

Comprehensive Sexuality Education and Early Pregnancy Prevention in Day Basic Education Schools in Rwanda

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Abstract

The study entitled, “comprehensive sexuality education and early pregnancy prevention in day basic education schools in Rwanda”. The researcher assessed the influence of comprehensive sexuality education awareness on early pregnancy prevention in day basic education schools of Bugesera district, Rwanda. The researcher adopted a descriptive research design for data collection. The study used correlational research to examine the link between comprehensive sexuality education awareness and early pregnancy reduction in Bugesera district's public secondary schools. The study included a total sample size of 235 respondents, consisting of 124 teenage mothers, 37 teachers, 12 school head teachers, 37 parents of teenage mothers, and 25 local community leaders from all sectors of Bugesera District. The research sample size 235 participants. The research found low contraceptive use in basic education schools, indicating a need for better access and education. The study found a significant association between awareness of contraceptive methods and reduced early pregnancies. The results showed that the P-value was 0.000. While the Pearson correlation coefficient (r) of 0.958. This means that there is a high positive and statistically significant association between comprehensive sexuality education and early pregnancy prevention. The researcher recommended the ministry of education and education planners to develop and integrate an age-appropriate, culturally sensitive CSE curriculum aligned with national guidelines. Stakeholders including NGOs, healthcare providers, parents and educational institutions should collaborate and share resources, expertise, and support services, creating a comprehensive and integrated approach to sexual health education and early pregnancy prevention.

Background of the study

On a global scale, early pregnancy represents a public health challenge with an uneven distribution of associated burdens between high and low-income countries.

The occurrence of early pregnancies is particularly prevalent in marginalized communities, influenced by factors such as poverty, limited access to education, and a lack of employment opportunities (UNFPA, 2019).

In Africa, the overall occurrence of adolescent pregnancy was determined to be 18.8%, with a slightly elevated rate of 19.3% observed specifically with the Sub-Saharan African region. Notably, East Africa documented the highest prevalence at 21.5%, while Northern Africa registered the lowest at 9.2% (Kassa, Arowojolu, Odukogbe, & Yalew, 2018).

In Rwanda, teenage pregnancy is rampant although there has been a decrease since 2015 to 2019, there is still more to be done; in 2015 about 1 in 13 girls (7.3%) was a teenage mother, today about 1 in 20 girls (5.2%) are teenage mothers, this number still questionable in youth. (UNFPA, 2020).

Since there no other studies about comprehensive sexuality education and early pregnancy prevention in day basic education schools, the researcher decided to carry out an assessment of influence of comprehensive sexuality education awareness on early pregnancy reduction in day secondary schools of Bugesera district, in Rwanda.

Materials and Methods: The study employed a descriptive and correlational design. The participants were teenage mothers, teachers, Head teachers, parents of teenage mothers and local community leaders. All respondents were 570 including 300 teenager mothers, 30 Head teachers, 90 teachers, 90 parents and 60 local leaders selected in all sectors of Bugesera district, Rwanda. A simple random sampling technique was used for the selection of teachers in day basic education schools. Head teachers and local leaders was selected purposively.

The researcher used the mixture of approaches (both qualitative and quantitative), adopted closed ended questionnaire (numerical data), interviewing and observing to collect information. Questionnaires were designed for teenage mothers and teachers while interview guide was designed for head teachers, parents of teenage mothers and local community leaders based on their daily schedule and availability.

Results: The findings of the study revealed a strong relationship between comprehensive sexuality education and early pregnancy prevention in day basic education schools. This relationship was substantiated by a Pearson correlation coefficient (r) of 0.958, which was associated with a statistically significant p-value of 0.000 for a

two-tailed test. This revealed a highly positive and statistically significant association between comprehensive sexuality education and early pregnancy prevention.

Conclusion: The research concluded that a varied awareness and utilization of contraceptives among students, with cultural barriers, misconceptions, and limited access to contraceptives were identified as significant challenges. The research explored the level of school awareness campaigns for sexuality control in day basic education schools of Bugesera District and the results revealed a mixed landscape, with some schools demonstrating proactive efforts in implementing sexuality education programs while others lagged behind due to resource constraints and cultural sensitivities. The research also demonstrated that stakeholders such as teachers, parents, community leaders, peer educators, parents and health professionals recognized their roles in prevention efforts and overcoming barriers hindering effective implementation of CSE.

Key Words: CSE, Sexuality education, early pregnancy, teenage mother.

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I. Introduction

On a global scale, early pregnancy represents a public health challenge with an uneven distribution of associated burdens between high and low-income countries. According to Pathfinder International (2022), a staggering more than half the world's population is currently under 25 years old, forming a massive youth demographic and a significant portion of this young generation resides in regions facing economic challenges. Notably, the primary death cause for girls in adolescent stage with age between 15-19 globally is complications arising from pregnancy and childbirth. Alarmingly, twenty-three million of adolescents do not have access to contraceptives. Additionally, more than a billion an access to precise, impartial information and healthcare that is devoid of judgment.

