Factors Associated with the Prevalence of Induced Abortions among Females of Age 16 to 30 Years at Busiu Center IV, Mbale District. A Cross-sectional Study.

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Abstract

Background:
 Induced abortion is defined as a procedure done to end pregnancy [ACOG], and most induced abortions are done in the first 12 weeks of pregnancy.

Methodology:
The study was cross-sectional in design. This is so because it yields results in a short time. A simple random sampling technique was used to select 60 respondents who participated in the study.

Results:
The majority 35(58%) of the respondents were Bagisu and the least 4(7%) were Bagwere. Most 33(55%) of the respondents had attained secondary 12(40%) of the respondents had attained primary level, 9(15%) attained tertiary level and the least 6(10%) had attained none. Majority (43)72% of the respondents were in the age range of 16-26 years due to fact that this is the reproductive age group, still attending school, more sexually active and are exposed to sexual and reproduction information and articles; of which most are not married having fear to sustain pregnancy and the least (17) 28% were 30-44 years as most of them are married thus with no fear for sustaining the pregnancy once they conceived.

Conclusion:
The study showed that most of the women of reproductive age had some knowledge of induced abortion but a few knew about safe induced abortion and the majority knew at least one method of induced abortion.

Recommendations:
This study highlighted the need for policymakers and health administrators to implement measures that would increase the knowledge of people on safe induced abortion including legal rights.

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1   Background of the Study

According to the WHO, unsafe abortion is defined as the "process of terminating a pregnancy either by people lacking necessary skills or an environment lacking minimal medical standards (less safe) or both (least safe) (Medecins sans frontiers, 2019). On the other hand, induced abortion is defined as a procedure done to end pregnancy [ACOG]; and most induced abortions are done in the first 12 weeks of pregnancy. Induced abortion can also be defined as an abortion that is brought about intentionally also called artificial or therapeutic abortion. An abortion that occurs without intervention is known as a miscarriage(The Johns Hopkins Manual of Gynecology and Obstetrics (4 ed.), 2017). The Ugandan Ministry of Health 2006 Ugandan policy

guidelines and service standards for sexual and Reproductive Health and rights gives several specific cases in which women have the right to seek an abortion; and that includes rape, sexual violence, incest, or when a woman has pre-existing conditions such as HIV/AIDS, cancer of the cervix. It can also be performed by a licensed medical doctor in a situation where a woman's life is deemed to be at risk.

Globally, approximately180 to 200 million pregnancies occur each year, and about 75 million are unwanted pregnancies , the majority of unwanted pregnancies end in induced abortions. The WHO estimates that over 20 million pregnancies result in unsafe abortions and this proportion has been increasing with developing countries contributing over 97% of unsafe abortion cases including Uganda. Each year, an estimated 56 million induced abortions occur worldwide and 45% of these are unsafe.

In Ghana, the prevalence of induced abortion was found to be higher among women aged 25 to 34 years, those who had secondary level education, those living in urban areas & in the Ashanti region, those in the Akan ethnicity & and those belonging to the non- Catholic Christian denomination. Mozambican women are not an exception. Maternal mortality ratio (MMR) is high- estimated at 408 deaths per 100,000 live births in Mozambique, and abortion complications contribute to about 6.8% of the MMR. Various issues surround the recording and classification of induced abortions, miscarriages, and stillbirths in low and middle-income countries including Uganda [Angela JN, Abdul Mumin AR, *et al.*, International Journal of Gynecology and Obstetrics –November 2019]. These include limited early evaluation and documentation of risk factors, limited early dating to prevent postdate miscarriages and stillbirths, limited availability of diagnostic testing, a large proportion of deliveries occurring from outside the health facilities, lack of early identification of fetal distress, and prompt delivery of such fetuses

Some reasons behind women's choice to terminate a pregnancy are related to factors such as being very young and wishing to postpone childbirth, economic reasons, relationship problems, rape, and/or social stigma related to being pregnant while unmarried.

The Ugandan law prohibits abortion under all circumstances except where there is a risk for the woman's life. However, it has been estimated that over 297000 unsafe abortions occur and nearly 85000 women have induced abortions performed manually. Furthermore, the Ugandan Ministry of Health's 2006 National Policy Guidelines and Service Standards for Sexual and Reproductive Health and Rights gives several specific cases in which women have the right to seek an abortion for example; rape, sexual violence or incest, women with pre-existing conditions like HIV/AIDS or cervical cancer. The main objective of the study was to determine the factors associated with the prevalence of induced abortions among females of age between 16 to 30 years of attending health services at Busiu Health Center IV in Mbale district.

Study methodology
Study Design

The study design was cross-sectional and descriptive; it employed both qualitative and quantitative methods of data collection. This method aimed at obtaining the relevant data concerning factors associated with the prevalence of induced abortions among females of age between 16 to 30 years within a short period. The study design also disproved assumptions that may arise during the study.

Area of study

The study was carried out at Busiu Health Centre IV. Busiu Health Centre IV is a hospital in Eastern Uganda and an elevation of 1,166 meters. It is located along Mbale-Tororo Highway.

Study Population

The study targeted females of age between 16 to 30 years who presented at the ward with any history of induced abortion, a complication of an induced abortion plus antenatal mothers with any previous history of induced abortion. The researcher used this population in the study because it was the most prevalent induced abortion.

Sample size determination

Sample size = QR/O

Q=Number of days spent in data collection

R=Maximum number of people interviewed per day

O=Maximum time the interview took

Q=10 days, R=6 O=1

Therefore, 10 * 6/1=60

Sampling Technique

The researcher used the simple random sampling technique as it is easy to collect the relevant

data from the respondents in a short period with minimal bias.

