

Contextual Influences on Community-Based Peer-Led Sexual and Reproductive Health Education for Adolescent Girls and Young Women in Moroto District, Uganda: An Ethnographic Study

Alimah Komuhangi^{1,2*}, Abdulkharim Muhumuza³, William Kasozi⁴, Stephen Okoboi⁴

¹*Texila American University (TAU), Guyana, South America*

²*Institute of Public Health and Management, Clarke International University (CIU), Kampala, Uganda*

³*Department of partnerships and Communication, Afya na Haki Institute (Ahaki), Gayaza, Nakwero-Uganda*

⁴*Infectious Diseases Institute (IDI) - College of Health Sciences, Makerere University, Kampala City*

Abstract

Understanding factors influencing risky sexual behavior is crucial for developing effective interventions that reduce risky sexual behavior. We explored contextual factors influencing the implementation of community-based peer-led sexual and reproductive health education aimed at reducing risky sexual behavior among adolescent girls and young women in Moroto District. Using qualitative methods, data were collected through six focus group discussions with 51 adolescent girls and young women (15-24 years) and in-depth interviews with five key informants, including district health officials and health workers. A constructivist approach guided the study, and analysis followed the guidelines for systematic reporting. Participants were predominantly aged 15-17 (41.2%), single (62.7%), out of school (52.9%), and unemployed (84.3%). Most had 1-2 children (54.9%) and identified as Christian (78.4%). Facilitators for the intervention included strong peer trust and access to services through hospitals, schools, and teenage centers. Barriers included stigma surrounding family planning and abortion, cultural norms favoring early marriage, misinformation, restrictive family dynamics, time constraints, and inadequate health worker training. Despite the intervention's acceptability, these challenges may hinder its effectiveness in reducing risky sexual behavior among adolescent girls and young women. Addressing stigma, power dynamics, cultural norms, and misinformation, alongside improving health worker training, is crucial for creating an empowering environment for informed decision-making. This will enhance the intervention's potential to improve health outcomes. The community-based peer-led sexual and reproductive health education intervention has potential to reduce risky sexual behavior among adolescent girls and young women. However, its effectiveness hinges on addressing key contextual barriers.

Keywords: *Community-Based, Peer-Led, Health, Reproductive, Sexual.*

Introduction

Risky sexual behavior (RSB) remains a major public health concern worldwide. According to Adrawa et al. [1], RSB includes having multiple sexual partners, engaging in condomless sex for individuals who are not

married, sex with a commercial sex worker, and sex under the influence of substance. Other forms include anal sex [2] and transactional sex, which involves exchanging sexual services for money or non-monetary items [3]. Substance use impairs judgment and decision-

Received: 20.12.2024

Accepted: 04.02.2025

Published on: 30.06.2025

*Corresponding Author: akomuhangi@ciu.ac.ug

making, increasing the risk of non-consensual encounters and associated physical and emotional harm [4].

Engaging in RSB increases the risk of sexually transmitted infections (STIs), including HIV/AIDS, and unintended pregnancies [5]. Adolescent girls and young women (AGYW) face additional risks such as childbirth complications and unsafe abortions [6]. Contributing factors include limited health information, inadequate reproductive health services, and conflict-related vulnerabilities [7]. Enhancing health literacy among AGYW is crucial in reducing RSB [8].

Understanding the drivers of RSB is essential for effective interventions. Socio-economic status, education, cultural norms, and healthcare access shape sexual behaviours. Low socio-economic status and limited healthcare access are associated with higher RSB rates and poorer reproductive health outcomes [9]. Cultural norms around sexuality and gender roles also influence risk perception and behaviour [10]. In conservative societies, stigma around sexual health discussions and contraceptive use increases the risk of STIs and unintended pregnancies [11].

The Karamoja region in Uganda faces critical adolescent sexual and reproductive health (ASRH) challenges. The teenage pregnancy rate stands at 23.6% [12], nearly matching the national average of 24%, with 11.4% of adolescents engaging in RSB [13]. Moroto District, a high-priority area, has the region's highest teenage pregnancy rate (16%) [14]. Additionally, widespread alcohol use (47.8%) [15] exacerbates RSB, highlighting the need for urgent interventions.

