THE PREVALENCE AND FACTORS ASSOCIATED WITH INDUCED ABORTION AMONG PATIENTS ATTENDING THE MATERNITY DEPARTMENT AT KITEBI HEALTH CENTRE III IN KAMPALA DISTRICT.A CROSS SECTIONAL STUDY.

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Page | i ABSTRACT

Purpose of the study

Was to determine the prevalence and factors associated with induced abortion among patients attending the maternity department at Kitebi Health Centre III in Kampala district

Objectives

The specific objectives were to identify the prevalence, identify the predisposing factors for induced abortion, and determine health service-related factors leading to abortion among patients attending the maternity department at Kitebi Health Centre III.

Methodology

The study employed a cross-sectional study design. Data was collected by questionnaire method using an intervieweradministered questionnaire. Respondents were sampled by a convenient sampling technique. Data was analyzed manually and presented in tables and pie charts.

Results

The prevalence of induced abortions was found to be 9.4%. predisposing factors that were associated with abortions included; the age of 18-25 (55.6%), having children more than 5 (44.4%), being married (44.4%), alcohol consumption (55.6%), higher level of education (44.4%). Health service-related factors included; not including contraceptive methods in health education (55.6%), not counseling on reproductive health services (55.6%%), abortions done in places outside the health facilities (77.0%), and access to abortion services (77.8%)

Conclusions

The study established that the prevalence of induced abortion was high. The predisposing factors were age 18-25, being married, alcohol consumption, many live births, and having tertiary/university education. Health service-related factors were lack of counseling in reproductive health and contraceptives and access to surgical and nonsurgical abortion services.

Recommendations

There is a need to provide counseling on contraceptive methods, provisions of contraceptives with regular supplies, and training of health workers on contraceptives so that they enrich their knowledge of various contraceptive methods.

Keywords: Prevalence, Factors, Induced Abortion, Patients, Maternity, Health Centre iii Submitted: 2023-11-23 Accepted: 2024-01-20

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Background information of the study

According to WHO abortion accounts for about 8% (4.7–13.2) of maternal mortality worldwide (Kim, *et al.*, 2016). The term 'abortion' has become synonymous with induced abortion which is an intentional termination of pregnancy but it also includes spontaneous abortion, also known as miscarriage. Maternal deaths due to abortion, and more specifically unsafe induced abortion, are associated with a risk of misclassification, which might lead to underreporting. Legal, social, and cultural ramifications that are associated with abortion mean that

women are reticent to disclose abortion attempts, and relatives or healthcare professionals tend not to report deaths as such. Moreover, as deaths resulting from unsafe abortion have decreased in recent years, the focus is shifting towards adverse outcomes associated with abortion(*Unsafe Abortion*,2023.). By analyzing the national estimates of abortion-related hospital admissions for 26 developing countries, it is estimated that seven million women were treated for complications from unsafe pregnancy termination in 2012(Kim, *et al.*, 2016). A 2014 systematic analysis of worldwide data estimates that approximately 8% of all maternal deaths are attributable to unsafe abortion and related complications. (Kim, *et al.*, 2016).WHO defines unsafe abortion as "a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking minimal medical standards or both. (*Unsafe Abortion*,2023)" In India, complications of

2 unsafe abortion account for an estimated 9% of all maternal deaths, according to the latest government report on causes of death from 2010.56 While maternal mortality rates have declined, the proportion of maternal deaths attributable to these complications has remained relatively constant over the past decade.57 Hence, the overall number of deaths due to unsafe abortion is likely to have decreased along with maternal deaths—potentially by 28–40%, depending on which maternal mortality estimate is used (Stillman, *et al.*,2014.).

(Bearak et al., 2020a), In 2015–19, there were $121\cdot0$ million unintended pregnancies annually (80% uncertainty interval [UI] $112\cdot8-131\cdot5$), corresponding to a global rate of 64 unintended pregnancies (UI 60–70) per 1000 women aged 15–49 years. 61% (58–63) of unintended pregnancies ended in abortion (totaling 73·3 million abortions annually [66·7–82·0]), corresponding to a global abortion rate of 39 abortions (36–44) per 1000 women aged 15–49 years. (Bearak, *et al.*, 2020).

