Asian Journal of Research in Medical and Pharmaceutical Sciences

1(3): 1-6, 2017; Article no.AJRIMPS.36533

Factors Associated with Inconsisitent Female Condom Use among Sexually Active Young Persons in Western Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. Authors INU, SOU, OJF, AO and NT designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors INU, SOU, AA, GPO and OSO managed the analyses of the study. Authors INU, SOU, TCO, OJF, KFA and NT managed the literature searches. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJRIMPS/2017/36533
Editor(s):
(1) Costas A. Fourtounas, Faculty of Medicine, School of Health Sciences, University of Thessaly, Greece.
Reviewers:
(1) Renshan Sun, Third MIlitary Medical University, China.
(2) Edmund J. Kayombo, Muhimbili University of Health and Allied Sciences, Tanzania.
Complete Peer review History: http://www.sciencedomain.org/review-history/21097

Original Research Article

Received 31st August 2017
Accepted 19th September 2017
Published 22nd September 2017

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ABSTRACT

Background: Female condoms are devices used during sexual intercourse as a barrier contraceptive to reduce the risk sexually transmitted infections (STIs) such as HIV, gonorrhea and syphilis. Consistent and appropriate use of condom is the most effective way of preventing HIV/AIDS transmission and unwanted pregnancies. Hypothesis tested was the influence of educational status on female condom & HIV/AIDS knowledge. This study was aimed at determining the knowledge, attitudes, experiences and factors associated with the inconsistent and incorrect use of female condom among sexually active young persons in Western Nigeria.

Materials and Methods: This cross-sectional study was carried out in Ogun State & Ekiti State, Western Nigeria. The target population was sexually active young persons between ages 15 to 40 years, which included people living with HIV/AIDS and female sex workers. A multi-stage sampling technique was used to select 360 respondents who were administered a well-structured pre-tested questionnaire. All data were statistically analyzed, using Statistical Package for the Social Sciences (SPSS) while statistical test of significance was performed using Chi-Square test.

Results: A total of 360 (37 males & 323 females) respondents participated in the study. Most of them were in the age range of 21- 25 years, with the mean age ± SD of 22.94 ± 3.78 years. 24.7% of them know how to use female condom but only 12.8% of them have ever used female condom as against 38.1% that have ever used male condom. Only 4.2% respondents are HIV positive, as 50.3% of the respondents preferred male condom mainly due to accessibility, affordability and easier use.

Conclusion: The knowledge about female condom in this study was average while the attitudes towards its use were not favourable mainly due to the preference for male condom as a result of complaints about female condoms including unavailability, higher cost and insertion difficulty. Thus, there is need to extensively educate the entire populace especially women regarding the misconceptions and social stigma about female condom in order to boost its use.

Keywords: Female condom; Western Nigeria; female sex worker; sexually active.

1. INTRODUCTION

Female condoms are devices used during sexual intercourse as a barrier contraceptive to reduce the risk sexually transmitted infections (STIs) such as HIV, gonorrhea and syphilis, though, it its protection against them is inferior to that by unintended pregnancy and male condoms [1]. Consistent and appropriate use of condom is the most effective way of preventing HIV/AIDS transmission and unwanted pregnancies [1]. The use of the female condom is seen as a way of providing protection to women against sexually transmitted infections (STIs) and unwanted pregnancies [2]. Female condom for instance, provides bi-directional protection to both partners. Studies suggest that women are more likely to get infected with sexually transmitted infections (STIs) than men and to bear the consequences associated with unplanned pregnancies and STDs [1,3]. Female condom has emerged as an acceptable alternative barrier method to the male condom [2]. However, HIV remains a major threat to public health and well-being of people living especially in sub-Saharan Africa, as it is a region with more than two-thirds (69%) of the world's HIV/AIDS caseload [4]. Generally, across the world, in order to promote the access to the female condom, its awareness, availability and use, mass media campaigns have been undertaken [2]. Stockman and Associates recommend to increase the availability of female condom and to provide the populations with education on their use [5]. A research outcome on the factors associated with inconsistent use of condom showed that 29.6% of the sexually active respondents were using condoms consistently while 32.4% of them agreed that should a condom slip off during sexual intercourse, it will land up in their stomach [6]. The outcome of a 2015 study on the knowledge, attitudes and utilization of female condom in Kumba Cameroon, showed that 67.3% of the respondent knew about female condoms, 75.6% of them knew that correct and consistent use of female condoms during sexual intercourse can prevent HIV transmission, with the main source of information regarding female condom being the mass media (64.6%) while perceived decrease in sexual satisfaction with the female condom use was reported by 64.1% and 38.7% of them said the female condoms were readily available [7]. In another 2015 publication of research work conducted in Nigeria

