Reproductive Health Education Needs of Adolescent Girls in Luwero district, Uganda

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우간다 루웨로 지역 여성 청소년의 성생식보건 교육 수요

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Abstract The study aims to identify unmet needs, barriers, and constraints in reproductive health education for adolescent girls in Luwero, Uganda. The study included a survey of 55 young women (aged 14-26) in the region and interviews with 40 stakeholders, including teachers and healthcare workers. Results showed that the majority of respondents (87%) rely on schools for reproductive health information, preferring health institutions (58%) for reproductive health services. Over half of respondents encountered obstacles accessing relevant information due to limited resources and cultural barriers and emphasized the significance of schools and health institutions as essential health information sources. Schools and health institutions need to collaborate to enhance reproductive health education for young women's accessibility.

Key Words: Reproductive health, Reproductive health education, Adolescents, Needs assessment, Uganda

요 약 본 연구는 우간다의 루웨로 지역 여성 청소년을 대상으로 성생식보건 교육의 수요, 접근장벽, 제약을 파악하기 위해 수행되었다. 루웨로 지역의 14-26세 젊은 여성 55명을 대상으로 설문조사를 실시하고 교사, 의료인력등 40명의 이해관계자를 대상으로 면담을 진행하였다. 연구 결과, 응답자 대부분은 성생식보건 정보를 학교를 통해 얻는 것으로 답하였으며(87%) 의료기관에서 성생식보건 서비스를 받기를 선호하였다(58%). 응답자들의 절반이상은 자원 부족이나 문화적 장벽으로 성생식보건 정보를 얻는데 어려움을 경험하였고 학교와 의료기관이 보건 정보를 제공하는 가장 중요한 장소라는 점을 강조하였다. 따라서 여성 청소년의 성생식보건 교육 접근성을 높이기위해 학교와 의료기관의 협력이 요구된다.

주제어: 성생식보건, 성생식보건 교육, 청소년, 수요조사, 우간다

^{*}This work was supported by the National Research Foundation of Korea (NRF) grant funded by the Korea government (MSIT) (No. 2022R1F1A1068934).

^{*}This article is a revision of the first author's master's thesis from the University of Florida.

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1. Introduction

In Uganda, the issues of early pregnancy and marriage are significant concerns that impact the country's health and social aspects[1]. In 2016, the maternal mortality ratio in Uganda was reported to be 336 deaths per 100,000 live births, and a substantial portion of these deaths (17.2 percent) occurred among teenage mothers aged 15 to 19. While many women plan and desire pregnancies, adolescents often face unintended pregnancies[2]. The 2016 Uganda Demographic Health Survey (UDHS) reveals that one in every four females (25 percent) aged 15 to 19 is pregnant with their first child or has already given birth[3].

Insufficient knowledge about contraceptive methods and limited availability of reproductive health services and education are significant factors contributing to unintended teenage pregnancies. The lack of accurate information about reproductive health, including sexual anatomy, puberty, menstruation, pregnancy, childbirth, and family planning leaves many young girls unaware of what constitutes a healthy and safe lifestyle and their rights as women[4]. A study conducted by Bankolep et al. in Uganda discovered that approximately half of the girls and one-third of the boys were unaware that condoms should be used only once[5]. According to Neema reproductive health education for teen girls in Uganda is still inadequate and not tailored to their needs, resulting in limited access to contraceptive methods for many teenagers[6].

The insufficient availability of birth control options indicates a lack of investment in the overall development of girls, particularly in their education and health[7]. These circumstances arise due to unfavorable attitudes towards girls' independence, a devaluation of education, particularly for girls, and various

barriers that prevent girls from accessing or continuing their education[7]. Additionally, inadequate education, limited child protection services, and a lack of opportunities contribute to a lack of knowledge among many teenage girls regarding their rights as women[8].

The research aimed to identify the unmet requirements, obstacles, and limitations related to the availability of reproductive health education for young women in Luwero. Its objective was to find the most effective approaches to address those limitations. This research involved collecting data and analyzing factors affecting adolescent girls, specifically focusing on the Luwero area in Uganda. A needs assessment and situational analysis examined teenage girls' most critical health and reproductive health education needs. This article is based on the author's master's thesis[9].

