

Understanding the Influential Factors of Teenage Pregnancy in Kirumya Sub-county, Bundibugyo District, Western Uganda

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ABSTRACT

Teenage pregnancy remains a pressing global concern, impacting public health and development on multiple fronts. This study focused on probing the specific factors contributing to teenage pregnancy in Kirumya sub-county, Bundibugyo District, in western Uganda. Its objectives centered on determining the prevalence of teenage pregnancy, identifying key contributing factors, and highlighting the challenges faced by adolescents contending with early pregnancies. Engaging fifty teenage mothers and drawing insights from ten key informants, the study employed face-to-face individual interviews and Focus Group Discussions (FGDs) for data collection. The research uncovered an alarming prevalence of teenage pregnancy, estimated at 30-40%, surpassing the national average of 25%. Several interconnected factors drove this heightened incidence, including inadequate parental guidance, limited educational opportunities for teenagers, negative cultural norms, challenging socio-economic conditions, insufficient access to youth-friendly services and contraceptives, and a dearth of supportive environments for proper child rearing and development. Furthermore, the study shed light on the significant challenges faced by teenage mothers, encompassing the weight of childcare responsibilities, parental discrimination, and a lack of spousal support. In summary, the study revealed the pronounced prevalence of teenage pregnancy in Bundibugyo District, largely stemming from social, cultural, and institutional factors. Its recommendations advocate collaborative efforts among government entities, NGOs, schools, and parents, emphasizing improved sex education, enhanced accessibility to youth-friendly services, and the establishment of comprehensive social, economic, and psychological support networks for teenage mothers navigating this intricate landscape.

Keywords: teenage pregnancy, associated factors, women.

INTRODUCTION

Teenage pregnancy has remained a major public health and development concern globally [1]. Teenage pregnancy is detrimental to the health of both mother and child and it is a problem that affects nearly every society, developed and developing alike. It is one of the key issues concerning reproductive health of women not only in developing but also in developed countries. Addressing the challenge of teenage pregnancy requires clear understanding of the prevalence and associated factors in local contexts as opposed to generalised global indicators. It is on this basis that this study will be carried out to investigate the factors associated with teenage pregnancy in

Bundibugyo District, Kirumya Sub-county in the western part of Uganda.

A teenage or teen is a person whose age is a number ending in teen, that is to say, someone from the age of ten to the age of nineteen. In practice the operational definition of teenage varies widely from country to country depending on cultural, institutional and political factors. For the purposes of this study the term teenage refers to a person being from the age of 10- 19 years. Teenage pregnancy is a public concern in both developed and developing world [2]. The 2014 World Health Statistics indicates that the average global birth rate among 13 to 19 year olds is 49 per 1000 girls [1].

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The vast majority of these births (95%) occur in low and middle income countries where by the experience poverty, sexual abuse and other factors which contribute to teenage pregnancies [3,4] . The risk of death due to pregnancy - related cause is doubled among women aged 15 to 19 compare to women in their twenties. Young women are also at risk of unwanted pregnancies, sexual transmitted diseases and unsatisfactory or coerced early relationship [2].

East Africa has been rated second globally after West Africa as the region with the highest number of women reporting a birth before the age of 19 [5]. Uganda leads the region in the number of teenage pregnancies at (33 per cent), followed by Tanzania (28 per cent) and Kenya (26 per cent). For a region experiencing one of the highest population growth rates in the world, East Africa is also teetering on the brink of a crisis of underage pregnancies. In most of the areas shortage of family planning methods usually occurs and it contributes to the problem of teenage pregnancies.

Early childbearing particularly has negative demographic, socio-economic and sociocultural consequences. Teenage pregnancy is associated with higher rates of morbidity and mortality for both the mother and infant during and after delivery. Teenage mothers are at a greater risk of socio-economic disadvantage throughout their lives. The younger the mother the greater the likelihood that she and her baby will experience health complications. The risk of death among

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infants in the first month of life is particularly high when the mother is under 20 years old. Among adolescent mothers, the rate of death among infants during the first month of life - the neonatal mortality rate - is 41 per 1000 live births, compared with 22 per 1000 when the mother is older [6].

Early sexual activity increases the risk of multiple sex partners, unprotected sex that ends up into sexual transmitted diseases such as Acquired immunodeficiency syndrome (AIDS) and risk of premature rupture of membranes, preterm labor, and postpartum infection. According to [10] among the teenage mothers, the neo-natal mortality rate is 41 per 1000 live births, compared with 22 per 1000 when the mother is older between 20 to 29 years.

Government and non-governmental organizations (NGOs) have decided to address this issue through policies and other initiatives. In spite of the huge investments and modification of concerned policies and interventions, teenage pregnancy still persists to the extent of reaching crisis proportions in most African countries [1].