Up to five million unsafe abortions are performed in Africa every year, with young women disproportionately affected(Brookman-Amissah & Moyo, 2004). In Nigeria, out of 5 million pregnancies, 54,000 resulted in induced abortion. Studies have suggested a possible link between induced abortion and intrauterine adhesion. (Ajayi, *et al.*, 2022)

Abortion is one of the main contributors to the high maternal mortality in Uganda(Nanvubya, et al., 2021). An abortion rate of 39 per 1,000 women aged between 15 and 49 years was reported in 2013 in Uganda representing approximately 314,300 abortions(Nanvubya, et al., 2021). The Ugandan abortion rate was slightly higher than the estimated rate for the East African region at 34 per 1,000 women between 2010 and 2014. In 2013, approximately 128,682 women were treated for abortion complications up from 110,000 in 2003(Nanvubya, et al., 2021). The injuries and illnesses resulting from unsafe abortion place a huge healthcare burden and remain a critical challenge for the Ugandan healthcare system, which is already burdened with other morbidities (Nanvubya, et al., 2021) The above background, therefore, forms the basis of my research titled "The Prevalence and Factors associated with abortion among Patients Attending Maternity Department at Kitebi Health Centre iii in Kampala District" This will help the maternity department at the Health Centre, relevant health authorities, and the country at large to obtain information that can be essential in planning service delivery and allocation of resources. The policymakers in the Ministry of Health might use this knowledge to improve strategies for post-abortion care (PAC). To determine the prevalence and factors associated with induced abortion among patients

attending the maternity department at Kitebi Health Centre III in Kampala district.

METHODOLOGY Study design

A cross-sectional study design was used to conduct the study because it allows the determination of independent and dependent variables at the same point in time with no follow-up of the participants.

Study area

The study was carried out at Kitebi Health Centre III, Central Kampala district. Kampala district is located in the central region of Uganda and is Uganda's capital city. The coordinates of the town are" 0° 19" N, 32°35" E and the GPS of Kitebi Health Centre III are 0.281379, 32.545525. The study area was chosen because it receives a large number of female patients with cases of abortion in the maternity department. This study was conducted between June and July 2023

Study population

The study was conducted among patients attending the maternity department at Kitebi Health Centre III Kampala district and this is because there are cases of abortionrelated complications at the maternity department at Kitebi Health Centre III.

Sample size determination

The sample size was determined using the Kish and Leslie formula as stated below

N= $z^2 p q$ d^2 — Where; n = the desired sample size Z = the standard normal deviation usually set at 1.96 P = 50% Therefore P= 0.5 Q = (1-P) d = absolute error allowed (10%) = 0.1 Substitution into the above equation Q= (1-p) = (1-0.5) = 0.5 Thus, n = (1.96)2 (0.5 X 0.5) (0.1)2 n = 96 Therefore the study included 96 Respondents.

Inclusion criteria

All patients attending the maternity department at Kitebi Health Centre III at the time of the study, who had consented participated in the study.

Exclusion criteria

All patients attending the maternity department at Kitebi Health Centre III who were critically ill and those who failed to consent were excluded from the study.

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Sampling technique

A convenient sampling procedure was employed in the study to select the participants. This is because the sampling method is easy to administer for a big homogenous population.

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Sampling procedure

A convenient sampling procedure was employed in the study to select the participants, patients who attended the maternity department on that day were explained the purpose of the study, and those who consented were sampled on a first come first serve.

Data collection method

Data was collected using a structured intervieweradministered questionnaire prepared and pretested before the study and ample time was provided to the respondents. This is because the use of interviewer-administered questionnaires removes the necessity of the respondent being literate, and allows for clarification of questions and responses. This was done by both the researcher and trained research assistant.