Sampling Procedure

A simple random sampling method was used to sample the mothers who brought their children under five years at Busiu Health Center IV

PRE-TESTING

This was done by random selection of the females who came to seek medical attention at Busiu Health Center Iv

Data collection method

The researcher used the questionnaire method to collect data from the females of age 16 to 30 years attending medical services at Busiu Health Center Iv-Mbale District. This was because it enabled data collection in a short period at relatively low costs, and it is also easy to quantify data for analysis.

Study tool

A questionnaire was pre-tested and designed by the author based on the demographic characteristics of respondents and specific objectives were used during data collection.

Research assistants who can read and interpret it were selected and trained on how to administer the questionnaire.

Data collection procedure

The researcher introduced himself to the females of age 16 to 30 years at Busiu Health Center IV who come seeking medical services

The researcher explained the entire procedure of data collection process to the respondents;

Give the meaning of the study

Establish the level of confidentiality and the purpose of the study

The researcher sought consent by offering a consent form to the voluntary participants.

A self-administered questionnaire for literate respondents and interpreted for illiterate respondents in Lugisu by the researcher assistant as the researcher reads it out and records the data findings.

2   Data Analysis and Presentation

Data was statistically analyzed manually by simple calculators to minimize data entry errors and was presented in a frequency table, pie charts, and bar graphs. This method of data analysis will time for

the researcher to look through the mistakes of data collection; presenting data in variables.

Ethical considerations

A letter of introduction to the facility was obtained from Medicare Health Professional's College, addressed to the District Health Officer (DHO) Mbale District seeking permission to conduct the study in Busiu Health Center Iv

Permission will also be sought from the medical superintendent Busiu HCIV and from LC1 Chairperson Hospital Zone to carry out a study in their areas of jurisdiction.

• The researcher will seek consent from each of the respondents by giving a consent form before administering the questionnaire. In the consent form, the respondents will have a right to either accept or withdraw from the participation in the study.

• The information obtained for the respondents was kept with utmost confidentiality by the researcher by not disclosing the respondents' information to anyone during and after the study and in the same way, the information that was obtained was used for study purposes.

• The welfare of respondents was assured by explaining the research procedure, the purpose of the study, and the level of confidentiality to them before issuing a consent form.

• The respondents have assured anonymity as no names of the respondents were taken by the researcher and data that was collected was only be used for statistical purposes.

Quality Control

The researcher will ensure quality by; pre-testing of the questionnaire tool. The questionnaire was pre-tested for time, cost-effectiveness, flexibility, reliability, and validity.

3   Data analysis and presentation

The majority 43(72%) of the respondents were in the age range of 16-26 years, and the least 17(28%) were 30-44 years.

Most of the respondents 35(58%) were Bagisu, 10(17%) were Itesotes, 6(10%) were Basoga, 4(7%) were Bagwere, 3(13%) were other tribes and the least 2(3%) were Baganda.

Most 30(18%) of the respondents were Anglican, 13(22%) were Catholic, 11(19%) were Muslim,

Table 1. Demographic Characteristics Of The Respondents

Characterictics	Frequency	Percentage (%)
Age		
16-26	43	72
30-44	17	28
Tribe		
Baganda	2	3
Basoga	6	10
Bagisu	35	58
Itesotes	10	17
Bagwere	4	7
Others	3	5
Religion		
Protestants	18	30
Catholic	13	22
Muslim	11	19
Orthodox	10	16
Others	7	12
Education Level		
Primary	12	20
Secondary	33	55
Tertiary	9	15
None	6	10
Marital Status		
Never married	51	85
Married	9	15
Employment Status		
Peasant	12	20
Business	9	15
Not employed	32	53
Civil servant	7	12
Place of Residence		
Urban area	18	30
Rural area	42	70
Number of children respondents had		
None	37	65
1-2	10	17
2-4	8	13
>or=5	3	5

10(16%) were Orthodox and lastly, 7(12%) were other such as Born again Christians

The majority 33(55%) of the respondents attained secondary level, 12(20%) attained primary level, 9(15%) attained Tertiary level and the least 6(10%) had never gone to school.

The majority 51(85%) of the respondents were never married while 9(15%) were married.

Most of the respondents 32(53%) were non/not employed such as students, 12(20%) were peas-ants, 9(15%) were Businessmen and women and 7(12%) were civil servants.

The majority 42(70%) of the respondents were residing in rural areas while 18(30%) were residing in urban areas.

The majority 39(65%) of the respondents had no children, 10(17%) had 1-2 children, 8(13%) had 3-4 children and the least 3(5%) had more than 5 children.

The socio-demographic factors associated with induced abortion among females of age between 16 to 30 years of attending health services

In this first objective, the researcher sought to find out the socio-demographic factors associated with induced abortion among females of age between 16 to 30 years of attending health services

The majority 43(72%) of the respondents were in the age range of 16-26 years, and the least 17(28%) were 30-44 years.

Most of the respondents 35(58%) were Bagisu, 10(17%) were Itesotes, 6(10%) were Basoga, 4(7%) were Bagwere, 3(13%) were other tribes and the least 2(3%) were Baganda.

Most 30(18%) of the respondents were Anglican, 13(22%) were Catholic, 11(19%) were Muslim, 10(16%) were Orthodox and lastly, 7(12%) were other such as Born again Christians

The majority 33(55%) of the respondents attained secondary level, 12(20%) attained primary level, 9(15%) attained Tertiary level and the least 6(10%) had never gone to school.