This study will be conducted in Kirumya Sub-county in Bundibugyo District. The study will be carried out to determine the current prevalence of teenage pregnancy and its associated factors because the district is located in one of the remote areas of Uganda which limited access to sexual and reproductive health services. Studies have shown that such areas are susceptible to teenage pregnancies.

METHODOLOGY

Research Design

This adopted a descriptive cross-sectional study [7].

Study Area

This study will be undertaken in Bundibugyo district, but specifically in Kirumya Sub-County of Bwamba County, Western Uganda.

Study Population

The study population will include all the teenage ladies who will have at least produced a baby or were pregnant during the time of the study, men considered as opinion leaders, and women above 19 years in Kirumya sub-county.

Inclusion Criteria

All ladies from the age of 13 to 19 years who had at least a child, or will be pregnant in the study sub-county by the time of data collection will all be eligible to participate. Men who will be considered opinion leaders or respected in the community will also be selected and lastly older women in the community will also be selected for the focus group discussions.

Exclusion Criteria

Girls aged between 13-19 years who will not be either pregnant, nor has ever been pregnant will be excluded from the study.

Sample size

The researcher purposively selected fifty teens aged between 13 years and 19 years from Kirumya sub-county will be interviewed. Twelve opinion leaders will also be selected purposively with the help of local leaders for focus group discussions.

Using Kish Leslie formula (1965);

$$n = \frac{z^2(p)(1-p)}{e^2}$$

Where z = standard normal deviation set at 95% Confidence Interval (1.96)

n = estimated minimum sample size required.

p = proportion of a characteristic in a sample (3.35% = 0.035)

e = margin of error (5% = 0.05)

Therefore $n = \frac{(1.96)^2(0.035)(1-0.035)}{(0.05)^2} = 49.7$

$n = 50$

Table 1: Summary of the Sample

Category	Number
Teenage mothers 13-19 years	50
Opinion leaders	10
Total	60

Sample Selection

The study area will be Bundibugyo district, but Kirumya sub-county will be purposively selected because the statistics showed that the entire district has many reported cases of teenage pregnancy.

In Kirumya sub-county, through local council leaders, 50 women who will be eligible for the study will purposively be selected. From Kirumya sub-county which has 5 parishes and 10 teenage girls will be purposively selected through local council leaders from each parish.

For the selection of opinion leaders for focus group discussions, volunteers especially working on village health teams will be recruited to help in mobilisation of opinion leaders who are knowledgeable and can clearly and openly communicate about the subject matter. Using a judgemental sampling method, a total of 50 respondents will be interviewed and two focus group discussions will be organised one for the men and the second being for the women.

Data Collection Procedure

The developed data collection tools will be pre-tested in the neighbouring Bubukwanga sub-county for purposes of assessing their relevance and correcting any errors that might be there before the final data is collected from the study area.

The researcher will use in-depth interviews (IDI) to collect rich data from the teenage ladies. Focus group discussions will be held with the men's and then the women's groups to enrich the data collected for better insight into the problem under study.

These methods yielded rich data. Based on the fact that most respondents in the study area had low literacy level [8], some explanation and probing was done to make the maximum meaning out of the study.

Data Management and Analysis

The analysis will be done by using systematic content analysis [9]. Responses will be recorded verbatim and coded and categorised into units of similar ideas. These will further be categorised into themes for better analysis from which conclusions and possible explanations to the research questions were made.

Ethical Issues

This is an important part of a research regardless of the type. The researcher will ensure that respondents consent or assent to the study before their participation since most of them will be below the age of eighteen years.

Due to their humble educational background most respondents will consent by use of thumb prints and a few others will be able to sign. Respondents

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will be informed about the purpose of the study and their freedom to opt out of the study at any time when they so wished.

The information given by the respondents will be kept confidential and not disclosed to anyone [10].

