Determinants of Induced Abortion Intention among Adolescents Seeking Youth-Friendly Services in Homa Bay County, Kenya

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Abstract

BACKGROUND

Approximately 6.4 million women die because of unsafe abortion in Africa. Abortion contributes to 35% of maternal deaths nationally, out of these adolescents account for 17%. Homa Bay County is among the 15 high-burden counties in the country, which accounts for 97% of maternal deaths. Interestingly, 23% of the deaths are as a result of teenage pregnancy. The study aimed to determine the induced abortion intention among adolescents seeking youth-friendly services in Homa Bay County.

METHODS AND MATERIAL

A cross-sectional was implemented for the study from April to June 2020. Systematic random sampling was used to select 332 participants among 1652 adolescents in the study areas. Data was collected through self-administered questionnaires. Univariate analysis, stepwise selection and multivariate logistic regression were employed to find determinants of induced abortion intention. The study was approved by the Ethical Review Committee of Masinde Muliro University of Science and Technology (MMU/COR: 509099) and NACOSTI offered a research permit NACOSTI/P/20/4496.

RESULTS

The study revealed a significant association between induced abortion intention and being multiparous (OR: 0.064; 95% CI: 0.005-0.918: p= 0.028). The current study found a strong association between adolescents' belief that their physical health reduces the likelihood of pregnancy from unprotected sex. Respondents who had a low perception of physical health were susceptible and had higher odds of having induced abortion intention. Similarly, the respondents who agreed that they do not talk to their partners about pregnancy were thrice as likely to have had induced abortion intention (OR: 3.2; 95% CI: 1.7- 6.1: p= 0.0002). In addition, those who believed that if they continued with the pregnancy their academic career would be endangered were 4.3 times as likely to have had induced abortion intention (OR: 4.3: 95% CI: 2.2 – 8.1; p < 0.0001).

CONCLUSION

In this study, induced abortion intention was significant among adolescents who had a misinformed perception of their physical health and chances of getting pregnant even if they practised unprotected sex, lacked disclosure to partners and were urged not to discontinue their career and profession. Governments should embrace and operationalize multisectoral and pre-counselling approaches coupled with comprehensive sexual reproductive health education in and out of school in Adolescents programs. Similarly, Adolescent' programs should scale up male involvement.

Keywords: *Intention, Induced abortion, Adolescent, Determinants, Kenya*

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Introduction

Adolescent pregnancy is often accompanied by multifaceted health outcomes such as unsafe abortions, abortion complications such as bleeding, sepsis, infertility, and tear of the reproductive organs e.g., cervix, uterus, and vagina, among others. The complications are attributed to physical immaturity and poor health-seeking behaviour among adolescents (1). Universally, unintended pregnancy is an increasing social concern. It's estimated that 11% of births occur among adolescents aged 15 to 19 years (2). Induced abortion intention is a well-thought-out action by an individual who is exposed to a particular health problem which she or he views as a risk to his/her life. Globally, 25 million abortions occurred from 2010-2014 (3). 8 million was unsafe either carried out in conditions not meeting the required medical standards or by non-trained health care provider (4). Similarly, Africa accounts for 6 million unsafe abortions, out of these 2.5 million abortions and 22,000 deaths are among adolescents aged 15-19 years (5). Approximately 15% (3.2 million) of the 21.2 million unsafe abortions were among adolescents (6).

Almost two-thirds (63%) of pregnancies among adolescents in Kenya are unintended, and 35% of those unintended pregnancies end in abortion (7), 17% are among adolescents (8). Kenya remains among the countries experiencing unacceptably high maternal mortality of 362 deaths per 100,000 live births, and abortion is a major contributor (1). Approximately 464,000 induced abortions occur nationally, with an abortion rate of 48 per 1,000 women of reproductive age (15-49) years, adolescents being the majority (9). This figure is above the rate for Sub-Saharan Africa of 31 abortions per 1000 women of reproductive age (10).