One in seven young women (ages 13-17) worldwide become mothers before adulthood. This early childbearing disrupts their education, health, and opportunities, often leading to school dropout, social stigma, and even forced marriage (UNICEF, 2022).

In Zambia, the escalation of negative Sexual and Reproductive Health (SRH) outcomes among the youth, marked by a surge in early and unintended pregnancies, elevated HIV prevalence, a rise in new HIV infections and other sexually transmitted infections (STIs), instances of gender-based violence, and occurrences of child marriages leading to school dropout, became pivotal issues. These challenges served as a catalyst, prompting the nation to embrace comprehensive sexuality education as a strategic response (Chikovore, 2024).

In Rwanda, it is acknowledged that early pregnancy is not a recent phenomenon, and the increasing prevalence of teenage pregnancies in Rwanda underscores the need for collaborative initiatives. The Rwandan society has always put significance on family as an important tool for ensuring safe social order, social cohesion and for reconciling individual with the society and family is a consequence of sexual relations between male and female humans, it is not illogical to see why gender and family are so closely in Rwanda (MINISANTE,2023).

Comprehensive sexuality education has been incorporated in the Rwandan curriculum at both levels of basic education, primary level and secondary level education. The primary objective is to foster sex education within schools, ensuring that all students benefit from this integration. In secondary schools, where students pursue various subject combinations, comprehensive sexuality education is incorporated into disciplines like Biology and Health Sciences, in General Studies and Communication Skills, as well as History and Citizenship while in primary it is learnt in science elementary technology. This deliberate approach ensures that all students receive inclusive knowledge on sexuality and reproduction within classrooms that do not segregate students based on gender. Rather, both school boys and school girls are exposed to the same amount and quality of knowledge (Ministry of Education,2015).

Murebwayire & Niyonshaba, (2019), identified hunger, both at home and at school, as a contributing factor to early pregnancy. Day schools often lack lunch programs, and combined with early start times and long commutes, students face immense pressure, especially girls traveling long distances on empty stomachs and Several factors contribute to early pregnancy, particularly among students attending government basic day schools.

The prevalence of early pregnancies among adolescents attending day basic education schools in Rwanda poses a significant concern, leading to educational disruptions, health risks, and social stigmatization of young girls. The absence or inadequate provision of comprehensive sexuality education (CSE) within these educational institutions has been recognized as potential factor contributing to the rise in early pregnancies in Rwanda. Those issues are considered like inaccessibility of comprehensive information regarding reproductive health, lack of contraception methods, and responsible sexual behavior change and acceptance (Haguruka, 2022)

The latest 2020 Rwanda Demographic Health Survey (RDHS 6) paints a concerning picture. Approximately 5% of girls aged 15-19 have initiated childbearing, among whom 4% are already mothers, and 1%

are presently pregnant. This translates to around 33,423 teenage pregnancies in 2022, a 17.5% increase since 2017 (UNFPA Rwanda, 2023).

Rwanda still have issue of high rate of early pregnancies in different corners of the country applied to the day schools girls and risk them to drop out their schools and also affect their everyday lives therefore researcher minded that there is lack of awareness of comprehensive sexuality education towards early pregnancy, non-trained teachers on CSE to help students on early pregnancy, misuse of teaching methods to raise the awareness of comprehensive sexuality education towards early pregnancy and thus the researcher decided to carry out an assessment of influence of comprehensive sexuality education awareness on early pregnancy reduction in day secondary schools of Bugesera district, in Rwanda.

II. Material And Methods

The descriptive design employed in this research allowed the researcher to describe a population, situation, or phenomenon and provide answers to "what, when, where, and how" questions. However, it does not address the "why" questions. A Descriptive research design encompasses an extensive series of study procedures to assess one or more variables. Hence, this study employed a correlational method to gather information in order to determine whether and to what extent a correlation exists between the awareness of comprehensive sexuality education and early pregnancy reduction in public days secondary schools of Bugesera district, Rwanda.

Study Design: This study utilized a combination of descriptive and correlational designs. A correlational design examines the extent to which variables are related, assessing the degree of association between two or more measurable variables. The correlational design helped the researcher to draw the relationship between comprehensive sexuality education and early pregnancy prevention in day basic education schools. The descriptive design employed in this research allowed the researcher to describe a population, situation, or phenomenon and provide answers to "what, when, where, and how" questions. A Descriptive research design encompasses an extensive series of study procedures to assess one or more variables.