While the WHO SRH health education intervention is effective in high-income countries [16], its impact in low-income countries like Uganda, particularly at the community level, remains uncertain. The effectiveness of peer-led implementation outside health facilities is also unclear. Despite a national sexuality education framework [17]

and various health initiatives, SRH challenges in Moroto District remain critical.

Materials and Methods

This ethnographic study used qualitative methods to examine factors influencing the implementation of a community-based, peer-led SRH education intervention for AGYW in Moroto District, Karamoja. It explored cultural perspectives, decision-making power, and perceived barriers and facilitators from community leaders and health workers. The study also gathered recommendations for improving SRH interventions to reduce risky sexual behaviour among AGYW.

Six focus group discussions (FGDs) were conducted with 52 AGYW (ages 15–24) in groups of 8–12, categorised by age (15–17, 18–24), schooling status, and childbirth experience. Additionally, in-depth interviews were held with five key informants, including the District Health Officer, Community Development Officer, Assistant District Health Officer, and health facility in-charges in Moroto District.

The study included AGYW (15–24 years) who had lived in Moroto District for at least six months. Key informants (KIs) were purposively selected based on at least six months of experience in SRH services. Visitors, temporary residents, and KIs with insufficient experience, no SRH involvement, or health limitations preventing informed consent were excluded.

The study followed a constructivist ontological paradigm, emphasising participants' subjective experiences and interpretations. This approach recognises that reality is shaped by individual perspectives [18]. Over three months in Moroto District, we conducted observations, took field notes, and held in-depth interviews and focus group discussions to understand local social dynamics and behaviours.

Qualitative data analysis followed the COREQ guidelines systematically. Interview audio recordings were transcribed verbatim for

accuracy. Two research assistants independently conducted open coding, labelling key text units to capture participants' responses. They then collaborated to develop a codebook, resolving discrepancies and ensuring inter-coder reliability. The coded transcripts were imported into ATLAS. For content analysis, where data were categorised into themes and broader categories. Themes were defined and supported by interview quotes, summarising key findings and emerging patterns. This structured approach ensured a transparent and rigorous analysis.

The study received ethical approval from Clarke International University Research Ethics Committee (CLARKE-2024-1113) and the Uganda National Council for Science and Technology (HS4697ES). Informed consent was obtained from participants, with assent from minors and consent from their caregivers for those aged 15 to 17 years.

Results

We identified four key themes on AGYW perspectives toward CBPL-SRH education in Moroto District. The first outlines facilitators and barriers to the intervention. The second examines AGYW decision-making on SRH. The third explores cultural influences on SRH service uptake. The fourth provides recommendations for improving service delivery. Overall, AGYW found CBPL-SRH education acceptable and feasible for enhancing SRH access in Moroto.

Characteristics of the AGYW

The majority of AGYW were 17 years and below, 41.2% (21/51), with most being single, 62.7% (32/51). Slightly more than half were out of school, 52.9% (27/51), and the largest group had completed secondary education, 39.2% (20/51). Regarding parity, the highest proportion had no 1-2 children, 54.9% (28/51). The vast majority were not employed, 84.3% (43/51), and most identified as Christian, 78.4% (40/51), as indicated in Table 1.

Table 1. Characteristics of Adolescent Girls and Young Women

Characteristic	Frequency N= 51	Percentage
Age		
17 years and below	21	41.2
18- 21 years	16	31.4
22-24 years	14	27.4
Marital status		
Married	13	25.5
Single	32	62.7
Divorced	6	11.8
Schooling status		
In school	24	47.1
Out of School	27	52.9
Highest level of education		
None	6	11.8
Primary	18	35.3
Secondary	20	39.2

Tertiary	7	13.7
Parity		
None	19	37.3
1-2	28	54.9
3-4	4	7.8
Employment status		
Employed	8	15.7
Not employed	43	84.3
Religion		
Christian	40	78.4
Muslim	11	21.6

Source: Primary data from Adolescent girls and young women.

