Original Article

Adolescent-Parent Communication on Sexual and Reproductive Health Issues in Nyarugenge and Kamonyi Districts, Rwanda: A Qualitative Exploration of Adolescent Insights

Josephine Uzayisenga[1*], Augustin Nshimiyimana[2], Aimable Musafili[2], Gerard Kaberuka[3], Marie Laetitia Ishimwe Bazakare[3], Madeleine Mukeshimana[4], Laetitia Nyirazinyoye[1], Viateur Hategekimana[5]

[1]School of Public Health, College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda, P.O Box3286, Kigali-Rwanda
[2]Department of Psychiatry and Behavioral Sciences, School of Medicine and Pharmacy, College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda, P. O Box3286, Kigali-Rwanda
[3]Centre for International Reproductive Health Trainings (CIRHT), Michigan University, Kigali, Rwanda, P.O Box3286, Kigali-Rwanda
[4]School of Nursing and Midwifery, College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda, P.O Box3286, Kigali-Rwanda
[5]Department of Paediatrics and Child Health, School of Medicine and Pharmacy, College of Medicine and Health Sciences, University of Rwanda, P.O Box3286, Kigali-Rwanda

***Corresponding author:** Josephine Uzayisenga. School of Public Health, College of Medicine and Health Sciences, University of Rwanda, Kigali, Rwanda, P.O Box3286, Kigali-Rwanda. Email: joseuzabet@gmail.com. ORCID: https://orcid.org/0009-0006-4828-5000

Cite as: Uzayisenga J, Nshimiyimana A, Musafili A, Kaberuka G,Bazakare IM L, Mukeshimana M, Nyirazinyoye L, Hategekimana V. Adolescent-Parent Communication on Sexual and Reproductive Health Issues in Nyarugenge and Kamonyi Districts, Rwanda: A Qualitative Exploration of Adolescent Insights. Rwanda J Med Health Sci. 2025;8(1): 30-48. https://dx.doi.org/10.4314/rjmhs.v8i1.3.

Abstract

Background
The quality of communication between adolescents and parents regarding sexual and reproductive health is a crucial area that needs improvement. Although existing studies emphasize the significance of parent-adolescent communication from parental views, there is a gap in investigating adolescents' perspectives. Understanding their experiences can help develop effective communication strategies that address their developmental needs and promote healthier behaviours.

Objective
This study aims to collect detailed information about how adolescents view their communication with their parents, the difficulties they face in these exchanges, and solutions for enhancing adolescent health.

Methods
A phenomenological exploratory study design was conducted using eleven focus group discussions among adolescents between December 2020 and January 2021.

Findings
The study revealed three key themes, including communication patterns, challenges that make open dialogue difficult, and various solutions to enhance discussions about sexual and reproductive health between parents and adolescents.

Conclusion
Improving communication between parents and adolescents about reproductive health is crucial for encouraging healthier behaviours. By addressing challenges such as cultural taboos, limited knowledge, and fear of family and social stigma that leads to poor communication, parents and adolescents will navigate the complexities of sexual and reproductive health issues effectively.

Rwanda J Med Health Sci 2025;8(1):30-48

Keywords: Adolescents, communication, sexual and reproductive health, parents

Background

Good sexual and reproductive health (SRH) encompasses complete physical, mental, and social well-being in all aspects of the reproductive system.[1] Access to accurate information is crucial, and adolescents should be empowered to protect themselves from sexually transmitted infections.[2]

Adolescent health is a significant priority that involves parents, healthcare providers, and adolescents.[3]Worldwide, adolescents face considerable challenges related to their SRH.[2] Despite significant progress in recent years, adolescent pregnancies continue to be a major concern in sub-Saharan Africa. [4] Globally, the birth rate in 2022 for girls aged 10-14 was estimated at 1.5 per 1000 [5]. However, this figure was closer to 4.6 for sub-Saharan Africa, according to data from the WHO.[6] In addition, more than 1 million curable sexually transmitted infections (STIs) are acquired worldwide every day by people aged 15-19.[5]

Communication between adolescents and parents on Adolescent Reproductive Health (ARH) issues is an emerging public health concern.[2, 7]This is partly because some parents and other trusted adults are often uncomfortable discussing relevant information with adolescents as they enter puberty.[8] The emergence of sexual complexities at this stage of life is not always easy to navigate, fear and taboo can further prevent the necessary education and guidance, and this may lead adolescents to early sexual activity, early pregnancies, and contracting HIV and other sexually transmitted diseases.[9]

Literature on the role of parents in adolescent SRH worldwide, including in Sub-Saharan Africa, highlights the issue of adolescents dying every year due to avoidable negative consequences such as unwanted pregnancy, unsafe abortion, and sexually transmitted infections, including HIV/AIDS.[4,9] Therefore, international and non-governmental organisations have started to implement actions by focusing on improving parent-child communication during adolescence.[11] Effective SRH communications promote healthy sexual development and reduce sexual risks.[12]

For effective parent-adolescent communication, parents should openly and accurately advise their children about SRH as they are growing.[13] Additionally, adolescents need to feel comfortable when discussing reproductive health with their parents, including talking about the physical changes at puberty, the menstrual cycle, wet dreams, birth control pills, and condom use.[14]

In Africa, communication about sexual reproductive health issues is done along gender lines[15,16] for example, mothers are likely to educate girls about relationships, menstruation, and home hygiene, while fathers talk to boys about the responsibilities of fathers in the family.[17, 18] However, communication on these issues is typically inconsistent because normally involves warnings, threats and behaviour discipline and is motivated by seeing or hearing something a parent perceived as a harmful experience (such as death attributable to HIV and unmarried adolescent pregnancy). [15,19]

Parents need to play a significant role in providing sexual and reproductive information and education to their children.[20,21] Research has shown that many adolescents do not have a good understanding of reproductive biology and methods of prevention.[22,23]
When parents do not effectively communicate with their children, adolescents may seek information about SRH from mass media and peers.[24] However, the information obtained from these sources may be inaccurate or incomplete and biased depending on the interests of the source. [25, 26]

Parents' communication with their adolescent children is expected to transmit

values, beliefs and expectations about SRH.[27, 28] Evidence demonstrates that effective communication prevents young people from unsafe sexual practices and their associated health consequences such as early pregnancies, and sexually transmitted diseases.[29,30]

The growing rate of risky behaviours among East African adolescents has bigger trouble for the adolescent, family and society.[31, 32] Young women in this region face challenges related to SRH, including sexually transmitted infections, unwanted pregnancies, unsafe abortions, contraception, sexual abuse and rape, female genital mutilation, and maternal or child mortality.[33,34]

This is linked to the failure of communication with adolescents for most parents in this region on SRH issues, including early pregnancies, and STIs.[35,36] Several factors, including gender differences, level of education among parents, occupations, traditional and religious norms, all contribute to poor communication between parents and adolescents.[8,28] While parent-adolescent SRH communication is one trusted source of SRH information for adolescents, it seems to be inadequately practised in Rwanda as evidenced by different studies done on adolescent reproductive health, which confirmed that the parent's time to interact with their adolescents was insufficient.[14, 37]

The study done in East African countries [38] highlights that parents and adults were primary sources of SRH information and needed to learn about effective communication with their children.[39, 40] In addition, there is a need to address gender differences and sociocultural norms that hinder effective communication.[8,41] The age group of 10-19 is a transition period during which adolescents gain knowledge and acquire abilities that will aid them in creating habits that promote good health.[42]

Although existing studies emphasise the significance of parent-adolescent communication from a parental standpoint, there is an urgent need to investigate adolescents' perspectives. Understanding their experiences can help develop more effective communication strategies that address their developmental needs and promote healthier family dynamics. This research seeks to address a significant gap by exploring adolescents' perspectives through qualitative methods.