The majority 51(85%) of the respondents were never married while 9(15%) were married.

Most of the respondents 32(53%) were non/not employed such as students, 12(20%) were peasants, 9(15%) were Businessmen and women and 7(12%) were civil servants.

The majority 42(70%) of the respondents were residing in rural areas while 18(30%) were residing in urban areas.

The majority 39(65%) of the respondents had no children, 10(17%) had 1-2 children, 8(13%) had 3-4 children and the least 3(5%) had more than 5 children

Knowledge about the complications of induced abortions among females of age 16 to 30 years.

In this second objective, the researcher sought to find out the Knowledge about the complications of induced abortions among females of age 16 to 30 years.

The majority 55(92%) of the respondents had ever heard about induced abortion while 5(8%) had never heard about induced abortion.

The majority 40(67%) of the respondents had ever received information about the complications of induced abortion while 20(33%) had never received any information about the complications of induced abortion.

Most 18(30%) of the respondents reported personal observation as the main source of information via (the internet, Facebook and tube, etc), 15(25%) reported attending health talks, 12(20%) reported radio, 8(14%) reported friends and lastly 7(11%) reported parents.

The majority 50(83%) of the respondents were aware of the complications of induced abortion while 10(17%) were not aware of the complications of induced abortion.

Most of the respondents 33(55%) reported bleeding as a complication known, 12(20%) reported foul-smelling discharge, 9(15%) reported death, and lastly 6(10%) reported infertility.

The majority 40(67%) of the respondents had ever heard about induced abortion while 20(33%) had never heard about induced abortion.

Half 20(50%) of the respondents reported that they knew traditional herbs, (28%) reported medical methods while the least 9 (22%) reported surgical methods.

The health-related factors associated with induced abortion among females of 16 to 30 years.

In this third objective, the researcher sought to find out the health-related factors associated with induced abortion among females of 16 to 30 years.

The majority 40(67%) of the respondents had a history of induced abortion while 20(33%) had never had any history of induced abortion.

Most of the respondents 36(60%) reported that they had induced abortion was conducted in two years, 11(18%) had induced abortion conducted less than one year ago, 8(13%) had induced abortion conducted in more than two years ago and 5(8%) reported others such more than three years.

The majority 39(65%) reported that Traditional practitioners carried out an induced abortion, 10(17%) reported private clinics, 8(13%) reported Health centers, and lastly, 3(5%) reported hospitals.

Most 24(40%) of the respondents reported being too young to bear a child as the reason for induced abortion,16 (27%) reported disrupting education, 12(20%) reported disrupting employment while the least 8(13%) reported Others causes.

The majority 43(72%) of the respondents had an illness in the last one-month while 17(28%) had no illness in the last one month.

Most of the respondents 23(53%) reported that Morning sickness was the illness in the last month, 10(23%) reported Abnormal vaginal discharge,

Table 2. Distribution of respondents by Age (n=60)

Age(years)	Frequency (F)	Percentage (%)
16-26	43	72
30-44	17	28
Total	**60**	**100**

Table 3. Distribution of respondents by tribe (n=60)

Tribe	Frequency (F)	Percentage (%)
Baganda	2	3
Basoga	6	10
Bagisu	35	58
Itesotes	10	17
Bagwere	4	7
Others	3	5
Total	**60**	**100**
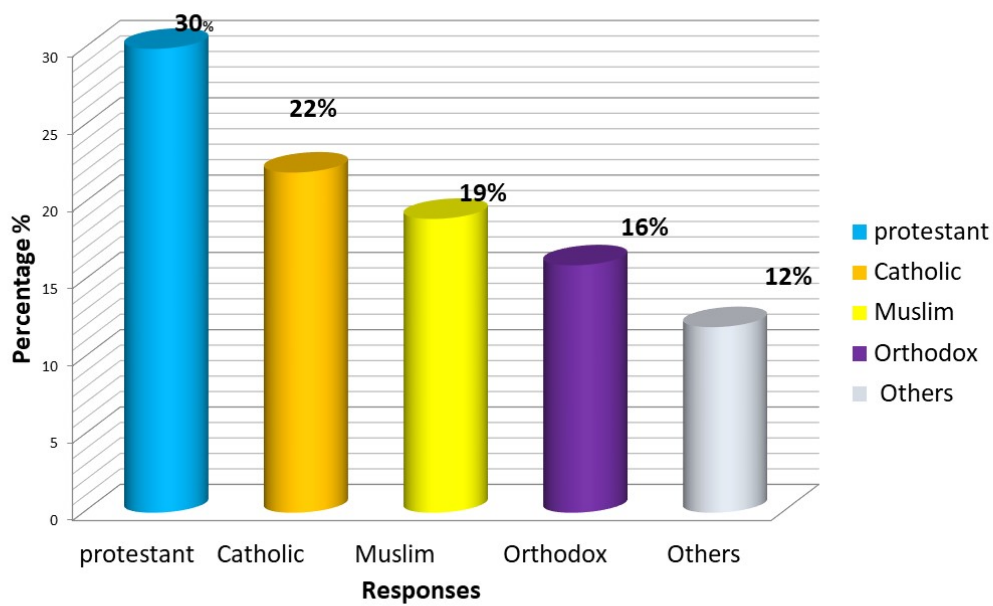
Figure 1. Distribution of respondents by Religion (n=60)

Table 4. Distribution of respondents by the level of education (n=60)