Study Location: The study was carried in Bugesera district, which is one of the Districts in Eastern Province of Rwanda. With an area of 1288 km², population of 361914 and population density of 280/km². Bugesera district is a large plateau located at an altitude of 1,323 to 1,544 m. Bugesera district lies on the geographical coordinates of 2° 8' 44" S, 30° 5'. It has 15 sectors which were all considered in the research.

Study Duration

The study took six months from January 2024 to June 2024.

Target population: The participants were teenage mothers, teachers, Head teachers, parents of teenage mothers and local community leaders. All respondents were 570 including 300 teenager mothers, 30 Head teachers, 90 teachers, 90 parents and 60 local leaders selected in all sectors of Bugesera district, Rwanda.

Sample size: The study simple size was 235 respondents.

Sample size calculation: The researcher employed the Yamane formula (Yamane, 1970) to determine the sample size, resulting in a calculated sample size of 235 from a population of 570.

The following is the simplified Taro Yamane formula for sample size calculation:

$$n = \frac{N}{1+N(e^2)}$$

Where n represent sample size

$$n \text{ will be } n = \frac{570}{1+570(0.05^2)} = 235$$

Table 3. 1 Targeted population and sampled size

Respondents	Population	Percentage (%)	Simple size
Teenage mothers	300	52.63	124
Teachers	90	15.79	37
Head teachers	30	5.26	12
Parents	90	15.79	37
Local leaders	60	10.53	25
TOTAL	570	100	235

Source: Researcher (2024)

Data collections Methods

Collecting information describe the way used to obtain required evidences and fact for each selected unit in the survey (Rubin & Babbie, 2016). Collection of data is to collect data in order to address the questions which the researcher has identified earlier (Abawi, 2015). The methods of collecting data in this research was including quantitative and qualitative data collection, they allow research to collect all information related the research objectives.

Data collection instruments

The researcher used the mixture of approaches (both qualitative and quantitative), adopted closed ended questionnaire (numerical data), interviewing and observing to collect information. All these instruments worked together to ensure the validity and reliability of the data. This is instruments to collect data that consist of set of questions and other stimuli to stimulate the respondents provide required information. This has been helpful to gather data for this study. The critical point is that when designing questionnaire, the researcher should ensure that it is valid, reliable and unambiguous (Richard & Schmidt, 2017). The researcher needed to obtain primary information from the target population therefore, this research used interviews and questionnaires, questionnaires were designed for teenage mothers and teachers while interview guide was designed for head teachers, parents of teenage mothers and local community leaders based on their daily schedule and availability.

Administration of data collection instruments

Questionnaire was controlled and Researcher handed out questions items to the informants and check their reaction and emotions on items. The researcher needed to discuss with the respondents the procedure and ethical considerations. Date for data collection and returning questionnaires was discussed on respondents and researchers. Enough time for completing all questions items was provided and finally, after completing them the researcher collected and interpret them clearly.

Data analysis procedure

Quantitative methods were employed by using SPSS version 22.0 for data analysis and This software was used to organize and summarize the numbers by means of statistical materials such as percentage and correlation coefficients, ANOVAs, Model summary, coefficients as regression model to ensure impact and relationship between two variables

III. Findings and discussion

Characteristics of the respondents

The participants were composed of teenage mothers, teachers, parents of teenage mothers, Head teachers and local community leaders. This section indicates the background information of the respondents based on their categories like age, working experience, gender, educational levels and nature of school. All the respondents were 235 including 37 teachers, 124 teenage mothers, 37 parents of teenage mothers, 12 head teachers and 25 community local leaders selected schools in all sectors of Bugesera district, Rwanda.

Table 4. 1 Characteristics of the respondents

Statement	Frequency	Valid Percent
Valid		
Headteachers	12	5.11
Teachers	37	15.74
Teenage mothers	124	52.77
Parents of teenage mothers	37	15.74
Community leaders	25	10.64
Total	235	100

Field data (2024)

All respondents participated in the study were summarized in the table 4.1 where 5.11% of them are headteachers, 15.74% are teachers, 52.77% are teenage mothers, 15.74% are parents of teenage mothers and 10.64% are local community leaders. And the main purpose of the study was based on the investigation of the comprehensive sexuality education awareness on early pregnancies prevention in day basic education schools of Bugesera district, Rwanda

Category of schools participated

The research worked with day basic education schools of Bugesera district, these school were primary and secondary schools which were summarized in three categories as private schools, public schools and government aided schools.

