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## **Awareness and use of female condoms among young Nigerian women**

Bankole Henry Oladeinde\*<sup>1</sup>, Richard Omoregie<sup>2</sup>, Adekunle Abdulfatai Onifade<sup>3,4</sup>, Misan Olley<sup>5</sup>, Joshua Ahamdi Anunibe<sup>5</sup>, Oladapo Babatunde Oladeinde<sup>6</sup>

<sup>1</sup>Department of Medical Microbiology, College of Health Sciences, Igbinedion University, Okada, Edo State, Nigeria.

<sup>2</sup>School of Medical Laboratory Sciences, University of Benin Teaching Hospital, P.M.B 1111, Benin City, Edo State, Nigeria.

<sup>3</sup>Department of Chemical Pathology, College of Health Sciences, Igbinedion University, Okada, Edo State, Nigeria

<sup>4</sup>Faculty of Health & Social Care, St George's University of London & Kingston University London

<sup>5</sup>Department of Pathology, Igbinedion University Teaching Hospital, Okada, Edo-state, Nigeria.

<sup>6</sup>National Fistula Center Abakaliki, Ebonyi State, Nigeria

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### **ABSTRACT**

**Aim:** The study was conducted to assess level of awareness and use of female condoms among young Nigerian women.

**Methods:** A total of 435 young and single Nigerian women (comprising 261 female undergraduate students and 174 rural resident women) were recruited for this study. A structured questionnaire was administered to all participating subjects.

**Results.** Awareness of the female condom was significantly higher among female undergraduate students (93.7%) than rural resident women (5.2%) (OR=280.73, 95%CI =121.15, 650.52; P=0.0001). No significant difference was observed in level of use of the female condom between female undergraduate students (1.9%) and rural resident women (0%) P = 0.1624. The media and friends were the most effective sources of information of female condom among female undergraduate students and rural resident women respectively. Preference for male condoms was given as reason for non use of the female condoms among both groups studied. Rural women's perception of the function of female condoms was largely on the premise of prevention of pregnancy.

**Conclusion:** Female condom use among young and sexually active Nigerian women is poor. Strong grassroot intervention, interpersonal communication and elimination of inhibiting cultural and social beliefs are key to promoting increased female condom use in Nigeria.

**Key words:** Female condom, Knowledge, use, young women, Nigeria.

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\* Author to whom all correspondence should be addressed.  
E-mail: bamenzy@yahoo.com; Tel:+2348059638379

## **Introduction**

Sexually transmitted infections (STIs) including HIV/AIDS are global health concerns. Sexually transmitted infections are high among young people in Africa, largely due to high risk behaviour and neglect of potential preventive measures. Particularly distressing is the fact that nearly 3.3 million youth are living with HIV/AIDS in sub Saharan Africa, and 76% of these youth are women<sup>(1)</sup>. In sub Saharan Africa young women within the age group of 15-24 years are 3-4 times more likely to be infected with HIV than men of the same age<sup>(1)</sup>. Economic dependency, feminization of poverty, limited educational opportunities, unequal distribution of sexual power (sexual violence and coercion), and lack of political will have been cited as reasons for this trend among women<sup>(2, 3, 4, 5)</sup>.

An effective tool in HIV prevention campaign is the condom. The condom, male or female is the only technology available to prevent the sexual transmission of HIV. When used consistently and correctly, condoms have been proven to be effective in the prevention of HIV, unwanted pregnancy and several sexually transmitted infections<sup>(6)</sup>. Knowledge and use of the male condom is not uncommon. However with well over 50% of all young people living with HIV worldwide being women,<sup>(7)</sup> there is need for a female HIV prevention initiative (female condoms) to empower women to protect themselves from risk of HIV infection.

Poverty and illiteracy are risk factors for HIV infection<sup>(8)</sup>. These factors are rife in most rural settings in Nigeria and could expose the woman to high risk of infection. Accurate assessment of self reports of sexual behaviours is vital to the evaluation of HIV prevention and family planning intervention. Data on knowledge and use of condoms in Nigeria is sparse and has largely focused on the male condom amongst urban population. Against this background and the need to assess the level of awareness and use of the female condom among young urban and rural Nigerian women, this study was undertaken.

## **Materials and Methods**

### **Study area**

Three rural communities in Ovia North East Local Government Area of Edo State namely Okada, Ogbese and Utese were choice areas for this study. The Local Government has an estimated population of 155 344 persons<sup>(9)</sup>. Majority of the residents of these communities are farmers. Igbinedion University, Nigeria's first private University, is located in Okada community

### **Study Population**

A total of 261 single female undergraduate students from three different colleges of the Igbinedion University Okada were recruited for this study. One hundred and seventy four young and single women resident in rural communities

of Ovia North East Local Government Areas were also co-opted into this study. All young women enrolled for this study were not virgins. A structured questionnaire was administered to all participating subjects. Verbal informed consent was obtained from all participating subjects prior to data collection. The study was approved by the Ethical committees of the Igbinedion University, Okada, Nigeria and Ovia North East Local Government council.

### **Statistical analysis**

The data obtained were analyzed using Chi-square ( $X^2$ ) or Fischer's exact test as appropriate and odd ratio analysis using the statistical software INSTAT®. Statistical significance was set at  $P < 0.05$ .

### **Results**

Awareness of female condom was significantly higher among female undergraduate students (93.8%) than young rural women (5.2%) (OR=280.73, 95%CI =121.15, 650.52;  $P=0.0001$ ). No statistically significant difference was however observed in level of use of female condoms between both groups of women  $P = 0.1624$ . While knowledge of female condoms was gotten largely from the media and internet among the undergraduate population, informal exchange of knowledge of female condom was observed to be the most effective tool amongst young rural resident women studied Table 1.