Category 1: Perceived Facilitators and Barriers

Participants valued community-based peer-led SRH education in Moroto, recognising it as a crucial and innovative approach to addressing their unmet SRH needs. They saw peer support as an effective way to encourage youth to seek and use SRH services. Peer-led models were viewed as empowering, enabling AGYW to take control of their health. Trust in peers was a key facilitator for successful SRH education delivery.

“Most times I get advice from friends when I have big issues disturbing my mind because I trust my friend” (Adolescent, age 18-24, in school).

The availability of SRH services was seen as key to supporting community-based peer-led SRH education. Participants noted that educating adolescents is most effective when services are easily accessible. SRH services were available at Moroto Regional Referral Hospital, health centers like Nakapelimen, and schools. Many facilities also had youth-friendly spaces offering tailored SRH services for AGYW.

“We obtain SRH services from the teenage center at Moroto RRH or from Nakapelimen health center” (Adolescent girl, age 18-24, in school).

For a community-based peer-led SRH education intervention to succeed, it must build on AGYW’s awareness of existing SRH services, supported by easy access to information from schools, health facilities, parents, boyfriends, and peers. Participants saw themselves at high risk of unwanted pregnancies due to alcohol abuse, theft, and poverty, which drive early marriages. However, they felt empowered to make or change SRH decisions independently.

“Most young people are aware of the availability of services, especially those in school, because they have different ways to get information. For example, at school we have a senior woman teacher who gives us information” (Girl, age 15-17, in school).

In regard to SRH information, key concerns included stigma and the risk of health status disclosure by peers or healthcare providers. Some AGYW distrusted peers with sensitive reproductive health information, as they lacked professional training in confidentiality. Another challenge was limited access to accurate SRH information, with myths and misconceptions from unreliable sources posing a risk to effective service delivery.

“There is a lot of awareness among AGYW on SRH. The problem is getting the courage to go to hospital when you have a problem which is common for many of us because we fear

people pointing at us or showing us bad attitude and telling the public about our problems” (Young woman, given birth).

“In Moroto District, most youth are aware of the value of SRH services especially those who are educated. The only problem is that in our community, many youths cannot access correct information to be able to make a correct decision. Sometimes girls say this is bad based on a myth” (Adolescent, age 18-24, in school).

Another barrier foreseen to affect the effectiveness of a community-based peer-lead SRH education, is lack of time to attend such sessions by the AGYW. Given their assigned gender roles, as girls they spend most of the time doing domestic chores including; cooking, taking care of siblings, fetching water among others. This leaves them with limited time if any to attend hospitals or going to places where sessions may have been organised.

“Sometimes our parents give us a lot of work and even punish you when you refuse. At times when you say you want to go to hospital they simply think, that you want to go and visit a boyfriend yet at times you don’t want them to know the type of disease that you suffering from” (Girl, age 15-17, in school).

Category 2: AGYW’s SRH Decision Making

Family power dynamics influence AGYW’s decisions on SRH in Moroto. Parents, older siblings, or partners have more control and often decide on matters like family planning, contraceptive use, or HIV testing. Many girls feel they cannot refuse their parents’ decisions since they still live with them. Others comply with their partners’ wishes out of fear of domestic violence or to maintain their relationships.

“In many cases our parents influence our decisions in many ways and sometimes they force us to do certain things like getting married when you are still very young in order to bring wealth to the family” (Girl, never given birth).

“Sometimes my decisions are influenced by

friends or my boyfriend but this is the best choice because anything can happen between me and him if I did something without his knowledge” (Girl, ever given birth).

Category 3: Cultural Perspectives

Cultural norms strongly influence the acceptance of peer-led SRH education in Karamoja. Early marriage is prestigious, as it increases a girl's value. Marrying an older, wealthy man is highly valued for the large dowry he provides. A virgin bride brings great respect to her parents, leading some to force their daughters into early marriage to gain this honor.

“When you marry an older man, he can take good care of you and can bring wealth to the family by giving them more animals” (Girl, never given birth).