Data collection tools

The data was collected using self-administered questionnaires consisting of closed-ended questions. The researchers supplied the questionnaires to the respondents. For those who were illiterate, structured interviews were used where they were asked questions to answer while the researcher filled in the responses.

Piloting the study

A similar study was carried out on patients attending the maternity department at Nsangi Health Centre III Wakiso district. A sample of 5 participants was interviewed and necessary corrections were made to the questionnaire before data collection.

Quality control

The quality of the research was assured through adjusting the interview questions after pre-testing, translating the questionnaire to Luganda (local language) then back to English, and training the research assistants before data collection.

Data analysis and presentation

Data was cleaned, sorted, and checked for completeness and then analyzed manually by tallying. It was presented in the form of tables and charts.

Ethical considerations

The research report was approved by the Medicare Health Professionals College research committee.

An introductory letter from the Medicare Health Professionals College was issued by the Research ethical committee and was used to introduce the researcher to the DHO Kampala district.

Permission to conduct the study at the Health Centre was sought from the health center administration.

Informed consent was obtained from all selected respondents before administering the questionnaire and confidentiality was maintained.

RESULTS

Prevalence of induced abortion at Kitebi H/C III Figure 1: Distribution of respondents by whether they have ever had an induced abortion



The majority, 87(90.6%), of the participants had not had an induced abortion whereas 9.4% had ever had an induced abortion.

Predisposing factors to induced abortion. Table 1: Distribution of respondents by their age

	Age	Frequency (%)	Ever had an abortion		
			Yes (Frequency (%)	No (Frequency (%)	
Page 4	18-25	28(29.2)	05(55.6)	23(26.4)	
	26-30	37(38.5)	01(11.1)	36(41.1)	
	31-35	26(27.1)	03(33.3)	23(26.4)	
	>35	05(5.2)	00 (0.0)	05(5.8)	
	Total	96	09	87	

The majority (55.6%) of the respondents who had ever had an induced abortion were in the age group of 18-25 years whereas none, 00(0.0%) of those who were more than 35 years of age had ever had an abortion.

Table 2: Distribution of respondents by the number of live births they have ever had

Livebirths	Frequency (%)	Ever had an abortion	
		Yes (Frequency (%)	No (Frequency (%)
None	38(39.6)	03(33.3)	35(40.3)
1-2	12(12.5)	01(11.1)	11(12.6)
3-4	13(13.5)	01(11.1)	12(13.8)
>5	33(34.4)	04 (44.4)	29(33.3)
Total	96	09	87

The majority of respondents, (44.4%), who had ever had an induced abortion had more than 5 live births while the least, 11.1% of the respondents had between 1-2 and 3-4 children.

Table 3: Distribution of respondents by their marital status

Marital	Frequency (%)	Ever had an abortion		
status		Yes (Frequency (%)	No (Frequency (%)	
Married	58(60.4)	04(44.4)	54(62.1)	
Single	27(28.1)	03(33.3)	24(27.6)	
Divorced	04(4.2)	01(11.1)	03(3.4)	
Widowed	07(7.3)	01(11.1)	06(6.9)	
Total	96(100%)	09(100%)	87(100%)	

The majority of respondents, (44.4%), who had ever had an induced abortion were married while the least, 11.1% of the respondents were divorced and widowed.

Table 4: Distribution of respondents by alcohol consumption

Variable	Category	Frequency (%)	Ever had an abortion	
			Yes (Frequency (%)	No (Frequency (%)
Alcohol	Yes	35(36.5)	05(55.6)	30(34.5)
consumption	No	61(63.5)	04(44.4)	57(65.5)
Total		96(100%)	09(100%)	87(100%)

The majority of respondents, (55.6%), who had ever had an induced abortion were alcohol consumers while 44.4% of the respondents weren't alcohol consumers.