RESULTS

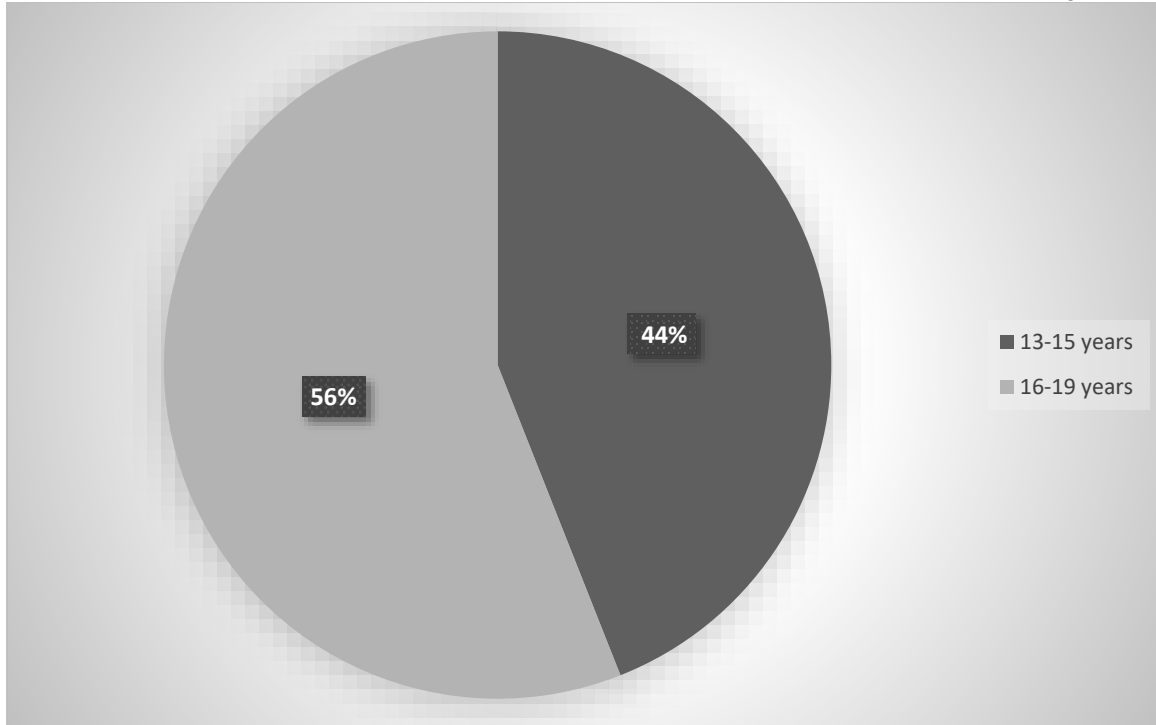
Table 1: Background characteristics of Respondents

No.	Characteristic	Frequency	Percentage
1	Age		
	13-15	22	44
	16-19	28	56
	Total	50	100
2	Education		
	No formal education	8	16
	Primary education	36	72
	Secondary	5	10
	Tertiary	1	2
Total	50	100	
3	Marital status		
	Unmarried	12	24
	Married	34	68
	Widowed	4	8
Total	50	100	
4	Occupation		
	Housewife	15	30
	Agriculture	20	40
	Petty business	11	22
	Student	3	6
Total	50	100	
5	Occupation of partner		
	No occupation	8	16
	Agriculture	36	72
	Petty business	4	8
	Student	2	4
Total	50	100	
6	Religion		
	Catholic	26	52
	Anglican	21	42
	Muslim	3	6
Total	50	100	

Source: Field data, 2021

Table 1 shows that majority of the respondents, 28 (56%) were aged 16-19 years while 22 (44%) were 13-15 years. This shows that most of teens that are

susceptible to pregnancies are those above 15 years because there is increased sexual activity in this age group.



Source: Field data, 2021

Figure 1: Showing age distribution

According to the findings, 72% of the respondent had primary education, 16% had no formal education, and 10 % had secondary education while 2% had tertiary education. This shows that most teenage pregnancies take place at primary level reducing the chances of the girls progressing to higher education levels. Findings in table 1 indicate that 68% of the respondents were married, 24% were unmarried even after getting pregnant while 8 % were widowed. This implies that majority of the teenager pregnancies are also related to early marriages in society. There is also a big percentage of young girls who have to take care of their babies as single mothers. The study looked at the occupation of the teenager mothers and their partners. Majority of the mothers, 40% were in agriculture, 30% were housewives, 22%

were in petty trade especially vending and roadside trade while 6 were still students. Among the partners of teenage girls, 72% were in agriculture, 16% had no occupation, and 8% were in petty business while 4% were still students.

Majority of the respondents, 52% were Catholics, 42% were Anglican while 6% were Muslims implying that majority of the people in Kirumya Sub-County are Catholics. Religion has been connected to people's sexual behaviour and thus an important factor in understating teen pregnancies.

The study sought to determine the prevalence of teenage pregnancy in Bundibugyo District. Since the study used a small sample, respondents were asked to estimate the prevalence of teenage pregnancies in their community.