2. Methods

2.1 Study Area

The research took place in Luwero district, Uganda, spanning from May to July in 2016. Luwero is in the central part of Uganda. The Uganda Bureau of Statistics estimated the population of Luwero at 476,900 in 2016[1]. According to the same source, Uganda is stratified into administrative units including districts, counties, sub-counties, parishes and villages. There are three counties, sub-counties, 91 parishes and 592 villages within the district. The number of health facilities was 39, and the poverty rate for the district was 18% in 2012[10, 11]. During the 1980s, Luwero district experienced a brutal civil war, lasting for five years. This conflict led to a high number of casualties, including deaths, rapes, and the exploitation of innocent civilians[12].

2.2. Study Population and Data Collection

The needs assessment survey on reproductive health education focused on young women residing in Luwero district. Although the definition of adolescence in Uganda typically ends at age 19, this research involved participants up to aged 26 women to gather insights from their past experiences and recommendations for enhancing services for younger women. One of our trained researchers conducted and supervised surveys and interviews. The needs assessment survey comprised 55 young women.

The need assessment survey was conducted in secondary and primary schools, and health center in the Luwero district. While the schools were chosen randomly, the selection of the health center was purposeful due to its provision of reproductive health services, making it a suitable representation of youth-friendly health facilities in the area. With the consent of the schools and health centers, teachers, and health workers, they assisted the researcher in mobilizing young women aged 14 to 26 for the survey. The teachers and health workers randomly selected and distributed the self-report survey questionnaires to the chosen young females. The participants were given the survey forms and allowed to complete them at home per the researcher's instructions. The completed surveys were then submitted to the responsible person, and the researcher collected them on separate days.

A semi-structured interview was conducted with 31 important individuals and 9 young women aged 14 to 26. The interviews took place in various locations, including secondary schools, primary schools, non-governmental organizations, one Catholic church, the district health office, the district education office, and health centers in Luwero district. The

researcher personally conducted face-to-face semi-structured interviews with carefully selected stakeholders and young women. The interviewees consisted of school teachers, health professionals, non-governmental organization members, community leaders, and government officials who actively participate in offering reproductive health services within the community.

2.3. Study Design

We utilized quantitative and qualitative approaches in a cross-sectional study to gain a thorough understanding. The study collected information on the availability and accessibility of reproductive healthcare services and education for young women through field visits and secondary data sources. Throughout the research process, the methods and design were tailored to respect societal communication norms.

The survey tool used in the study drew inspiration from two questionnaires: the 'Illustrative Ouestionnaire for Interview-Surveys with Young People' designed by John Cleland, and the 'Topics for Individual In-Depth Interviews and Focus Group Discussion: Partner Selection, Sexual Behaviour and Risk Taking' designed by Roger Ingham and Nicole Stone[13]. The instrument is widely used to capture needs and concerns of young people regarding reproductive health. The validity of this instrument was reported to be high[14]. The purpose of the needs assessment survey was to gather women's viewpoints on the primary health and reproductive health education requirements Table 1. The survey investigated young womens' viewpoints on reproductive health, social connections, access to healthcare services, obstacles to accessing them, and potential remedies. The survey design primarily

evaluated adolescents' accessibility to reproductive health information and education rather than their knowledge, abilities, or behavior. It encompassed inquiries about demographic information, 26 open-ended questions, and four multiple-choice questions. The open-ended questions are designed to gather information about information channels and challenges in accessing reproductive health. They include inquiries such as "Do young people of your age talk openly to other people about sex and related issues? If yes, what issues do you talk about?" and "Is there anyone that young people don't talk to or don't like talking to about these issues? If yes, who is it?" Table 2 presents demographic information and multiple-choice responses, while the results of the open-ended questions are analyzed together with the interviews in the results descriptions.

Semi-structured interviews utilized an open and informal interview style. The interview questions were created with the purpose of determining the thoughts and viewpoints of the main individuals involved regarding various reproductive health matters. The questions encompassed a wide range of information regarding the topics of concern. Through these questions, we were able to compile a list of general health concerns, specifically related to reproductive health, and delve into the reasons behind their occurrence as well as potential solutions.

In our analysis of the interviews, we employed thematic analysis to identify similarities, distinctions, and connections[15]. We categorized the important findings by integrating the results of the needs assessment survey and semi-structured interviews.

