Social and psychological factors affecting utilization of female condom among youths in Migori County, Kenya

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Abstract
The female condom is a dual protection tool for both prevention of HIV/AIDS transmission and conception of unwanted pregnancies. In Migori, HIV prevalence is 16 percent and utilization of female condom is at 0.3 percent. A descriptive cross-sectional study was conducted among 380 youths who were systematically and randomly sampled. Majority of youths (86.6%) were aged between 18 and 25 years with 83.9 percent being single, 95.3 percent were Christians, and 4.7 percent Muslim. There was a significant association between marital status, Men's role in negotiation of safe sex, incompetence in female condom insertion, and utilization of the female condom.

Keywords
female condom, youth in tertiary institutions

Introduction
Globally, by the year 2012, distribution of the female condom had increased to 60 million units per year; this trend led to innovation of new brands of the female condom to include woman’s condom, FC2, and panty condom. This made decision makers and health care personnel interested in advocacy and distribution of the device. In 2013, a global day was set for a contest for “female condom are film content,” and this contest attracted many young women and many of those who had used the device shared their experiences. In South Africa, policy makers recognize the critical role of this female-empowered tool (i.e. female condom) and have included it in the policy for contraception and dual protection (PATH, 2011–2015). The female condom was introduced in Kenya 25 years ago but has yet to become a common good in that market.

According to World Health Organization’s (WHO, 2014) report, women are more likely than men to get infected with sexually transmitted diseases (STDs) and to suffer the consequences of unplanned pregnancies due to their biological make up. Female youths are vulnerable to sexual abuse especially after abusing substances like alcohol. In the same report, WHO (2014) estimated that 39 percent of the youths in Kenya account for HIV/AIDS new infections.

The Kenya Demographic Health Survey (WHO, 2014) indicates that contraceptive prevalence peaks among married women in the age group of 30–34 years and is lowest for women aged 15–19 years. The levels of teenage childbearing are highest in Nyanza (27%) and Coast (26%) provinces and lowest in Central province (10%; WHO, 2014). According to the National AIDS Control Council (NACC) report, Kenya is among the six African countries which have high burden levels of HIV infection. It was estimated that HIV infection was highest among youths who cohabit, followed by married couples who do not know the HIV status of their partners; hence, HIV prevalence is highest in the lake region of Kenya with Kisumu County on the
lead followed by Siaya and Migori Counties (NACC, 2014). New HIV infections in Migori County were more than 5000 per year with approximately 1876 deaths related to HIV; 38.8 percent of men and 31.6 percent of female youths engage in sex with multiple partners and never used a condom in their last sexual act; this poses a risk for getting HIV among the youths (NACC, 2014).

According to KDHS (2014) report, the number of people living with HIV has increased from 1.4 million in 2009 to 1.6 million in 2013. Countrywide, 2.1 percent of youths aged 15–19 years are using male condom, while less than 1 percent of the same age group are using female condom. In the same report in Migori, 44 percent of youths aged 15–19 years are using contraception, while 55.4 percent are not on any method of contraception; of those using contraceptives, 3.1 percent are using male condom, while 0.3 percent are using female condom (KDHS, 2014).

On demographic factors, single youths were more likely to use the female condom compared to married youths; information on female condom use and availability of the device determines its utilization (Mujanayi et al., 2017). Efficacy in female condom insertion skills and partner negotiation skills plays a role in female condom use. In a study completed in South Africa, training of youths on skills related to female condom insertion increased use of the device after demonstrations. This suggests that increased efficacy on insertion of the device and skills on partner negotiation will improve and increase use of the female condom (Schuyler et al., 2016).

Negative attitudes and male dominance in decision-making influence use of female condom among youths. Perception and religious teaching also contribute negatively to a greater degree on the use of the female condom (Mugadza et al., 2016).

Early sexual debut, frequency of sexual activity, unknown HIV status of the partner or the perceived negative HIV status of the partner, and the female gender were attributed to inconsistent condom use among adolescents in northwest Cameroon (Morris et al., 2014). Njue et al. (2011) found out that some youths believed that young boys and girls have no sexually transmitted infections and hence no need to use condoms. In Tanzania, lack of skilled health care providers especially on sexual reproductive services and gender disparities were the main barriers to sexual reproductive services among youths in Mtswara district (Mbeba et al., 2012).