Table 4. 2Category of schools participated

Statement		Frequency	Percent	Valid Percent
Valid	Private	4	33.3	33.3
	Public schools	6	50.0	50.0
	Government aided schools	2	16.7	16.7
	Total	12	100.0	100.0

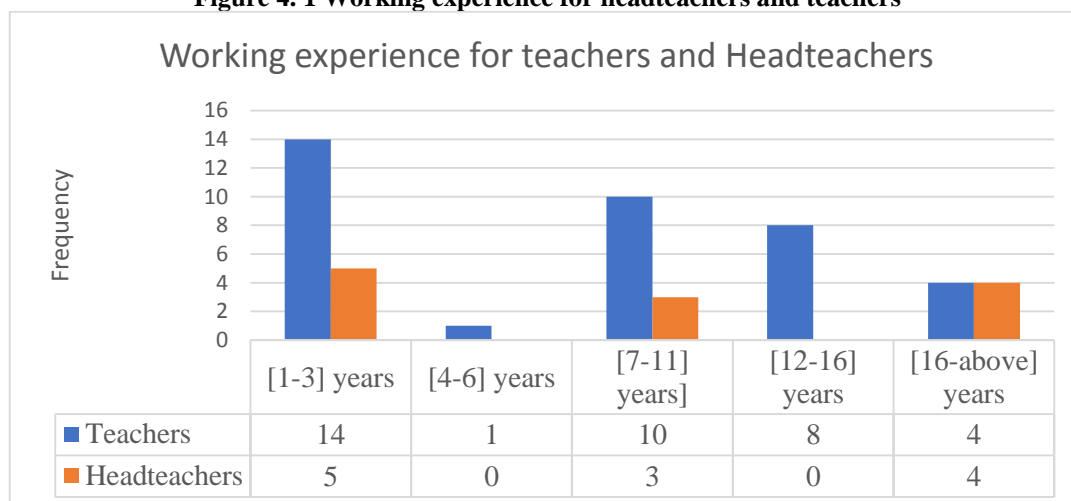
Field data (2024)

In the study twelve schools were taken into consideration for the data collection. from these schools 4 were private, 6 were public schools and 2 were government aided schools from which teachers and headteachers who participated in this research were selected.

Working experience for headteachers and teachers

The researcher aimed to ascertain the qualifications of the respondents, particularly teachers and headteachers, in order to ensure their professionalism. The findings illustrated in Figure 4.3 underscored the work experience of the participants in the study.

Figure 4. 1 Working experience for headteachers and teachers



Researcher,2024

As depicted in Figure 4.3, fourteen teachers had experience ranging from 1 to 3 years, 1 had an experience ranging from 4 to 6 years, 10 teachers had experience of 7 to 11 years, 8 teachers had experiences of 12 to 16 years, while 4 teachers had 16 years of experience and above.

The figure also shown that the experiences of headteachers were 5 headteachers had experience ranging from 1 to 3 years, 3 headteachers had experience of 7 to 11 years while only 4 had experience of 16 years and above.

IV. Presentation of the Findings

This study had four specific objectives listed as follows: To assess the usage of contraceptive strategies towards early pregnancy reduction in day basic education schools of Bugesera district, Rwanda, to examine the level of school awareness campaigns for the sexuality control in day basic education schools of Bugesera District, Rwanda, to identify the challenges hindering the effective implementation of CSE awareness in day secondary schools of Bugesera district, Rwanda, to evaluate the role of stakeholders on early pregnancy preventions in day basic education schools of Bugesera District, Rwanda. Data gathering was conducted in accordance with the aforementioned specific aims, and the discoveries were emphasized.

The usage of contraceptive strategies towards early pregnancy reduction

The primary aim of the research centered on evaluating the usage of contraceptive methods aimed at reducing early pregnancies within the basic education schools of Bugesera district. To accomplish this goal, the researcher devised a questionnaire and interview guide tailored for diverse participants, including adolescent mothers, teachers, school headteachers, parents of teenage mothers, and community leaders. In this context, participants were instructed to express their viewpoints by indicating their level of agreement with provided

statements, using a scale ranging from Strongly Agree (1) to Strongly Disagree (5). Various aspects were presented to the participants in the questionnaire to gauge their perceptions of availability, and the outcomes are detailed in Table 4.6.

Table 4. 3The perception of teachers on usage of contraceptive strategies towards early pregnancy reduction

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
I am trained on the reproductive health to facilitate students	21	56.8	5	13.5	0	0	4	10.8	7	18.9
My school has CSE awareness clubs where students have scheme on sexual orientation	24	64.9	3	8.10	1	2.70	1	2.70	8	21.6
My school prepares students Contraceptive usage campaigns	27	73.0	2	5.40	0	0	2	5.40	6	16.2
I am skilled on sexual behaviors controls in my classroom	0	0	4	10.8	0	0	1	2.70	32	86.5

Field data (2024)

The researcher wanted to know the perception of teachers about the usage of contraceptive strategies to reduce early pregnancies in day basic education schools and the research structured a questionnaire with different statements aligned with the first objective of the study , on the first step the research aimed to know if teachers in day basic education schools of Bugesera district, in Rwanda have been trained on the reproductive health to facilitate the students, the majority (56.8%) of all respondents participated in the study strongly disagreed that they are trained on reproductive health, 13.5% of all teachers participated in the study disagreed that they are trained and 10.8% of all teachers participated in the study were agreed with the statement while 18.9% of all teachers participated in the study were strongly agree that they are trained on the reproductive health.