Table 1. Question structure employed for conducting needs assessment

Topic Focus	Question	Source
Important sources for RH	Where have you gained the most knowledge about reproductive health and health information?	Cleland et al., 2001
Preferred person to discuss about RH	Who would you prefer to engage in discussions about topics such as pregnancy, HIV/AIDS, abstinence, and contraception?	Cleland et al., 2001
Experience of obstacles in accessing RH	Have you encountered any difficulties in accessing reproductive health information or education in the past?	Own
Obstacles accessing RH	What challenges have you encountered when seeking reproductive health education in the past?	Own
Preferred location for RH	Where do you believe reproductive health services for young people should be offered?	Cleland et al., 2001

^{*}RH: reproductive health

3. Results

The survey gathered information from 55 participants, which included details about their demographics, such as gender, age, educational level, and religious affiliation. The group of young females in the survey falls within the age range of 14 to 26, with an average age of 18. The participants' education levels were divided into those below secondary school (65%) and those beyond high school (34%). Regarding religion, most respondents identified as Christian (76%), while a smaller percentage identified as Muslim (14%).

3.1 Primary Information Channel

The survey participants predominantly obtained reproductive health and general health information from their school environment, accounting for 87% of respondents. Interviews further supported the notion that schools played a central role in providing information to adolescents. Various stakeholders such as school teachers, healthcare professionals, religious leaders, and government officials, acknowledged that young individuals primarily

acquired information from their teachers within school settings. Additionally, some stakeholders mentioned the influence of mass media platforms like television and radio as secondary sources of new information.

Since the majority of teenagers dedicate a considerable amount of their day to educational institutions, where they learn important information about general health and reproductive health, including topics like puberty and physical changes. Normally, it is the responsibility of experienced teachers, both

male and female, to provide reproductive health education to students. However, many teachers have recognized the lack of a specific timeframe for delivering such information. The findings indicate that young females perceive school as their primary and crucial source of knowledge regarding health subjects, surpassing the influence of parents, friends, and mass media in information dissemination. Nonetheless, a restriction exists in obtaining sufficient information within the school environment.

Table 2. Descriptive characteristics and reproductive health needs of study respondents (N=55)

Variables		N (Mean ± SD)	% (Max/Min)
Gender	Male	0	0
	Female	55	100.00
Age	Continuous	(18 ± 2.55)	(26/14)
Education	<=Secondary	36	65.45
	>=High school	19	34.55
Policion	Muslim	8	14.55
Religion	Christian	42	76.36
Important sources for RH	School	48	87.27
	Television	11	20.00
	Radio	9	16.36
	Doctors	14	25.45
	Church/Mosque	5	9.09
	Newspapers or Magazines	12	21.82
	Friends	22	40.00
(multiple responses)	Parents	26	47.27
	Adult relatives	6	10.91
	Sisters, brothers, or teenage relatives	3	5.45
	Boyfriend	3	5.45
	Pamphlets or flyers	0	0
	Others	0	0
	Parents	13	23.64
	Other family member	0	0
Preferred person to	School teacher	6	10.91
discuss about RH	Friends	9	16.36
(multiple responses)	Health worker (clinic, hospital)	20	36.36
	Religious leader	2	3.64
	Other	5	7.27
Experience of obstacles	Yes	30	54.55
for RH	No	25	45.45
	RH was expensive	13	23.64
	RH education was not available	17	30.91
Obstanlar assessing DII	Parental disapproval	7	12.73
Obstacles accessing RH education (multiple responses)	Embarrassment or shyness to access RH	16	29.09
	Ignorance to get RH	11	20.00
	Immorality to know RH	3	5.45
	Against from religion	1	1.82
	Other	0	0
Preferred location for RH (multiple responses)	Health center and Hospital	32	58.18
	School	14	25.45
	Church	2	3.64
	Home	2	3.64
	rione	_	0.01

"During break or lunch periods, we gathered female students to provide education on menstruation and demonstrate how to create sanitary pads." [Senior women teacher]

"While certain important subjects are addressed in our classes, there was insufficient time to adequately cover all the essential information and address students' inquiries." [Science teacher]

"We obtained information from friends or other sources, but we acknowledged that the information was frequently unclear or unsuitable." [Teen Girl]

In terms of people's preferences for accessing reproductive health services and information, a survey revealed that 36% of the participants favor engaging in conversations about subjects like pregnancy, childbirth HIV/AIDS, abstinence, and contraceptive with healthcare providers. The majority of participants, approximately 58%, expressed that hospitals and health centers should be the primary providers of reproductive health services. Furthermore, 25% of respondents identified schools as potential sources of guidance regarding sexual health services for young individuals. The interview findings also emphasized that schools and healthcare institutions are the most crucial sources of information pertaining reproductive health, as well as the preferred locations for accessing services and information in the future.

