

Full Length Research Paper

Knowledge and attitudes about induced abortions among female youths attending Naguru Teenage Information and Health Centre, Kampala, Uganda

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This study aims to investigate unsafe abortion, which is more prevalent in low resource countries, contributes significantly to maternal morbidity and mortality. In Uganda, majority of patients treated for complications of induced abortion are adolescents and young, yet their knowledge and attitudes are understudied. In this paper we described the knowledge and attitudes of female youths about medical complications of induced abortions. Participants in this study were 319 youths aged 15 to 24 years who were attending Naguru's Information and Health Centre. At recruitment the youths' socio-demographic characteristics, knowledge and attitudes about induced abortions and its complications were obtained using an interviewer-administered questionnaire. Knowledge was assessed using a scoring system and attitude using a Likert scale. In addition, four focus group discussions were conducted using an interview guide. We did the Bivariate analysis to determine the association between the youth's attitudes towards induced abortion. Data from focus group discussions were analyzed manually. The results revealed most (93.1%) of the youths knew at least one medical complication of an induced abortion. Death (91.3%) was the most commonly cited complication. Few (16%) participants would encourage their colleagues to procure an abortion, while 83.7% would counsel others about perceived dangers of induced abortions. Participants who knew at least one complication were more likely to counsel their colleagues about the dangers of an induced abortion. Thus, knowledge of complications of induced abortions was high among female youths attending Naguru Teenage Information and Health Centre (NTIHC). The majority of the youths were willing to counsel others about the medical complications of induced abortions.

Key words: Knowledge, attitudes, induced abortions, female youth.

INTRODUCTION

Unwanted pregnancies in youths and complications of induced abortions are an important health problem in the world (WHO, 2011). Each year, approximately 20 million

abortions are performed worldwide, 95% of them in developing countries (WHO, 2011). In Uganda, about 297,000 women undergo induced abortions each year

and about one-third of these are treated for complications (Singh, 2005). However, this may be an underestimate considering the Ugandan law which does not allow termination of pregnancy on request.

Due to various reasons, youths are vulnerable to unplanned and unintended early sexual encounters which lead to unwanted pregnancies. They are therefore exposed to seek for induced abortion and candidates to suffer its complications. The youths who undergo an induced abortion expose themselves to serious health risks such as haemorrhage, genital injuries, sepsis (Mbonye, 2000; Mirembe et al., 2010) and death (Silberschmidt, 2001).

In general, in many African countries women younger than 20 years of age represent up to 70% of women treated for abortion complications (Mbonye, 2000; Ahman and Shah, 2011). Single, young, low-parity women, and most often secondary school and university students, account for the bulk of all induced abortions in Uganda (Mirembe et al., 2010). Uganda has one of the highest teenage pregnancy rates in the world of 25% (UDHS, 2006/07).

The complications of induced abortions have been documented in many studies around the world. However, knowledge and attitudes about induced abortions among young people have been addressed in very few previous studies and none in Kampala Uganda.

Youths between the ages of 10 to 24 who attend Naguru Teenage Information and Health Centre (NTIHC), which is a youth model Centre in Uganda, are either in school or out of school. They come from Kampala city and its neighbouring suburbs or districts and form a homogenous group.

This study assessed the knowledge and attitudes of female youths attending NTIHC about medical complications of induced abortions. The findings are hoped to provide evidences for policymakers regarding efforts to reduce risks associated with induced abortions in female youths.

METHODS

Participants in this study were 319 youths attending Naguru Information and Health Centre. Naguru Information and Health Centre is part of the Naguru Health Centre IV in Kampala City Council. It also serves as Youth Centre with Youth friendly Health Services. Many youths, especially those close to Kampala, are referred here for counseling and management of health related issues.

Female youths eligible for inclusion aged between 15 and 24 years, were seeking advice from the Health Centre and consented to the study. The youths were selected randomly using computer generated random numbers by the research assistants who were trained nurses until the sample size was attained. A sample size of 319 was taken to be sufficient based on calculations from the Kish and Leslie formula for cross-sectional studies.