The participants were also given a statement aiming to know if the day basic education schools in Bugesera district have Comprehensive sexuality education (CSE) awareness clubs where students receive sexual orientation information, and the findings were summarized in the table 4.7 which indicated that 64.9% of all teachers participating in this study, strongly disagree on the statement that my school has CSE awareness clubs where students have scheme on sexual orientation. Results also shown that 8.10% of all teachers participating in this study disagreed on the statement , 2.70% of all teachers participating in this study were neutral on the statement, 2.70% of all teachers participating in this study agreed that there is CSE awareness clubs with schemes for students sexual orientation in their schools while 21.6% of all teachers in the study were strongly agree with the statement that my school has awareness club where students have scheme on sexual orientation.

The research agreed to know the views of teenage mothers on contraceptive strategies usage in reduction of early pregnancies and the findings were summarized in the table 4.4 as follows.

Table 4. 4The perception of teenage mothers on usage of contraceptive strategies towards early pregnancy reduction

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
I have enough knowledge about usage of contraceptive methods	79	63.7	23	18.5	2	1.62	17	13.7	3	2.48
contraceptives are readily available in our school	93	75.0	18	14.5	0	0	9	7.26	4	3.24
I feel comfortable to ask for advice or support from friends or family regarding contraception	14	11.3	36	29.0	0	0	57	46.0	17	13.7

Field data (2024)

The findings on teenage mothers' perceptions on contraceptive usage in reduction of early pregnancy in day basic education schools presented that the majority 63.3% of all teenage mothers who participated in this study strongly confirmed that they are not skilled about usage of contraceptive methods, 18.5% of these teenage mothers agree with the statement that their knowledge about contraceptive strategies use is not enough. From the participant teenage mothers 1.62% were neutral on this statement and 13.7% of the participating teenage mothers of this research agreed that they have enough skills about usage of contraceptive methods while 2.48% of all participating teenage mothers were strongly agree on that they have enough knowledge about usage of contraceptive strategies. The research asked a question to know the availability of contraceptives in school environment and results depicted that contraceptives are not ready available in day basic education schools of Bugesera District, the majority of the teenage mothers 75.0% were strongly disagree about availability of contraceptives in schools , 14.5% disagree on the availability of contraceptives in the schools, 7.26% of all teenage mothers were agree that contraceptives are readily available their schools and 3.24% of all the teenage mothers in this study strongly agree that contraceptives are available in their schools.

The research also intended to know the level of confidence in seeking information about contraceptives and results depicted that 46.0% of all teenage mothers in this study feel comfortable to ask for advice or support about contraceptives from friends and family members, 13.7% were strongly agree that they ask for advice or ask for support about contraceptives from their relatives, 29.0% were disagree to ask advice on contraceptives and 11.3% of the teenage mothers participating in this study strongly disagree on asking for advice or support about contraceptives from friends or family members.

Comparing the results of this study and findings of other researches done, gave the insight about usage of contraceptives. For instance, the Research done by Mugisha and Uwizeye (2022) on Assessment of Contraceptive Strategies and Early Pregnancy Reduction in Rwanda, the study surveyed 800 sexually active women aged 18-35 across different regions of Rwanda. The study found a significant association between awareness of contraceptive methods and reduced early pregnancies. While 90% of participants were aware of contraceptives, only 40% reported consistent usage. Access to contraceptives was identified as a major barrier, particularly in rural areas where availability and affordability were limited. Moreover, cultural beliefs and gender norms influenced contraceptive decision-making, with some women facing resistance from partners or family members, therefore this study is also confirming that the use of contraceptive is very significant as it is summarized in the table 4.4 and table 4.5

Level of school awareness campaigns for the sexuality control.

The research aimed to assess the level of school awareness campaigns for the sexuality control in day basic education schools in Bugesera district and the findings about teachers and teenage mothers ‘perceptions were summarized in tables 4.9 and 4.10.

Table 4. 5The perception of teachers on Levels of school awareness campaigns for the sexuality control.