"Health workers and educators should offer helpful guidance since young individuals fear discussing sexual health with their parents." [Teen girl #1] "Schools and healthcare facilities are secure environments with knowledgeable professionals who specialize in assisting teenagers." [Teen girl #2]

"Schools are accessible within most communities and can easily reach single-gender groups." [Young woman #1]

"Hospitals and healthcare centers offer readily accessible information and individualized services for all individuals." [Young woman #2]

3.2. Challenges in Accessing Reproductive Health Education

According to the survey participants, a majority of 54% encountered difficulties when trying to access information or education related to reproductive health. Among young women who faced these challenges, the most frequent restrictions was the unavailability of reproductive health education close in Additionally, proximity (30%). 29% of respondents expressed feeling too ashamed to seek information from any source. Other significant barriers included the cost of services (23%) and a lack of awareness about reliable sources of information (20%).

The interviews conducted unveiled that numerous teenage girls experience apprehension when it comes to directly seeking information about reproductive health. Cultural and traditional obstacles create difficulties for young women in expressing their need for such information. Teachers, healthcare professionals, and community leaders have observed that parents feel uneasy when discussing matters of sexuality with their children. Additionally, certain individuals associate family planning with negative ideas. These attitudes and societal obstacles can impede young women from

accessing crucial information about their well-being and personal growth.

"In Ugandan cultures, it was common for parents to avoid discussing sexuality with their teenage children due to its taboo nature." [Community leader]

"We refrain from openly discussing topics such as sexuality and contraception with our students." [Teachers]

Furthermore, a lack of adequate teaching resources and personnel poses an additional challenge in imparting precise knowledge about reproductive health to adolescents. In the majority of schools, textbooks were only available to the teachers, leaving students without access to essential learning materials. Consequently, many students resorted to transcribing the information presented by teachers on the blackboard as they couldn't afford their own textbooks.

"Conveying information about pregnancy, contraceptive methods, or bodily changes solely through verbal explanations, without the aid of visual materials, has significant challenges." [Biology teacher]

"In many rural areas within our district, there is an insufficient number of teachers, resulting in the need to teach multiple levels of classes and attend to numerous students simultaneously. Vital topics like pregnancy and the reproductive health system of our bodies are either omitted or hastily explained due to time constraints, leaving many students with misunderstandings on crucial health matters." [Biology teacher]

3.3. Services and Information Required by Young Women

When it comes to the specific services and information that young women need, the most common responses highlighted their desire for greater understanding of topics such as menstrual cycles, puberty, reproduction, and sanitary pads. Many young women expressed a need for greater understanding of preventing unwanted pregnancy and sexually transmitted diseases like AIDS. Some girls emphasized the necessity for additional youth centers in their communities. as well as access to contraceptives and family planning counseling for sexually active youths. Additionally, many girls emphasized the importance of making the services and programs offered by healthcare institutions, and schools more appealing and engaging. Others expressed a need for increased access to radios, magazines, the Internet, and various social media platforms that can promote these services and provide diverse and helpful information.

3.4. Significance of School Outreach Programs

When asked about the ideal place to educate adolescents about reproductive health, most interviewees and survey respondents agreed that schools are the most suitable setting. They believed that schools are effective because young people spend significant time there, allowing information to reach many youths simultaneously. Unlike other sources like television or radio, which may not be accessible to some rural areas, school attendance rates are relatively high in Uganda. Stakeholders expressed the view that schools should be the primary location for guiding and counseling young individuals.

According to the interviewed teachers, some health centers have implemented outreach

programs in schools, collaborating with teachers to provide reproductive health services. They acknowledged the importance of appropriately delivering essential information about menstruation, family planning, healthy relationships, sexually transmitted infections (STIs), and HIV prevention, with trained teachers or health workers facilitating this education in schools. The teachers expressed their interest in the collaboration between health facilities and schools, as it would benefit teachers and students by providing them with improved reproductive health information.

4. Discussion

Child deliveries in government and PNFP(Private Not For Profit) health facilities in Luwero were 61 percent in 2016 and increased to 74 percent in 2019[1]. Pregnant women who received four antenatal care visits were 63 percent and decreased to 48 percent in 2019. In the district, the number of GBV(Gender Based Violence) survivors reported to a health facility was 1,337 in 2017 and slightly decreased to 1,355 in 2019[1]. The decrease in pregnant women receiving four antenatal care visits can be attributed to access barriers such as limited healthcare facilities and services, especially in Insufficient rural areas. awareness and education about reproductive health may have also played a role, along with cultural and social factors influencing healthcare-seeking behavior.