A study on the role of condom negotiation on condom use revealed that fear of afflicting partners’ feelings, partners disliking the use of condoms, condoms being uncomfortable during sex, religious prohibition, and condom cost contribute to low utilization of condoms. In the same report, it was reported that condom negotiation strategies can improve condom utilization (Exavery et al., 2012). In agreement with these findings, Njue et al. (2011) in their research on effects of porn videos in Kisumu revealed that inconsistent condom use was associated with increased trust, discomfort, reduction of pleasure, and girls having limited ability to request condom use. Other studies showed that the size, appearance, overall fit, and smell affected the use of the female condom (Wang et al., 2016). Low utilization of female condom was related to low level of awareness among the youths, and acceptance and availability in shops and chemists determined use of female condom in Ghana (Ananga et al., 2017).

Students in Kigari College reported to have knowledge of the female condom but lacked the skill on their use and that female condoms were not readily available, which lead to low utilization of the device (Mbarushimana and Ntaganira, 2013). In western Kenya, a study on community norms about youth condom revealed that youths found with condoms in high school were considered to be immoral and deviant. Teachers in high school were antagonistic to youth condom use and believe that condom use is against the community norms (Tavrow et al., 2012).

Materials and methods

Site of study. The study was carried out in Migori County in Nyanza (western part of Kenya). The study employed a cross-sectional descriptive study in design involving three tertiary training institutions in the county. The study was conducted among 380 youths in selected tertiary institutions in Migori County. Systematic random sampling was employed to sample individual youths from each institution. Questionnaire interviews were used to collect data; nurses in each institution’s clinic provided more information as key informants. Data collected were then analyzed using statistical package for social sciences (SPSS version 23). Bivariate analysis was used to measure the strength of associations, while the multivariate analysis was used to adjust the confounders. Chi square was used to identify the statistical significance of the association between the variables. A p value of 0.05 was used.

Results

The ages of the respondents ranged from 18 to 35 years with a mean age of 23 years and standard deviation (SD) of 0.341 years. More than half of the participants (86.6%) were aged between 18 and 25 years, while the remaining (13.4%) were between 25 and 35 years. Age of the respondents was insignificant in relation to use of the female condom as a barrier device for prevention of HIV/AIDS and unplanned pregnancy ($p > 0.05$, $\chi^2 = 2.253$, odds ratio (OR) = 4.117); however, increase in age was associated with minimal or low level of awareness of the female condom.

Expectedly, a majority of the youths were single (83.9%), while the remaining participants were married (10.8%) and others separated or cohabiting (5.3%). Marital status was negatively correlated with use of the female condom.
condom at –0.348 for the last 6 months. The association between marital status and utilization of the female condom was significant at (p < 0.05, \( \chi^2 = 66.969, \text{OR} = 43.919 \)) with a mean of 1.21 and SD of 0.523, where the married proportion reported higher level of awareness and use of the female condom compared to the proportion that was single or separated or divorced. The results were positively skewed with few married youths whose utilization of the device was higher compared to the many single youths.

Most of the respondents were Christians by denomination (95.3%), while the remaining participants (4.7%) were Muslims. There was no significant association between denomination of the research participant and the use of the female condom (\( p > 0.05, \chi^2 = 0.723, \text{OR} = 1.385 \)) with mean of 1.05 and SD of 0.213.

During focused group discussions, most participants reported to have been influenced to have sex late at night after either watching movies till late hours in male hostels or after abusing substances like alcohol and smoking shisha (i.e. hookah tobacco). This was attributed to unplanned sexual acts and influence from sexual partners who preferred male condom or unprotected sex. Those who were in stable relationships further explained that in case they requested for use of condoms, the partner posed issues of mistrust in the relationship, and those who agreed to have safe (protected) sex reported using a condom for prevention of pregnancy and not necessarily prevention of HIV/AIDS.