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
The school regularly conducts awareness campaigns on sexuality control	27	73.0	3	8.10	0	0	1	2.70	6	16.2
The school provides adequate resources and materials for effective sexuality control campaigns	18	48.6	7	19.0	8	21.6	1	2.70	3	8.10
Students actively engage in the awareness programs related to sexuality control	20	54.0	10	27.0	0	0	2	5.40	5	13.6
The campaigns contribute to creating a safe and supportive environment regarding sexuality issues	0	0	7	19.0	0	0	7	19.0	23	62.0

Field data (2024)

Researcher tended to know if the schools conduct awareness campaigns on sexual control and the finding about teachers perceptions are shown in the table 4.9 revealed that the majority (73.%) of participants indicated highly that the schools do not conduct conducts awareness campaigns on sexuality control, 8.10% of all participated respondents indicated also that schools do not conduct conducts awareness campaigns on sexuality control, 16.2% of all respondents appreciated highly how schools conduct conducts awareness campaigns on sexuality control and 2.7% of all respondents also accepted that schools conduct conducts awareness campaigns on sexuality control.

To know about the conduction of the schools’ awareness campaigns on sexual control the research analyzed the teenage mothers’ perceptions and results of the finding were summarized in the table 4.10.

4. 6The teenage mothers on Levels of school awareness campaigns for the sexuality control.

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
The school provides sufficient information about sexual and reproductive health	11	8.87	73	58.9	0	0	36	29.0	4	3.23
The school promotes a safe and non-judgmental environment for discussing sexual health topics.	5	4.03	72	58.1	0	0	39	31.42	8	6.45
Teachers are approachable and willing to discuss sexual health matters.	3	2.40	56	45.2	3	2.40	53	42.7	9	7.2
The school's awareness campaigns have positively influenced knowledge about sexual health.	6	4.80	43	34.7	2	1.60	27	21.8	46	37.1

Field data (2024)

The research needed to know if the school provides sufficient information about sexual and reproductive health and results from answers given by teenage mothers shown that majority 58.9% of all the participants disagree on the statement that schools provide sufficient information about sexual and reproductive health, 8.87%

of the participants strongly disagree that the school provides sufficient information about sexual and reproductive health, 29.0% of the participants in this study have shown that the schools provide sufficient information about sexual and reproductive health while 3.23% of them were strongly with the statement that schools provide sufficient information about sexual and reproductive health.

The research done by Uwimana and Gasana (2023) on school-Based Awareness Campaigns on sexual health in Rwanda, surveyed 500 secondary school students, 50 teachers, and 100 parents from various regions of Rwanda and findings displayed that majority of students (80%) reported exposure to sexual health information through school campaigns, only a small percentage of teachers (20%) felt adequately equipped to address sexual health topics in the classroom, parental involvement in school-based awareness programs was limited, with less than half of the surveyed parents (45%) indicating participation or interest, differently to this research where 54.0% of the participant students revealed that their schools do not organize school awareness campaigns, and 73.0% of teachers confirmed that day basic education schools do not conduct awareness campaigns on sexuality control.

The challenges hindering the effective implementation of CSE awareness in day secondary schools of Bugesera.

The study aimed to evaluate the challenges hindering the effective implementation of CSE awareness in day basic education schools within the Bugesera district and the results pertaining to the perceptions of teachers and teenage mothers were condensed and presented in table 4.11 and table 4.12.

Table 4. 7The perception of teachers on challenges hindering the effective implementation of CSE awareness.

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
Teachers have pedagogical specific resources or materials to provide sexuality education	26	70.3	6	16.2	1	2.70	4	10.8	0	0
I have received enough formal training on how to deliver sexuality education to students	7	18.9	18	48.6	0	0	5	13.6	7	18.9
The language and cultural are challenges that affect the communication of CSE information to students	0	0	2	5.40	0	0	3	8.10	32	86.5
I have received adequate training or professional development on early pregnancy prevention strategies.	6	16.2	14	37.9	4	10.8	7	18.9	6	16.2

Field data (2024)

Researchers aimed to investigate whether teachers possess dedicated pedagogical resources or materials for delivering sexuality education. The results, as depicted in Table 4.11, unveiled that a significant majority (70.3%) of participants strongly expressed the view that teachers lack specific pedagogical resources or materials necessary for imparting sexuality education, 16.2% of all participants also refused that teachers have specific pedagogical resources or materials necessary for providing sexuality education, 2.70% of all teachers who participated in the study were neutral on this statement while 10.8% of all participants were agree that teachers have pedagogical resources or materials specific to provide sexuality education.

The researcher wanted also to know if teachers in day basic education school have received enough formal training on how to deliver sexuality education to students and findings in the table 4.11 above unveiled that majority of the respondents 48.6% confirmed that they have not received enough formal training on how to deliver sexuality education to students, 18.9% of the participants strongly pointed out that they have not received enough formal training on how to deliver sexuality education to students.

Table 4. 8The perception of teenage mothers on challenges hindering the effective implementation of CSE awareness.