This study aims to gather in-depth insights into how adolescents perceive their communication with their parents. This includes their feelings about openness and trust, as well as the challenges they encounter in these interactions. Lastly, the findings aim to inform strategies for improving these essential relationships.

Methods

Study design

This study used a phenomenological exploratory study design with 11 focus group discussions comprising 132 participants to explore the perceptions, challenges, and solutions of adolescents aged 10-19 regarding their communication with parents.

Study Setting

The study took place in Rwanda, which is located in the eastern part of Central Africa. The participants were identified through youth-friendly centres in both urban and rural areas, in Kigali and Kamonyi districts. In Rwanda, each district is assigned one youth centre, except Nyarugenge, which has two centres. During field visits, the research team identified those two youth centres of Nyarugenge District as operational youth centres that are actively engaged in various reproductive health activities. The research provides an extensive perspective on the distinct challenges encountered by adolescents in diverse contexts by choosing both urban (Kigali) and rural (Kamonyi) sites. Urban regions may exhibit different communication challenges (constraints)

than rural areas, facilitating a detailed comprehension of how cultural beliefs influence adolescent parent communication. These centres included the Kimisagara Youth Friendly Centre in the Kimisagara sector, Nyarugenge District; the Rafiki Youth Friendly Centre in the Nyamirambo sector, Nyarugenge District, Kigali City; and the Kamonyi Youth Centre in the Gacurabwenge sector, Kamonyi district, southern province. The chosen centres offer a diverse array of programs across multiple pillars, such as adolescent sexual reproductive health services and entrepreneurship all of which are crucial for promoting comprehensive youth development. The availability of these services creates an appropriate environment for examining the extent to which they address the needs and solutions of adolescents. The youth-friendly centres function as direct contact points for adolescent individuals who are the target population for this study, rendering them best for the recruitment of participants who can offer first-hand information about their experiences in communication with their parents. This accessibility improved the reliability of the data gathered concerning adolescents' experiences of SRH communication with their parents. The selected study settings provided a free, private and friendly environment that enabled adolescent's active participation in the study without external interferences.

Study Participants

The research encompassed adolescents ranging in age from 10 to 19 years both males and females. A total of 132 male and female adolescents participated in 11 focus group discussions. Four of these group discussions were held at Rafiti Youth Centre, four at Kimisagara Youth Centre, and three at Kamonyi Youth Centre, with each group consisting of 12 participants. The groups were heterogeneous and categorized by different age ranges. The choice to integrate both males and females in group discussions regarding adolescent parent communication was shaped by the necessity for varied viewpoints, and the advantages of encouraging equal participation from all genders. We organized eleven focus groups as follows: three groups of adolescents aged 10 to 12, three groups of those aged 13 to 14, three groups for those aged 15 to17, and two other groups for those aged 18 to 19. Forty-one male and ninety-one female adolescents, aged 10 to 19, participated in the focus group discussions and details about the sexual allocation per setting are detailed in Table.1 describing participants' demographic characteristics. Furthermore, every question in the focus group discussion guide was prepared to target all participants, as we aimed to gather insights from individuals across all age groups of study participants.

The decision to also include the age range of 10 to 14 years was based on studies showing that adolescents in this group often face sexual challenges, such as unwanted pregnancies and sexually transmitted diseases including HIV.[5] The adolescents were group interviewed about their perceptions, challenges, and solutions regarding communicating with their parents.

Sampling technique

A purposive sampling technique was employed to select adolescent participants for this study. The sample size was established based on the principle of data saturation. Data saturation occurs when no additional information is revealed after several interviews, suggesting that the information gathered from earlier participants has become redundant.[43]
A pilot study was conducted to enhance the validity of instruments, assess feasibility, and improve the overall quality of research. This involved two group discussions with adolescents aged 10 to 19 at the Rafiki youth centre.

Inclusion criteria

Adolescents between the ages of 10 and 19 who attended selected youth centres were eligible to participate in the study. They had to be residing in the community or studying in the area where the youth centre

was located, schooling, or not, and sign the consent and confidentiality agreements.

Exclusion criteria

Adolescents who were not active participants in the youth centre's activities were excluded from the study and were identified through collaboration with healthcare providers.

Adolescents who did not agree to sign the consent and confidentiality agreement and who did not provide assent forms and consent from their parents for those under 18 years old were not selected to participate in the study. Adolescents who were not available for interviews during data collection due to permanent or temporary migration were excluded. Persons aged under 10 or over 19 years were excluded from the study. Likewise, those with verbal communication impairment challenge were also excluded.

Data collection

This study used focus group discussions conducted in youth-friendly centres in urban and rural areas of Rwanda to explore adolescents' insights towards their sexual communication with parents, the challenges they face, and their proposed solutions for improving communication with their parents. Focus group discussions were held in in Kinyarwanda, the language spoken by all participants. All participants were selected by their healthcare providers in the centres in each selected district.

The data collection tool used in this study was a focus group discussion guide. The researcher utilized an adapted semi-structured interview guide developed by Muhwezi et al in 2015,[12] with permission. Audiotape recorders were used to record interviews and field notes were taken during the focus group discussion.

Data analysis

The data were analysed using a thematic content analysis approach. The audio recordings of the focus group discussions were transcribed verbatim by the research team to create written documents that mirrored the participants' spoken language. Once the transcripts were finalized, the research team engaged in a detailed reading of the texts to attain a thorough comprehension of the content, context, and nuances inherent in the participants' responses. This analysis sought to reveal underlying meanings and implications that could easily be overlooked before translation was made from Kinyarwanda to English.

The principal investigator with qualitative research skills and competent research assistants who were experienced in qualitative research were designated to extract meaningful units from the transcripts, condense them, and assign codes to them. These codes were then grouped into categories. To ensure consistency in meaning units, codes, and categories, the principal investigator and the two research assistants reviewed and compared Kinyarwanda and English transcripts. All interviews were transcribed, translated into English, and analyzed thematically.

The study involved three levels of coding: The first level involved creating codes based on the language used by participants, the second level involved clustering the coded data and creating categories, and the third level involved determining a central theme. Disagreements among coders about the identified codes were resolved through discussion, and coding adjustments were made to improve the study's interpretability. Participant quotes and codes were used to illustrate the study's conclusions.

Ethical considerations

This study was approved by the Institutional Review Board (IRB) of the College of Medicine and Health Sciences at the University of Rwanda (approval notice number: 040/CMHS IRB/2020). Before the interviews, all participants signed a written informed consent form and a confidentiality agreement to protect sensitive information from being disclosed. Assent forms were provided for those under eighteen years old, and their parents or guardians consented for them to participate in the study. All steps in this study were performed according to relevant ethical guidelines and regulations for conducting

research involving human subjects.