Education level	Frequency (%)	Ever had an abortion	
		Yes (Frequency (%)	No (Frequency (%)
No formal education	11(11.5)	00(0.0)	11(12.7)
Primary	16(16.7)	1(11.1)	15(17.2)
Secondary	49(51.0)	03(33.3)	46(52.9)
Tertiary/university	20(20.8)	05(55.6)	15(17.2)
Total	96(100%)	09(100%)	87(100%)

Table 5: Distribution of respondents by their education level

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The majority of respondents, (55.6%), who had ever had an induced abortion had attained tertiary/university education while none (0.0%) of the respondents had no formal education.

Health service-related factors leading to induced abortion Table 6: Distribution of respondents by whether topics on contraceptive methods are included in the health education at the hospital.

Variable	Category	Frequency (%)	Ever had an abortion	
			Yes	No
			Frequency (%)	Frequency (%)
Inclusion of contraceptive methods	Yes	64(66.7)	03(33.3)	61(70.1)
in health education	No	21(21.8)	04(44.4)	17(19.5)
	I don't know	11(11.5)	02(22.2)	09(10.4)
Total		96(100%)	09(100%)	87(100%)

The majority of respondents stated that contraceptives were included in the health education of which 33.3% had ever had an induced abortion while 11.5% of the

respondents didn't know whether contraceptives were included in the health education of which 22.2% had ever had an abortion.

Table 7: Distribution of respondents by whether they have ever received counseling on reproductive health services at the hospital.

Variable	Category	Frequency (%)	Ever had an abortion	
			Yes (Frequency (%)	No (Frequency (%)
Received counseling on reproductive health services	Yes No	72(75.0) 24(25.0)	04(44.4) 05(55.6)	68(78.2) 19(21.8)
Total		96(100%)	09(100%)	87(100%)

The majority,55.6% of the respondents that had ever had an induced abortion had never received counseling on reproductive health services while 44.4% of the respondents that had ever had an induced abortion had ever received counseling on reproductive health services.

Table 8: Distribution of respondents by where they had the abortion carried out.

Variable	Category	Frequency (%)
Where abortion was performed from	Health facility	03(33.3)
	Out-of-health facility	00(00.7)
Total		09(100%)

The majority, 66.7% of the induced abortions were performed out of the health facilities whereas 33.3% of the induced abortions were performed in health facilities.

	Variable	Category	Frequency (%)	Ever had an abortion	
				Yes	No
				Frfrequency (%)	Frequency (%)
Page 6	Have access to surgical and	Yes	66(70.8)	07(77.8)	66(75.9)
	nonsurgical abortion services.	No	28(29.2)	02(22.2)	21(24.1)
	Total		96(100%)	09(100%)	87(100%)

 Table 9: Distribution of respondents by whether they have access to surgical and nonsurgical abortion services.

The majority, 77.8% of the respondents that had ever had an abortion had access to surgical and non-surgical abortion services while 22.2% of the respondents that had ever had an abortion had no access to surgical and nonsurgical abortion services.

Discussion

Prevalence of induced abortion.

The overall prevalence of abortion at Kitebi H/C III was found to be 9.4%. this prevalence is higher than that in Ohio (8.0%) as indicated by Huber-Krum, *et al.* (2020), and also higher than the prevalence in the US which was at 1.4% (Ralph, *et al.* 2020 and Ethiopia (6.2%) as studied by Abate, *et al.* (2020). This high prevalence of abortion could be attributed to the fact that the health facility is located in the capital city and therefore attracts patients exposed to risky sexual behaviors that result in unintended pregnancy which ends up being terminated and to the fact that the health facilities are easily accessible.

Predisposing factors for induced abortion

The study revealed that 55.6% of those who had ever had an induced abortion were in the age group of 18-25 years. This could be attributed to the fact that most were still studying and therefore had unintended abortions and had to terminate them to continue with their education. The finding is in line with another study in Uganda which reported that the prevalence was high (72%) among the age group 16-26 because it's a reproductive age and sexually very active (Wanale, 2022).