Age	Frequency (F)	Percentage (%)
Primary	12	20
Secondary	33	55
Tertiary	9	15
None	6	10
Total	**60**	**100**
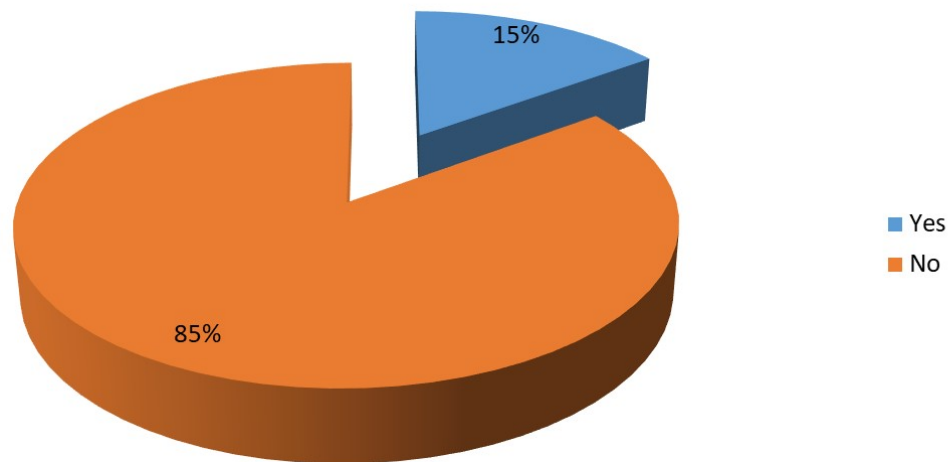
Figure 2. Whether the respondents were married (n=60)

Table 5. Distribution of respondents by Employment status (n=60)

Age	Frequency (F)	Percentage (%)
peasant	12	20
Business	9	15
non/not employed	32	53
civil servant	7	12
Total	**60**	**100**

Table 6. Number of children that Respondents had

Number of children	Frequency (F)	Percentage (%)
None	39	65
1-2	10	17
3-4	8	13
≥5	3	5
Total	**60**	**100**

Table 7. Whether respondents ever received any information about the complications of induced abortion

Responses	Frequency (F)	Percentage (%)
Yes	**40**	**67**
No	**20**	**33**
Total	**60**	**100**
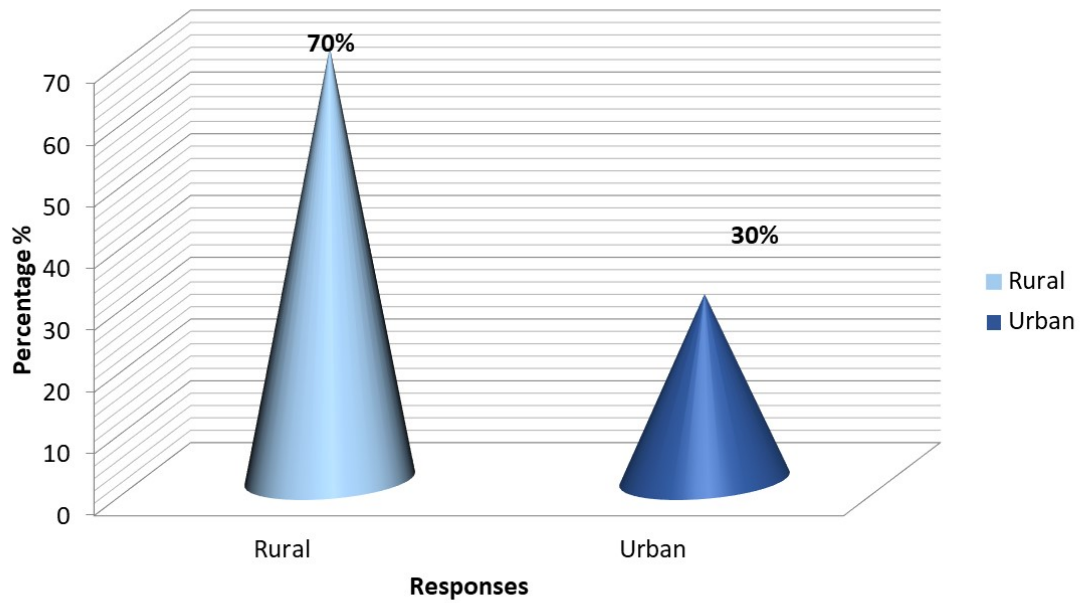
Chart 1. Distribution of respondents by Place of residence
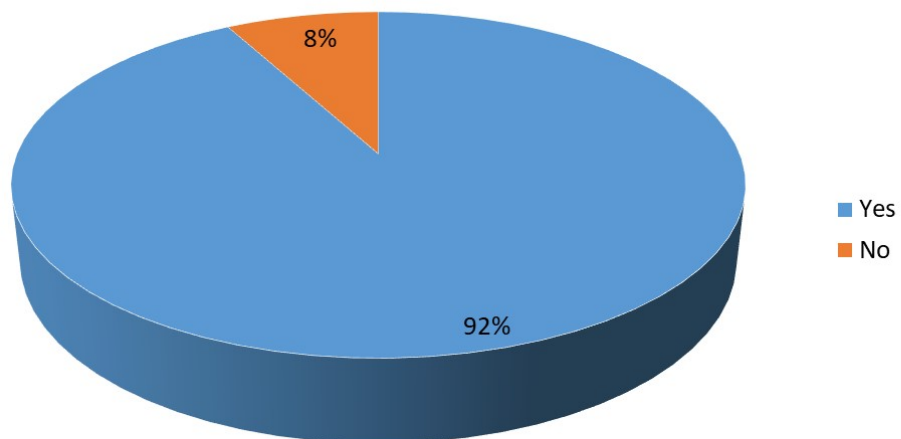
Table 8. Respondents' source of information about the complications of induced abortion (n=60)