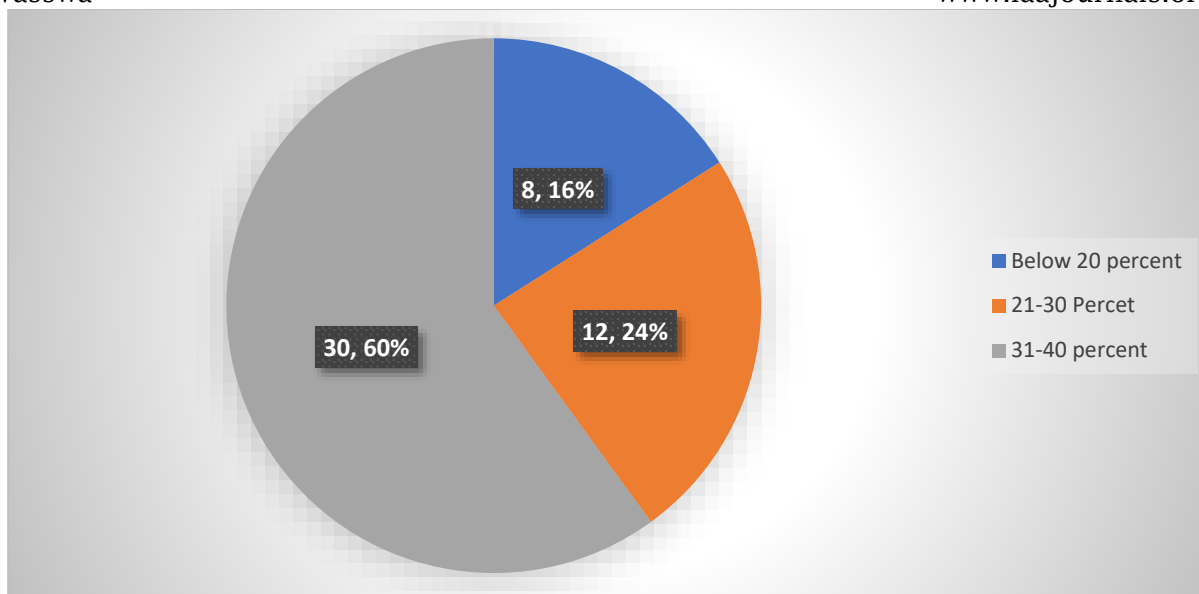


Figure 2: Prevalence of teenage pregnancy

Source: Field Data, 2021

Findings in figure above show that majority of the respondents 60% felt that teenage in the community was between 31-40%, 24% revealed that it was 21-30 % while 16% felt it was below 20%. Findings from key informants collaborated the findings from teens as shown in verbatim below.

"I think about 4 out of 10 teens get pregnant in this community which is a big problem." (35 years old local leader).

"We have a big challenge in this village. In every 10 girls, at least 3 girls get pregnant before they are 18 years." (44 year old primary school teacher).

This shows that there was a high prevalence of teenage pregnancies in Kirumya sub-county Bundibugyo District, in western Uganda.

Table 3: Knowledge of Respondents on Family Planning

Responses	Number of Respondents	Percentage
Stopping women from producing	29	58
Not sure	10	20
Spacing children	6	12
Having few children	4	8
Couples helping each other at home	1	2
Total	50	100

Source: Field data, 2021

The understanding of most respondents (58%) was that, contraceptives meant stopping women from producing children. Much as a reasonable number of the respondents had the correct view of what family planning is, it was evident that the

majority of the respondents did not clearly have the correct understanding and their responses. Other 20% were not sure what contraceptives meant. The findings concurred with the views from FGDs as presented below.

Table 4: Access to major sources of Information

Source of information	Yes		No	
	Freq	%	Freq	%
Access to radios	29	58	21	42
Access to TV	6	12	44	88
Access to newspapers	3	6	47	94
Access to health workers	21	42	29	58
Access to VHTs	31	62	19	38

Source: Field data, 2021

Findings in table 4 above shows that there was limited access to major sources of information about contraceptives and prevention of unwanted pregnancies. Majority of the respondents, 31 (62%) had access to VHTs, 29 (58%) had access to radios, 24% had access to health workers, only 12% accessed TVs and 6% accessed newspapers. Yet, these have been the major channels used by government and

NGOs to campaign against early pregnancies.

Adequate knowledge on pregnancy and its associated risks can lead to better decisions on when to get pregnant. The researcher was interested in knowing about Prior knowledge the respondents had on risks of becoming pregnant at their age.

Table 5: Knowledge on Risks Associated with Teenage Pregnancy

Responses	Frequency	Percentage
There is no risk	16	32
I am not sure	9	18
Early pregnancies can lead to death	5	10
Early pregnancies can lead to dropping out of school	15	30
Early pregnancy can affect the family economically	5	10
Total	50	100

Source: Field data, 2021

In general most of the respondents were ignorant about the risks of teenage pregnancy. 32% of the respondents said there was not risk while 18% were not sure. However, 30% rights revealed that early pregnancies can lead to child drop outs, 10% revealed death while other 10% revealed affecting the family economically.

Availability of services for young people can determine the final outcome of their health through effective decision making and better life skills. The researcher found out that majority of the respondents did not have access to youth friendly services.