At recruitment information was obtained about the youths' socio-demographic characteristics, knowledge and attitudes about induced

abortions and its complications using an interviewer administered questionnaire. The socio-demographic characteristics information obtained were the age, religion, tribe, marital status, residence, and the highest level of education. The knowledge obtained was about the medical complication of induced abortion such as haemorrhage, sepsis/infection, genital injuries and death and attitudes towards induced abortion. Each of these factors was given a score, which were summed up, and used to assess the youth's knowledge about induced abortions. These were categorized into whether the youth had adequate or inadequate knowledge about induced abortion.

Attitude about induced abortion was assessed using a Likert scale in which the participants made a decision on the level of agreement with each of the statements given to them. These were summarized to indicate whether the participant agreed or disagreed with the each of the statements.

Four focus group discussions (FGDs) were conducted. Two FGDs comprised members who were still in school and two had members who were out of school. Of these two FGDs, one had members aged 15 to 19 years and another one had members aged 20 to 24 years. This was based on the fact that knowledge and attitudes about induced abortions among female youths who were in school may be different from those of female youths who were out of school. In addition, knowledge and attitudes about induced abortions among adolescents aged 15 to 19 years might be different from that of young adults aged 20 to 24 years.

Members of Focus Group Discussion were eligible as above but did not participate in the quantitative part of the study. Each focus group comprised 12 female youths, and the duration for each discussion was one and half hours. The moderator of the discussion was one of the research assistants. The purpose of the discussion was explained to participants by the principal investigator. Participants were informed that there was no wrong or right answer during discussion.

Qualitative data collection was done after the quantitative data collection, in order to clarify and explain certain issues that arose from the quantitative aspect of the study. An interview guide of 10 questions which were generated from the quantitative data collection was used.

Each participant was encouraged to freely give her point of view. The discussions were recorded using a tape and were transcribed by the secretary. At the end of the discussion, participants were free to ask any question about the topic.

The data collected were cleaned, coded and entered in EPI Data version 2.1 b package (EpiData Association, Odense, Denmark) and exported to SPSS version 12.0 (SPSS Inc, Chicago, Ill) for analysis. Bivariate analyses were done to assess the association between the participants' attitudes towards induced abortions and the socio-demographic, social and medical factors. A *p* value of <0.05 was taken as significant. Qualitative data were manually analyzed.

Ethical approval was obtained from the Mulago Hospital Ethics Committee, the Makerere University College of Health Sciences Ethics Committee and the National Council for Science and Technology.

Written informed consent was obtained from the participants and assent was obtained from participants who were aged below 18 years.

RESULTS

A total of 319 female youths participated in the study. Most of the youths (63.6%) knew at least someone who had procured an abortion and 60.2% knew someone who became ill after undergoing an abortion. About 43.6% of

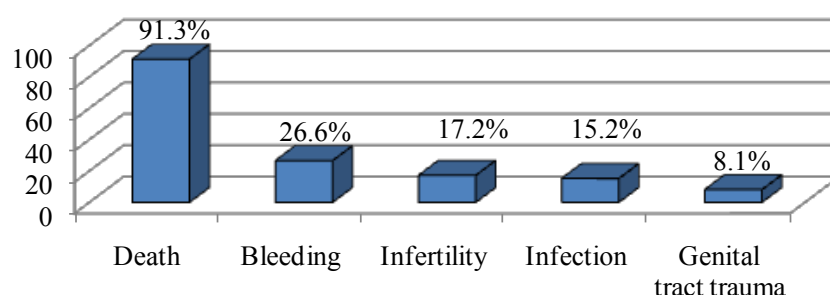


Figure 1. Medical complications of induced abortions mentioned by study participants.

Table 1. Attitudes towards induced abortion.