Responses	Frequency (F)	Percentage (%)
Radio	12	20
Friends	8	14
Parents	7	11
Personal observation	18	30
From attending health talks	15	25
Total	**60**	**100**
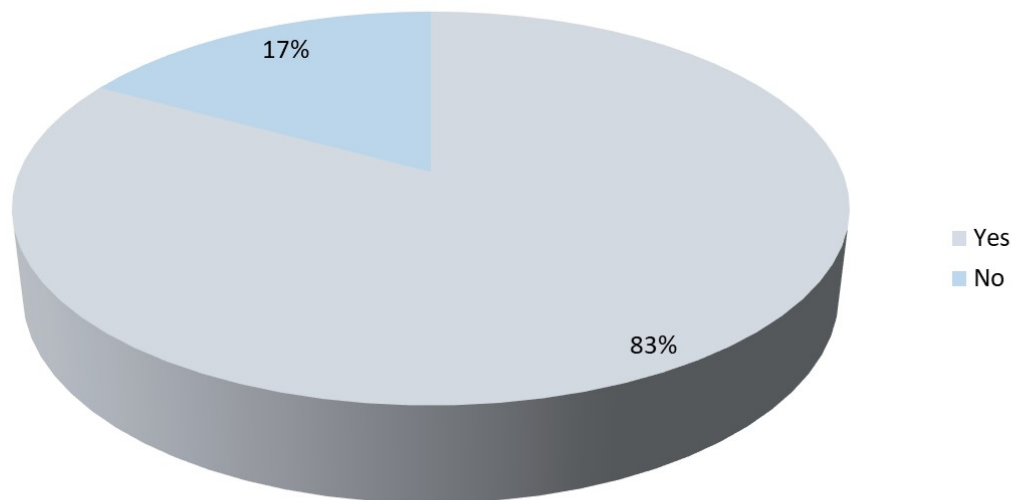
Figure 4. Whether respondents were aware of any complications of induced abortion

Table 9. The complications respondents knew (n=50)

Responses	Frequency (F)	Percentage (%)
foul smelling discharge	12	20
Vaginal bleeding	33	55
Death	9	15
Infertility	6	10
Total	**50**	**100**

Table 10. Methods of inducing abortions that respondents knew (n=40)

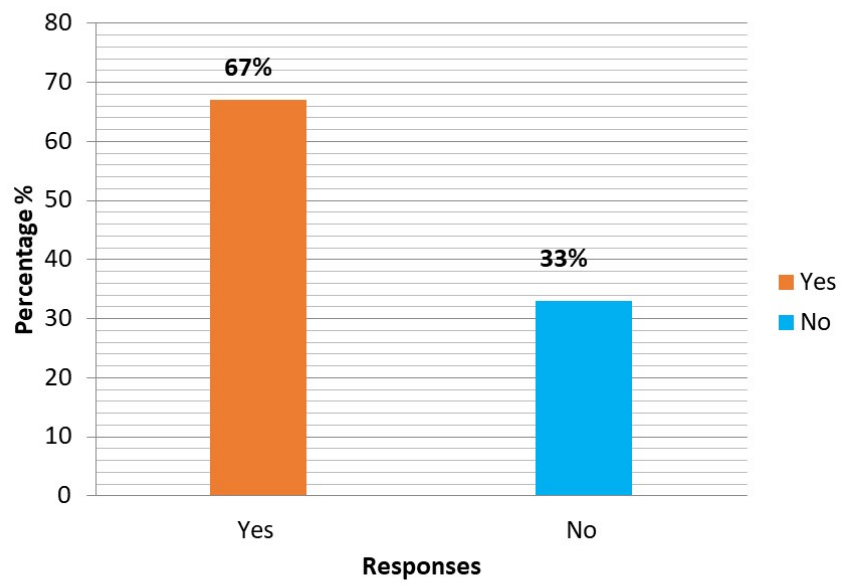| Responses	Frequency (F)	Percentage (%)
Traditional herbs	20	50
medical method	11	28
surgical methods	9	22
Total	**40**	**100**

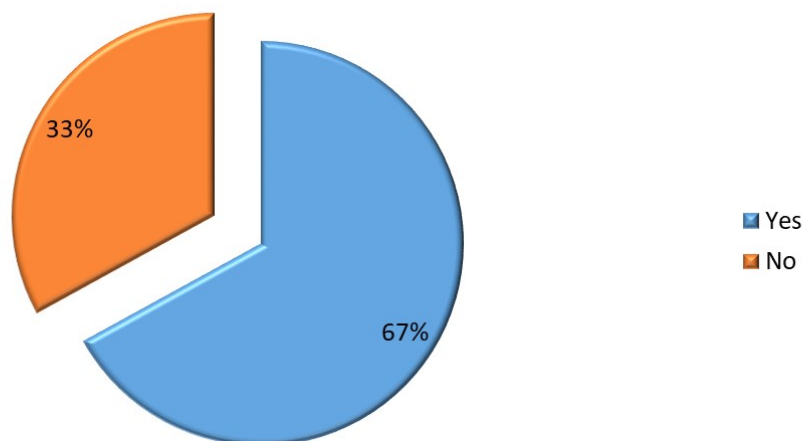**Figure 5.** Whether respondents knew any method used in conducting an abortion

