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SOCIAL DEMOGRAPHIC FACTORS AFFECTING UTILIZATION OF FEMALE CONDOM AMONG YOUTHS IN SELECTED TERTIARY TRAINING INSTITUTIONS IN MIGORI COUNTY, KENYA. Joshua Omwenga Boraya, Department of reproductive health, School of public health, Kenyatta University, Nairobi, Kenya. P. O box 10337-00100, Nairobi, Kenya. Dr. Albert Gachau, Department of pathology, School of Medicine, Kenyatta University. O box 43844-00100. Nairobi, Kenya.

## SOCIAL DEMOGRAPHIC FACTORS AFFECTING UTILIZATION OF FEMALE CONDOM AMONG YOUTHS IN SELECTED TERTIARY TRAINING INSTITUTIONS IN MIGORI COUNTY, KENYA.

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### ABSTRACT

**Background:** 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% among the youths with the female youth having a higher prevalence than male counterpart at 7.6% and 5.6% respectively. Female condom use is low at 0.3% with an early sexual debut among the youths before 15 years of age.

**Objective:** To determine social demographic factors affecting utilization of female condom among the youths in Migori County, Kenya.

**Methodology:** A descriptive cross sectional study was conducted among 380 youths in selected tertiary institutions in Migori County, systematic random sampling was employed to sample youths from each institution. Questionnaires were used to collect data, nurses in each institution's clinic provided more information as key informants.

**Results:** A total of 380 female youths participated in the study, 86.6% were aged between 18-25 years with 83.9% being single, 95.3% were Christians and 4.7% Muslim. There was a significant association between marital status and utilization of the female condom ( $p \leq 0.000$ ,  $\chi^2 = 66.969$ ,  $OR = 43.919$ ), increase in age was significantly associated with awareness of female condom use among youth ( $\chi^2 = 4.210$ ,  $OR = 0.86$ ,  $p = 0.040$ ), majority of the youths fear getting pregnant than contracting HIV at significance level of  $p = 0.016$ . Men's say in negotiation on female condom use was also significant at  $p = 0.042$ , majority of the youth were incompetent in female condom insertion process at  $p = 0.020$ .

**Conclusion:** Low levels of self-efficacy on female condom use, lack of negotiation skills for safe sex among partners, and age of the youth. The Ministry of Health through county government need to promote female condom use among youths in tertiary institutions through product distribution, opportunities to practice correct use and communication addressing misconceptions about female condom use.

### INTRODUCTION

Globally by the year 2012 distribution of the female condom had increased to 60 million units per year, the 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 to be interested in advocacy and distribution of the device. In 2013, global day was set for a contest

for “female condom are- film contest”, this contest attracted many young women and many of those who had used the device shared their experiences. for “female condom are- film contest”, this contest attracted many young women and many of those who had used the device shared their experiences.

In South Africa, the policy makers recognize the critical role of the female empowered tool (female condom) and have included it in the policy for contraception and dual protection [1]. The female condom was introduced in Kenya 25 years ago but has yet to become a common good in our market. According to World Health Organization (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.

The female youths are vulnerable to sexual abuse especially after abuse of substances like alcohol. In the same report, WHO estimated that 39 per cent of the youths in Kenya account for HIV/AIDs new infections [2]. The Kenya Demographic Health Survey [2] indicates that contraceptive prevalence peaks among married women in the 30-34 age-group and is lowest for women aged 15-19 years, the levels of teenage childbearing are highest in Nyanza (27 per cent) and Coast (26 per cent) provinces and lowest in Central province (10 per cent)[2].

According to 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 and that HIV prevalence is highest in the lake region of Kenya with Kisumu County on the lead followed by Siaya and Migori Counties respectively[3], new HIV infections in Migori County was more than 5000 people per year and approximately 1876 deaths related to HIV.

38.8% of men and 31.6 female youths engage in sex with multiple partners and never used a condom in their last sexual act, which poses a risk for contracting HIV among the youths [3]. 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 per cent of youths aged 15 – 19 years are using male condom while less than 1 per cent of the same age group are using female condom.

In the same report in Migori 44 per cent of the youths aged 15 -19 years are using contraception while 55.4 per cent are not on any method of contraception, of those using contraceptives 3.1 per cent are using male condom while 0.3 per cent are using female condom [4] On demographic factors, single youths were more likely to use the female condom compared to married youths, information on female condom use availability of the device determine its utilization [5].