Attitude	Frequency	Percentage
Would advise or encourage a colleague to go for an abortion		
Yes	51	16.0
No	268	84.0
Would counsel a colleague about dangers of an induced abortion		
Yes	267	83.7
No	52	16.3
Ever considered undergoing an abortion		
Yes	79	24.8
No	240	75.2
Ever lost or terminated a pregnancy (N= 117)		
Yes	66	56.4
No	51	43.6
If yes, (N=66)		
Was done on purpose	49	74.2
Came out itself	17	25.8
If pregnant now, would consider going for an abortion		
Yes	47	14.7
No	272	85.3

the youths knew where to have an abortion procured. Most (93.1%) participants knew at least one complication of an induced abortion while 6.9% did not know any. The dangers of induced abortion as known by participants are presented in Figure 1. The most commonly cited complication was death. Other complications cited were: bleeding (26.6%), infertility (17.2%), infection (15.2%) and genital tract trauma including uterine perforation (8.1%). Participants' attitudes towards induced abortion are shown in Table 1.

Most (83.7%) participants would counsel a colleague with an unwanted pregnancy about the dangers of an induced abortion and 24.8% of participants had ever considered

undergoing an induced abortion. One hundred and seventeen (36%) youths had been pregnant before and 66 (56.4%) participants had lost or terminated a pregnancy in the past. Among participants who had lost or terminated a pregnancy in the past, 49(74.2%) had undergone an induced abortion.

At the time of the study, 14.7% participants would consider undergoing an abortion if they became pregnant at the time of the study. But it is shown that participants who would counsel a colleague about dangers of induced abortions were approximately eight times more likely to know at least one complication of an induced abortion than those who would not.

Table 2. Factors associated with knowledge of complications of induced abortion.

Factor	Knows complications of induced abortion		Odds ratio (OR)	95% CI
	Yes	No		
Age group (years)				
15 to 19	165	9	1.81	0.75 – 4.35
20 to 24	132	13		
Marital status				
Single	127	13	0.52	0.21 - 1.25
Married	170	9		
Family structure				
Monogamous	160	13	0.81	0.34 – 1.95
Polygamous	137	9		
Ever been pregnant before				
Yes	107	10	0.68	0.28 – 1.62
No	190	12		
Pregnant now				
Yes	115	12	0.53	0.22 – 1.26
No	182	10		
Do discuss sex matters with parents or guardians				
Yes	89	4	1.93	0.63 – 5.85
No	208	18		
Do discuss sex matters at school				
Yes	180	7	2.08	0.64 – 6.77
No	62	5		
Have ever considered abortion				
Yes	72	7	0.69	0.27 – 1.75
No	225	15		
Have ever lost/terminated a pregnancy before				
Yes	59	6	0.819	0.22 – 3.07
No	48	4		
Would counsel a colleague about dangers of induced abortions				
Yes	257	10	7.71	3.13 – 19.20*
No	40	12		

*p-value less than 0.05 is considered significant.

Bivariate analysis of factors associated with knowledge about complications of induced abortions and induced abortion

Bivariate analysis of factors associated with knowledge about complications of induced abortions is as shown in Table 2. Participants who had ever been pregnant before

were approximately three times more likely to advise or encourage a colleague with an unwanted pregnancy to go for an induced abortion than those who had never been pregnant (Table 3).

Study participants who had ever considered undergoing an abortion before were almost ten times more likely to advise or encourage a colleague with an unwanted

Table 3. Factors associated with induced abortions.

Factor	Would advise or encourage a colleague to go for abortion		Odds ratio (OR)	95% C.I.
	Yes	No		
Age group (years)				
15 – 19	28	146	1.02	0.56 – 1.86
20 – 24	23	122		
Marital status				
Single	24	116	1.17	0.64 – 2.12
Married	27	152		
Family structure				
Monogamous	25	148	0.78	0.43 – 1.42
Polygamous	26	120		
Ever been pregnant before				
Yes	30	87	2.98	1.61 – 5.49*
No	21	181		
Ever considered abortion				
Yes	34	45	9.91	5.10 – 19.27*
No	17	223		
Do discuss sex matters with parents				
Yes	10	83	0.54	0.26 – 1.14
No	41	185		
Do discuss sex matters at school				
Yes	27	160	0.78	0.37 – 1.63
No	12	55		
Would recommend legalization of abortion				
Yes	22	11	28.23	11.77 – 67.74*
No	17	240		
Ever lost or terminated a pregnancy				
Yes	24	41	4.49	1.67 – 12.06*
No	6	46		
If pregnant now, would consider abortion				
Yes	32	15	28.41	13.15 – 61.38*
No	19	253		

*p-value less than 0.05 is considered significant.

unwanted pregnancy to go for an induced abortion.