on female condom use, it was reported that there was a good knowledge of female condom (64.3%), with the majority getting the information through friends (50.8%) while 32.9% of the respondents agreed that female can protect against STIs, HIV/AIDS etcetera [8]. In Brasil, a study on the factors associated with condom use in people living with HIV/AIDS revealed that generally 82.8% of males and 76.2% of females use condom, 72.3% did not reveal their HIV serum status to the casual partners, 82.3% revealed the positive HIV serum status their fixed partners while 99.5% do not reveal their serum status but use condoms [9]. In Rwanda, it was reported that 79% of the respondents were aware of female condom but only 24% knew how to use it. Most of the respondents believed that the female condom can prevent unwanted pregnancies (78%), STIs and HIV/AIDS (81%) while less than 3% cited female condom as their contraception method [10]. The aim of the study was to determine the knowledge, experiences and factors associated with the inconsistent and incorrect use of female condom among sexually active young persons especially that belong to the key population of our society.

2. MATERIALS AND METHODS

This cross sectional study was carried out in towns across the three senatorial districts of both Ogun & Ekiti States, South-Western Nigeria. The target population was sexually active young individuals especially that belong to the key population of our society. A semi-structured questionnaire was administered consecutively on 360 respondents. Demographic and socio-economic information obtained were included. Data was collected using a pre-tested questionnaire on the knowledge, experiences and factors affecting female condom use.

A multi-stage sampling technique was used to select the respondent from selected local government areas (LGAs) in each of the three senatorial districts in both states. In stage 1 from a sampling frame of the entire number of local government areas in each senatorial districts of each state, one-third number of LGAs was selected using simple random sampling method. In stage 2, a list of towns in each of the selected LGA's was randomly made. In stage 3, houses in the towns were randomly selected. The final stage involved in the selection of consenting sexually active young persons. The questionnaires were then administered on the respondents. Scoring of outcome variables with correct answers was done. Correct answers will be scored 1 point while wrong answers were scored 0. Following the scores, addition and calculation of the average score, respondents who scored below the average score were categorized as having poor knowledge while those with scores above the average were classified as having good knowledge.

2.1 Sample Size

Sample size calculation was done using 95% confidence interval, 0.05 precision and prevalence rate. The report of the 2013 study revealed 29.6% of the sexually active persons were using condoms consistently [6]. Using Leslie Fischer's formula for population >10,000, the formula for sample size calculation is: $n = Z^2PQ/d^2$ [11].

$$n = Z^2PQ/d^2$$

Where:

n = minimum sample size, d = degree of precision (taken as 0.05),
Z = standard normal deviation at 95% confidence interval which is 1.96,
P = proportion of the target population (estimated at 22.2% which is 29.6/100 = 0.296),
Q = alternate proportion (1-P) which is 1-0.296= 0.704

$$n = \frac{(1.96)^2 (0.296)(0.704)}{(0.05)^2} = 320$$

Also, adding a 5% non-response rate, the minimum sample size (n) will be 5/100 X 320 = 16

Thus, it will be 16 + 320 = 336 = n

2.2 Statistical Analysis

Data was statistically analyzed using Statistical Package for the Social Sciences (SPSS) for windows version 21.0 software (SPSS Inc., Chicago, IL, USA). Data was expressed as Mean ± Standard Deviation (SD). Frequency counts were generated for all variables and statistical test of significance was performed with Chi-Square test. Significance was fixed at $P < 0.05$ and highly significant if $P < 0.01$.