Efficacy in female condom insertion skills and partner negotiation skills play a role in female condom use, in a study done in South Africa training of the youths on skills on female condom insertion increased use of the device after demonstrations. It is therefore evident that increased efficacy on insertion of the device and skills on partner negotiation will improve and increase use of the female condom [6].

Negative attitude, male dominance in decision making especially on when to use a condom influences utilization of the female condom among the youths. Perception and religious teaching also contribute negatively to a greater degree on use of the female condom [7]. 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 was attributed to inconsistent condom use among adolescent in northwest Cameroon [8].

Njue et al, found out that some youths believed that young boys and girls have no sexually transmitted infections hence no need to use condoms [9]. 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 Mtwara district [10].

A study on role of condom negotiation on condom use revealed that fear of affecting partners' feelings, partners disliking use of condoms, condom being uncomfortable during sex, religious prohibition and condom cost contribute to low utilization of condoms. In the same report it is reported that condom negotiation strategies can improve condom utilization [11].

In agreement with these findings, Njue et al, in their research on effects of porn videos in Kisumu revealed that inconsistent condom use is associated with increased trust, discomfort, reduction of pleasure and girls having limited ability to request for condom use [9]. Other studies showed that the size, appearance, overall fit and smell affected the use of the female condom [12]. Low utilization of female condom were related to low level of awareness among the youths, acceptance and availability in shops and chemists determined use of female condom in Ghana. [13] Students in Kigari College reported to have knowledge on female condom but lacked the skill on their use and that Female condom was not readily available leading to low utilization of the device [14]

In western Kenya, a study on community norms about youth condom revealed that youths found with condoms in high school was considered to be immoral and deviant. Teachers in high school were antagonistic to youth condom use and that condom use is against the community norms [15].

## 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.

Questionnaires interviews were used to collect data; nurses in each institution's clinic provided more information as key informants. Data collected was 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  $p < 0.05$  was used.

## RESULTS

The ages of the respondents were ranging from 18 to 35 complete years with a mean age of 23 years and SD 0.341. More than half of the participants (86.6%) were aged between 18 and 25 years of age, while the remaining (13.4%) were aged 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 ( $p=0.133$ ,  $\chi^2=2.253$ ,  $OR=4.117$ ), however increase in age was associated with minimal or low level of awareness of the female condom. Expectedly majority of the youths were single (83.9%), while the remaining were married and others separated or cohabiting, (10.8%) and (5.3%) respectively

Marital status was negatively correlated with use of the female condom at  $-0.348$ , The association between marital status and utilization of the female condom was significant at ( $p \leq 0.000$ ,  $\chi^2 = 66.969$ ,  $OR = 43.919$ ) with a mean of 1.21 and SD of 0.523, where by 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 with a  $p$  value of, ( $p = 0.395$ ,  $\chi^2 = 0.723$ ,  $OR = 1.385$ ) with mean of 1.05 and SD of 0.213. During focused group discussions, most participants reported to had 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.

This was attributed to unplanned sexual acts and influence from sexual partners who preferred male condom or unprotected sex. For 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 to use a condom for prevention of pregnancy and not necessarily prevention of HIV/ Aids.

On further analysis those who had prior knowledge and training on use of female condom they didn't translate that to use of the device, however the researchers found out that availability of the knowledge on use of the device does not translate to use value, ( $p = 0.040$ ,  $\chi^2 = 4.210$ ,  $OR = 2.942$ ,  $SD = 0.262$ ,  $Mean = 1.07$ ). 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, from relatives and their partners 80.5%, 13.4% and 6.1% respectively.

During focused group discussion, it came out from the participants that the youths were not fully satisfied with the support they receive from the principal supporter therefore seek more money from both relatives and sexual partners. Majority of the respondents reported to have gotten main financial support from the parents, some who received support from partners and relatives were likely to have casual relations and this increased use of the device among those who engaged in casual sexual relationships, ( $p = 0.034$ ,  $\chi^2 = 6.738$ ,  $OR = 5.985$ ,  $Mean = 1.26$ ,  $SD = 0.559$ ).

A silicone vaginal model was used to assess the level of self-efficacy in use (insertion process) of the female condom, most participated 97% had a challenge on insertion of the female condom into the model, and it was evident that the participants were aware of the female condom but were not conversant on its insertion process. A likert scale was used to assess the attitude of the respondents on use of the female condom, where by most respondents revealed a negative attitude to use of the female condom.