Study participants who had ever lost or terminated a pregnancy were five times more likely to advise or encourage a colleague with an unwanted pregnancy to go for an induced abortion than those who did not have such an experience.

Study participants who would recommend its legalization by the government were more likely to advise or recommend a colleague with an unwanted pregnancy to go for an induced abortion.

Participants who would have considered undergoing an induced abortion at the time of the study if they were

pregnant, were twenty-eight times more likely to advise or encourage a colleague with an unwanted pregnancy to go for an induced abortion.

Qualitative aspect of the study

Source of knowledge about induced abortion and its dangers

The majority of the participants reported to have received information on induced abortion and its dangers from friends, either at school or at home. When asked about the contribution of parents and teachers in providing this information, they gave different answers.

Some of the participants who were informed by their parents were also warned about the dangers they may encounter in case they undergo an abortion. These dangers included death, becoming infertile, and getting sick.

Teachers at school also provided information to some of the participants. This information also included dangers of undergoing abortion.

"My parents usually warn me about abortion in case accidentally I become pregnant. They usually tell me that I may fail to produce again or I may get sick and die. Also at school teachers sometimes tell us about ladies who misbehaved, became pregnant, aborted and got problems." (An adolescent female in school).

"Our parents usually tell us that if a lady becomes pregnant, it is better to deliver. If a lady removes a pregnancy, she may die." (A young adult female in school).

Some participants in school never got any information from their teachers. They presumed that talking about abortion at school was not allowed.

"Since I started school, I have never heard my teachers telling us something about abortion and its dangers. I don't know why. May be they are not allowed." (An adolescent female in school)

Other parents did not contribute to the knowledge of their daughters about abortion and its dangers. Participants thought this was due to either lack of knowledge by parents or fear of encouraging their daughters to undergo abortion one day.

"...We are many ladies at home. My parents do not discuss with us about induced abortion and its dangers because maybe they fear we might abort one day." (An adolescent female, not in school).

"Parents do not discuss with their daughters at home about induced abortion and its dangers maybe because

they do not know much about that. Or they know but they do not discuss with their daughters because they fear for them for them to go and put this into practice." (A young adult female not in school).

Participants' attitudes towards induced abortion

Participants had different attitudes towards induced abortion. Most of them were reluctant because they never appreciated the outcome of an induced abortion. They thought an induced abortion exposes the person undergoing it to many complications.

Moral consideration, religious conviction and potential values of the abortuses, were some of the reasons given by participants not willing to advise others to go for an abortion.

"I cannot advise or encourage a colleague of mine who has an unwanted pregnancy to abort because if she aborts she will lose respect. Also maybe the baby she will produce may become an important person in future and help the country." (An adolescent female not in school).

"I cannot advise my colleague or my friend to go and have an abortion. She may abort, yet that may be the only chance God gave her to produce and have a kid. By aborting, she will lose that chance of having a kid. Also to abort is a sin." (A young adult female not in school).

Only a small number of participants supported abortion and were willing to refer others to go and have it done. The main motivations of their willingness included fear of parents, remaining in school and irresponsibility of the boyfriend.

"Yes. I can advise a friend who becomes pregnant to go and have an abortion done because circumstances may not be favorable to continue that pregnancy. That will help her not to be chased away by her parents and will allow her to continue with school. Also the boyfriend who got her pregnant may not be responsible. So, I think abortion is good." (A young adult female in school).

"Yes inducing abortion is good. If someone is in school, she will remove the pregnancy before parents and friends get to know and she will continue with her studies....If the parents get to know you are pregnant, they may chase you away." (An adolescent female in school).