Homa-bay County registered the highest unintended pregnancy among adolescents (40%) than the national (18%). Out of this, approximately 14% end up in abortion (1). Homa-bay County is quite a unique county with 16 islands, fishing is the livelihood among the habitats and hence a majority of adolescents are involved in fishing (HCIDP, 2018- 2020). The adolescents face complex and interrelated challenges such as living along the Lake Victoria basin, dependence on fishing as their main source of livelihood, being exposed to bad fishing practices such as fish for sex and limited access to quality adolescent sexual reproductive health services. This may increase the risks of unprotected sexual encounters. In most cases adolescents never have a prior plan for sexual entanglement hence the use of contraceptives is quite limited leading to unintended pregnancies. It is important to study the behavioural practices among adolescents on unprotected sex, unintended pregnancy, and induced abortion. The gap the researcher wishes to fill in this study is the relationship between adolescents' unintended pregnancy and induced abortion intention. It is against the background that the proposed research intends to examine the determinants of intention to induce abortion among adolescents in Homa Bay County.

Methods

Study area and period

The study was conducted in 30 youth-friendly facilities in Homa Bay County, Kenya between April and June 2020.

Table 1:
Proportionate distribution of study participants per health facility

Facility level	% proportion of participants' distribution	Number of participants
Level IV & V	60	200
Level III	30	99
Level II	10	33

Homa Bay County has a total of 204 facilities, all of which offer integrated youth-friendly services.

Study design and population

A cross-sectional study design was adopted to assess the determinants associated with induced abortion among adolescents seeking youth-friendly services. Currently and previously pregnant adolescents seeking youth-friendly services were the populace. The study conducted systematic sampling to come up with the study population.

Sample size determination and procedure

The sample size was calculated using Fishers' formula by assuming; (0.27) adolescents aged 10-19 years were pregnant against (0.73) of the general population, 95% confidence interval, 5% margin error and 10% loading population to take care of the refusals. The final sample size was 332 then, a number to be interviewed per level was generated followed by a systematic sampling of every 5th respondent was selected into the study.

Data collection and quality assurance

Data was collected using an adapted English self-administered questionnaire and key informant interview guide that consists of; socio-demographic (17 items), Sexual activity and pregnancy history (9 items) and finally Health belief model constructs Perceived susceptibility (3 items), and perceived severity (6 items) with yes/No or multiple choices. The dependent variable intention to induce abortion was measured by asking the following questions; If pregnant now, do you intend to carry this pregnancy to term? and in your previous pregnancy did you intend to carry that pregnancy to term? The questionnaire was communicated to the participants both in English and translated into the local language (LUO). The data tool was pretested in 6% of the calculated sample size. The data collectors underwent one-and-a-half-day training to equip them with communication skills and professionalism as well as maintain confidentiality. Supervision and spot-on checks on completed questionnaires were done daily by the lead supervisor.

Data processing and analysis

Univariate analysis was done for both independent and dependent variables to examine the association between the dependent variable and all other independent variables, separately. For multivariate analysis, the total score for each domain (perceived susceptibility, severity, benefits, barriers, and self-efficacy) was calculated by summing the responses to the individual questions.

Step-wise selection was used to align all the variables remove those which were redundant and retain those that were relevant to the study. In the bivariate analysis, independent variables significantly associated with the dependent variable at P-value ≤ 0.2 were included in the multivariable logistic regression analysis and variables significantly associated at p-value ≤ 0.05 were identified as determinants of intention for induced abortion. The degree of association was assessed using adjusted odds ratios. The adequacy of the model was assessed using Hosmer and Lemeshow goodness of $p > 0.05$.