This was later elaborated during the focused group discussion that most respondents didn't like the shape, size and the inner ring of the female condom. They had perceived fear of the inner ring can cause pain during sex and the shape was not attractive to users neither are there varieties in terms of sizes, this means awareness, and knowledge does not translate to use, however personal attitude and self-efficacy were significant predictors of female condom use.

Variables ( N=380)	Frequency	X <sup>2</sup> , df, p	Odds ratio
<b>Age In Years</b>		X <sup>2</sup> =2.253	OR= 4.117
18-25 Years	329 (86.6%)	df= 1	
25-35 Years	51 (13.4%)	P=0.133	
<b>Marital Status</b>			
Single	319 (83.9%)	X <sup>2</sup> =66.969 <sup>a</sup>	O R= 43.919
Married	41 (10.8%)	df= 2	
Separated/Divorced	20 (5.3%)	P=0.000	
<b>Denomination</b>		X <sup>2</sup> =0.723	O R= 1.385
Christian	362 (95.3%)	df= 1	
Muslim	18 (4.7%)	P=0.395	
<b>Main Financial Supporter</b>			
Parent/Guardian	306 (80.5%)	X <sup>2</sup> =6.738 <sup>a</sup>	O R= 5.985
Relatives	51 (13.4%)	df= 2	
Partners/Friends	23 (6.1%)	P=0.034	
<b>Ever Heard Of The Female Condom</b>		X <sup>2</sup> =4.210	O R= 2.942
Yes	352 (92.6%)	df= 1	
No	28 (7.4%)	P=0.040	
<b>The Female Condom Is Difficult To Use</b>		X <sup>2</sup> =.111 <sup>a</sup>	O R= .121
Yes	343 (90.3%)	df= 1	
No	37 (9.7%)	P=0.739	
<b>The Female Condom Prevents Pregnancy</b>			
Yes	356 (93.7%)	X <sup>2</sup> =12.168	O R= 7.119
No	24 (6.3%)	df= 2	
		P=0.000	
<b>The Female Condom Prevents Both HIV And Pregnancy</b>			
Yes	219 (57.6%)	X <sup>2</sup> =1.517	O R=1.438
No	50 (13.2%)	df=2	
Not Sure	111(29.2%)	P=0.468	

On utilization of female condom majority of the respondents 73.9% reported to use the female condom for prevention of pregnancy, 15.3%, 10.8% HIV/ aids and both pregnancy and HIV/ aids respectively. Most of the youths feared getting pregnant than contracting HIV/Aids, therefore whenever they were in not safe days,

they opted to use condom while on safe days they had unprotected sex ( $p \leq 0.000$ ,  $\chi^2 = 12.168$ ,  $OR = 7.119$ ,  $SD = 0.244$ ,  $Mean = 1.06$ ).

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### **Social factors affecting utilization of female condom**

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#### **Source Of Information About Female**

##### **Condom**

Media	233 (61.3%)	$X^2 = 1.785$	$O R = 3.201$
Health Workers/Clinics	39 (10.3%)	$df = 2$	
Friends	108 (28.4%)	$P = 0.410$	

#### **Use of The Female Condom Before Any Sexual Act To Prevent Unwanted Pregnancy**

Never	367 (96.6%)	$X^2 = 12.168$	$O R = 7.119$
Sometimes	10 (2.6%)	$df = 2$	
<b>Most Of The Time</b>	3 (0.8%)	$P = 0.000$	

#### **Ability To Convince Sexual Partner To Use A Female Condom**

Strongly Agree	12 (3.2%)	$X^2 = 10.389$	$O R = 9.253$
Agree	38 (10.0%)	$df = 2$	
Not Sure	134 (35.3%)	$P = 0.034$	
Disagree	97 (25.5%)		
Strongly Disagree	99 (26.1%)		

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The researchers found out that still in this era men had a say on sexual matters, 77% of the respondents reported to use or not to use 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 about use of condoms, this was evident during focused group discussion where the respondents reported that a woman should not initiate sexual talks and for those who are courageous to talk openly on sexual relations especially 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 ( $p=0.034$ ,  $\chi^2=10.389$ ,  $OR= 9.253$ ,  $SD=1.073$ ,  $Mean=3.61$ ).

### DISCUSSION

According to the research findings, the researcher found out that marital status was significantly affecting use of the female condom, this was related to trust among partners and mistrust for casual sex partners.

