions have a high likelihood of being incomplete and being associated with medical, social, and physical consequences. Yet, the risks and factors associated with seeking abortion services outside of the formal healthcare system can be prevented. The objective of this study was to explore the factors related to informal abortion from the experience of young girls in rural Rwanda.

The study identified various factors surrounding the decision-making of seeking abortion services outside of formal healthcare system among rural young girls in Rwanda, including limited access to SRHR at the micro level and social-economic factors at the macro level. For our participants, all pregnancies that resulted in informal abortions were unintended, suggesting the opportunity in better supporting prevention of unwanted pregnancies. A report on unsafe abortion in Sub-Saharan regions identified a high incidence of unintended pregnancy in these particular regions [40]. Similarly, various studies have highlighted unintended pregnancies as the main factor to decide on seeking for abortion care services outside of formal healthcare settings [41, 42].

The study identified limited access to SRHR as an essential factor associated with informal abortion. At the individual level, young girls have limited access to reliable information and comprehensive sexual health education. However, there are multiple interventions in Rwanda to increase the accessibility of SRHS, which could probably improve in terms of accessibility to SRHR in the future [43, 44]. There is a need to extend the study in the areas where interventions have been implemented to assess the prevalence and associated factors of self-induced abortion in those particular areas.

On the other hand, the structural challenges, such as the lack of official abortion care services and requirements surrounding safe abortion care practice, limit access to safe abortion care and lead young girls to seek for informal abortions outside of formal healthcare system. The findings from this study correlate with the conclusions of the cross-sectional studies conducted in Nepal and Madagascar. In the studies, the restrictive nature of abortion laws limits access to safe abortion care, increasing the incidence of informal abortion [41, 42]. Similarly, the abortion law in Rwanda is very restrictive, allowing safe abortion for limited circumstances, including rape, pregnancies of minors, incest, and when the pregnancy poses a high risk [45]. Interventions should be planned to increase the accessibility of SRH services to prevent unintended pregnancies, at the same time as making safer abortions broadly available.

Also, in terms of structural challenges, most participants identified poverty as one of the factors leading to unwanted pregnancy, as well as limiting their resources in addressing unintended pregnancy. This suggests the necessity of policy approaches to combat poverty in rural areas and improve the livelihood of young girls, which can reduce the rates of unintended pregnancy and improve general access to healthcare. The issue of poverty as a factor for informal abortion services is not only for the Rwanda context. It is also a common challenge for many low-income countries. For instance, in Nepal, India, and Ghana, young girls consent to sex due to poverty, and when they get pregnant, they often rely on informal abortions [29, 35, 36, 46, 47].

Regarding social and cultural aspects of informal abortion, this study identified stigma as an important factor leading to challenging decision-making among young girls in rural Rwanda. Most of the young girls decided to have an informal abortion for fear of being stigmatized by their families, colleagues, and friends at schools, etc. According to the Rwandan culture, pregnancy for unmarried women is regarded as a stigma not only for the one who got pregnant but also a stigma for all of her family. There are particularly stigmatized words used against children born to unmarried mothers—similarly, other such harmful terms are used commonly towards women who get pregnant without getting married. Therefore, for unmarried women, when they got pregnant, the first decision is to either accept the stigma or decide to induce an abortion. A scoping review on the role of the stigma about safe abortion care highlighted stigma as a persistent barrier to safe abortion care [48]. The scoping study considered 50 qualitative studies around social stigma associated with abortion, and the findings identified that abortion care seeks fear of being stigmatized by either healthcare providers or families and opt for informal abortion, suggesting intervention to prevent the strong stigma attached to the different context around the world [48]. Therefore, this study calls for increasing awareness and implementing a comprehensive abortion legalization and access policy that ensures safe and legal abortion services for all women, including rural women, and addresses the factors that impede access to safe abortion care. Moreover, this study's findings stress the importance of developing and implementing a national awareness and education campaign that aims to reduce stigma and increase knowledge about safe abortion options. During the course of this policy, emphasis should be placed on providing accurate information about reproductive health, contraception, and the availability of safe abortion services for both young women and society at large in order to promote understanding, acceptance, and access to abortion care. Upon effective implementation of these policy changes, it is believed that they can

help create an environment that enables young women to make informed decisions regarding their reproductive health and to access safe abortion care services, thus reducing the incidence of informal induced abortions.