Results

Socio-demographic characteristics

Response was obtained from 297 pregnant adolescent girls giving a response rate of (89.5%). Age 10-17 years (58.(%) Was leading with an average of 17.2 (± 1.3) and ranged between 14.0 to 19.0 years. The majority were single (63.3%) with two-thirds having attained a secondary level of education (67%). A higher proportion (44.4%) were of SDA faith with the least being Catholics (13.5%). The majority were Luo's (89.6%), and most had a parity of more than one (80.8%) and came from a family size of 4 – 6 members (52.5%). A higher proportion (81.8%) came from a family with a previous annual income of more than KSh. 30,000/=. More than a third (34.3%) were

pregnant among whom 12.8% wanted induced abortion, in total 17.5% (n = 52) had intended or had induced abortion.

Socio-demographic characteristics influencing intention to induce abortion.

Table 4.2; shows results on socio-demographic characteristics influencing intention for induced abortion among the study participants. A significant association was reported among respondents who were multiparous (χ^2 = 9.6; df = 1; p = 0.002) with a higher proportion (20.8%) having had an intention of or having had induced abortion. Participants with less than KSh. 30,000/= in the last year (χ^2 = 8.7; df = 1; p = 0.003), or those whose close friend died, or family member had a serious medical problem (χ^2 = 12.9; df = 1; p = 0.004) was insignificantly having the intention to induced abortion.

Association between perceived susceptibility and induced abortion

The current study results reveal a strong association between the beliefs that adolescent's fitness and strength make it more likely that they will not conceive if they have unprotected sex (Table 4.4).

Table 2:
Socio-demographic characteristics of participants

Variables	Categories	Frequency (n)	Percent (%)
Age cohort in years	10 – 17	175	58.9
	18 – 19	122	41.1
Mean ± SD (Range) in years		17.2 ± 1.3 (14.0 – 19.0)	
Marital status	Single	188	63.3
	Married	109	36.7
Level of education	None	14	4.7
	Primary	84	28.3
	Secondary	199	67.0
Religion	SDA	132	44.4
	Anglican	19	6.4
	Catholic	40	13.5
	Other Protestants	106	35.7
Ethnicity	Luo	266	89.
	Suba	27	9.1
	Luhya	4	1.3
Parity	< 1	57	19.2
	≥ 1	240	80.8
Family size	1 – 3	67	22.6
	4 – 6	156	52.5
	≥ 7	74	24.9
Total household income last year (KSh.)	< 30,000	54	18.2
	≥ 30,000	243	81.8
Currently pregnant	Yes	102	34.3
Previously pregnant	No	195	65.7
Currently pregnant and has intention for induced abortion	Yes	13	12.8
	No	89	87.2
Previously pregnant and had an intention to induce abortion	Yes	39	20
	No	156	80

Those with such low perceived susceptibility as confirmed by agreeing with the above statement had a higher probability of having had an intention for induced abortion. Respondents who disagreed were less likely to have opted for induced abortion (OR: 4.5; 95% CI: 2.3 – 8.6; p < 0.0001). Furthermore, study participants who nodded not to talk about induced abortion with their partner were thrice as likely to have had the intention for induced abortion (OR: 3.2; 95% CI: 1.7 – 6.1; p = 0.0002).

Association between perceived severity and induced abortion

Participants who perceived that their economic growth and career/professional development were at risk with pregnancy were 90% less likely (OR: 0.1: 95% CI: 0.05 – 0.20; p < 0.0001) to have had an intention for induced abortion. Contrastingly, those fearing harm to their academic career were 4.3 times more likely to consider induced abortion (OR: 4.3; 95% CI: 2.2 – 8.1; p < 0.0001), highlighting adolescents prioritizing academic over job concerns. Although at a borderline level of statistical significance, respondents who were of the view that the problems they would experience if they were pregnant would last a long time were up to 3.1 times as likely to have considered going for induced abortion (OR: 1.7: 95% CI: 0.9 – 3.1; p = 0.07).