On further analysis, prior knowledge and training on use of female condom did not translate to using the device; however, the researchers found that availability of the knowledge on use of the device does not translate to use (\( p > 0.05, \chi^2 = 4.210, \text{OR} = 2.942, \text{SD} = 0.262, \text{mean} = 1.07 \)). There were many youths aware of the female condom and its benefits, but utilization of the same was very low.

Most of the respondents reported to receive their main financial support from their parents/guardians (80.5%), from relatives (13.4%), and their partners (6.1%). During focused group discussions, it came out that the youths were not fully satisfied with the support they receive from the principal supporter and therefore they seek more money from both relatives and sexual partners. Majority of the respondents reported to have gotten main financial support from the parents, and some who received support from partners and relatives were likely to have casual relations; this increased use of the device among those who engaged in casual sexual relationships for a period of 6 months (\( p < 0.05, \chi^2 = 6.738, \text{OR} = 5.985, \text{mean} = 1.26, \text{SD} = 0.559 \)).

A silicone vaginal model was used to assess the level of self-efficacy in use (insertion process) of the female condom; approximately, 97 percent were challenged on insertion of the female condom into the model. It was evident that the participants were aware of the female condom but were not conversant on its insertion process.

A Likert-type scale was used to assess the attitude of the respondents on use of the female condom. Most respondents revealed a negative attitude on use of the female condom. This was later elaborated during the focused group discussion that most respondents did not like the shape, size, and the inner ring of the female condom. They had perceived fear that the inner ring might cause pain during sex, and the shape of the condom was not attractive to users. There were no varieties in terms of sizes. This means that awareness and knowledge do not translate to use; however, personal attitude and self-efficacy were significant predictors of female condom use, as shown in Table 1.

On utilization of female condom, majority of the respondents (73.9%) reported to use the female condom for prevention of pregnancy, HIV/AIDS (15.3%), and both pregnancy and HIV/AIDS (10.8%). Most of the youths feared getting pregnant more than contracting HIV/AIDS; therefore, whenever they were not in safe days, they opted to use condom, while on safe days, they had unprotected sex (\( p < 0.05, \chi^2 = 12.168, \text{OR} = 7.119, \text{SD} = 0.244, \text{mean} = 1.06 \)), as indicated in Table 2.

The researchers found out that still in this era, men had a say on sexual matters; 77 percent of the respondents reported that using or not using the female condom was decided by their male counterparts, while the rest opted for unprotected sex to show trust for their partners. Female respondents said it is shameful to initiate sexual issues and discuss use of condoms. This was evident during focused group discussion where the respondents reported that a woman should not initiate sexual talks and those who are courageous to talk openly on sexual relations, especially the use of condoms, were seen to be immoral. A chi square was computed to check for association between ability to convince the male partner on use of a female condom and actual use, and this revealed that in this era, men are the dominant predictors on use of family planning with women lacking the negotiation skills for condom use (\( p < 0.05, \chi^2 = 10.389, \text{OR} = 9.253, \text{SD} = 1.073, \text{mean} = 3.61 \)).

### Discussion

According to the research findings, the researcher found out that marital status significantly affected use of the female condom. This was related to trust among partners and mistrust for casual sex partners. These findings concur with an early research completed in Kiambu County on use among female of reproductive age, which indicated trust as a factor on determining use of female condom (Nzioki et al., 2015). The main source of income was also considered significant in this study; those who received enough money for use from principal supporter reported low use or disuse of the female condom compared to those who do not get adequate funding and sought extra money from casual sex partners as this was revealed in focused group discussion. On further probing and analysis, it was revealed that the cost of purchasing the female condom was a barrier to the users; this is in line with the findings of Chawatama (2014), which indicated that the
high cost of the female condom lowered its availability in shops and other places of sale.