The findings concur with an early research done in Kiambu County on use among female of reproductive age which indicated trust as a factor on determining use of female condom [16]. The main source of income was also considered significant in this study, those who received enough money for use reported low use or disuse of the female condom compared to those who do not get adequate funding from home 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 [17] 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 when it comes to sexual matters, women lacked negotiation skills for use of female condom and it was reported that the time taken between insertion of the female condom before the actual act was long and sometimes the male partner may fail to turn up even after the women had inserted the device in time.

In most cases it was reported that sex among the youths was 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 [18] found out among women of reproductive age in Kenya.

### CONCLUSIONS:

Based on the researcher's findings on demographic factors affecting the use of female condom marital status, personal efficacy on female condom insertion process and the time frame between time of insertion and actual use, individual negotiation skills on protected sex and personal attitude significantly affected female condom use.

### DECLARATION

The authors declare that they have no competing interests.

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## REFERENCES

1. PATH. (2011-2015). Using innovative female condom advocacy to improve awareness and catalyze change. westlake: path.org.
2. World Health Organization, WHO. (2014). Progress report on the global HIV/AIDS epidemic.
3. National Aids Control Council, NACC. (2014). Kenya HIV estimates County profile. Nairobi: Ministry of health.
4. Kenya Demographic Health Survey, KDHS. (2014). CONTRACEPTIVE USE. Nairobi: Kenya bureau of statistics.
5. Mujanayi, M., Bernard, J., Kandolo, I., Matungulu, M., Murumbati, K., Ghislain, M., et al. (2017). Evaluation of female condom use among students at the university of Lubumbashi: Knowledge, attitude and practice on university cities. 4 (11), 1-9.
6. Schuyler, A., Masvawure, T., Smit, J., Beksinska, M., Mabunde, Z., Ngoloyi, C., et al. (2016). Building women's knowledge and skills in female condom use: lesson learned from a south african intervention. Health education research, 31 (2), 260-72.
7. Mugadza, G., Krumpfen, P., Matilda, Z., & Augustine, N. (2016). Female condom: Knowledge, perception and practices among female college students. Journal of medical and dental science research, 3 (1), 10-15.
8. Morris, L., Kouya, F., Kwalar, R., Pilapil, M., Saito, K., Palmer, N., et al. (2014). Factors associated with inconsistent condom use in adolescents with negative or unknown HIV status in Northwest Cameroon. AIDS Care, 26 (11), 14405.
9. Njue, C., Voeten, H., & Remes, P. (2011). porn video shows, local brew, and transactional sex: HIV risk among youth in kisumu, Kenya. BMC Public Health, 11 (1), 635.
10. Mbeba, R., Mkuye, M., Magembe, G., Lubazi, W., Mellah, A., & Mkuwa, s. (2012). Barriers to sexual reproductive health services and rights among young people in Mtwara district, Tanzania: a qualitative study. The pan african medical journal, 13 (1), 13.
11. Exavery, A., Mubyazi, G., Rugemalila, J., Mushi, A., Massaga, J., Malebo, H., et al. (2012). Acceptability of condom promotion and distribution among 10-19 year old adolescents in Mpwapwa and Mbeya rural districts in Tanzania. BMC public health, 12, 569.
12. Liu, M., Cheng, Y., & Wang, X. (2016). Acceptability of phoenurse female condom and second generation femidom female condom in chinese women. Journal of obstetric and gynaecology research, 42 (11), 1567-74.
13. Ananga, M., Kugbey, N., Misomu, J., & Asante, O. (2017). Knowledge, acceptance and utilization of the female condom among women of reproductive age in Ghana. Contraception and reproductive medicine, 2 (15).
14. Mbarushimana, V., & Ntaganira, J. (2013). Knowledge and attitude to female condom use among undergraduates of Kigari Health Institute. Rwanda journal of health, 2 (1).
15. Tavrow, P., Karei, E., Obbuyi, A., & Omollo, V. (2012). Community norms about youth condom use in western Kenya: Is transition occurring. African journal of reproductive health, 16 (2), 241.
16. Nzioki, M., Okello, B., & Orago, A. (2015). Acceptability and accessibility of the female condom in Kenya. India: LAP Lambert Academic Publishing.
17. Chawatama, D. (2014). The utilization and acceptability of the female condom among female sex workers: a study in Zeerust, North west, South Africa. Retrieved 8 24, 2016, from <http://scholar.sun.ac.za/handle/10019.1/86390>
18. Obembe, T., Adebawale, A., & Odebynmi, K. (2017). Perceived confidence to use female condoms among students in tertiary institutions of metropolitan city, South west Nigeria. MBC research notes, 10, 398.