3. RESULTS

3.1 Socio-demographic Data

A total of 360 consenting respondents participated in the study. Most of the respondents are in the age range of 21 – 25 years, with a mean age ± SD of 22.94 ± 3.78 years. Most of the respondents' highest education level is tertiary education certificate, 218 (60.6%) followed by secondary/high school leaving certificate, 119 (33.1%).

Only 88.3% of the respondents have heard about female condom, 12.8% have used female condom, 10.3% are currently using female condom, 36.9% believe that female condom can slip off during sex and land up in their stomach, 89.7% reported that female condom can prevent unwanted/unplanned pregnancy while 50.3% prefer male condom to female condom.

Table 1. Socio-demographic data of respondents

Variables	Frequency (%)
Age group (years)	
< 18	5 (1.4)
18 – 20	102 (28.3)
21 – 25	179 (49.7)
26 – 30	62 (17.2)
31 – 35	10 (2.8)
36 - 40	2 (0.6)
Gender	
Male	37 (10.3)
Female	2358 (89.7)
Highest level of education	
No formal education	6 (1.7)
Primary	17 (4.7)
Secondary	119 (33.1)
Tertiary	218 (60.6%)

The null hypothesis is accepted when the test statistic is lesser than the tabled value or critical value.

Table 2. Female condom use, attitude & practice

Variables	Frequency (%)
Ever heard about female condom	
Yes	318 (88.3)
No	42 (11.7)
Ever seen a female condom	
Yes	195 (54.2)
No	165 (45.8)
Can correctly fit a female condom	
Yes	67 (18.6)
No	293 (81.4)
Ever used a female condom	
Yes	46 (12.8)
No	314 (87.2)
Currently using a female condom	
Yes	37 (10.3)
No	323 (89.7)
Ever used a male condom	
Yes	137 (38.1)
No	207 (57.5)
No Response	16 (4.4)
Shy to buy a condom	
Yes	132 (36.7)
No	200 (55.6)
No Response	28 (7.8)
Prefer male condom to female condom	
Yes	181 (50.3)
No	138 (38.3)
No Response	41 (11.4)
Female condom can slip off during sex and land in my stomach	
Yes	133 (36.9)
No	180 (50.0)
No Response	47 (13.1)
Female condom can prevent unwanted/unplanned pregnancy	
Yes	323 (89.7)
No	22 (6.1)
No Response	15 (4.2)

Table 3. Information on HIV/AIDS testing

Ever tested for HIV	
Yes	215 (59.7)
No	125 (34.7)
No Response	20 (5.6)
Tested for HIV in last 6 months	
Yes	136 (37.8)
No	198 (55.0)
No Response	26 (7.2)
Result of HIV test	
Negative	325 (90.2)
Positive	15 (4.2)
Undisclosed	20 (5.6)

Table 4. Chi square result showing influence of educational level on the use of female condom

Variables	χ^2	df	Critical value	P-value	Decision
Educational level does not have effect on the use of female condom	3.22	3	7.82	0.359	Accepted