Figure 6. Whether respondents have any history of induced abortion

Table 11. Time when the respondents last had an induced abortion

Responses	Frequency (F)	Percentage (%)
less than one year ago	11	18
two years	36	60
more than two years ago	8	13
Other	5	8
Total	**60**	**100**

Table 12. Whether respondents induced abortion from home or hospital

Responses	Frequency (F)	Percentage (%)
Private Clinic	10	17
Traditional practitioners	39	65
Hospital	3	5
Health Center	8	13
Other	0	0
Total	**60**	**100**

Table 13. Reason why the respondents had induced abortion

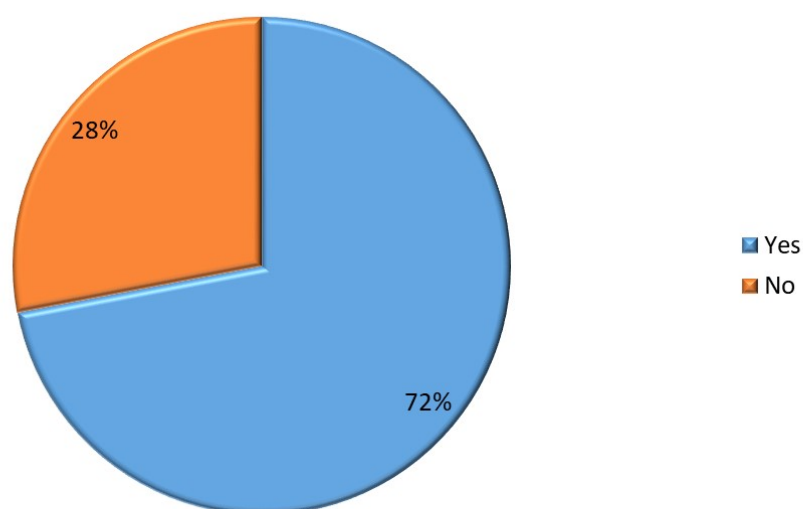| Responses	Frequency (F)	Percentage (%)
Too young to bear a child	24	40
Disrupt education	16	27
Disrupt employment	12	20
Other	8	13
Total	**60**	**100**

Figure 7. Whether respondents had any illness in the previous month

Table 14. The illness incurred by the respondents in the previous month n=43

Responses	Frequency (F)	Percentage (%)
Abnormal vaginal discharge	10	23
Morning sickness	23	53
Candida	6	14
Malaria	4	9
Total	**43**	**100**

6(14%) reported Candida, and lastly, 4(9%) reported malaria.

4   Discussion, Conclusions, and Recommendations

5   Discussion

Demographic characteristics of the respondents.

Most 43(72%) of the respondents were of age between 16-26 years possibly because this is the reproductive age group, still attending school, more sexually active, and are exposed to sexual and reproduction information and articles; of which most are not married having fear to sustain pregnancy; while only 17(28%) were between 30-44 years as most of them are married thus no fear for sustaining the pregnancy once they conceived.

The majority 35(58%) of the respondents were Bagisu and the least 4(7%) were Bagwere; this was because the study was conducted at Busiu Health Center IV which is in Bugisu sub-region with a few Bagwere who are natives only by marriage.

Most 18(30%) of the respondents were protestants; this is because protestants don't recommend the use of contraceptive methods and premarital sex as this is a sin, which predisposes the young sexually active group at risk of unprotected sex ending up with induced abortion due to fear to sustain the pregnancy; while the least 7(12%) had no religion as they use contraceptive methods thus a few ending up with unwanted pregnancy hence induced abortion.

The majority 33(55%) of the respondents had attended a secondary level of education; this is because they most sexually active group and more exposed to unprotected sex possibly due to peer pressure plus the easy access to online pornographic information which is embraced by the majority, while the least 6(10%) were not at school under parental care with limited exposure to sexual information.

Most 51(85%) of the respondents were not married possibly because great fear is attached to pregnancy among the unmarried thus ending up in induced abortion compared to the married who have no fear of sustaining the pregnancy hence were the least 9(15%) in number.

The majority 32(53%) of the respondents were not employed while the least 7(12%) were civil servants; this was because the unemployed females have limited information on the use of contraceptives, and are easily lured into unprotected sex by men as they cannot sustain themselves alone financially and also having a lot of vacant time with nothing to do compared to the civil servants who are well acquainted with knowledge on contraceptive use and also financially stable.

42(70%) of respondents were from the rural setting while only 18(30%) were from the urban settings. This was due to the fact the hospital (Busiu HCIV) where the research study was conducted was established in a rural setting and it was

found that most of the females in the rural setting were ignorant about contraception and the dangers of induced abortion, compared to those from the urban setting.

Socio-demographic factors associated with induced abortion among females of age between 16 to 30 years attending health services

The study showed that the majority (43)72% of the respondents were in the age range of 16-26 years due to fact that this is the reproductive age group, still attending school, more sexually active and are exposed to sexual and reproduction information and articles; of which most are not married having fear to sustain pregnancy and the least (17) 28% were 30-44 years as most of them are married thus with no fear for sustaining the pregnancy once they conceived. This is not in line with binary logistic regression analysis and the multivariate lo-

gistic regression analysis of the Ghana Health and Demographic Survey data by Guure, C., et al. 2019 on socio-demographic factors affecting the abortion rate in Ghana which revealed that women in the age group 35-39 years had the highest (31.2%) prevalence of abortion while women in the age group of 15-19 years had the lowest (2.6%).