“The community here believes that when their daughters get married off as early as possible it brings respect to the parents especially if she is a virgin and that means more wealth into girl’s family” (Girl, age 15-17, in school).

Family planning services are seen as only for women who have given birth. Many believe contraceptives cause infertility, leading to stigma for schoolgirls or those without children who seek them. Some AGYW feel shy discussing contraceptives with health workers, viewing them as parental figures who may judge them for being sexually active before marriage.

“People in this community think young people should not use family planning. It should be used by people who have had the children they want because it causes infertility” (Girl, ever given birth).

Abortion is considered taboo in Moroto District, with society stigmatizing any girl suspected of having one. It is seen as shameful, regardless of the circumstances, and a girl who has had an abortion may struggle to find a husband. There is a belief that abortion brings a

curse to the girl's family, leading to the loss of lives in the future.

"Most people hear treat women who have aborted with shame and they are discriminated because they have brought a curse to the family and that family members will start dying because of that curse" (Girl, ever given birth).

In Moroto District, men are the primary decision-makers in marriages, and all decisions within the home must be approved by the husband. Most men oppose family planning because they value having many children, seeing them as symbols of wealth. Girl children, in particular, are viewed as assets that can bring wealth through bride price. As a result, women often fear using contraceptives or family planning without their husband's consent, which undermines the effectiveness of SRH services.

"The only problem is that in our community of Moroto District, a man's decision in the home is final for the young women who are married so if a man says no, you cannot get contraceptives or go for family planning" (Adolescent girl, ever given birth).

"The man here decides for his wife to go for family planning. The problem most men do not like some of these things" (Adolescent girl, 18-24, in school).

Category 4: Recommendations

Participants made two major recommendations if a community-based peer-led SRH education is to smoothly take place in Moroto. First, community sensitization aimed at changing the mindset of people in Karamoja about the benefits of SRH services. In some homes, girls seeking SRH services are seen as wasted. It is believed that sensitization will help to deal with and debunk some cultural beliefs attached to SRH services for AGYW in the region. Furthermore, sensitization will improve access to correct SRH information.

"You need to increase community sensitization on health problems and where young people can go for services. Help

communities know that it's not bad for a girl to receive such services" (Girl, age 15-17, in school).

The second is associated with stigma reduction training for the peers selected to lead the community-based peer-led SRH education. With this kind of training, peers will be able to avoid disclosure of fellow AGYW information if they approached them. This training will also help the service providers to use non-judgemental language and attitude that scare adolescent girls from going to facilities to access SRH services.

"Train health workers and those people in hospital, they should not scare us with the language of blaming us and showing us attitude that they do not want to work on us" (Girl, ever given birth).

There were also suggestions to have women handling SRH service delivery to the AGYW instead of men. Girls believe they can freely open up to a fellow woman than to a man. This is underpinned by the advice for hospitals or other health centres to emulate what is done in schools where girls' reproductive health issues are handled by senior women not men.

"Female issues should be handled by women because it promotes opening up. I think it is the same reason why schools have senior one teacher" (Girl, ever given birth).

Findings from the In-depth Interviews with District Health Officer, Assistant District Health Officer, Community Development Officer and in Chargers of Healthcare Facilities.

Category 1: Barriers to Access SRH Information

AGYW in rural areas mainly rely on friends for SRH information due to limited access to healthcare facilities and parental guidance. Low literacy levels and poor media reach further restrict information flow. Cultural myths and social beliefs discourage AGYW from seeking SRH services, reinforcing misconceptions. Many are unaware of available services and

face infrastructural and social barriers to access.

"The community in Moroto is highly conservative with low literacy levels, limiting AGYW's willingness to take on information. Most young women mainly get SRH information from friends, as parents in this enclosed system cannot discuss such topics with their children" (IDI-3).

"Although SRH information is shared on the radio through Resident District Commissioner airtime, the radio coverage in the region is very low, making it difficult for many AGYW to access this information" (IDI-2).

"Young people are aware that SRH services are available in hospitals, but the main challenge is the fear of being discovered with conditions like STDs, which discourages them from seeking care." (IDI-5).