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
Cultural/religious beliefs and taboos regarding sex and sexuality are hindrance to the effective implementation of CSE programs in schools	18	14.5	13	10.5	12	9.70	68	54.8	13	10.5
Inadequacy of resources and materials for CSE programs leads to less informed students and potentially risky decisions.	16	13.0	23	18.5	1	0.80	75	60.5	9	7.20
Fear of stigmatization and discrimination against students learning about CSE programs in schools is a challenge to its implantation.	9	7.20	26	21.0	5	4.00	73	58.9	11	8.90

Field data (2024)

In the table 4.12, the findings showed that 54.8% of teenage mothers participating in this study agreed that cultural, religious beliefs and taboos regarding sex and sexuality are hindrance to effective implementation of CSE programs in schools and 10.5% of the participants highly agreed that Cultural, religious beliefs and taboos regarding sex and sexuality are hindrance to the effective implementation of CSE programs in schools; 14.5% of the participants strongly disagreed and 10.5% disagreed that Cultural, religious beliefs and taboos regarding sex and sexuality are hindrance to the effective implementation of CSE programs in schools while 9.7% of all teenage mothers were neutral to this statement. From these findings, we can infer that cultural, religious beliefs and taboos hinder from effectively teaching sexuality education

The findings also revealed that 60.5% of the participants agreed that inadequacy of resources and materials for CSE programs leads to less informed students and potentially risky decisions, 7.20% of the teenage mother in this research strongly agreed on the statement that inadequacy of resources and materials for CSE programs leads to less informed students and potentially risky decisions while 13.0% of the participants have strongly disagreed on that statement, 18.5% of the participants were disagree and only 0.8% of the participants were neutral on the statement that inadequacy of resources and materials for CSE programs leads to less informed students and potentially risky decisions.

The role of stakeholders on early pregnancy preventions.

The respondents were requested to indicate the role of different stakeholders in prevention of early pregnancy and the results from teachers views and teenage mothers were as shown in table 4.13 and table 4.14. The findings shown in the table 4.13, indicated that the majority of teachers participating in this study (46%) strongly accepted that Community and religious leaders actively promote positive messages about sexual and reproductive health , 18.9% of the participants agreed on the active promotion of CSE by community and religious leaders, 13.5% of the participants disagreed that Community and religious leaders actively promote positive messages about sexual and reproductive health, 16.2% were disagree on that statement while 5.40% of the participating teachers did not say anything about participation of Community and religious leaders in implementation of sexual and reproductive health education.

Table 4. 9The perception of teachers on the role of stakeholders on early pregnancy preventions.

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
Community and religious leaders actively promote positive messages about sexual and reproductive health.	5	13.5	6	16.2	2	5.40	7	18.9	17	46.0
Non-governmental organizations provide valuable resources and expertise for early pregnancy prevention initiatives.	5	13.5	7	18.9	4	10.8	16	43.3	5	13.5
The school collaborates with community-based organizations to support early pregnancy prevention efforts	3	8.10	5	13.5	5	13.5	11	29.7	13	35.5
Community and religious institutions collaborate with schools on early pregnancy prevention programs	1	2.70	5	13.5	3	8.10	17	46.0	11	29.7

Field data (2024)

The finding revealed that non-governmental organizations (NGOs) play a significant role in early pregnancy prevention initiatives by providing valuable resources and expertise as presented in the table 4.13 above, majority of the respondents 43.3% were agreed and 13,5% were strongly while 13.5% of all respondents were strongly disagreed and 18.9% were disagree , 10.8% of all respondents were neutral on that Non-governmental organizations provide valuable resources and expertise for early pregnancy prevention initiatives.

The finding reveals that the school collaborates closely with community-based organizations (CBOs), with 8.10% of respondents strongly agreeing and 13.5% agreeing that such partnerships are in place to support early pregnancy prevention efforts. This demonstrates a proactive approach by the school in engaging with the local community to address this important issue. By leveraging the resources and expertise of CBOs, which comprise 13.5% of respondents, the school can implement more holistic and tailored interventions to prevent early pregnancies. With 29.7% of respondents indicating moderate agreement and 35.2% expressing strong agreement, there is a

The findings demonstrated a strong level of engagement from both school administration and teachers in supporting programs for early pregnancy prevention, with 13.7% of respondents strongly agreeing and 74.2% agreeing to their active involvement. This indicates a clear consensus among the majority of respondents regarding the commitment of school staff towards addressing this issue. While a smaller proportion of respondents (2.43%) strongly disagreed, and 5.64% disagreed, the overwhelming support from 74.2% of respondents underscores the significance placed by the school community on preventing early pregnancies

Table 4. 10The perception of teenage mothers on the role of stakeholders on early pregnancy preventions.