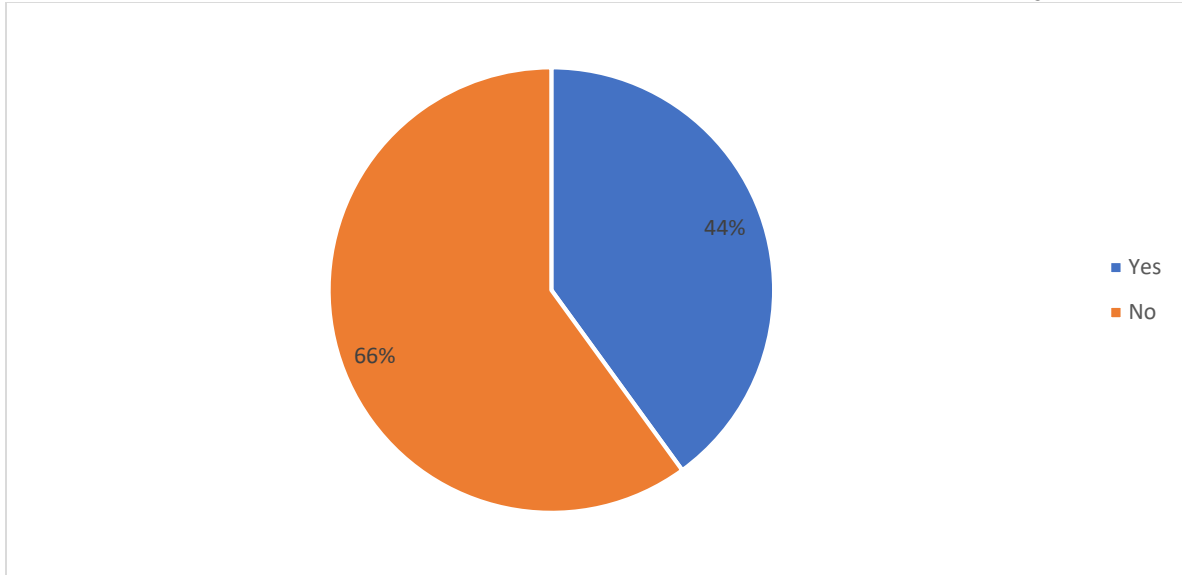


Figure 3: Access to Youth Friendly Health Services

Source: Field data, 2021

According to the findings, majority, 33 (66%) of the respondents did not have access to youth friendly services while 22 (44%) had access to the services. Through FGDs, it was revealed that St. Francis Medicare Centre was the only youth friendly service centre available to provide services to the youth.

Having one youth friendly health services for the entire County or Sub-County greatly limits access to the services for the young people. The respondents appreciated the friendliness of the service providers, but decried the late start of services.