"Most youth in town are aware of SRH services, but their use is limited by attitudes, fear, lack of comprehensive knowledge and lack of drugs in the community health facilities (IDI-1).

Category 2: Facilitators to Access to SRH Information

In urban areas, AGYW are more aware of SRH services and know where to access them, including hospitals, schools, and the media. Health workers confirm that services like counseling, family planning, and health education are available at health centers, with advanced services at places like the Teenage Centre in Moroto Regional Referral Hospital. AGYW who can afford private care also seek services at private clinics. When given clear information, many are open to using SRH services where access is easier.

"Here in Moroto, most AGYW get information on SRH when they come to the hospital, through radio and TV. Some of them get information on SRH through their teachers at school or from reading the Straight Talk newspaper" (IDI-2).

"Most youth embrace SRH services by using them when they need them. As a counsellor and

nurse at the health center, every day when I am on duty, I attend to young people with different SRH needs" (IDI-4).

Category 3: Risky Sexual Behavior among AGYW

Respondents noted that AGYW, especially those from less supportive family backgrounds, often engage in risky behaviors like excessive drinking and unsafe sex, which impair their judgment and hinder access to SRH services. They highlighted that peer-led, community-based education could be effective in addressing SRH issues in Moroto, especially if peer educators are trusted and well-known. Given AGYW's high-risk lifestyles and limited awareness of the consequences of their actions, respondents emphasized the need for focused SRH services and community education to improve service utilization and reduce risky sexual behavior.

"Youth start drinking early at a young age and get involved in early sexual relationships with mature men." (IDI-4).

"Most young women marry older men, and the decision to use SRH services such as family planning is in the hands of their husbands. As a woman, you have nothing to say." (IDI-3).

"There is a lot of drinking and bad sexual behavior. Young people start drinking when they are still children, and society sees this as normal and a way of socialization." (IDI-5).

Category 4: Decision-Making Power among AGYW

Respondents noted that AGYW in Moroto District struggle to make independent decisions about SRH due to economic challenges and reliance on parents, husbands, or boyfriends for survival. This dependence limits their autonomy, with decisions about family planning and marriage often made by men, parents, or clan leaders. Marriage is viewed as an economic opportunity, reducing AGYW's ability to make informed SRH choices. Peer influence, limited knowledge, and cultural

norms also hinder decision-making, especially in rural areas. While community-based peer-led SRH models may be affected by AGYW's low decision-making power, involving community leaders in sensitization efforts could improve acceptance and access to SRH services.

"A lot of teenage marriages are influenced by their parents, AGYWs have limited ability to make personal decisions even on their health" (IDI-3).

"Some women have attempted to secretly use family planning without their husbands' knowledge and this sometimes has led to instances of gender-based violence" (IDI-4).

"The decision-making power is likely to affect SRH because many young people may not be able to decide for themselves yet wrong information is very popular" (IDI-1).

"If this program is to succeed, we will need to work more with the health care system and community champions who are always good in delivering messages and are trusted by the community" (IDI-2).

Cultural Barriers and Myths Surrounding SRH Services

Respondents highlighted that marriage is seen as a means of gaining wealth through livestock, leading to early marriages for young girls. Family planning is often stigmatized by negative myths, and abortion is strongly condemned. However, some women still seek family planning services. Addressing these misconceptions could enhance the acceptance of community-based peer-led SRH education. The respondents emphasized the cultural value of marriage as a way to enrich families, which conflicts with family planning. They suggested involving influencers and satisfied users to promote the intervention and increase SRH service acceptance.

"In this community, using family planning is like a head on collision with cultural values, some people think when you use family planning you may not have children anymore" (IDI-4).

"Here people value large families and relate this to wealth. Socially abortion is perceived negatively and it is believed that family members will continuously die in that family where the abortion had been committed" (IDI-5).

"Here in our community people look at marriage as a way of getting rich by giving away their daughters to a person who gives them more animals" (IDI-1).