Conclusion

This qualitative phenomenological study explored the factors influencing informal abortion decision-making among young girls in rural Rwanda. This study found that the factors contributing to informal abortions among young Rwandan women include limited access to and utilization of SRHRs and sociocultural and economic factors. Identifying those factors could inform necessary interventions to prevent the risk of informal abortion. We recommend expanding access to comprehensive youth and young women-friendly SRHR services through targeted interventions. Additionally, the Rwanda Ministry of Health should coordinate with its stakeholders and partners to ensure that SRHR services are more accessible, reliable information is provided, comprehensive sexual health education is provided, and safe and legal abortions are available in rural areas. It is essential to address social stigma through public awareness campaigns as well as foster cultural sensitivity in order to reduce the stigma attached to unmarried pregnancies and abortions. The findings could also inform advocacy around accessibility to SRHR and social, cultural, and economic factors. Efforts should be made to combat poverty-related vulnerability as one of the leading causes of unintended pregnancies and informal abortions. The stigma associated with unintended pregnancies and the need to improve the structural challenges around safe abortion care.

The study had limitations; being a qualitative with a limited sample size, the findings cannot be generalized. Also, the study was very sensitive, limiting the possibility of many people consenting. Future research should look at the incidence or prevalence of informal abortion in Rwanda to identify the magnitude of this problem.

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12905-024-03410-7.

Supplementary Material 1

Acknowledgements

We would like to thank the 10 Rwandan young women who participated in this study, as well as the reviewers who will contribute their time and expertise to the review of this manuscript.

Author contributions

JPN, AO, AN, GK, AN, OT, JBHH, JB, JAA, and GU, contributed to the design of the study proposal/ protocol that was submitted for grant application and ethical review at the University of Rwanda Institutional Review Board. AY, JBHH, JB, and JAA recruited participants and conducted semi-structured interviews in the field. AY, JBHH, and GU transcribed and translat-ed the collected data from Kinyarwanda into English. JPN, AY, AN, and OA analyzed the col-lected data and developed the final themes presented in this paper. OA, GK, JP, and AY led the interpretation of the data. JP drafted the introductions, background, and methodology sections, AY drafted the results section, and AN drafted the discussion section. All authors have re-viewed and approved the final version of this manuscript.

Funding

University of Michigan's Center for International Reproductive Health Training (CIRHT) provided financial support for this research project through the University of Rwanda.

Available of data and materials

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

Declarations

Consent for publication

Not Applicable.

Competing interests

The authors declare no competing interests.

Ethical approval and consent to Participants

All study materials and the study protocol were reviewed and approved by the Institutional Review Board at the University of Rwanda, College of Medicine and Health Sciences (Approval Notice No: 333/CMHS IRB/2022) on May 31, 2022. This study was conducted in accordance with all ethical standards, and since all participants were between the ages of 18 and 24, informed consent was obtained from all participants.

Author details

[1]School of Nursing and Midwifery, College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda
[2]Arthur Labatt Family School of Nursing, Western University, London, Canada
[3]Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada
[4]School of Health Sciences, College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda
[5]School of Nursing and Midwifery, Aga Khan University, Kampala, Uganda
[6]School of Nursing, Nipissing University, North Bay, North Bay, ON, Canada
[7]Lawrence Bloomberg Faculty of Nursing, University of Toronto, Toronto, Canada
[8]Gynecology and Obstetrical Department at Byumba District Hospital, Northern Province, Gicumbi, Northern Province, Rwanda
[9]Gynecology and Obstetrical Department, Kibagabaga District Hospital, Kigali, Rwanda

Received: 22 September 2023 / Accepted: 14 October 2024
Published online: 28 October 2024