It was made clear to all participants that anyone could withdraw anytime from the study without adverse consequences. Moreover, any information obtained from the study would be kept confidential and used only for research purposes. In case of any violation of the participant's rights, they were provided with the contact details of the Principal Investigator to report such cases. Each study participant was assigned a number and required to sign a confidentiality agreement to ensure that the topics discussed in the group remained private.

The background information of the 132 adolescents who participated in 11 focus groups are displayed in Table 1. Each group discussion had 12 participants. The age range of the adolescents was between 10 and 19 years, with most of them falling in the age range of 15-19 years. Concerning the level of education among 132 participants, 61 had completed primary education, 36 had lower high school level education, 28 had upper high school level education, and 7 had no formal education. In terms of religion, 113 of the participants were Christians, while 19 were Muslims. Finally, 116 of the participants were single.

Results

Socio-demographic characteristics of the study participants

Table 1. Background Characteristics of participants (adolescents)

Characteristics	Names of youth centres and number (n) of participants			
	Kamonyi	Kimisagara	Rafiki	Total
Educational background				
None	0	5	2	7
Primary	18	31	12	61
Lower secondary school	13	8	15	36
Upper secondary school	5	4	19	28
Religion				
Christian	33	43	37	113
Muslim	3	5	11	19
Occupation				
Unemployed	10	34	4	48
Student	21	10	40	71
Housekeeper	2	4	0	6
Hairdresser	1	0	2	3
Technician	1	0	1	2
Electrician	1	0	1	2
Marital status				
Single	30	38	48	116
In union	0	6	0	6
Cohabitating	5	2	0	7
Separated	1	2	0	3
Widower	0	0	0	0
Age group (years)				
10-14	12	10	21	43
15-19	24	38	27	89
Gender				
Male	17	2	22	41
Female	19	46	26	91

Themes and categories emerged from this study

Following the objectives of this study, three main themes emerged. Each theme was further sub-divided into categories and codes (Table 2)

Table 2. Illustration of themes, categories and codes emerging from the data analysis

Themes	Categories	Codes
Communication Patterns	Frequency	Infrequent discussion
		More communication with mothers
	Content	Focus on STIs/HIV & body changes and abstinence
		Little emphasis on contraception and safe sex practices
	Parental Closeness	Mothers are more approachable & supportive than fathers
	Poor quality	Intimidation for fathers
	Triggers	Limited knowledge
		Onset of menstruation
		Onset of adolescent pregnancy in the community
		Trust and shared experience
		Dialogues dynamics: open, honest.
Challenges/ Barriers to communication	Norms	Cultural norms & taboos
		Social stigma or rejection
	Quality of information	Accuracy of information
		Limited access to information
	Unavailability of parents	Busy work schedule
Solutions	Education & awareness	Workshops/training programs for parents
		Promote peer-led discussions (peer education)
		School programs to encourage peer support
		Address taboos about sexuality
	Cultural sensitivity	Contextualized communication

Theme 1: communication patterns

Category 1. Frequency

Infrequent Discussions

Findings from this study indicated that adolescents communicate infrequently with their parents about SRH topics. One participant explained this concern as follows:

"My parents often come home late and exhausted from work, making it difficult for me to have frequent and meaningful conversations about SRH. As a result, these important discussions are rare" (a 19-year-old adolescent girl from an urban youth centre).

Category 2. Content

Focus on: STIs/HIV& body changes and abstinence

While there may be some interaction with the parents, the discussion tends to focus mainly on STIs, HIV, physical changes and abstinence with limited attention to contraceptive methods or safe sex practices. Adolescents suggested conversations that go beyond these topics and include practical advice on navigating sexual relationships. One participant stated the following:

"Parents prioritize discussions about abstinence and consequences of sexuality over conversations about contraception and sexual relationship" (a 15-year-old adolescent girl from an urban youth centre).

Little emphasis on contraception and safe sex practices

Limited access to information about contraception and safe sex practices was raised as a challenging issue. While some parents acknowledged the importance of discussing contraception with their adolescents, many do so inadequately or indirectly. Adolescents express a strong desire for more open and informative conversations about safe sex practices and contraceptive options. In addition, enhancing parent-adolescent communication in this area is essential for promoting healthier sexual behaviours among adolescents. One participant stated the following:

"I wish my parents would engage in open conversations about safe sex practices and contraception, providing me with the information I need to make informed choices. Instead of focusing solely on abstinence and the risks of HIV, I believe it's essential to discuss comprehensive sexual health education that empowers me to protect myself and understand my body."(a 19-year-old adolescent boy from an urban youth centre).

Category 3. Parental closeness

More communication with mothers

The findings from this study indicate that adolescents prefer discussing adolescent SRH issues with their mothers rather than their fathers. In addition, participants noted that mothers are more likely to engage in conversations about sexuality, while fathers are often viewed as unapproachable or intimidating. Two participants shared the following:

"I have a close relationship with my mom; I often ask her many questions, and we have more opportunities to chat" (a 17-year-old adolescent girl from an urban youth centre).

*"Having open communication with my mother facilitates discussions on such topics" (*an 18-year-old adolescent boy from a rural youth centre).

Mothers are more approachable &supportive than fathers

The participants indicated that mothers are typically viewed as supportive figures who promote dialogue, whereas fathers may take a more authoritarian stance, which can hinder adolescents from starting conversations about their sexual health. Two participants explained it as follows:

"Most of the time, it's just my mother talking; I wish both parents would listen more closely" (a 16-year-old adolescent boy from a rural youth centre).

"I'm not comfortable with my father's conversations normally, I think asking him questions about sexuality will be challenging" (a 15years old adolescent girl from urban youth centre).

Intimidation for fathers

The study found that the intimidation felt by adolescents during sexual health discussions with their fathers stems from a combination of perceived strictness, embarrassment, and a lack of open communication. Addressing these barriers is crucial in order to foster healthier father-adolescent relationships and promoting better sexual health outcomes for adolescents. Encouraging fathers to engage in more open dialogue can help alleviate fears and misconceptions surrounding these important conversations. One participant shared the following:

"Our fathers are strict and intimidating; they make us less likely to approach them about anything related to sex "(a 17years old adolescent boy from urban youth centre).

Category 4. Poor quality

Limited knowledge

The quality of communication about SRH between adolescent and parents is often inadequate and influenced by limited knowledge, leading to misunderstandings and misinformation among young people. Here is a quote from an adolescent that highlights her experience regarding this issue:

"Many parents lack adequate knowledge regarding sexuality, reproductive health and family planning. There is a remarkable absence of quality information to discuss these critical matters, and our parents are often unware of adolescent sexual and reproductive health needs" (a 19-year-old adolescent boy from a rural youth centre).