Integration of Community-based Peer-led SRH Education into Existing Health Programmes

Respondents noted that SRH services are free at the Regional Referral Hospital, health centers, and institutions like Marie Stopes and Straight Talk Foundation. They believe community-based, peer-led SRH education would be well-received, especially if the peer educators are trusted in the community. Integrating this education into existing health programs could improve referrals to hospitals and address barriers like long distances to health facilities and limited drug supplies from national systems.

"Most health facilities in the region offer SRH services but sometimes young people fear to come to hospital when they have problems. Other institutions that offer SRH services are Straight talk foundation, Brac Uganda, save the children, Doctors with Africa, CUAAM, UNFPA and Marie stopes" (IDI-1).

"It is nice to hear about this program. I think this is a good idea and when we add it to the existing health programmes, we can get people referred for treatment from the community" (IDI-3).

"The community-based peer-led SRH education program will require adopting the champions approach and integrating them into a team of service providers that already exist in the formal health care system. This peer-led approach will be more acceptable than other models" (IDI-5).

"Integrating gender sensitivity into the

community-based peer-led SRH education model, by involving female and younger health workers, can help address barriers such as conservative cultural practices, religious influences, and long distances to health facilities” (IDI-2).

Discussion

In Moroto District, adolescent girls and young women (AGYW) recognize the potential of CBPL-SRH education in reducing risky sexual behaviors and enhancing SRH knowledge. This is supported by findings from similar studies in Zambia and South Asia, where peer-led interventions significantly increased HIV awareness and engagement in SRH discussions [19][20]. These interventions empower AGYW to have more control over their health.

Trust among peers emerged as a facilitator for CBPL-SRH education, with AGYW preferring advice from peers rather than adults or healthcare providers. This aligns with research showing the effectiveness of integrated HIV and SRH services when complemented by peer support, as seen in South Africa [21].

SRH services at key locations, such as Moroto Regional Referral Hospital and local health centers, were identified as potential enablers for CBPL-SRH education. However, simply having youth-friendly services does not ensure access or utilization, highlighting the need for greater focus on improving both access and use of these services [22].

While CBPL-SRH education shows promise, factors like stigma, cultural norms, misconceptions, and limited decision-making power among AGYW may hinder its effectiveness. Stigma surrounding SRH topics often deters AGYW from seeking services, especially in a cultural context where discussing SRH is taboo. Peer-led programs can reduce stigma by fostering trust and confidentiality, while respecting local norms. Traditional gender roles that prioritize male

authority over female autonomy also limit AGYW's access to SRH information. This is consistent with findings in Morocco, where gender norms for women affected SRH access, leading to suffering and frustration for young women who lacked autonomy in decision-making [25].

Early marriage and domestic responsibilities, common in Moroto, also hinder AGYW's participation in SRH education programs [26]. Effective interventions should offer flexible schedules or integrate SRH education into daily activities. Myths and misconceptions about SRH, such as beliefs that contraceptives cause infertility or promote promiscuity, further hinder the success of peer-led education. Peer educators should be equipped with culturally sensitive, evidence-based information to counter these myths, which are prevalent in rural communities such as those in Nigeria [28] and Karamoja, where traditional beliefs govern SRH [29].

Beliefs surrounding virginity, fertility, and abortion also influence the effectiveness of CBPL-SRH education. In many traditional societies like the Karamojong, early sexual activity, abortion, and fertility are deeply linked to family honor, leading to stigma and social exclusion [26]. CBPL-SRH programs must address these beliefs and promote safe, legal alternatives to abortion, which is often viewed as a moral transgression in Karamoja [31].

Conclusion

This study highlights the potential of CBPL-SRH education to reduce risky behaviors and improve SRH knowledge among AGYW in Moroto District. Key factors for success include trust among peers, youth-friendly services, and culturally sensitive approaches. However, contextual barriers such as stigma, traditional gender norms, and misconceptions must be addressed for effective outcomes. By fostering confidentiality, providing flexible scheduling, and equipping peer educators with accurate, culturally relevant information, CBPL-SRH

education can empower AGYW to make informed health decisions, ultimately improving their well-being.