References

1. WHO. (2018) Worldwide, an estimated 25 million unsafe abortions occur each year.
2. Ganatra B, Gerdts C, Rossier C, et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a bayesian hierarchical model. Lancet. 2017;390:2372–81.
3. Ganatra B, Tunçalp Ö, Johnston HB, Johnson BR, Gülmezoglu AM, Temmerman M, Ganatra B, Tunçalp Ö, Johnston HB, Johnson BR, Gülmezoglu AM, Temmerman M. From concept to measurement: Operationalizing WHO's definition of unsafe abortion. Vol. 92, Bulletin. Bull World Health Organ 92:155.
4. WHO. (2015) Safe abortion: Technical & Policy Guidance for Health systems Legal and Policy considerations. Hum Reprod Program Res Impact 1–10.
5. World Health Organization. (2015) Safe Abortion Care and Post-Abortion Contraception. 1_92.
6. Gerdts C, Raifman S, Daskilewicz K, Momberg M, Roberts S, Harries J. Women's experiences seeking informal sector abortion services in Cape Town, South Africa: a descriptive study. BMC Womens Health. 2017;17:1–10.

7. Tongue ZL. Telemedical and self-managed abortion: a Human rights Imperative? Eur J Health Law. 2022;30:158–81.
8. Harries J, Daskilewicz K, Bessenaar T, Gerdts C. Understanding abortion seeking care outside of formal health care settings in Cape Town, South Africa: a qualitative study. Reprod Health. 2021;18:1–8.
9. Guttmacher Institute. (2016) Induced abortion worldwide. 6736:1–2.
10. World Health Organization (WHO). (2018) Adolescent pregnancy.
11. MoH. (2012) Adolescent sexual reproductive health and rights policy 2011–2015. 1–33.
12. Kane G. When abortion is a crime:Rwanda. Chapel Hill. 2015;1:21.
13. Favier M, Greenberg JMS, Stevens M. Safe abortion in South Africa: we have wonderful laws but we don't have people to implement those laws. Int J Gynecol Obstet. 2018;143:38–44.
14. Schummers L, Norman WV. Abortion services in Canada: Access and safety. CMAJ. 2019;191:E517–8.
15. Bearak MJ, Burke Lagasse K, Jones KR. Disparities and change over time in distance women would need to travel to have an abortion in the USA: a spatial analysis. Lancet Public Heal. 2017;2:e493–500.
16. Sutton A, Lichter DT, Sassler S. Rural–urban disparities in pregnancy intentions, births, and abortions among US adolescent and young women, 1995–2017. Am J Public Health. 2019;109:1762–9.
17. Rahaman M, Das P, Chouhan P, Das KC, Roy A, Kapasia N. Examining the rural – urban divide in predisposing, enabling, and need factors of unsafe abortion in India using Andersen's behavioral model. BMC Public Health. 2022;22:1–14.
18. Doran FM, Hornibrook J. Barriers around Access to Abortion experienced by Rural women in New South Wales, Australia. Rural Remote Health. 2016;16:1–12.
19. Ipas Africa Alliance. (2017) Health access rights. Nairobi.
20. World Health Organisation W. (2016) Media centre preventing unsafe abortion. 1–5.
21. Singh S, Darroch J, Ashford L, Vlassoff M. (2009) Adding it up: the costs and benefits of investing in family planning and maternal and newborn health. Guttmacher Inst. https://doi.org/978-1-934387-04-7.
22. Mikołajczak M, Bilewicz M. Foetus or child? Abortion discourse and attributions of humanness. Br J Soc Psychol. 2015;54:500–18.
23. Streubert HJ, Carpenter DR. Qualitative research in nursing: advancing the humanistic imperative. Nurs Res. 2011. https://doi.org/10.1097/00006199-199601000-00014. 5th ed.
24. Hammersley M. Alfred Schutz and ethnomethodology: origins and departures. Hist Hum Sci. 2019;32:59–75.
25. Susilo S, Istiawati NF, Aliman M, Alghani MZ. Investigation of early marriage: a Phenomenology Study in the Society of Bawean Island, Indonesia. J Popul Soc Stud. 2021;29:544–62.
26. Colaizzi PF. Reflection and research in psychology: a phenomenological study of learning. Dubuque, IA: Kendall/Hunt Publishing Company; 1973.
27. Colaizzi PF. (1978) Psychological research as the phenomenologist views it. Existent Phenomological Altern Psychol 48–71.
