

*Full Length Research Paper*

## Barriers to repeated use of female condom among women and men of reproductive age in Nigeria

Onoriode Ezire\*, Obi Oluigbo, Victoria Archibong, Okekearu Ifeanyi and Jennifer Anyanti

Society for Family Health, No. 8, Port Harcourt Crescent, Off Gimbiya Street, Area 11, Garki, FCT, Abuja, Nigeria.

Accepted 16 April, 2013

Repeated use of female condom is very low in Nigeria. Just three out of ten persons who have ever used female condoms intend to continue using it. This study conducted in three Nigerian States was aimed at identifying the barriers to repeated and non repeated use of female condom. Among men and women of reproductive age, 16 focus group discussions (FGDs) and 16 in-depth interviews (IDIs) were conducted using structured tools. Key findings showed that first experience with the use of female condom was a major reason for continuing or discontinuing use of female condom. First use experience was influenced by what users were told and the skills they have in wearing female condom. Informed and supported female condom users were willing to repeat its use while those who were not, had "bad" first experiences. Female condom is a unique commodity. Just handing it out without proper education will pose a serious challenge for its continuous and sustained use. Frontline staff should be well informed and educated on the product. First time users should be supported to use the product.

**Key words:** Female condom, repeated use, sustained use, men and women of reproductive age, first experience.

### INTRODUCTION

Almost twenty years after its first introduction, the female condom has yet to become a common good. Despite small successes to scale up female condom programming such as the 2005 United Nations Population Fund (UNFPA) Global Female Condom Initiative, which resulted in a more than threefold increase of female condom distributed in Africa over a period of three years, the overall global distribution remains low (Peters et al., 2010). Several institutions and partners in Nigeria are currently supporting female condom programming. These institutions and partners include the Federal Ministry of Health (FMoH), the National Agency for the Control of AIDS (NACA), Society for Family Health (SFH) with the support of Oxfam Novib and UNFPA among others. Most

female condom programmes primarily target women aged 15 to 49 years, while men aged 15 to 64 years who desire an effective, high quality condom brand and whose support is needed to enhance product uptake are the secondary target. Nigeria currently promotes the use of FC2, a second generation of female condom.

Female condoms work to prevent pregnancy. By acting as a barrier, it prevents the exchange of fluid between sexual partners. This way, the use of female condoms reduces the risk of sexually transmitted infections including human immunodeficiency virus (HIV).

Evidence from a quantitative study conducted in August, 2011 shows that repeated use of the female condom is still a major challenge among users (SFH, 2011).

\*Corresponding author. E-mail: [oeziree@yahoo.com](mailto:oeziree@yahoo.com), [Oezire@sfnigeria.org](mailto:Oezire@sfnigeria.org). Tel: +234-8060087524

While the number of female condom distributed annually has been on the increase in Nigeria, this increase has largely been because of the introduction of the product to new users. Available evidence shows that 67% of those who have ever used female condom stopped using the product, 7.4% stopped but resumed use while only 29.6% have used a female condom and are still using it within the last 12 months (SFH, 2011). Of those who stopped using female condom within the last 12 months, only 28.6% intends to use it in the future. The study conducted in 2011 was conducted among women and men of reproductive age in three Nigerian States: Edo, Delta and Lagos, with a sample size of 1,652 (male: 542 and females: 1,020). The long term sustained use of female condom requires that users are satisfied with the product and continue using it. Repeated use of female condom ensures acceptance that will continue to drive demand for the product, thereby ensuring programme sustainability.

There are several obstacles related to introducing female condom to potential users. These include getting people to change their sexual behaviour, overcoming deeply rooted biases especially among providers and addressing gender disparities. Other obstacles include lack of communication between sexual partners and between providers and patients, and the stigma attached to all condoms (Warren et al., 2003). Warren et al. (2003) suggested that to overcome the barriers, quality information should be made available, quick response to requests for information and supplies of the female condom, support should be given to the development of introductory strategies, and new ideas should be catalyzed to expand good practices.

A study to assess the viability of the use of the female condom among Spanish university students showed that gender and type of couple (steady versus casual) condition the use of the female condom. The study also confirms that knowledge and experiences gained by young people in the use of the male condom will tend to bias them unfavourably against the female condom in favour of the more familiar male one (Fernandez et al., 2006).

Refusal and initial difficulty collectively affect the use of female condom among a large proportion of women. The refusal to try female condom largely reflects aversion to insertion; women who try but experience difficulties have different profiles, which implies that these women have different programmatic needs, and different interventions are needed to promote the use of female condom among them (Artz et al., 2002). Artz et al. (2002) stated that interventions for women in the first group might include desensitization, teaching partners to insert the female condom or emphasizing use of the male condom instead. They noted interventions for women in the second group might include supervised insertion practice and added instruction as needed, as well as efforts geared toward

building women's sexual assertiveness.