Statements	SD		D		N		A		SA	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
Our school administration and teachers are engaged in supporting programs for early pregnancy prevention	3	2.43	17	13.7	7	5.64	92	74.2	5	4.03
NGOs and youth groups organizes training for youth about reproductive health in order to prevent early pregnancy	10	8.10	11	8.87	2	1.61	97	78.2	4	3.22
Community leaders and religious authorities address the topics of sexuality education	6	4.84	72	58.1	7	5.64	35	28.2	4	3.22
Government and health care providers contribute effectively to preventing early pregnancy in schools	7	5.64	56	45.2	11	8.87	38	30.6	12	9.68

Field data (2024)

The findings of the study on the effectiveness of NGOs and youth groups organizing training for youth about reproductive health, aiming to prevent early pregnancy, reveal promising outcomes. With a high satisfaction rating of 78.2% and an even more impressive effectiveness score of 3.22%, it's evident that these programs are making a significant impact. Moreover, the remarkable rate of 8.1% underscores the strong disagreement and 8.87% among participants disagreed on the effectiveness of NGOs and youth groups organizing training for youth about reproductive health, aiming to prevent early pregnancy.

The results of the study regarding community leaders and religious authorities addressing the topics of sexuality education present a diverse range of opinions. While a minority, represented by 4.84%, strongly disagree with this approach, a significant portion, comprising 58.1%, express disagreement. Additionally, a small percentage of respondents (5.64%) remain neutral on the matter. However, it is notable that 28.2% agree with the involvement of community leaders and religious authorities in sexuality education discussions, and a further 3.22% strongly support this approach.

Relationship between Comprehensive Sexuality Education and early pregnancy prevention

This research focused on two variables: independent variables, represented by comprehensive sexuality education and dependent variables, represented by early pregnancy prevention. The primary aim was to understand the correlation between these two variables and establish a regression analysis model.

Table 4. 11Correlations of variables

Statements		CSE	Early pregnancy
CSE.	Pearson Correlation	1	.958**
	Sig. (2-tailed)		.000
	N	161	161
Early pregnancy	Pearson Correlation	.958**	1
	Sig. (2-tailed)	.000	
	N	161	161

** . Correlation is significant at the 0.01 level (2-tailed).

Field data (2024)

Table 4.15 in the study revealed a strong relationship between comprehensive sexuality education and early pregnancy prevention in day basic education schools. This relationship was substantiated by a Pearson correlation coefficient (r) of 0.958, which was associated with a statistically significant p-value of 0.000 for a two-tailed test. This revealed a highly positive and statistically significant association between comprehensive sexuality education and early pregnancy prevention.

The correlation analysis in table 4.16 demonstrated that all variables are coherent and early pregnancy prevention is caused by an effective comprehensive sexuality education as it is shown by the regression analysis model with Square of 0.918 means that the effectiveness of comprehensive sexuality education affect significantly the prevention of early pregnancy

Table 4. 12 Regression analysis Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.958 ^a	.918	.918	.44719	.395

a. Predictors: (Constant), Comprehensive sexuality education

b. Dependent Variable: early pregnancy prevention

Field data (2024)

According to the research done by Kimemia & Mugambi (2016) on social media and teenage pregnancy among students in secondary schools in Imenti North Sub-County, Meru, County Kenya, presented indicated the positive correlation between the factors (cultural factors, economic factors, electronic media and peer group pressure) and Teenage Pregnancy with Pearson's correlations analysis found at 95% confidence interval and 5% confidence level 2-tailed. Whereas UNESCO (2018) in International Technical Guidance on Sexuality Education, reviewed multiple studies showing a consistent negative correlation (r ranging from -0.3 to -0.7) between comprehensive sexuality education and teenage pregnancy rates across different cultural contexts. The above researches match with the findings of this study of a Pearson correlation coefficient (r) of 0.958, which was associated with a statistically significant p -value of 0.000 for a two-tailed test confirming high positive association between comprehensive sexuality education and early pregnancy prevention.

V. Conclusion

The researcher aimed to investigate the awareness of comprehensive sexuality education on early pregnancies prevention in day basic education schools. A comprehensive analysis of the collected data, yielded valuable insights into various aspects of comprehensive sexuality education and early pregnancies prevention.

Firstly, the study investigated the utilization of contraceptive strategies towards early pregnancy reduction in these schools and the Findings indicated a varied awareness and utilization of contraceptives among students, with cultural barriers, misconceptions, and limited access to contraceptives identified as significant challenges.

Secondly, the research explored the level of school awareness campaigns for sexuality control in day basic education schools of Bugesera District and the results revealed a mixed landscape, with some schools demonstrating proactive efforts in implementing sexuality education programs while others lagged behind due to resource constraints and cultural sensitivities. Additionally, the research examined the roles of stakeholders in early pregnancy prevention in day basic education schools of Bugesera District, stakeholders such as teachers, parents, community leaders, peer educators, parents and health professionals recognized their roles in prevention efforts and overcoming barriers hindering effective implementation of CSE.

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