The majority 35(58%) of the respondents were Bagisu and the least 4(7%) were Bagwere; this was because the study was conducted at Busiu Health Center IV which is in Bugisu sub-region with a few Bagwere who are natives only by marriage. There was no research found that had been conducted in Eastern Uganda to relate.

Most 18(30%) of the respondents were protestants; this is because protestants don't recommend the use of contraceptive methods and premarital sex as this is a sin, which predisposes the young sexually active group at risk of unprotected sex to ending up with induced abortion due to fear to sustain the pregnancy; while the least 7(12%) had no religion as they use contraceptive methods thus a few ending up with unwanted pregnancy hence induced abortion. This is in agreement with the research study which was carried out by Ololade J. Baruwa, Acheampong S Yaw, *et al.*in North-West University; Mafikeng Campus in 2014 which revealed that most (62%) of women belong to other Christian denominations, followed by Muslim.

The study showed that most (33)55% of the respondents attained secondary level, (12)20% attained primary level, (9)15% attained Tertiary level, and the least (6)10% had never gone to school. This is because at the secondary level, the most sexually active group and more exposed to unprotected sex possibly due to peer pressure plus the easy access to online pornographic information which is embraced by the majority, while the least,6(10%); not at school are under parental care with limited exposure to sexual information. This is not in line with binary logistic regression analysis and the multivariate logistic regression analysis of the Ghana Health and Demographic Survey data by Guure, C., *et al.* 2019 on socio-demographic factors affecting the abortion rate in Ghana which revealed that Considering education, women with primary education had the most (22.3%) prevalence of while women with no formal education had the lowest (19.6%) abortion rate.

It was revealed by the study that most (51)85% of the respondents were never married while (9)15%

were married because great fear is attached to pregnancy among the unmarried thus end up in induced abortion compared to the married who have no fear to sustaining the pregnancy hence were the least 9(15%) in number. This is not in agreement with a study carried out by Chae S, *et al* (2017) on Characteristics of women obtaining induced abortions in selected low- and middle-income countries which revealed that regarding marital status, the rate of abortion is 26.8% among married women compared to 9.9% among the never-married women.

Furthermore, the majority 32(53%) of the respondents were not employed while the least 7(12%) were civil servants; this was because the unemployed females have limited information on the use of contraceptives, and are easily lured into unprotected sex by men as they cannot sustain themselves alone financially and also having a lot of vacant time with nothing to do compared to the civil servants who are well acquainted with knowledge on contraceptive use and also financially stable. This is not in agreement with the research study which was conducted by Ololade J. Baruwa, Acheampong S. Yaw, et al.in North-West University; Mafikeng Campus in 2014 which revealed that the majority (72%) of women are working while 28% are not.

The study also revealed that the majority (42)70% of the respondents were residing in rural areas while (18)30% were residing in urban areas. This was due to the fact the hospital (Busiu HCIV) where the research study was conducted was established in a rural setting and it was

found that most of the females in the rural setting were ignorant about contraception and the dangers of induced abortion, compared to those from the urban setting. This is not in agreement with binary logistic regression analysis and the multivariate logistic regression analysis of the Ghana Health and Demographic Survey data by Guure, C., *et al.,* 2019 on socio-demographic factors affecting the abortion rate in Ghana which revealed that the place of residence, women residing in urban areas have a higher prevalence of 24.7% abortion rate compare to the 18.2% of women living in rural areas.

Knowledge about the complications of induced abortions among females of age 16 to 30 years.

The study revealed that the majority (55)92% of the respondents had ever heard about induced abortion while (5)8% had never heard about induced abortion. This is because most of them were attending secondary level of education, very sexually active moreover in COVID-19 lockdown and could easily access sexual information online with their phones or from friends and also with the use internet cafes. This is in agreement with a cross-section study carried out by Rachel Yaecob *et al.*, 2018 about "Knowledge, Attitude and Practice towards Induced Abortion and Associated Factors among Female students in Yebu Secondary School, Jimma zone, South West Ethiopia which revealed that 74.2% of them had had an induced abortion. This might be due to the increased level of awareness of the risk of induced abortion and differences in other factors including religion and culture in those study areas.

The research study also showed that the majority 50(83%) of the respondents were aware of the complications of induced abortion while only 10(17%) were not aware of any complications of induced abortion. This was due to the fact most of them reported having observed them directly from their peers and also due to the sexual education from a school where they are briefed with this information. This is in line with the research study carried out in Nigeria by Cadmus E and Owoaje E, 2014 on knowledge about complications and practice of abortion among female undergraduates in the University of Ibadan which revealed that (90.4%) of respondents knew that infertility was a complication of abortion; 363 (85.4%) knew death was a possible complication; 345 (81.2%) knew unsafe abortion may be associated with bleeding and 336 (79.1%) and 326 (76.7%) respectively.

The majority 18(30%) of the respondents reported having received information about the complications of induced abortion through personal observation via (the internet, Facebook and Youtube, etc), 15(25%) reported attending health talks, 12(20%) reported radio, 8(14%) reported friends while the least 7(11%) from their parents. This followed the fact that most young females receive information about the complications of induced abortion through direct observation via the internet, Facebook Youtube, and other social media platforms compared to their parents thus receiving more information through direct observation than from their parents. This is in agreement with

the cross-section study which was carried out by (Paluku *et al.,* 2013) about knowledge, attitude, and practices towards induced abortion among female youths attending Naguru Teenage Information and Health Center, Kampala, Uganda where the majority of the participants reported to have received information on induced abortion and its dangers from friends, either at school or at home.