During focused group discussion, it was broadly argued that men have a say on sexual matters, women lacked negotiation skills for use of female condom, the time taken between insertion of the female condom and the actual use was long, and sometimes the male partner may fail to turn up even after the women had inserted the device in time. In

### Table 1. Demographic factors affecting use of female condom among youths.

| Variables (N=380)                          | Frequency | $\chi^2$, df, p | Odds ratio (OR) |
|-------------------------------------------|-----------|-----------------|-----------------|
| **Age (years)**                           |           |                 |                 |
| 18–25                                     | 329 (86.6%) | $\chi^2=2.253$  | OR=4.117        |
| 25–35                                     | 51 (13.4%)  | $p > 0.05$      |                 |
| **Marital status**                        |           |                 |                 |
| Single                                    | 319 (83.9%) | $\chi^2=66.969^a$ | OR=43.919       |
| Married                                   | 41 (10.8%)  | df=2            |                 |
| Separated/divorced                        | 20 (5.3%)   | $p < 0.05$      |                 |
| **Denomination**                          |           |                 |                 |
| Christian                                 | 362 (95.3%) | df=1            | OR=1.385        |
| Muslim                                    | 18 (4.7%)   | $p > 0.05$      |                 |
| **Main financial supporter**              |           |                 |                 |
| Parent/guardian                           | 306 (80.5%) | $\chi^2=6.738^a$ | OR=5.985        |
| Relatives                                 | 51 (13.4%)  | df=2            |                 |
| Partners/friends                          | 23 (6.1%)   | $p < 0.05$      |                 |
| **Ever heard of the female condom**       |           |                 |                 |
| Yes                                       | 352 (92.6%) | df=1            |                 |
| No                                        | 28 (7.4%)   | $p < 0.05$      |                 |
| **The female condom is difficult to use** |           |                 |                 |
| Yes                                       | 343 (90.3%) | df=1            | OR=.121         |
| No                                        | 37 (9.7%)   | $p > 0.05$      |                 |
| **The female condom prevents pregnancy**  |           |                 |                 |
| Yes                                       | 356 (93.7%) | df=2            | OR=7.119        |
| No                                        | 24 (6.3%)   | $p < 0.05$      |                 |
| **The female condom prevents both HIV and pregnancy** | | | |
| Yes                                       | 219 (57.6%) | $\chi^2=1.517$  | OR=1.438        |
| No                                        | 50 (13.2%)  | df=2            |                 |
| Not sure                                  | 111 (29.2%) | $p > 0.05$      |                 |

$^a$= the exact $p$ value was 0.001.

### Table 2. Social factors affecting use of female condom.

| Social factors affecting utilization of female condom | Frequency | $\chi^2$, df, p | Odds ratio (OR) |
|-----------------------------------------------------|-----------|-----------------|-----------------|
| Source of information about female condom            |           |                 |                 |
| Media                                                | 233 (61.3%) | $\chi^2=1.785$  | OR=3.201        |
| Health workers/clinics                               | 39 (10.3%)  | df=2            |                 |
| Friends                                              | 108 (28.4%) | $p > 0.05$      |                 |
| Use of the female condom before any sexual act to prevent unwanted pregnancy | | | |
| Never                                                | 367 (96.6%) | $\chi^2=12.168$ | OR=7.119        |
| Sometimes                                            | 10 (2.6%)   | df=2            |                 |
| Most of the time                                     | 3 (0.8%)    | $p < 0.001$     |                 |
| Ability to convince sexual partner to use a female condom | | | |
| Strongly agree                                        | 12 (3.2%)   | $\chi^2=10.389$ | OR=9.253        |
| Agree                                                | 38 (10.0%)  | df=2            |                 |
| Not sure                                              | 134 (35.3%) | $p < 0.05$      |                 |
| Disagree                                              | 97 (25.5%)  |                 |                 |
| Strongly disagree                                     | 99 (26.1%)  |                 |                 |
most cases, it was reported that sex among the youths was an unplanned event, making it difficult to know when to carry a female condom since carrying it all the time made the female youth to be seen as being immoral. These findings echo what Obembe et al. (2017) found out among women of reproductive age in Kenya.

Conclusion

Based on the researches, factors affecting the use of female condom are marital status, personal efficacy on female condom insertion process, the time frame between time of insertion and actual use, individual negotiation skills on protected sex, and personal attitude.

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