Acknowledgements

We thank Clarke International Research Ethics Committee (CIUREC) and the Uganda National Council for Science and Technology (UNCST) for ethical approval, the District Health Officer of Moroto District for granting us administrative clearance to conduct the study, Last but not least, we thank the Community Development Officer (CDO), Assistant District Health Officer (ADHO), and health facility in-charges in Moroto District and

References

- [1]. Adrawa, J., 2023, Risky sexual behaviors and their health implications. *Journal of Sexual Health*, 14(3), 234-245.
- [2]. Yadegarfar, M., 2020, Biopsychosocial predictors of risky sexual behaviours among the gay men in the UK.
- [3]. Jones, K. G., et al., 2015, The prevalence of, and factors associated with, paying for sex among men resident in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3), *Sexually Transmitted Infections*, 91(2), pp. 116–123.
- [4]. Maguen, S., Nichter, B., Norman, S. B., & Pietrzak, R. H., 2023, Moral injury and substance use disorders among US combat veterans: Results from the 2019–2020 National Health and Resilience in Veterans Study. *Psychological medicine*, 53(4), 1364-1370.
- [5]. Reynolds, B. W., et al., 2019, Executive function, impulsivity, and risky behaviors in young adults. *Neuropsychology*, 33(2), p. 212.
- [6]. Alsubaie, A. S. R., 2019, Exploring sexual behaviour and associated factors among adolescents in Saudi Arabia: a call to end ignorance', *Journal of Epidemiology and Global Health*, 9(1), p. 76.
- [7]. Scull, T. M., et al., 2020, The understudied half of undergraduates: risky sexual behaviors among

the Adolescent Girls and Young Women (AGYW) in Moroto District who consented to participate in this study.

Conflict of Interest

All authors declare no conflict of interest.

Contributions

AK: study conception and design. WK: acquisition of data. AK: analysis and interpretation of data. AK, WK, and AM: drafting of manuscript. AK, WK, SO, and AM: critical revision and final approval of the manuscript.

community college students', *Journal of American college health*, 68(3), pp. 302–312.

- [8]. Darteh, E. K. M., Dickson, K. S., and Amu, H., 2020, Understanding the socio-demographic factors surrounding young peoples' risky sexual behaviour in Ghana and Kenya', *Journal of Community Health*, 45(1), pp. 141–147.

- [9]. Adimora, A. A., & Schoenbach, V. J., 2005, Social context, sexual networks, and racial disparities in rates of sexually transmitted infections. *The Journal of Infectious Diseases*, 191(Supplement_1), S115-S122.

- [10]. Lehrer, J. A., Lehrer, E. L., & Koss, M. P., 2013, Unwanted sexual experiences in young men: Evidence from a survey of university students in Chile. *Archives of sexual behavior*, 42, 213-223.

- [11]. Higgins, J. A., & Smith, N. K., 2016, The sexual acceptability of contraception: reviewing the literature and building a new concept. *The Journal of Sex Research*, 53(4-5), 417-456.

- [12]. Ministry of Health. 2024, High rates of teenage pregnancy; Director General Health Services, highlights strategies to curb this growing burden. Available at: <https://www.health.go.ug/2024/02/27/high-rates-of-teenage-pregnancy-director-general-health-services-dr-henry-g-mwebesa-highlights-strategies-to-curb-this-growing-burden/>

- [13]. Ssebunya, R. N., et al., 2018, Prevalence and correlates of HIV testing among adolescents 10–19

years in a post-conflict pastoralist community of Karamoja region, Uganda, *BMC public health*, 18(1), pp. 1–8.

[14]. Uganda Bureau of Statistics. 2014, Human Poverty Index and Administrative Divisions in Moroto District. Kampala: Uganda Bureau of Statistics.

[15]. Uganda Health Sector Performance Report. 2020/2021. Available at: <https://library.health.go.ug/sites/default/files/resources/Annual%20Health%20Sector%20Performance%20Report%202020-21-1.pdf>

[16]. Desrosiers, A., Betancourt, T., Kergoat, Y., Servilli, C., Say, L., & Kobeissi, L., 2020, A systematic review of sexual and reproductive health interventions for young people in humanitarian and lower-and-middle-income country settings. *BMC public health*, 20, 1-21.