The results of this study show that the primary information channel for young women at school, and the preferred person they want to talk to about reproductive health is health workers. Various social, cultural, and traditional obstacles hinder young women from accessing necessary reproductive health information. The information needed is menstrual cycles,

reproduction, sanitary pads, and avoiding unwanted pregnancy and sexually transmitted diseases. Health centers' school outreach program is emphasized as a possible implementation.

The findings from various studies reinforce the importance of schools in promoting reproductive health. Erulkar's research highlights the effectiveness of incorporating reproductive health education within school settings[16]. The study suggests that a comprehensive approach involving various educational materials and activities such as discussions. safe lectures. groups, demonstrations is suitable for delivering relevant information. By creating a safe and organized environment, these programs can effectively deliver appropriate messages and equip adolescents with essential skills[16, 17].

School-based reproductive health programs have the potential to reach many adolescents of school age[18]. In a safe and structured school environment, reproductive health education programs can provide appropriate messages and skills to adolescents.

Various studies and reviews have shown that reproductive education plays a crucial role in increasing knowledge, attitudes, skills, and behaviors aimed at preventing unintended teenage pregnancies [17, 19-22]. A review analyzing adolescent health interventions across different developing nations revealed that educational programs had the potential to bring about substantial changes in knowledge and awareness regarding reproductive health[17]. Another study conducted in the Soroti District of Uganda found that a reproductive health program implemented in schools contributed to a decrease in sexual activity among adolescents attending those schools[18].

Schools are seen as potential agents in

combating sexual and gender-based violence[23]. Various stakeholders, including healthcare professionals, teachers. government officials, emphasize the significant role that schools play in delivering messages and information to young people and as a catalyst for positive change. This result is supported by research showing that girls attending school are less likely to enter early marriages and have more control over their decisions regarding pregnancy[24].

To effectively reach and support teenage girls, health centers can establish collaborative programs with schools. By sharing teaching tools and utilizing available trained teachers and volunteers, health centers can enhance their outreach efforts. Furthermore, integrating the outreach program within the school curriculum over an extended period, such as offering special workshops or lessons once a week throughout a semester, would ensure that girls receive accurate information for a longer duration. thereby promoting understanding. This approach would expand the accessibility of reproductive health education and services to a greater number of girls.

One of the promising solutions is integrating reproductive health education program into schools, enabling broader coverage institutionalizing the crucial aspect education. It may be necessary to provide training programs for teachers responsible for delivering this type of education. Given that healthcare most health centers have professionals and midwives, they can directly educate students in schools or train teachers if required.

5. Conclusion

In Luwero district, Uganda, young girls face

numerous risks and vulnerabilities concerning reproductive health. The lack of reproductive health education opportunities is the primary obstacle, according to healthcare professionals and teachers. Many teenage girls have limited accessibility to reproductive health information such as contraceptive methods. Cultural factors further complicate matters as young people struggle to gain the necessary understanding to make informed choices in life. For instance, discussions about sexuality between parents and their adolescent children are often considered taboo in many Ugandan cultures. Additionally, certain Catholic and Muslim school teachers feel uneasy discussing sexual topics and contraceptive methods with their students. Even in healthcare centers, some teenage girls hesitate to seek reproductive health information. These obstacles challenges can prevent young women from making informed decisions about their health.

To address these issues, this study proposes that schools serve as crucial platforms to reach individual girls and society as a whole. It is suggested that implementing outreach programs in schools and creating a youth-friendly environment can improve access reproductive health counseling and ensure attendance girls. increased among By establishing cooperative programs between health centers and schools, a greater number of adolescent girls can be reached, and the outreach efforts can be sustained over a more extended period.

To prevent adolescent pregnancy in Uganda, it is important to employ comprehensive strategies that address various societal, economic, and other factors contributing to this issue. A multidimensional approach should encompass a wide range of areas that address diverse vulnerabilities. Although we recognized

the significance of an integrated approach, we faced limitations in terms of time and resources, which prevented us from fully addressing all these multidimensional aspects. Additionally, our study's small sample size generalizability. restricts our findings' Furthermore, the findings and recommendations provided in this study have limited applicability to the specific areas in Luwero. Therefore, caution is necessary when extrapolating the results and recommendations. Nevertheless, the insights gained from this study can be valuable similar socio-economic and cultural contexts.

Conflict of interest: The authors declares that there is no conflict of interest

Ethical approval: Ethics approval for this study was obtained from the Institutional Review Board at the University of Florida (#IRB201600701) and the TASO Research Ethics Committee in Uganda (#TASOREC/21/16-UG-REC-009).

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