Category 5. Triggers for communication
Onset of menstruation
The onset of menstruation offers a chance for parents and adolescents to engage in open discussions. However, many parents postpone these conversations until after this important milestone, potentially leaving their children unprepared. Encouraging open dialogue about SRH topics before the start of menstruation can alleviate anxiety and foster a supportive environment for adolescents as they navigate these changes.
"I got my period at school, and I had no idea what to do. I wish my mum had talked to me about it before" (a 14years old adolescent girl from rural youth centre).
Onset of adolescent pregnancy in the community
Participant's insights indicated that many discussions arise from external events instead of being initiated proactively by parents. For example, the onset of adolescent girl's pregnancy or its suspicion in the community often prompt these conversations. One of the participants expressed the following:
"Parents typically started conversations when something 'bad' (unplanned pregnancy of a colleague) had occurred, so these are in form of warnings" (an 18-year-old adolescent girl from an urban youth centre).

Trust and shared experiences
Trust and shared experiences are vital in enhancing communication between adolescents and their parents. By building a trusting relationship and sharing relevant personal experiences, parents can encourage their adolescents to communicate more freely about their lives. On this matter, two participants stated the following:
"When your mother shares her experiences, it provides you with valuable insights and fosters a secure environment for you to articulate your thoughts and feelings" (a 16years old adolescent boy from urban youth centre).
"Knowing that someone you trust understands your struggles can be incredibly validating and helps you feel less alone" (a 17years old adolescent boy from urban youth centre).
Dialogues dynamics: open, honest.
Encouraging open and honest conversations between parents and adolescents is crucial for developing effective communication. Such dialogue helps build trust and understanding, allowing adolescents to express their thoughts and feelings freely. When parents transparently engage with their adolescents, it fosters a supportive environment that can lead to stronger relationships. This kind of communication is vital for addressing concerns and navigating the challenges of adolescence. Ultimately, it lays the foundation for healthy interactions throughout their lives. One participant explained the following:
"I feel truly empowered and at ease when my parents are open and honest with me. Their transparency creates a safe space for discussion, allowing me to express myself freely and fostering a deeper connection between us."(a 16-year-old adolescent girl from a rural youth centre).

Theme 2. Challenges/barriers to adolescent-parent communication
Effective communication about SRH between adolescents aged 10 to 19 years and their parents is essential for promoting healthy attitudes and behaviours. However, several challenges can hinder these conversations. This overview organized categories and codes of challenges identified in this study and included quotes from adolescent participants to highlight the issues.

Category 1. Norms
Cultural norms & taboos
The study found that cultural norms often consider discussions about SRH as taboo, which leads to discomfort for both parents and adolescents when addressing these topics. One participant explained this as follows:
"In our culture, discussing sex is often viewed as shameful, so I refrain from bringing it up with my parents preventing a risk of being judged" (a 19-year-old adolescent girl from a rural youth centre).

Social stigma or rejection

Social stigma surrounding sexuality topics can create an environment where adolescents feel uncomfortable discussing their thoughts and feelings with their parents. This stigma often stems from cultural and religious beliefs that discourage open conversations about sexuality. One participant indicated the following: *"I have the impression that discussing sexual matters with my parents would lead them to perceive me as promiscuous or that I'm engaging in inappropriate behaviour and this may lead to social judgment and rejection"* (a 17-year-old adolescent girl from an urban youth centre).

Category 2. Quality of information

Accuracy of information

The participants revealed that many parents feel embarrassed or ashamed to discuss SRH topics due to poor knowledge and accuracy of information they have about sexuality and reproductive health and this inhibits open dialogue. Two participants discussed this concern as follows:

"We convinced ourselves that their support was not there. Following experiences of feeling unsupported during significant life events, we decided to pursue information on our own, frequently relying on peers rather than our parents who don't know too much about sexual and reproductive health" (a 17-year-old adolescent girl from a rural youth centre).

"Our parents have a concern that access to accurate sexual reproductive health information may encourage us to engage in sex while normally when we're are allowed to access early and complete information, we are more likely to take fewer risks when we eventually initiate sexual activity, they have to provide true and complete information" (an 18-year-old adolescent girl from an urban youth centre).

Limited access to information

In addition, the study found that some adolescents engage in conversations about SRH without a strong understanding of the issues because of limited access to accurate information, which can impede effective communication and foster misunderstandings. One participant stated the following:

"I don't know too much about sexuality so I don't mind if my parents are not engaging in such conversations" (a 14-year-old adolescent girl from an urban youth centre).

Category 3. Unavailability of parents

Busy work schedule: The participants believed that effective communication between parents and adolescents is crucial for fostering healthy development; however, various socio-economic factors can present considerable obstacles. The main issue identified in this study is the busy work schedule of parents which limits their availability for discussions. The adolescents also criticize the reliability of SRH information outside the home. One participant conversed as follows:

"Parents often fail to recognize that books or newspapers cannot serve as substitutes for their presence, but they are always busy" (a 17-year-old adolescent girl from an urban youth centre).

This underlines the importance of direct involvement in discussions, rather than depending solely on external materials for education on delicate subjects like sexuality issues.

Theme 3. Solutions proposed by adolescents for improving adolescent-parent communication on Sexual and Reproductive Health issues

To improve communication between adolescents and parents about SRH issues, adolescents have proposed various strategies/solutions.

Category 1. Education and Awareness

Workshops/training programs for parents

The study found that workshops and training programs designed for parents can greatly improve the dialogue between parents and adolescents concerning SRH matters. These initiatives provide parents with essential skills, knowledge, and confidence, enabling them to engage in substantive discussions with their children about sensitive subjects like sexuality.

One participant shared solutions as follows: *"I appreciate it when my parents share their own experiences and knowledge, it makes me feel protected and less alone, however, they need to be trained and updated on different current approaches to adolescent sexual and reproductive health to feel more confident to initiate conversations"* (the 18-year-old adolescent boy from the urban youth centre).

Promote Peer-led discussions (Peer education)

The findings indicated that incorporating peer-led discussions into educational programs can greatly improve communication between parents and adolescents. This strategy promotes a supportive atmosphere for open dialogue, equips adolescents with essential knowledge, narrows communication gaps, increases parental engagement, and utilizes the benefits of positive peer influence. Such a comprehensive approach not only tackles current communication issues but also promotes the development of enduring, healthy relationships between parents and their adolescent children. Two participants shared their experiences as follows:

"Talking with friends about tough topics makes it easier to talk to my parents later on as I feel more prepared" (the 16-year-old adolescent boy from the rural youth centre).

"Hearing how others handle similar issues helps me see things differently. Sometimes, my friends have better advice than adults" (the 19-year-old adolescent boy from the urban youth centre).

School programs to encourage peer support

The findings revealed that the introduction of peer support programs within educational institutions not only aids students in developing their emotional and social skills but also facilitates improved communication between adolescents and their parents. By creating a supportive atmosphere where students feel appreciated and comprehended, these initiatives promote healthier family relationships and enhance the overall mental well-being of young individuals.

One adolescent shared his idea as follows: *"Peer support programs can significantly improve familial relationships during the critical adolescent years by stimulating empowerment, creating safe spaces, normalizing growth, and encouraging open dialogue"* (the 18-year-old adolescent boy from the rural youth centre).

Category 2. Cultural sensitivity

Address taboos about sexuality.