DISCUSSION

In this paper we present the youths' knowledge about induced abortion and its medical complications. The study found that the major source of information for participants

about abortion was from friends and parents and teachers played a minor role in among those participants who were still in school. This result correlates with what Mitchell et al. (2006) observed in a Kenyan study on knowledge and perceptions of adolescents about abortion, where friends were the main sources of information cited by participants. However, this result contrasts another study which reported that adolescents consider their parents as useful sources of advice on sex matters (Adaji et al., 2010), although other investigators (Correia et al., 2011) have shown that sexual matters are not discussed freely with parents. Investigating teenage sexual activity among secondary school girls in Brazil, Correia found that the teenagers receive very little sex education from their parents (Correa et al., 2009). This could be due to the fact that talking about sex is still regarded as a taboo in many societies.

Since parents and teachers provide little information about abortion and its complications to youths, it is now friends who pass on the information to their peers yet themselves are not necessarily well informed. This was reflected by the different meanings of what abortion participants gave.

From both the quantitative and qualitative aspects of this study, it was shown that participants were aware of complications of induced abortion. An important proportion of participants (60.2%) knew someone who became sick after undergoing an abortion. Also, more than 90% knew at least one complication of an induced abortion. The most commonly mentioned complication was death followed by bleeding, infertility, infection and genital tract trauma. Similar findings were reported in a cross-sectional study in Ethiopia about the knowledge, attitude, behaviour and practice of women on abortion by Senbeto et al. (2005). This study also showed that awareness about complications of induced abortions was high among female youths with 75% of them knowing the complications of induced abortions. The most commonly cited complications in this Ethiopian study were death, bleeding and infections. Death is a tragic event and most people learn about it.

While 83.7% of the study participants would counsel their colleagues about the dangers of an induced abortion, about 16% of them were willing to refer others for an abortion. This is in contrast to what was found in South Africa by Buga (2002) where in a cross-sectional study on attitudes of medical students to induced abortion, 87.2% of respondents were willing to refer a woman for abortion under certain circumstances such as threat to the mother's life, rape, severely malformed fetus, threat to the mother's mental health, and parental incompetence. Only 12.8% of respondents would not refer colleagues for an abortion under any circumstances. This contrast in the results may be due to the fact that in South Africa abortion is legal and the study population in the two studies was not standardized. However, in the focus

group discussions, the few participants who supported abortion and were willing to refer others for abortion provided reasons. This means there is usually a reason why people choose to abort.

Contemplation of abortion was high before the time of data collection (24.8% versus 14.7%). Probably, all the participants were not straightforward when answering this question, abortion being a very sensitive topic. This figure was also reflected in the focus group discussions where few participants reported they would consider abortion if pregnant. Different reasons were given, like continuing with studies, irresponsibility of the boyfriend or fear of disappointing parents and being chased away.

In this study, participants who were willing to counsel a colleague about dangers of induced abortions were more likely to know at least one abortion-related complication. This could be because youths who knew complications of induced abortions were less likely to go or to refer others for an abortion. Willingness to advise or encourage a colleague to go for an induced abortion was significantly associated with participants' previous experience of having been pregnant, having considered undergoing an abortion and having ever terminated a pregnancy. This could also mean that those who became pregnant and induced abortion in the past did not have any complications. Therefore they think the procedure is safe and they are not concerned about referring others.

In this study, participants who did not have any knowledge about the abortion law in the country and those who would have considered abortion if pregnant at the time of the study were more likely willing to refer others for an abortion. This means lack of knowledge about the abortion law contributes to abortion consideration by female youths. This also means that personal attitude towards induced abortion influences a person's advice toward others regarding abortion. This tendency was reflected in the focus group discussions where participants who were willing to refer others for abortion were also themselves willing to undergo the procedure if pregnant.

LIMITATIONS

This study was conducted in an urban setting, and this may not reflect the knowledge and attitudes which the youth have in the rest of the country. Secondly, this topic is sensitive and some youths may not have given the correct responses to the questions which could have affected the results. However, we obtained valuable information which can be used by the policy makers in Uganda.

Conclusion

Knowledge of complications of induced abortions was high

among female youths attending Naguru Teenage Information and Health Centre (NTIHC). The majority of the youths were willing to counsel others about the medical complications of induced abortions. Parents and teachers need to teach the youth about abortions and its dangers. This may reduce the morbidity and mortality associated with unsafe abortion in this country.

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