28. Shosha G. Employment of Colaizzi's strategy in descriptive phenomenology: a reflection of a researcher. Eur Sci J. 2012;8:31–43.
29. National Institute of Statistics of Rwanda. Ministry of Health (MOH) [Rwanda], ICF (2020) Rwanda demographic and health survey 2019–2020: key indicators report. Kigali, Rwanda, and Rockville, Maryland, USA.
30. Ellard-Gray A, Jeffrey NK, Choubak M, Crann SE. Finding the hidden participant: solutions for recruiting hidden, hard-to-reach, and vulnerable populations. Int J Qual Methods. 2015;14:1–10.
31. Palinkas LA, Aarons GA, Horwitz S, Chamberlain P, Hurlburt M, Landsverk J. Mixed method designs in implementation research. Adm Policy Ment Heal Ment Heal Serv Res. 2011;38:44–53.
32. Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Adm Policy Ment Heal. 2015;42:533–44.
33. Polit DF, Beck TC. Nursing research: Generating and assessing evidence for nursing practice, 10th editi. Lippincott, Williams & Wilkins; 2017. https://doi.org/10.1097/01.NMC.0000363684.43186.fe.
34. Polit DF, Beck CT. (2015) Nursing research: Generating and assessing evidence for nursing practice 10th edition.
35. Mckim C, Mckim C. Meaningful Member-Checking: a Structured Approach to Member-checking. Am J Qual Res. 2023;2023:41–52.
36. Birt L, Scott S, Cavers D, Campbell C, Walter F. Member checking: a Tool to enhance trustworthiness or merely a nod to Validation? Qual Health Res. 2016;26:1802–11.
37. Elo S, Kääriäinen M, Kanste O, Pölkki T, Utriainen K, Kyngäs H. Qualitative content analysis. SAGE Open. 2014;4:1–10.
38. Lincoln YS, Guba EG. Establishing trustworthiness. Naturalistic inquiry. Nat. Inq; 1985.
39. Ministry of Health R. (2019) Ministerial order determining conditions to be satisfied for medical doctor to perform abortion. 1–10.
40. Bankole A, Remez L, Owolabi O, Philbin J, Williams P. (2020) From unsafe to safe abortion in Sub-Saharan Africa: Slow but steady progress.
41. Yogi A, Kc P, Neupane S. Prevalence and factors associated with abortion and unsafe abortion in Nepal: a nationwide cross-sectional study. BMC Pregnancy Childbirth. 2018. https://doi.org/10.1186/s12884-018-2011-y.
42. Ratovoson R, Kunkel A, Rakotovao JP, Pourette D, Mattern C, Andriamiadana J, Harimanana A, Piola P. Frequency, risk factors, and complications of induced abortion in ten districts of Madagascar: results from a cross-sectional household survey. BMC Womens Health. 2020. https://doi.org/10.1186/s12905-020-00962-2.
43. Mbarushimana V, Goldstein S, Conco DN. Not just the consequences, but also the pleasurable sex: a review of the content of comprehensive sexuality education for early adolescents in Rwanda. BMC Public Health. 2023;23:1–14.
44. Mbarushimana V, Conco DN, Goldstein S. Such conversations are not had in the families: a qualitative study of the determinants of young adolescents' access to sexual and reproductive health and rights information in Rwanda. BMC Public Health. 2022;22:1–26.
45. Rwanda Ministry of Health. (2018) National family planning and adolescent sexual and reproductive health.
46. Yokoe R, Rowe R, Choudhury SS, Rani A, Zahir F, Nair M. Unsafe abortion and abortion-related death among 1.8 million women in India. BMJ Glob Heal. 2019. https://doi.org/10.1136/bmjgh-2019-001491.
47. Engelbert Bain L, Zweekhorst MBM, Amoakoh-Coleman M, Muftugil-Yalcin S, Abejirinde IOO, Becquet R, de Cock Buning T. (2019) Correction: To keep or not to keep? Decision making in adolescent pregnancies in Jamestown, Ghana (PLoS ONE (2019) 14:9 (e0221789) https://doi.org/10.1371/journal.pone.0221789). PLoS One 14:223453.
48. Sorhaindo AM, Lavelanet AF. Why does abortion stigma matter? A scoping review and hybrid analysis of qualitative evidence illustrating the role of stigma in the quality of abortion care. Soc Sci Med. 2022. https://doi.org/10.1016/j.socscimed.2022.115271.

Publisher's note

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