Irrespective of the discipline of undergraduate students, no significant difference was observed in knowledge and level of use of female condoms Table 2. Preference for the male condom was observed as a major reason for non use of female condoms among female undergraduate students and rural women Table 3.

Rural women's perception of function of female condom rested largely within the confines of pregnancy prevention Table 4.

### **Discussion**

The female condom is the only female-initiated prevention product in the market today that provides simultaneous protection against STIs including HIV and unwanted pregnancies. Against this background this study was done to assess level of awareness and use of the female condom among young Nigerian women.

Awareness level of the female condom among female undergraduate students was 93.7%. A sound knowledge of female condoms has been previously reported among Nigerian female undergraduates <sup>(10)</sup>. However a significant difference in level of awareness was observed between female undergraduate students (93.7%) and young rural women (5.2%). Factors such as illiteracy, poverty and epileptic power supply in rural areas may militate against the fast and easy spread of information on female condoms which are often channeled through the electronic and print media in Nigeria.

**Table 1:** Knowledge and use of female condoms among female undergraduate students and rural young women.

Characteristics	N <sub>1</sub> =261	N <sub>2</sub> =174	OR	95%CI	P value
	FUDS (%)	YRW (%)			
<b>Knowledge</b>					
Yes	245(93.7)	9(5.2)	280.73	121.15, 650.52	<0.0001
No	16(6.1)	165(94.8)	0.004	0.0015, 0.0082	
<b>Use</b>					
Yes	5 (1.9)	0(0)	7.480	0.41, 136.30	0.1624
No	256(97.3)	174(100)	0.134	0.007, 2.434	
<b>Source of Knowledge</b>					
Internet	103(42.0)	-			N/D
Media	213(86.9)	2(22.2)			N/D
Friends	37(15.1)	7(77.8)			N/D
<b>Parents</b>					
School (classroom)	21(8.6)	-			N/D
Health worker	6 (2.4)	1(11.1)			N/D

FUDS= Female undergraduate students; YRW=Young rural women; N<sub>1</sub>= Number of Female undergraduate students; N<sub>2</sub>= Number of Young rural women OR= odd ratio; CI= confidence interval; N/D= not done

**Table 2:** Knowledge and use of female condoms among female undergraduate students in different Colleges

Characteristics	N	Knowledge	Use
		Yes (%)	Yes (%)
Status of students			
Medical students	112	108(96.4)	1(0.9)
Engineering students	54	46 (85.2)	0(0)
Law students	95	91(95.7)	4(4.4)

N= number tested; P value (Knowledge) = 0.0113; P value (Use) = 0.125

**Table 3:** Reason(s) for non use of female condoms

<b>Characteristics</b>	<b>N<sub>1</sub> =245</b>	<b>N<sub>2</sub> = 9</b>
	<b>FUDS (%)</b>	<b>YRW (%)</b>
<b>Reason(s)</b>		
Not readily available	14 (5.7)	-
Ashamed to buy product	12(4.8)	-
Belief forbids its use	3 (1.2)	-
Partner disapproves its use	36(14.7)	-
Don't like using condoms	2 (0.8)	2 (22.2)
OK with male condoms	184(75.1)	5 (55.5)
Use pills	4 (1.6)	2 (22.2)

FUDS= Female undergraduate students; YRW=Young rural women; N<sub>1</sub>= Number of female undergraduate students; N<sub>2</sub>= Number of young rural women.

**Table 4:** Respondents perception on function (s) of female condoms

<b>Characteristics</b>	<b>N<sub>1</sub> =245</b>	<b>N<sub>2</sub> = 9</b>
	<b>FUDS (%)</b>	<b>YRW (%)</b>
Prevention of Pregnancy	217(88.6)	5 (55.5)
Prevent HIV transmission	245(100)	3(33.3)
Prevents STIs	184(75.1)	1(11.1)

FUDS= Female undergraduate students; YRW=Young rural women; N<sub>1</sub>= Number of female undergraduate students; N<sub>2</sub>= Number of young rural women; STIs= sexually transmitted infections.

No significant difference in rate of use of the female condom was observed between female undergraduate students and young rural women, suggesting that the educational status of the woman may not be a factor that affects its use in Nigeria. In this study, non availability of the female condom was not a potent reason for its non use. Preference and use of the male condom as a HIV/STI preventive tool was largely adduced as reason for non use of the female

condom in study groups. In a Spanish study carried out on university students, knowledge and experience gained by young people in the use of the male condom was found to cause a significant reduction in level of use of female condoms<sup>(14)</sup>. The fear and shame of being labeled prostitutes at point of purchase and by male sex partners perhaps, may also be responsible for their non use by young women in this study as girls in possession of condoms are generally portrayed in the light of been promiscuous by men in Nigeria.<sup>(15)</sup> These girls are therefore more likely to retire to having to use male condoms in their relationships than risk having it broken due to unfounded suspicion.

Rural women's perception on function of female condom was largely for the prevention of unwanted pregnancies. Most of the respondents with knowledge of female condoms had been educated by friends, who may have passed on half truths on the functions and uses of the female condoms to these women.

Female condom use among young Nigerian women is poor and not associated with unavailability of product. Evidence supporting the effectiveness of the female condom has accumulated steadily over the years<sup>(16)</sup>. The need for increased use of the female condom is further underscored by global estimates of HIV infections and other STIs among young women which are presently staggering. The elimination of cultural beliefs of associating condom use with illicit sex and irresponsibility through re-enforced community based female condom campaign programmes, is strongly advocated.

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