Table 3:
Socio-demographic characteristics influencing intention for induced abortion

Variable	Categories	n	Intention for induced abortion		χ^2	df	P value
			Yes (%)	No (%)			
Age group (yrs)	10 – 17	175	17.1	82.9	0.04	1	0.8
	18 – 19	122	18.0	82.0			
Mean age in years ± SD (Range)			17.6 ± 1.3 (15 – 19)	17.2 ± 1.2 (14 – 19)	- 0.3	295	0.8$
Marital status	Single	188	19.7	80.3	0.7	1	0.2
	Married	109	13.8	86.2			
Level of education	None	14	14.3	85.7	0.5	2	0.8
	Primary	84	15.5	84.5			
	Secondary	199	18.6	81.4			
Religious affiliation	SDA	132	18.2	81.8	1.0	3	0.8
	Anglican	19	10.5	89.5			
	Catholic	40	15.0	85.0			
	Other Protestants	106	18.9	81.1			
Tribe	Luo	266	19.2	80.8	4.9	2	0.1*
	Suba	27	3.7	96.3			
	Luhya	4	0.0	100.0			
Parity	< 1	57	3.5	96.5	9.6	1	0.002
	≥ 1	240	20.8	79.2			
Family size	1 – 3	67	10.4	89.6	3.3	2	0.2
	4 – 6	156	18.6	81.4			
	≥ 7	74	21.6	78.4			
Total household income last year (Ksh.)	< 30,000	54	3.7	96.3	8.7	1	0.003
	≥ 30,000	243	20.6	79.4			
Has experienced in last 12 months	A close friend died or a close family member developed complications	77	7.8	92.2	12.9	3	0.004*
	Was unemployed	25	28.0	72.0			
	Was a mother	170	17.7	82.3			
	None	25	36.0	64.0			

* t-test

Discussion

Effects of adolescents' perceived susceptibility and intention for induced abortion

In the current study, the prevalence of induced abortion intention was 17.5% among adolescents. This is consistent with the Kenya Demographic Health Survey, 2014 which showed that the prevalence of induced abortion was 14%. It is also consistent in a study done in Harare, Ethiopia that reported a prevalence of induced abortion of 14.4% (11).

Table 4:
Bivariate analysis on the association between perceived susceptibility to the consequence of induced abortion and intention to procure induced abortion

Variable	Categories	n	Intention for induced abortion		OR	95% CI	P value
			Yes (%)	No (%)			
An adolescent can get pregnant for the first time if she has unprotected sex	Agree	169	16.6	83.4	0.9	0.5 – 1.6	0.6
	Disagree	128	18.7	81.3			
My physical health makes it more likely that I won't get pregnant if we have unprotected sex	Agree	124	29.8	70.2	4.5	2.3– 8.6	< 0.0001
	Disagree	173	8.7	91.3			
I do not talk about pregnancy and induced abortion with my partner	Agree	137	26.3	73.7	3.2	1.7 – 6.1	0.0002
	Disagree	160	10.0	90.0			

Table 5:
Bivariate analysis on the association between perceived severity of the consequences of induced abortion and intention to procure induced abortion

Variable	Categories	N	Intention for induced abortion		OR	95% CI	P value
			Yes (%)	No (%)			
Conceiving would devastate at this age.	Agree	99	14.1	85.9	0.7	0.3 – 1.4	0.3
	Disagree	198	19.2	80.8			
Problems I would experience if I conceived would be long-term	Agree	127	22.1	77.9	1.7	0.9 – 3.1	0.07
	Disagree	170	8.1	85.9			
Conceiving would shift my plans and life	Agree	91	16.5	83.5	0.9	0.5 – 1.7	0.7
	Disagree	206	18.4	81.6			
My economic growth and professional career would interfere with pregnancy	Agree	220	7.7	92.3	0.1	0.05 - 0.2.0	< 0.0001
	Disagree	77	45.4	54.6			
The thought of being pregnant scares me	Agree	239	26.3	83.7	0.7	0.3 – 1.4	0.3
	Disagree	58	22.4	77.6			
If I continue with this pregnancy my academic career will be endangered	Agree	65	36.9	63.1	4.3	2.2 – 8.1	< 0.0001
	Disagree	232	12.1	87.9			