The study also showed that the majority 40(67%) of the respondents were aware of some of the complications of induced abortion while 20(33%) had never heard about induced abortion as they reported having received it from their peers and also due to the increased health sensitization talk shows on televisions, radios and from the sexual education at school. This is in agreement with the cross-section study which was carried out by Justin (Paluku *et al.,* 2013) about knowledge, attitude, and practices towards induced abortion among female youths attending Naguru Teenage Information and Health Center, Kampala, Uganda where the majority of the participants reported to have received information on induced abortion and its dangers from friends, either at school or at home.

It was discovered that most of the respondents (33)55% reported vaginal bleeding as a complication known, (12)20% reported foul-smelling discharge, (9)15% reported death, and lastly only (6)10% reported infertility. This is because induction abortion is associated with untimely detachment of the fetus from the highly vascularized uterine wall hence the bleeding. This is in agreement with a study carried out by a study carried out in Nigeria by Cadmus E and Owoaje E, 2014 on knowledge about complications and practice of abortion among female undergraduates in the university of Ibadan revealed that 81.2% knew unsafe abortion may be associated with bleeding.

Health-related factors associated with induced abortion among females of 16 to 30 years.

The study revealed that the majority (40) 67% of the respondents had a history of induced abortion while (20)33% had never had any history of induced abortion. This is because a previous history of induced abortion is a predisposing factor to induced abortion whereas with no history of induced abortion is rarely a risk to opt for inducing abortion due to fear of the related complications. This is in agreement with a research study carried out in Ethiopia by Tesfaye, G *et al* 2014 about Induced

Abortion and Associated Factors in Health Facilities of Guraghe Zone, Southern Ethiopia, it reported that 207 (51.8) of the respondents had a history of one or two induced abortions including the current pregnancy that ended in abortion.

The study also showed that most of the respondents (36)60% had induced abortion two years prior, (11)18% had induced abortion conducted less than one year ago, (8)13% had induced abortion conducted in more than two years ago and (5)8% reported other durations such more than three years. This was because most of the respondents tend to be fearless about the risks associated with induced abortion after two years as they consider themselves to be more experienced. This is equivalent to the Cross-sectional study which was carried out by Tesfaye, G *et al* 2014 about Induced Abortion and Associated Factors in Health Facilities of Guraghe Zone, Southern Ethiopia; which revealed that Sixty-eight (17%) of the respondents had a previous history of abortion, which was experienced once in 86.8%, twice in 11.7%, and three times in 1.5% of the respondents.

The majority (39)65% reported that Traditional practitioners performed induced abortions on them previously, (10)17% reported private clinics, (8)13% reported Health centers, and lastly (3)5% reported hospitals. This is due to fear of legal associated issues with induced abortion in hospital settings and also the very high prices charged by the medical health professionals willing to perform the abortion. This is in agreement with a study carried out by Tadesse N, *et al* 2020 about Prevalence of Induced Abortion and its Associated Factors among Female Students of Health Science in South West Ethiopia which revealed that the most commonplace abortion was a private clinic. The place where these abortions were conducted were Private Clinic 41(51.9), Health Center 22(27.9) Hospital 9(11.4), and traditional practitioners 7(8.8%).

It was also revealed that 24(40%) of the respondents reported being too young to bear a child as the reason for induced abortion, 16 (27%) reported disrupting education, 12(20%) reported Disrupt employment while the least 8(13%) reported others causes.

This is similar to a study carried out by Gezahegn Tesfaye, Mitiku Teshome, *et al.* 2014 about those women who had had an abortion, reported that

the most commonly given reasons were "not to disrupt education or employment" (35.6%) and "too young to bear a child" (28.7%).

The study showed that the majority 43(72%) of the respondents had an illness in the last one month while 17(28%) had no illness in the last one month. This is because most abortions are associated with poor management of sexually transmitted diseases and to a lesser extent urinary tract infections. This is in agreement with a research study which was conducted by (Berihun S, *et al* 2021) on the assessment of Induced Abortion and Its Associated Factors among Reproductive Age Group Women in Debre Markos Referral Hospital which revealed that (9(35%) had some kind of illness in the last one month, among them 6(6.6%) had the pregnancy-related disease and 5(1.9%) reported that as they were exposed for fetal deformity problem during this pregnancy.

The study also revealed that most of the respondents 23(53%) reported Morning sickness as an illness in the last month, 10(23%) reported Abnormal vaginal discharge, 6(14%) reported Candida, and lastly, 4(9%) reported malaria. This is because most of such illnesses are secondary to the pregnancy due to the altered immunity and change in the PH of the vaginal fluid. There was no clear literature found to relate with.

6   Conclusion

The study showed that most of the women of reproductive age had some knowledge of induced abortion but a few knew about safe induced abortion and the majority knew at least one method of induced abortion; the major source of information was from friends. Only a few people knew about all circumstances where induced abortion is legal and Socio-demographic factors associated with the prevalence of induced abortion among females of age between 16 to 30 years attending health services included age, employment status, and level of education. The major reason for induced abortion was because of financial difficulties followed by shame.

Recommendations.

This study highlighted the need for policymakers and health administrators to implement measures that would increase the knowledge of people on safe induced abortion including the legal rights.

The health workers should give health education to all females of age between 16 to 30 years regarding knowledge about induced abortion.

The need to also use mass media platforms like television and radios to run health education programs.

Acknowledgment

List of Acronyms

BMC: Biomedical College

DHO: District Health Officer

HCPs: Health Care Providers

HIV/AIDS: Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome

A   Publisher details:

B   References:

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