Findings show that the majority of respondents, (44.4%), who had ever had an abortion had more than 5 live births while the least, 11.1% of the respondents had between 1-2 and 3-4 children. This is attributed to the fact that they already have many children and are unable to take care of any more children and also attributed to cheating women who conceive with other men who are not their husbands and therefore terminate the pregnancies. The finding mirrors one done by Huber-Krum, *et al*, (2020) which showed that the prevalence was high among those who had many children.

The study also revealed that the majority, (44.4%), of those who had ever had an abortion, were married. The findings mirror a study in Turkey by Huber-Krum, *et al*, (2020) which showed that 17% of those who had aborted were married women. This could be because they had cheated on their spouse and got pregnant with another

man or they had gotten pregnant soon after giving birth to another baby.

Furthermore, findings showed a high prevalence of induced abortion among women who consume alcohol (55.6%). The findings correlate with findings from a study by Lentriro, *et al*, (2019) who revealed that women who consume alcohol are 3.3 times more likely to undergo induced abortions compared to those who don't consume alcohol. This is probably because alcohol deprives one of making clear decisions, especially regarding having protected sexual intercourse.

Also, the study revealed that most (55.6%) of those who had induced abortions had tertiary/university education.

Health service-related factors leading to induced abortion.

The study revealed that the majority, 33.3%, of the respondents who had ever had an abortion stated that contraceptives were included in the health education in the facility. The findings agree with findings in a study done in Yemen which reported that 33.9% normally accept family planning before they leave the hospital (Morris, *et al*, 2019). This is because family planning is always offered to those who have had abortions or who have just given birth to allow mothers to make an informed decision before when to have the next pregnancy hence preventing unintended pregnancies that result in induced abortion.

Moreso, findings showed that 55.6% of respondents who had ever had an induced abortion had never received counseling on reproductive health services. Failure to receive counselling on reproductive health deprives one of knowing how to prevent unwanted pregnancies hence the result is an induced abortion. The finding mirrors one from Ethiopia which reported that 24% of those who had induced abortions had not received any sexual health education (Lentriro, *et al*, 2019).

The study also revealed that 66.7% of the induced abortions were performed out of the health facilities whereas 33.3% of the abortions were performed in health facilities. This could be because of the expensive cost of abortions carried out from the health facilities. The study disagrees with one done in Ethiopia which reported that most (53%) of induced abortion was done in health facilities and only 47% were performed outside health facilities (Abate, *et al*, 2020).

Findings also showed that 77.7% of those who had an induced abortion had access to surgical and non-surgical

abortion services while 22.2% of the respondents who had ever had an abortion had no access to surgical and nonsurgical abortion services. This could be attributed to the fact that the study area is within the city center with many health facilities around ranging from clinics to government health facilities.

Page | 7 Conclusions

The overall prevalence of induced abortion was quite high. It was high among women aged 18-25 years, those with many children, the married, those with tertiary/university education followed by those with secondary education.

The predisposing factors to induced abortion include; younger age, being married, alcohol consumption, having more than five live births, higher level of education.

Health service-related factors included; accessibility to abortion services, lack of reproductive health education, and lack of counseling on contraceptive methods.

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LIST OF ABBREVIATIONS

%:	Percentage
ANG	

- ANC : Antenatal Care
- CME: Continuous Medical Education Dr: Doctor
- **HCG** : human chorionic gonadotropin hormone
- PAC: Post Abortion Care
- SMA: Self-managed abortion
- **Top:** Termination of Pregnancy
- **USA:** United States of America.
- **WHO:** World Health Organization

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Recommendations

The government and reproductive health organizations should increase access to contraceptive services through all the major sectors of service provision to reduce the prevalence of unintended pregnancy and induced abortions.

The Ministry of Health should ensure the training of more health care providers in contraceptive counseling, updating their knowledge of all methods, and increasing their skills in providing all methods that require a procedure like IUDs, and implants so that women make the right informed decision about a method that will work for them hence the reduced incidence of unintended pregnancies.

There should be an improvement in the mechanisms of contraceptive supply, especially at lower-level healthcare facilities, and ensuring regular supplies

The health facility should regularly organize and conduct health talks on contraceptives and induced abortion outcomes.

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