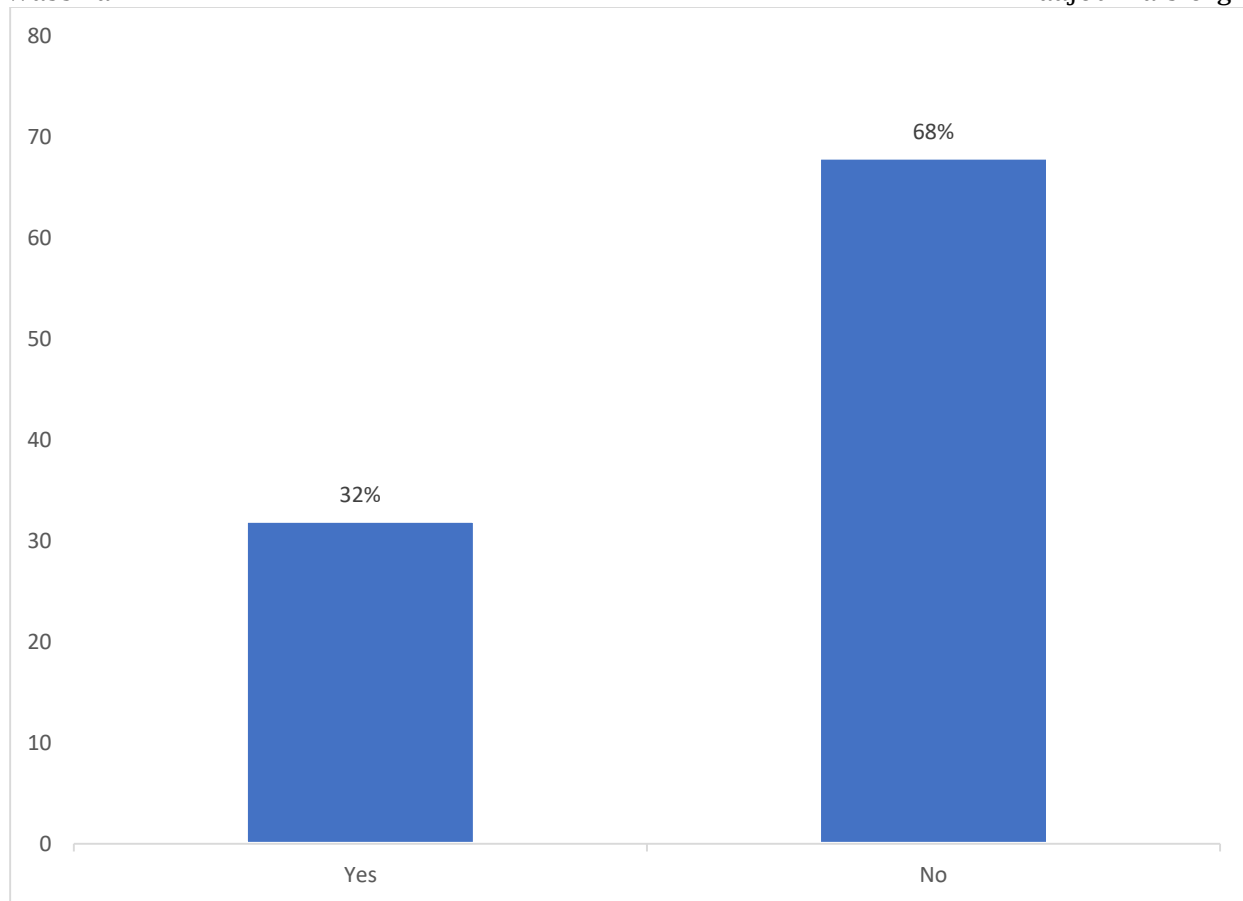


Figure 4: Parental communication about sex with teenagers
Source: Field data, 2021

Findings presented in figure 4 show that 34 (68%) have never communicated with their parents about sex while 16 (32%) have communicated with their parents. Such lack of parental guidance is partly attributed to cultural norms and values that prohibit people to openly discuss matters of sex and limited knowledge on behalf of the parents.

The views from both the individual interviews and that of the focus group discussions all suggested that, there was very little sex education rendered by parents to the children. Talking about sex in this community was considered a taboo; for instance a respondent said that;

This effectively denied the young people proper information on sex education. Where ever a parent tried to do sex education this was very vague like;

It is therefore evident that, parents played very minimal role in sex education hence exposing their children to wrong information on sex from other non-authentic sources like their peers and print media, which in a way contributed to teenage pregnancy.

When respondents were asked to reveal factors contributing to teenage pregnancies in the community, various reasons were given as presented in table 6 below.

Table 6: Reasons contributing to teenage pregnancies in Kirumya sub-county Bundibugyo District, in western Uganda

Factors for teenage pregnancy	Frequency	Percentage
Ignorance	20	40
Poor parental guidance	13	26
Negative Peer influence	11	22
Bad environment	17	34
Poverty	19	38
Pre-marital sex	3	6

Source: Field data, 2021

Based on the responses summarised in table 6, it is evident that a number of factors play a role in teenage pregnancy in this community which when addressed is likely to improve the situation in Kirumya. 20 (40%) revealed ignorance about contraceptives, 38% mentioned

poverty, 34% mentioned bad environment, 26% revealed peer pressure while 6% revealed pre-marital sex.

The study investigated the challenges faced by teenagers as a result of early pregnancies. Various challenges were reported as presented in table 7 below.

Table 7: Challenges faced by Teenagers as a result of early pregnancies

CHALLENGES	FREQUENCY	PERCENTAGE
Parents chasing away their pregnant daughters	22	44
Rejection by their partners	16	32
Dropping out of school	15	30
Lack of resources to care for the baby	13	26
Lack of food	10	20
Lack of shelter	8	16
Failure to meet medical bills for delivery and care	8	16
Health Complications	6	12

Source: Field data, 2021

The biggest challenge faced by teenager mothers is being chased away by their parents after becoming pregnant as revealed by 22 (44%) respondents. Respondents revealed that immediately the parents get to know that a girl is pregnant, they order her to leave the family leaving her homeless. 16 (32%) revealed that they are often rejected by the partners that impregnated them leaving them to suffer alone with the burden of caring for the pregnancy and

baby after birth. 30% of the respondents revealed that they face a challenge of dropping out of school. Pregnant teenagers drop of school because schools expel them after finding out. In addition, they have to take care of the baby. Other challenges revealed include lack of resource to look after the baby (26%), lack of food (20%), lack of shelter (16%), failure to meet medical bills (16%) and health complications related to early pregnancy (12%).