The study participants indicated that tackling taboos related to sexuality by open dialogue, thorough education, and nurturing environments is essential to enhancing adolescents' sexual health. With cultivating a culture that normalizes discussions about sexuality, we enable young individuals to make educated decisions about their bodies and relationships. As two participants wisely noted:

*"Discussing sex shouldn't evoke fear; it should be routine "*the 19-year-old adolescent boy from the urban youth centre).

"It's hard to bring up topics like sex when I know my parents are uncomfortable talking about it, sometimes I feel like my parents don't understand what I'm going through; I want to talk about things that matter to me without feeling awkward or judged, I wish they would just listen" (the 18-year-old adolescent boy from the rural youth centre).

Contextualized communication

The findings highlight that contextualized communication strategies, which consider cultural sensitivities and individual family dynamics, can enhance the quality of these discussions, leading to better health outcomes. Programs that empower parents with the skills and knowledge to engage openly about SRH topics have shown promise in reducing risks such as adolescent pregnancies and sexually transmitted infections while fostering a supportive environment for adolescents to express their concerns and seek guidance.

"You should engage in sex when you're emotionally ready and should be aware of all the consequences that come with your actions" (the 16-year-old adolescent girl from the rural youth centre).

"Adolescents who engage in open communication with their parents are at a reduced risk of experiencing teenage pregnancies" (the 17-year-old adolescent boy from the urban youth centre).

Discussion

The primary objective of this study was to investigate how adolescents perceive their interactions with parents on matters related to SRH: Promoting healthy behaviours and lowering the risks associated with early sexual engagement need parents and adolescents to have effective conversations about SRH.[14,44,45]

In Rwanda, the dynamics of discussions surrounding SRH are profoundly influenced by cultural norms and societal attitudes, which frequently lead to inadequate communication on these topics. This issue has been examined in various studies conducted in the country.[15,46] Even if they live together, adolescents tend to communicate more openly with their mothers than with their fathers. This is because they spend more time with their mothers than with their fathers. The results of this study are similar to the findings of the work done in Rwanda in 2024 and 2019. [47,48]

Rwandan culture traditionally emphasizes abstinence and views discussions about sexual health as taboo. This cultural context creates barriers for both parents and adolescents when addressing SRH topics. Many parents feel uncomfortable discussing these issues due to a lack of knowledge or a fear that such conversations might encourage sexual activity among their children as evidenced by other studies.[49, 50]

Fathers were often found to be strict, intimidating, unapproachable, and unavailable. They treat their adolescents, with silent warnings, threats, and hostility. In most studies, fewer male adolescents were comfortable communicating with their parents, and fewer communicated with their fathers.[50,51]

This study found that parents tend to delay initiating discussions on SRH with their adolescent children. They often wait for physiological change signs such as the onset of menstruation or the disclosure of a romantic relationship before broaching the subject. For sons, they also wait for them to start coming home late or having a girlfriend. Similar study findings were obtained from various studies conducted in Rwanda, Uganda, and Ethiopia.[9,25,52, 53]

Challenges to Adolescent Parent Communication

When parents try to initiate discussions about SRH with their children, they often do so by warning them about the dangers of early sexual activity. This approach can have negative consequences, as adolescents may feel too embarrassed or afraid to ask questions about SRH for fear that their parents will assume they are already sexually active. These finding is consistent with to those of other studies.[15,54,55]
Insufficient knowledge or confidence regarding SRH issues considerably obstructs communication between adolescents and their parents. This difficulty stems from multiple factors, such as cultural norms, the educational background of parents, and the changing dynamics of parent-adolescent relationships during the adolescent stage. This was highlighted by other studies conducted in different African regions.[56, 57]

As evidenced by adolescents, the discomfort among parents was that starting the discussion on SRH with their children too early could prompt their curiosity and lead them into high-risk sexual behaviours. This is in accord with reports from other studies. [48,58]

Strategies/Solutions to improve adolescent–parent communication

The adolescents often tend to seek information about SRH issues from sources such as peers,

schools, and the media. Parents need to have open and honest discussions with their adolescents to ensure that the information they receive from external sources is accurate and reliable. Parents should be aware that the information adolescents receive may not always be accurate and that as parents, they can play an important role in providing their children with trustworthy information, as reported in Tanzania.[30,59]

As suggested by other studies conducted in Sub-Saharan Africa, [48, 50, 60] when discussing SRH issues with adolescents, parents need to avoid making threats. Fathers should also be included in communication with adolescents. Fathers have an important role to play and need not be too strict or unavailable. They should feel comfortable discussing SRH issues in addition to emphasizing education. Parents need to deliver potentially life-saving messages to children more positively and effectively rather than using fear-based messaging, intimidation, warnings, and verbal abuse.

Based on adolescents' insights from this study, parents need to understand that when their children ask questions about relationships, sex, or condoms, it doesn't necessarily mean that they are already engaged in sexual activity or planning to start. Instead of discouraging them from asking or assuming the worst, parents should encourage their children to ask questions and seek clarification. This way, adolescents can access more accurate information and dispel many of the misconceptions and incorrect information that surround sex and condom use.[49,61, 62]

Effective dialogue regarding SRH between adolescents and their parents is crucial for encouraging safer sexual practices and mitigating risks such as unintended pregnancies and STIs. Nevertheless, several obstacles impede these conversations. Cultural taboos related to SRH significantly influence the health outcomes of adolescents by restricting access to necessary services, promoting misinformation, hindering effective communication, and leading to negative health effects. It is crucial to confront these taboos through thorough education and training programs and open discussions to enhance adolescent reproductive health and enable young individuals to make informed decisions regarding their bodies and future which is similar to other studies conducted previously.[4]

By addressing cultural taboos, enhancing parental knowledge through programs, and encouraging open discussions within families, we can empower adolescents with accurate information that promotes healthier choices regarding their sexual health. Evidence suggests that these initiatives not only benefit individual families but also contribute to better health outcomes for the broader community.[21,46]

According to adolescents proposed solutions in this study, parents should initiate conversations about SRH issues with their children when they start becoming aware of their sexuality and body parts. Waiting until adolescence to start these discussions may be too late, as children are already exposed to various sources of information about relationships and sex, some of which may be inaccurate. Parents need to understand that by not talking to their children about SRH, they are surely exposing them to receiving wrong/bad information from other sources.[14,48,53,58]

Strengths and Limitations of the Study

Effective communication between parents and adolescents is vital for promoting sexual health during adolescence. This study offers insights into the communication process, issues, and solutions within this relationship from the perspectives of adolescents. The findings can be used to improve this communication process and support healthy behaviours among adolescents. Despite the significance of the findings from this study, a limited number of participants were involved, indicating that these findings may not be generalised to other study settings in Rwanda.

Further research should be conducted to examine the communication between parents and adolescents at a national level. Additionally, as this was a qualitative study, there is a need for mixed-method studies to investigate this communication process in a more structured and objective manner, which may facilitate the triangulation of findings from both qualitative and quantitative research, thus providing a comprehensive view of parent-adolescent communication in Rwanda.