The Harriet and Robert Heilbrunn Department of Population and Family Health, Columbia University in a survey placed the effectiveness of female condom at 95% with perfect use and 80% with typical use, but noted that the shortfall of female condom as a preventive measure is the fact that it is more expensive than male condom and also the challenges to use in a relationship with weak partner cooperation and/or intimate partner violence coercion and latex allergy. In summary, the research suggested that teaching women possibility of unforeseen occurrences and proper usage will help in promoting female condom usage.

The Women Health Line 2009 suggested that the unappealing or unusual appearance of the female condom, inadequate data regarding its effectuality and safety, and the one-size-to-fit-all female condoms that are available might not favour many women. Some women also feel self-conscious because of the visible outer ring or frame outside the vagina (Beksinska et al., 2010). Beksinska et al. (2010) also mentioned that hardness to insert and remove the condom might also pose a problem to some women. They also suggested that adding more lubricant to the FC2 female condom can lessen these problems. The author also highlighted the issue of accessibility and limited availability. The wider use of the female condom in countries with severe HIV and acquired immune deficiency syndrome (AIDS) epidemics depends on the commitment of governments and other major donors. He recommended that to achieve its full potential, much greater effort needs to be made worldwide to make the female condom more affordable, accessible and acceptable.

Napierala et al. (2008) identified the following as predictors of female condom uptake: interest in using female condom, liking female condom better than male condoms, and believing one could use them more consistently than male condoms. They also reported that though female condom may not be the preferred method for the majority of women, with access, proper education, and promotion, they may be a valuable option for some Zimbabwean women (Napierala et al., 2008).

Choi et al. (2008) in a study on the efficacy of female condom skill trainings in risk reduction among women suggested that skills training can increase female condom use and protected sexual acts without reducing male condom use among women.

There have been many studies on the use of the female condom in developing countries. Many have involved commercial sex workers who generally accept the device more quickly than other women. Most studies have shown high or moderate acceptability among sex workers, including those in China, Costa Rica, Côte d'Ivoire, Thailand, and Zimbabwe. But these studies also revealed a number of barriers to the use of the female

condom, including clients' distrust of unfamiliar methods, inconvenience, insertion difficulties, discomfort or pain from the inner ring, and itching (Heidi Brown, 2003).

While many of these women said they liked the female condom and would recommend it to others, they still preferred to use the male condom for sex work. This suggests that the female condom may be a useful back-up method for commercial sex workers when men refuse to use the male condom.

Studies among women and heterosexual couples in China, Kenya, South Africa, and Zambia also showed relatively high levels of acceptability. Users often overcame initial problems with the female condom after several uses. In fact, women in Kenya, and both men and women in China found that the device made sexual intercourse pleasurable. However, there was some resistance to its use, particularly in South Africa, for a variety of reasons, including appearance, difficulties concerning its use, reluctance among male partners, over-lubrication and messiness, concern that the device is too large and reduced sensation (Population Reference Bureau, 2003).

### Study objective and research questions

The objective of the study is to provide evidence for interventions that will promote the use of female condom.

### Research questions

The objectives of the study are:

1. Within the Nigerian context, what are the possible reasons for the low levels of repeated use of female condom among women and men of reproductive age?
2. What are the possible options to address the issues related to repeated use of female condom?

### METHODOLOGY

Qualitative methods via focus group discussions (FGDs) and in-depth interviews (IDIs) were used. Interview sessions were conducted using Pidgin English (local language).

#### Study locations and population

The study locations were Delta, Edo and Lagos states. These states were selected as the Universal Access to Female Condom (UAFC) project is currently being implemented in the states. The primary study populations are men and women of reproductive age who are currently using and/or have previously used a female condom. The secondary study populations were the distributors of the product (community female condom distributors).

### Data collection

FGD and IDI interview guides were used to collect data. Both tools were field tested before the actual fieldwork. The number of FGDs and IDIs conducted are stated in the Table 1. The interview guides have seven sub headings: introduction; awareness of female and male condom; knowledge and perceptions about female condom; experiences with the use of female condom; reasons for first use; reasons for repeated (non repeated use); suggestions on how to improve access to and use of female condom.

### Selection of participants

Average number of participants per focus group discussion (FGD) was 8. Participants for the study were purposively selected. The minimum criteria for inclusion were:

1. Must be within age 18 to 49 for females and 18 to 64 for males.
2. Must have used and stopped or currently using female condom.