Table 8: Possible Solutions to Teenage Pregnancy

Solutions	Number of Respondents
Responsive parents	12
Increased access to family planning for teenagers	5
Sex education	10
Restricted access to videos and discos	12
Cultural restrictions	9
Girl child education	7

Source: Field data, 2021

DISCUSSION

Sixty (60) percent of the respondents revealed that teenage pregnancy in Bundibugyo district was between 31-40%, 24% revealed that it was 21-30 % while 16% felt it was below 20%. This shows that the prevalence in Bundibugyo district was higher than the national prevalence of 25% [11]. There has been generally increased incidence of teenage pregnancy in rural are urban areas in Uganda. According to UNICEF, approximately 35% of girls drop out of school because of early marriage and 23% do so because of early pregnancy [12]. In Uganda, the teenage pregnancy rate is 24% with regional variations. This increases to 34% in the poorest households. In rural areas, 24% of girls experience early pregnancy compared to 16% of wealthier households and 21% of urban girls [12].

The practice of early marriage is still prevalent in Uganda and is highly associated with lower female access to secondary education. In regions where girls are married before the legal age of 18, female secondary education is lower [13]. This is because when a girl child drops out of school or is being denied access to secondary education due to traditions or extreme poverty, they opt for marriage as a source of wealth to the family. Extreme poverty, harassment and threats of sexual violence often avert girls from attending school and causing them to be increasingly vulnerable to Sexual and Gender Based Violence (SGBV).

Age of a person greatly determines how well he can make decisions about certain issues. The younger the person, the likely she is to face challenges in proper decision making. From this study the age of the respondents had a bearing on their decision making abilities. The failure by

the respondents to make proper decisions could have contributed to teenage pregnancy in this community. Most respondents were only 15-16 years old. This was in line with an earlier study in Uganda for which showed that the mean age of first sexual intercourse for women was 15.5 years. [14] Early sexual activity seems to be a major challenge in developing countries. This could be linked to a number of factors which include poverty, lack of awareness on sex and sexuality among others.

A study done by Uganda Protestant Medical Bureau [15], showed that 20.4% of the adolescents start sexual intercourse from 14years of age or less, while 47.8% start between the age of 15-18 years and 31.8% start sex between 19-21 years of age. The tender age of sexual intercourse is a very big risk factor since it can cause lots of problems like contracting HIV/AIDS, predisposal to cancer of the cervix among others in these young ladies. The age of sexual debut most likely has a lot to do with parental guidance, lack of accurate information on sex and sexuality among others.

It is evident from the study that most of the respondents had a very modest formal educational level with the most highly educated respondent stopping in senior two. Lack of education leads to lack of knowledge on contraception and consequently to wrong decision making on matters of reproduction. This could be one of the reasons for the high teenage pregnancy in Kirumya sub-county. The [15] study further showed that, 58.2% of adolescents in the sub-county stop in primary level. The situation is worse for the teenage girls since communities prefer boy child education to that of the

girl child. It is very likely that, this low educational level impacts on uptake of health messages and negatively influences behaviour. Many of these young ladies missed opportunities to get information on sexual reproductive health from their formal education hence their vulnerability. This is similar to findings of other studies. Research in Nigeria showed that only 7% of women with seven years of schooling gave birth before 20 years of age, compared to 43% of women with no education. Similarly in Pakistan, only 16% of women with seven years of education gave birth before 20 years of age, compared to 54% of women with no education [14]. Therefore, good formal educational background can help a young girl to delay her reproduction and consequently avoid teenage pregnancy.

Child marriage is traditionally recognized as necessary for controlling girls' sexuality and reproduction. Cultural and religious notions of a girl's virginity and chastity in many societies are directly linked to the honour and status of a family or clan. This means that there is tremendous pressure on parents to marry off girls early to preserve family honour and minimize the risk of improper sexual activity or conduct [16]. Indeed, girls are perceived as incapable of protecting themselves through their own agency. Girls in rural communities may be withdrawn from school at first menstruation to restrict their movements in order to protect their sexuality [17]. This is also linked to the belief that girls' education will, in the long term, adversely influence their future roles as wives and mothers, leading families to continue justifying child marriages.

This finding is also similar to other studies [18], where they found out that low parental guidance, lack of awareness

and lack of correct information about the risks of unwanted pregnancy and sexual transmitted infections (STIs), peer and other social pressures, lack of skills needed to resist such pressures, lack of youth friendly, sexual health and counselling services, poverty and traditional cultural norms that give young women a low social position and little power to resist persuasions into unwanted sex are some of the factors responsible for teenage pregnancy. Therefore, adequate knowledge on reproductive health is very vital if the respondents are to avoid teenage pregnancy.