Conclusion

Adolescents' views on parental communication concerning SRH highlight considerable difficulties, alongside possible strategies to improve the conversation between parents and adolescents. Cultural taboos, insufficient parental engagement, and educational disparities were identified as significant obstacles hindering communication between adolescent parents. Educational initiatives and training aimed at improving communication skills and SRH knowledge and peer education initiatives can greatly enhance communication, resulting in adolescents who are better informed and exhibit healthier behaviours overall.

Recommendations

Parents should encourage their children to ask questions and seek clarification about SRH. This way, adolescents can access more accurate information and dispel many of the misconceptions and incorrect information that surround sex and the young developing body.

For children who attend school, the school environment can provide an opportunity to improve communication between parents and adolescents. Schools can invite parents to discuss their children's concerns conveniently. As educators, teachers should also play a role in training parents. They can help parents reflect on the quality, content, relevance, and appropriateness of the SRH education that is being provided at school. This can help avoid a situation where parents assume that teachers are solely responsible for addressing all SRH issues at school.

Acknowledgments

We want to acknowledge the support of the Centre of International Reproductive Health Training at the University of Michigan (CIRHT-UM) for supporting this study, the local government authorities for allowing us to access youth centres in their districts, sectors, and villages, and the youth centre coordinators and healthcare providers for providing the study participants. We acknowledge the Pre-Publication Support Service (PREPSS), which guided us through scientific communication training and follow-up support, including pre-publication peer review and editing.

Authors' contributions

UJ contributed to the conception, design, data collection, analysis, interpretation, and drafting of this work. NA got actively involved in the design and drafting of the work. KG contributed to the design and drafting of the work. IBML contributed to the conception and draft of this work.MM contributed to the drafting of the work, data analysis, and interpretation. NL got actively involved in the conception, drafting, data analysis, and interpretation of this work. MA contributed to drafting the work, data analysis, interpretation, and revision of the work. The final version of the manuscript was read and approved by all authors.

Funding

The funder of this study was the Center for International Reproductive Health Training, CIRHT, a global leader in integrating Family Planning and Comprehensive Abortion Care training into pre-service health education to reduce maternal mortality through improved access to reproductive health services. CIRHT partners with academic institutions in developing countries to maintain capacity for life-saving reproductive health services by integrating competency-based pre-service training in Family Planning and Comprehensive Abortion Care, restoring research culture, and improving the quality of care.

Availability of data and materials

The datasets generated and/or analyzed during the current study are not openly available to preserve the anonymity of the research participants. Still, they are accessible from the corresponding author on reasonable demand.

Consent for publication

Participants provided consent to publish results from this study

Competing interests

The authors declare that they have no competing interests.

This article is published open access under the Creative Commons Attribution-NonCommercial NoDerivatives (CC BYNC-ND4.0). People can copy and redistribute the article only for noncommercial purposes and as long as they give appropriate credit to the authors. They cannot distribute any modified material obtained by remixing, transforming or building upon this article. See https://creativecommons.org/licenses/by-nc-nd/4.0/

Reference

1. World Health Organisation . Sexual and reproductive health and rights. *who website.* 2025, http://www.who.int/reproductivehealth/topics/fgm/health_consequences_fgm/en/. Accessed 19 Mar 2025
2. Singh DR, Shrestha S, Karki K, Sunuwar DR, Khadka DB, Maharjan D, Sah LK, Simkhada B, Sah RK. Parental knowledge and communication with their adolescent on sexual and reproductive health issues in Nepal. *PLoS One.*2023; 18:1–16. https://doi.org/10.1371/journal.pone.0289116
3. Mchome Z, Richards E, Nnko S, Dusabe J, Mapella E, Obasi A . A "mystery client" evaluation of adolescent sexual and reproductive health services in health facilities from two regions in Tanzania. *PLoS One.*2015. https://doi.org/10.1371/journal.pone.0120822
4. Othman A, Shaheen A, Otoum M, Aldiqs M, Hamad I, Dabobe M, Langer A, Gausman J.Parent–child communication about sexual and reproductive health: perspectives of Jordanian and Syrian parents. *Sex Reprod Health Matters.* 2020; 28:313–323. https://doi.org/10.1080/26410397.2020.1758444.
5. WHO. Analytical Fact Sheet.*who web site.* 2023;2018–22.https://files.aho.afro.who.int/afahobckpcontainer/production/files/Sexual_and_Reproductive_Health_Analytical_Brief_2025.pdf. Accessed 19 Mar 2025
6. Aliyu TK, Aransiola JO . Parent-Adolescent Communication About Reproductive Health Issues in Nigeria. *Sage Open.*2023;13:1–17. https://doi.org/10.1177/21582440231166607
7. Agbeve AS, Fiaveh DY, Anto-Ocrah M. A Qualitative assessment of adolescent-parent sex talk in Ghana. *Afr J Reprod Health.*2022;26:146–160. DOI: 10.29063/ajrh2022/v26i12s.16
8. Motsomi K, Makanjee C, Basera T, Nyasulu P. Factors affecting effective communication about sexual and reproductive health issues between parents and adolescents in zandspruit informal settlement, Johannesburg, *South Africa. Pan African Medical Journal.* 2016; 25:1–7. DOI: 10.11604/pamj.2016.25.120.9208
9. Alimoradi Z, Kariman N, Simbar M, Ahmadi F. Empowerment of adolescent girls for sexual and reproductive health care: A qualitative study. *Afr J Reprod Health.* 2017.https://doi.org/10.29063/ajrh2017/v21i4.9Schwandt H, Boulware A, Corey J, et al . She is courageous because she does not care what people think about her…": attitudes toward adolescent contraception use among Rwandan family planning providers and adult female modern contraceptive users. *Reprod Health.* 2022; 19:1–13. https://doi.org/10.1186/s12978-022-01517-4