4. DISCUSSION

This research outcome has shown that 88.3% have heard about female condom, 12.8% have used female condom, 10.3% are currently using female condom, 36.9% believe that female condom can slip off during sex and land up in their stomach, 89.7% reported that female condom can prevent unwanted/unplanned pregnancy while 50.3% prefer male condom to female condom. This is slightly in agreement with a previous research on the factors associated with inconsistent use of condom which showed that 29.6% of the sexually active respondents were using condoms consistently while 32.4% of them agreed that should a condom slip off during sexual intercourse, it will land up in their stomach [6], as well as a 2015 study in Cameroon that showed 67.3% of the respondent knew about female condoms [7]. Furthermore, it is similar to the research outcomes of other studies as conducted elsewhere in Nigeria, which showed that there was a good knowledge of female condom (64.3%) [8], then 82.8% of males and 76.2% of females use condom in Brasil [9] and in Rwanda, where it was reported that 79% of the respondents were aware of female condom but only 24% knew how to use it. Most of the respondents believed that the female condom can prevent unwanted pregnancies (78%), STIs and HIV/AIDS (81%) while less than 3% cited female condom as their contraception method [10]. This shows that even though most of the respondents are very knowledgeable regarding female condom but the practice is perhaps low. The vast majority of respondents that have sued or willing to use condom prefer the male condom for various purposes they believe condom serve. This knowledge-gap especially regarding the female condom is also further given credence by the acceptance of the hypothesis on the educational level of respondents having effect on the use of female condom shows that the level of education does not necessarily impact the use of female condom.

5. CONCLUSION

The knowledge about female condom in this study was average while the attitudes towards its use were not favourable mainly due to the preference for male condom as a result of complaints about female condoms including unavailability, higher cost and insertion difficulty. Thus, there is need to extensively educate the entire populace especially women regarding the misconceptions and social stigma about female condom in order to boost its use.

CONSENT

All authors declare that 'written informed consent was obtained from the subjects and other approved parties for publication of this paper and accompanying images.

ETHICAL APPROVAL

All authors hereby declare that all experiments have been examined and approved by the appropriate ethics committee (the ethical review committee of the Federal Teaching Hospital, Ido Ekiti, Nigeria) and have therefore been

performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Holmes JL, Ogungbade GO, Ward DD, Garrison O, Peters RJ, Kalichman SC, Lahai- Momohe J, Essien EJ. Potential markers of female condom use among inner city African-American Women. AIDS Care. 2008;20(4):470 - 477.
2. Witte SS, El-Bassel N, Wu E, Chang M, Hill J. Promoting female condom use to heterosexual couples: Findings from a randomized clinical trial. Perspect on Sexual & Reprod Health. 2006;38(3):148-154.
3. Meekers D, Richter K. Factors associated with 3. Use of the female condom in Zimbabwe. Intl Family Planning Perspect. 2005;31(1):30-37.
4. United Nations Population Fund. Trends in maternal mortality from 1990-2010. World Health Organization, Geneva; 2012.
5. Stockman J, Morris M, Martinez G, Lozada R, Patterson T, Ulibarri M. Prevalence and correlates of female condom use and interest among injection drug-using female sex workers in two Mexico-US Border Cities, AIDS Behav; 2012.
6. Elvis ET. Factors associated with consistent condom use among senior secondary school female learners in Mbonge subdivision of rural Cameroon. J AIDS & HIV Res. 2013;5(6):214–223.
7. Elvis ET, Luchuo EB. Knowledge, attitudes and utilisation of the female condom among high school female students in Kumba, Cameroon. Br J Edu, Society & Behav Sci. 2015;5(2):169–180.
8. Nwaokoro JC, Ede AO, Ibe Sally NO, Emerole CO, Nwuto RC, Nwaokoro AA, Igwe I. Knowledge, attitude and practice of female condom use among undergraduates of the three selected higher institutions in Owerri, South-Eastern Nigeria. Glob Adv Res J. 2015;4(3):132–142.
9. Silva WD, Oliveira FJ, Serra MA, Rosa CR, Ferreira AG. Factor associated with condom use in people living with HIV/AIDS. Acta Paul Enferm. 2015;28(6): 587–592.
10. Mbarushimana V, Ntaganira J. Knwoledge and attitude to female condom use among undergraduates of Kigali health Institute. Rwand J Health Sci. 2013;2(1):16–25.
11. Daniel WW. Biostatistics: A foundation for analysis in the health sciences. 10th ed; 2013.

Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/21097