Parents play a crucial role in the nurturing and upbringing of their children. Parental guidance plays an important role in teenage pregnancy. Most respondents had some challenges with their upbringing more so those who were orphaned or had parents who cared so little about their well fare. Some parents attempted to give information to the children on sex and sexuality, but this was rather vague and many times in the passing. Therefore, children did not take them any seriously. There was no evidence of the traditional community responsibility on all children regardless of relationships where the community played active role in their upbringing. Parents were individualistic and only cared about their own children. At the family level, many teenagers did not get information about sex at home. They were hesitant to questions about sex for fear of embarrassing their parents. Studies show that, they seek information from sources such as videos, books, friends that may be confusing and misleading [18]. Therefore, it is evident that, poor parental guidance contributed greatly to the teen age pregnancy in this study.

CONCLUSION

The study concluded that there is a high prevalence of teenage pregnancies in Kirumya sub-county Bundibugyo District, in western Uganda. Factors that contributed to a high teenage pregnancy rate in Kirumya sub-county of Bundibugyo district are interrelated and rest on issues of parental guidance, level of education, cultural values, socio-

economic conditions, access to services, conducive environment for proper child upbringing and development as some of the key issues that in one way or another contribute to the high teen age pregnancy. Since it is on record that, sexually active adolescent women experience higher levels of reproductive mortality and morbidity than women in

20's and early 30's, all the concerned people should ensure that efforts in

addressing this situation are put in place.

REFERENCES

1. World Health Organization (WHO) (2014). World Health Statistics 2014. http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf
2. Acharya, D.R., Bell, J.S., Simkhada, P. *et al.* (2010). Women's autonomy in household decision-making: a demographic study in Nepal. *Reprod Health* 7,15. <https://doi.org/10.1186/1742-4755-7-15>
3. Miller, B. C. (2002). Family influences on adolescent sexual and contraceptive behavior. *J Sex Res.*, 39(1):22-6. doi: 10.1080/00224490209552115. PMID: 12476252.
4. Ouma, S., Obita, K. O., Mananura, T., Omara, A. H., Nabbale, F., Rama, M. T., & Awor, S. (2018). Teenage Marriage in Post Conflict Northern Uganda: A Case of Amuru District. *Science*, 6(2), 61-65.
5. WHO (2010) The World Health Report (2010): Health Systems Financing; the Path to Universal Coverage. W.H. Organization.
6. Masanyiwa, Z. S., Namwata, B. M., Mbeba, R. M., & Kaemdin, M. (2011). Self-Help Groups and Access to Sexual and Reproductive Health Services and Rights among Youth in Mtwara and Lindi Districts, Tanzania
7. Ugwu, Chinyere. N., & Eze Val, H. U. (2023). Qualitative Research. *IDOSR Journal of Computer and Applied Sciences* 8(1) 20-35. <https://www.idosr.org/wp-content/uploads/2023/01/IDOSR-JCAS-8120-35-2023.docx.pdf>
8. Hakim, C. (1987). *Research Design: Strategies and Choices in the Design of Social Research*, Contemporary Social Research Series 13. London: Allen and Unwin.
9. Burnard, P., & Morrison, P. (1994). Self-disclosure and nursing students: The replication of a Jourard study. *International Journal of Nursing Studies*, 31(2), 194-200. [https://doi.org/10.1016/0020-7489\(94\)90045-0](https://doi.org/10.1016/0020-7489(94)90045-0)
10. Ugwu, C. N., Eze, V. H. U., Ugwu, J. N., Ogenyi, F. C., & Ugwu, O. P. C. (2023). Ethical Publication Issues in the Collection and Analysis of Research Data. *Newport International Journal of Scientific and Experimental Sciences (NIJSES)* 3(2): 132-140. <https://nijournals.org/wp-content/uploads/2023/07/NIJSES-32-132-140-2023.pdf>
11. District Health Office (2016). Health Management Information System
12. UNICEF (2015) Monitoring Situation of Children and Women.
13. OECD. (2015). Final synthesis: New approaches to economic challenges. prepared for meeting of the OECD Council at the Ministerial Level Paris 3-4 June <http://www.oecd.org/naec/Final-NAEC-Synthesis-Report-CMIN2015-2.pdf>.
14. Nahum O. E., Yosipof, A., & Senderowitz, H. (2015). A Multi-Objective Genetic Algorithm for Outlier Removal, *J Chem. Inf. Model. J. Chem. Inf. Model.*, 55, 2507-2518.
15. UPMB (2007). An assessment of reproductive health services in Kirumya Sub County.
16. Sagade, J. (2005) *Child Marriage in India: Socio-legal and Human Rights Dimension*. Oxford: Oxford University Press.
17. UNICEF. (2001) *Early Marriage: Child Spouses*. Florence: UNICEF Innocenti Research Centre.
18. Neema et al (2004). Evidence of adolescent sexual reproductive health in Uganda.

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