11. Widman L, Choukas-bradley S, Noar SM, Nesi J, Garrett K. Parent-Adolescent Sexual Communication and Adolescent Safer Sex Behavior: A Meta-Analysis. *JAMA Pediatr.* 2016; 170:52–61. DOI: 10.1001/jamapediatrics.2015.2731
12. Muhwezi WW, Katahoire AR, Banura C, Mugooda H, Kwesiga D, Bastien S, Klepp KI. Perceptions and experiences of adolescents, parents and school administrators regarding adolescent-parent communication on sexual and reproductive health issues in urban and rural Uganda Adolescent Health. *Reprod Health.*2015; 12:1–16. https://doi.org/10.1186/s12978-015-0099-3
13. Vongsavanh V, Lan VTH, Sychareun V .Sexual and reproductive health communication between parents and high school adolescents in Vientiane Prefecture, Lao PDR. *Glob Health Action.*2020. https://doi.org/10.1080/16549716.2020.1785145
14. Nyirandegeya J, Rugema J, Katende G . Communication between Adolescents and their Parents on Sexual Risk-Taking Behaviours and Facilitating factors in Rwanda. *Rwanda Journal of Medicine and Health Sciences.*2022; 5:20–33. https://doi.org/10.4314/rjmhs.v5i1.4
15. Bushaija E, Sunday F, Asingizwe D, Olayo R, Abong'o B .Factors that Hinder Parents from the Communicating of Sexual Matters with Adolescents in Rwanda. *Rwanda Journal of Health Sciences.*2013; 2:13. DOI: 10.4314/rjhs.v2i2.2
16. Sidamo N, Kerbo A, Gidebo K, Wado YD. Exploring Barriers to Accessing Adolescents Sexual and Reproductive Health Services in South Ethiopia Regional State: A Phenomenological Study Using Levesque's Framework. *Adolesc Health Med Ther.*2024;Volume 15:45–61. DOI: 10.2147/AHMT.S455517
17. Manu AA, Mba CJ, Asare GQ, Odoi-Agyarko K, Asante RKO . Parent-child communication about sexual and reproductive health: Evidence from the Brong Ahafo region, Ghana. *Reprod Health.*2015; 12:1–13. DOI: 10.1186/s12978-015-0003-1
18. Darroch JE, Singh S, Woog V, Bankole A, Ashford LS. Research Gaps in Adolescent Sexual and Reproductive Health. Guttmacher Institute 1–7. Research Gaps in Adolescent Sexual and Reproductive Health . *Guttmacher Institute.*2016.https://www.guttmacher.org/report/research-gaps-in-sexual-and-reproductive-health. Accessed on 19 Mar 2025
19. English A, Ford CA . Adolescent Health, Confidentiality in Healthcare, and Communication with Parents. *Journal of Pediatrics.*2018; 199:11–13. DOI: 10.1016/j.jpeds.2018.04.029
20. Goli S, Noroozi M, Salehi M . Parental experiences about the sexual and reproductive health of adolescent girls with intellectual disability: A qualitative study. *Iran J Nurs Midwifery Res.*2020; 25:254–259. Doi: 10.4103/ijnmr.IJNMR_258_19
21. Agbenu I, Kyei J, Naab F . Female adolescent sexual reproductive health service utilization concerns: A qualitative enquiry in the Tema metropolis of Ghana. *PLoS One.*2024; 19:1–16. doi: 10.1371/journal.pone.0292103
22. Shinde S, Noor RA, Mwanyika-Sando M, et al . Adolescent health and well-being in sub-Saharan Africa: Strengthening knowledge base and research capacity through a collaborative multi-country school-based study. *Matern Child Nutr.*2023. https://doi.org/10.1111/mcn.13411
23. Sieving RE, Mehus C, Catallozzi M, et al . Understanding Primary Care Providers' Perceptions and Practices in Implementing Confidential Adolescent Sexual and Reproductive Health Services. J*ournal of Adolescent Health.*2020; 67:569–575. doi: 10.1016/j.jadohealth.2020.03.035
24. Dessie Y, Berhane Y, Worku A. Limited and Associated with Adolescent Poor Behavioral Beliefs and Subjective Parent-Adolescent Sexual and Reproductive Health Communication Is Very Limited and Associated with Adolescent Poor Behavioral Beliefs and Subjective Norms : Evidence from a Comm. *Plos One.* 2015. https://doi.org/10.1371/journal.pone.0129941

25. Bastien S, Kajula L, Muhwezi W . A review of studies of parent-child communication about sexuality and HIV/AIDS in sub-Saharan Africa. *Reprod Health.* 2011; 8:1–18. https://doi.org/10.1186/1742-4755-8-25
26. Ross DA, Mshana G, Guthold R . Adolescent Health Series: The health of adolescents in sub-Saharan Africa: Challenges and opportunities. *Tropical Medicine and International Health.*2021; 26:1326–1332. doi: 10.1111/tmi.13655
27. Melaku YA, Berhane Y, Kinsman J, Reda HL . Sexual and reproductive health communication and awareness of contraceptive methods among secondary school female students, northern Ethiopia: A cross-sectional study. *BMC Public Health.* 2014; 14:1–11. https://doi.org/10.1186/1471-2458-14-252
28. Yibrehu MS, Mbwele B. Parent - adolescent communication on sexual and reproductive health : the qualitative evidences from parents and students of Addis Ababa , Ethiopia. *Reproductive Health.* 2020;6:1–9. https://doi.org/10.1186/s12978-020-00927-6
29. Feleke SA, Koye DN, Demssie AF, Mengesha ZB .Reproductive health service utilization and associated factors among adolescents (15-19 years old) in Gondar town, Northwest Ethiopia. *BMC Health Serv Res.* 2013. https://doi.org/10.1186/1472-6963-13-294
30. Ndugga P, Kwagala B, Wandera SO, Kisaakye P, Mbonye MK, Ngabirano F . "If your mother does not teach you, the world will…": a qualitative study of parent-adolescent communication on sexual and reproductive health issues in Border districts of eastern Uganda. *BMC Public Health.* 2023; 23:1–12. https://doi.org/10.1186/s12889-023-15562-6
31. Garney WR, Flores SA, Garcia KM, Panjwani S, Wilson KL. Adolescent Healthcare Access: A Qualitative Study of Provider Perspectives. *J Prim Care Community Health.* 2024; https://doi.org/10.1177/21501319241234586
32. Coast E, Jones N, Francoise UM, Yadete W, Isimbi R, Gezahegne K, Lunin L. Adolescent Sexual and Reproductive Health in Ethiopia and Rwanda: A Qualitative Exploration of the Role of Social Norms. *Sage Open.* 2019. https://doi.org/10.1177/2158244019833587
33. Abdallah AK, Magata RJ, Sylvester JN . Barriers to parent-child communication on sexual and reproductive health issues in East Africa: A review of qualitative research in four countries. *Journal of African Studies and Development.* 2017; 9:45–50. DOI: 10.5897/JASD2016.0410
34. Habtu Y, Kaba M, Mekonnen H. What do service providers in Southern Ethiopia say about barriers to using youth-friendly sexual and reproductive health services for adolescents?: Qualitative study. *Reprod Health.* 2021; 18:1–15. https://doi.org/10.1186/s12978-021-01092-0
35. Okeke CC, Mbachu CO, Agu IC, Ezenwaka U, Arize I, Agu C, Obayi C, Onwujekwe O . Stakeholders' perceptions of adolescents' sexual and reproductive health needs in Southeast Nigeria: a qualitative study. *BMJ Open.* 2022. https://doi.org/10.1136/bmjopen-2021-051389
36. Kane FC, Tounkara LS, Kimassoum D, Diop AT, Mbacham WF. Nutritional value of a dietary supplement of Moringa oleifera and Pleurotus ostreatus. *African Journal of food science.*2017; 11:171–177. https://doi.org/10.5897/AJFS2016.1545
37. NISR, MOH, ICF . Rwanda Demographic and Health Survey 2014-15. *NISR, Kigali.*2016.https://www.statistics.gov.rw/datasource/108. Accessed 20 February 2023
38. Abdallah AK, Magata RJ, Sylvester JN . Barriers to parent-child communication on sexual and reproductive health issues in East Africa: A review of qualitative research in four countries. *Journal of African Studies and Development.*2017; 9:45–50. https://doi.org/10.5897/JASD2016.0410
39. Haberland N, Rogow D .Sexuality education: Emerging trends in evidence and practice. *Journal of Adolescent Health.*2015; 56:7. DOI: 10.1016/j.jadohealth.2014.08.013