[17]. Ministry of Education and Sports. 2018, National Sexuality Education Framework. Available at <https://scorecard.prb.org/wp-content/uploads/2019/06/Uganda-National-Sexuality-Education-Framework.pdf>.

[18]. Bryman, A., 2016, Social research methods. *Oxford university press*.

[19]. Hensen, B., Floyd, S., Phiri, M. M., Schaap, A., Sigande, L., Simuyaba, M., & Ayles, H., 2023, The impact of community-based, peer-led sexual and reproductive health services on knowledge of HIV status among adolescents and young people aged 15 to 24 in Lusaka, Zambia: The Yathu Yathu cluster-randomised trial. *PLoS Medicine*, 20(4), e1004203.

[20]. Kteily-Hawa, R., Hari, S., Wong, J. P. H., Chikermane, V., & Chambers, L. A., 2019, Development and implementation of peer leader training for community-based participatory sexual health research. *Progress in Community Health Partnerships: Research, Education, and Action*, 13(3), 303–319

[21]. Zuma, T., Busang, J., Hlongwane, S., Chidumwa, G., Gumede, D., Luthuli, M., & Shahmanesh, M., 2024, A mixed methods process evaluation: Understanding the implementation and delivery of HIV prevention services integrated within sexual reproductive health (SRH) with or

without peer support amongst adolescents and young adults in rural KwaZulu-Natal, South Africa. *Trials*, 25(1), 448.

[22]. Zuurmond, M. A., Geary, R. S., & Ross, D. A., 2012, The effectiveness of youth centers in increasing use of sexual and reproductive health services: A systematic review. *Studies in Family Planning*, 43(4), 239–254.

[23]. Pound, P., Langford, R., & Campbell, R., 2016, What do young people think about their school-based sex and relationship education? A qualitative synthesis of young people's views and experiences. *BMJ Open*, 6(9), e011329

[24]. Tam, A., 2019, The negotiation and management of sexual and reproductive health behaviour in marital relationships in rural south-western Uganda (*Doctoral dissertation, University of East Anglia*).

[25]. Ouahid, H., Mansouri, A., Sebbani, M., Nouari, N., Khachay, F. E., Cherkaoui, M., & Adarmouch, L., 2023, Gender norms and access to sexual and reproductive health services among women in the Marrakech-Safi region of Morocco: A qualitative study. *BMC Pregnancy and Childbirth*, 23(1), 407.

[26]. Muhanguzi, F. K., Bantebya-Kyomuhendo, G., & Watson, C., 2017, Social institutions as mediating sites for changing gender norms: Nurturing girl's resilience to child marriage in Uganda. *Agenda*, 31(2), 109–119.

[27]. Sommer, M., & Mmari, K., 2015, Addressing structural and environmental factors for adolescent sexual and reproductive health in low-and middle-income countries. *American Journal of Public Health*, 105(10), 1973–1981.

[28]. Ankomah, A., Anyanti, J., & Oladosu, M., 2011, Myths, misinformation, and communication about family planning and contraceptive use in Nigeria. *Open Access Journal of Contraception*, 95–105.

[29]. Rwabukwali, C. B., Achen, S., & Atekyereza, P., 2018, Sexual and reproductive health of adolescent girls in Karamoja in Uganda: A socio-cultural perspective. *Journal of Emerging Trends in Economics and Management Sciences*, 9(6), 325–335.

[30]. Achen, S., Atekyereza, P., & Rwabukwali, C. B., 2021, The role of culture in influencing sexual and reproductive health of pastoral adolescent girls in Karamoja sub-region in Uganda. *Pastoralism*, 11(1), 25.

[31]. Haddad, L. B., & Nour, N. M., 2009, Unsafe abortion: Unnecessary maternal mortality. *Reviews in Obstetrics and Gynecology*, 2(2), 122.