In a 2015 report from the American College of Pediatricians, up to 30.4% of USA teens who had unintended pregnancies ended up with induced abortion (12). In contrast, in a study done in southern Ethiopia out of 84.21% of unintended pregnancies among adolescents over 52.08 % were terminated. This clearly shows that induced abortion is a factor that should be addressed among young girls and it's a hidden social problem.

In the same study adolescents who perceived that their physical health makes them more likely not to get pregnant if they have unprotected sex were more susceptible to having intention to induced abortion. The perception by adolescents of being immune to pregnancy because of their physical fitness is a gap in knowledge and awareness of their sexuality (9). Adolescents are risk-takers, they like experimenting and they also receive information from many sources which are not factual. With all these energies their knowledge should be guided through structured comprehensive sexual education to enable them to make an informed choice".

The study also revealed that adolescents who were not comfortable disclosing to their partners their feelings on pregnancy and intention to induce abortion were more likely to have an intention for an induced abortion. This was consistent with a study in low and middle-income countries whose findings highlighted the secrecy that adolescent held with abortion issues to avoid loss of respect, their dignity stigma and abuse (13). The study findings are also in line with other studies in Zambia which highlighted that internalized stigma and shame led Adolescents to assess their emotions, do a comparison of the aftermath of termination and delivery as well as reflect on post-abortion feelings (14). This was also supported in a study in Ghana adolescent girls were sent far away to aunts, and grandparents to hide the shame. Besides, a lack of privacy and confidentiality was experienced by the adolescents through the service providers who talked to other community members about them (15).

Influence of adolescent's perceived severity on intention to induce abortion

In the current study, the adolescents who perceived severity as endangering academic career and professional growth had close association and intent to induce abortion. Uniformity of the study findings was observed in a study by (15) and (16) in Kenya and Uganda. The two studies highlighted that the adolescents who were pregnant viewed pregnancy as a hindrance to their education and professional pursuits and thus decided to abort. This was further supported by (14) that reported despite adolescent knowledge of abortion stigma and the cultural and religious norms on abortion which branded abortion as unacceptable and immoral. The adolescents could hear none of that and pursued abortion which they believed was the only way that could allow adolescents to pursue their education and professional goals. In further studies in Brazil and the USA, the adolescents expressed that induced abortion hid their sexuality inadequacy, protected their respect, and allowed them not to discontinue their schooling (17). The finding clearly shows how adolescents value academic careers since at this stage most of them are schooling.

Limitations

The stigma surrounding abortion in Kenya surrounds the social bias in reporting abortion experiences among adolescents. The data presented here was generated from pregnant adolescent girls who visited youth-friendly clinics and were accompanied by their parents/guardians. The cross-sectional study design may not bring out the true causal inferences. Nevertheless, the study findings contribute significantly to determinants of

intention to induce abortion among adolescent girls.

Conclusion and Recommendations

Adolescents who perceived that their physical health makes them more likely not to get pregnant if they have unprotected sex were susceptible to having the intention to induce abortion. For this reason, a multisector, comprehensive sexual reproductive health education and pre-conception counselling approach should be actively operationalized. In addition, there was a strong association between adolescents who agreed that they do not talk about pregnancy and induced abortion with their partners and were more susceptible to having the intention to induce abortion. The researcher believes that the Adolescent programs should scale up male involvement specifically targeting the males (fathers, boyfriends, and teachers) who are primary contact persons with the adolescent girls. Programs should develop curriculums that target them with information addressing teenage pregnancy prevention through men's lens. The researcher is calling for tailored Comprehensive Sexual Health services which are easily accessible to adolescents.

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