40. Mitiku I, Addissie A, Molla M . Perceptions and experiences of pregnant women about routine HIV testing and counselling in Ghimbi town, Ethiopia: A qualitative study. *BMC Res Notes.*2017; 10:1–8. https://doi.org/10.1186/s13104-017-2423-1
41. Hailemariam S, Gutema L, Agegnehu W, Derese M . Challenges Faced by Female Out-of-School Adolescents in Accessing and Utilizing Sexual and Reproductive Health Service: A Qualitative Exploratory Study in Southwest, Ethiopia. *J Prim Care Community Health.* 2021.https://doi.org/10.1177/21501327211018936
42. Vongsavanh V, Lan VTH, Sychareun V . Sexual and reproductive health communication between parents and high school adolescents in Vientiane Prefecture, Lao PDR. *Glob Health Action.* 2020. https://doi.org/10.1080/16549716.2020.1785145
43. Erlingsson C, Brysiewicz P . African Journal of Emergency Medicine COMMENTARY A hands-on guide to doing content analysis. *African Journal of Emergency Medicine.* 2017; 7:93–99. https://doi.org/10.1016/j.afjem.2017.08.001
44. Melese M, Esubalew D, Siyoum TM, Worku YB, Azanaw J, Mengistie BA . Parent–adolescent communication on sexual and reproductive health issues and associated factors among secondary public-school students in Gondar town, northwest Ethiopia: an institution based cross-sectional study. *Front Public Health.* 2024. https://doi.org/10.3389/fpubh.2024.1342027
45. Aliyu TK, Aransiola JO. Parent-Adolescent Communication About Reproductive Health Issues in Nigeria. *Sage Open.* 2023;13:1–17. https://doi.org/10.1177/21582440231166607
46. Uzayisenga J, Nshimiyimana A, Kaberuka G, Bazakare MLI, Mbarushimana V, Mukeshimana M, Musafili A, Nyirazinyoye L. Adolescents' perspectives regarding their communication with reproductive health service providers in Rwanda: an explorative study. *BMC Health Serv Res.* 2024. https://doi.org/https://doi.org/10.1186/s12913-023-10526-3
47. Kayiranga D, Uwimana MC, Nyirazigama A, Mukeshimana M, Moreland P . Perceptions of Adolescent Parenting Among High School Adolescent Students From Selected Rural and Urban Schools in Rwanda.*Rwanda Journal of Medicine and Health Sciences.* 2019; 2:86–95. https://dx.doi.org/10.4314/rjmhs.v2i2.3
48. Uzayisenga J, Nshimiyimana A, Kaberuka G, Bazakare MLI, Mbarushimana V, Mukeshimana M, Musafili A, Nyirazinyoye L. Adolescents' perspectives regarding their communication with reproductive health service providers in Rwanda: an explorative study. *BMC Health Serv Res.*2024; 24:1–8. https://doi.org/10.1186/s12913-023-10526-3
49. Nu Noe MT, Saw YM, Soe PP, Khaing M, Saw TN, Hamajima N, Win HH . Barriers between mothers and their adolescent daughters with regards to sexual and reproductive health communication in Taunggyi Township, Myanmar: What factors play important roles? *PLoS One.*2018; 13:1–16. DOI: 10.1371/journal.pone.0208849
50. Usonwu I, Ahmad R, Curtis-Tyler K . Parent–adolescent communication on adolescent sexual and reproductive health in sub-Saharan Africa: a qualitative review and thematic synthesis. *Reprod Health.* 2021; 18:1–15. https://doi.org/10.1186/s12978-021-01246-0
51. Valizadeh L, Zamanzadeh V, Rassouli M, Rahkar Farshi M. Concerns of Parents with or Raising Adolescent Children: a Qualitative Study of Iranian Families. *J Caring Sci.* 2018; 7:27–33. doi: 10.15171/jcs.2018.005
52. Dessie Y, Berhane Y, Worku A. Parent-adolescent sexual and reproductive health communication is very limited and associated with adolescent poor behavioral beliefs and subjective norms: Evidence from a community based cross-sectional study in Eastern Ethiopia. *PLoS One.* 2015; 10:1–14. DOI: 10.1371/journal.pone.0129941

53. 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; 22:1–14. https://doi.org/10.1186/s12889-022-14256-9
54. Shiferaw K, Getahun F, Asres G . Assessment of adolescents' communication on sexual and reproductive health matters with parents and associated factors among secondary and preparatory schools' students in Debremarkos town, North West Ethiopia. *Reprod Health.* 2014; 11:1–10. https://doi.org/10.1186/1742-4755-11-2
55. Gebreyesus H, Teweldemedhin M, Mamo A . Determinants of reproductive health services utilization among rural female adolescents in Asgede-Tsimbla district Northern Ethiopia : a community based cross-sectional study. *Reproductive Health.* 2019;16:1–10. https://doi.org/10.1186/s12978-019-0664-2
56. Chidwick H, Baumann A, Ogba P, Banfield L, DiLiberto DD. Exploring adolescent engagement in sexual and reproductive health research in Kenya, Rwanda, Tanzania, and Uganda: A scoping review. *PLOS Global Public Health.* 2022; 2:1–13. https://doi.org/10.1371/journal.pgph.0000208
57. Carpio-Arias TV, Verdezoto N, Guijarro-Garvi M, Abril-Ulloa V, Mackintosh N, Eslambolchilar P, Ruíz-Cantero MT. Healthcare professionals' experiences and perceptions regarding health care of indigenous pregnant women in Ecuador. *BMC Pregnancy Childbirth.* 2022; 22:1–11. https://doi.org/10.1186/s12884-022-04432-5
58. 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. https://doi.org/10.1186/s12889-022-14966-0
59. Ngilangwa DP, Rajesh S, Kawala M, Mbeba R, Sambili B, Mkuwa S, Noronha R, Meremo AJ, Nyagero J . Accessibility to sexual and reproductive health and rights education among marginalized youth in selected districts of Tanzania. *Pan African Medical Journal.* 2016; 25:1–7. doi: 10.11604/pamj.supp.2016.25.2.10922
60. Kusheta S, Bancha B, Habtu Y, Helamo D, Yohannes S . Adolescent-parent communication on sexual and reproductive health issues and its factors among secondary and preparatory school students in Hadiya Zone , Southern Ethiopia : institution based cross sectional study.*BMC Pediatrics.* 2019;1–11. https://doi.org/10.1186/s12887-018-1388-0
61. Nyathi D, Ndlovu J, Phiri K, Sibanda M. Dynamics of Parent-Adolescent Communication on Sexual and Reproductive Health in Sub-Sahara: A Focus on Barriers and Policy Implications. *Online Journal of Health and Allied Sciences.* 2020; 19:1–5. https://www.ojhas.org/issue75/2020-3-8.html
62. Rankin K, Jarvis-Thiébault J, Pfeifer N, Engelbert M, Perng J, Yoon S, Heard A . Adolescent sexual and reproductive health An evidence gap map. 3ie Evidence Gap Map Report 5. *International Initiative for Impact Evaluation (3ie).*2016; 1–69.