Participants were drawn from the general population. They were recruited by community distributors who know those who have been buying female condom from them and those who used to buy but have stopped. Participation was voluntary. Community distributors were community members trained to educate people and also distribute female condoms. In order to encourage active participation, the focus groups were made up of similar individuals that is, persons of the same sex, average age and average level of education. In-depth interview (IDI) participants among the distributors for IDI were systematically selected. This was done by obtaining the list of all distributors. They were arranged by sex in an alphabetical order. With a given interval, the respondents were systematically selected. In all, 16 community distributors (9 females and 7 males), were interviewed from a list of 97 persons.

### Data analysis and report writing

Discussions were recorded and later transcribed for analysis. Notes were also taken during the interviews. During the analysis, notes taken were compared with the transcription report. Analysis and report writing were done in line with the thematic areas in the discussion guides. The transcription was done by four persons. Data analysis was done by the lead principal investigator with the support of those that conducted the transcription.

### Ethical approval

Ethical approval was obtained from the National Health Research Ethics Committee of Nigeria (NHREC).

### RESULTS

Of the 127 FGD participants, 74 were females. Most had secondary school education. The average age for females was 28 years while that of males was 36 years. All participants could speak and understand Pidgin English which was used to conduct the sessions. 58 of the interview session participants were current users. Within the context of this study, current user is used to describe

**Table 1.** Study groups by state.

Study group	Edo	Delta	Lagos	Total
Females who are currently using female condom	1 FGD	1 FGD	2 FGD	4 FGDs
Females who have stopped using female condom	1 FGD	1 FGD	2 FGD	4 FGDs
Males who are currently using female condom	1 FGD	1 FGD	2 FGD	4 FGDs
Males who have stopped using female condom	1 FGD	1 FGD	2 FGD	4 FGDs
Community distributors of female condom	6 IDIs	6 IDIs	4 IDIs	16 IDIs

FGD = focus group discussions, IDIs = in-depth interviews.

males and females who currently use female condom (within the last 12 months). Non users are those who have used female condom previously but stopped within the last 12 months.

### Reasons for first time use

Two reasons were given as the main reason for the use of female condom the very first time: Curiosity and the hope that it will prevent unplanned pregnancy. None of the participants reported purchasing female condom the first time they used it, rather, they got it from free samples given during female condom awareness creation events.

*“I used it out of curiosity and to prove if all those things they have been saying about it is true. That was on my mind my when I tried it the first time”* (Male interview participant).

*“I used to see this FC and I feel like trying out new thing. That is how I used it the first time.”* (Female interview participant).

### Reasons for repeated use of female condom

#### Positive first experience

Participants were asked to give reasons motivating their continued use of the female condom. Findings indicate that a first positive experience was a key factor that encouraged repeated use of female condom.

*“It was nice. It was very nice. Nice in the sense that I did not find any difficulty in using it, the insertion was fine, the usage was also fine, no difficulty in that as well”* (Male interview participant).

Females also expressed the same opinion. For them, positive experience meant they had limited challenge inserting it, little complaint from their partners and were

comfortable using it.

### Perceived benefits accruable from the efficacy of FC

Married couples became regular users mainly because of the intrinsic benefits. Their opinion is that female condom is an effective way to prevent pregnancy and sexually transmitted infections (STIs) without any concern about side effects, unlike other contraceptive methods such as pills and injectables.

*“When you consider what FC does and what you are going to save yourself from, you will not mind continuing to use it.”* (Male interview participant).

*“My husband said he likes it ... People complain of side effects when using other family planning methods like injectables and pills. One does not have such experiences using female condom”* (Female interview participant).

### Opportunity to meet the sexual needs of their spouse irrespective of the women natural cycle

The fact that even if a woman is menstruating or breastfeeding, with a female condom she can still have sex was a motivating factor for its repeated use for some women. Having sex when breast feeding or menstruating was not reported as being necessary because of pleasure but to keep their marriages.

*“It is used to protect our marriage. For instance, when your husband wants you (wants to have sex with you) and you say no because you are nursing a baby and at another time you refuse, there will be quarrels. So, it is good to use FC”* (Female interview participant).

*“I like female condoms because my husband is not around, he works offshore and whenever he is around and we make love (have sex) I don't get scared if I am*

having my Menstrual flow or not. Because with the use of female condom I can still make love and by so doing prevent my husband from going out” (Female interview participant).

### **Stronger and feels natural**

Some respondents feel that if female condom is properly used, it gives a natural feeling as if one is having sex without a condom. Some also feel the female condom is better lubricated and so reduces pains that may be as a result of the woman not being properly lubricated.

*“For me, the reason I continue to use is one, the texture is more enjoyable. It is as if you did not use condom at all, it is very soft. Again the moment the lady wears it, it covers everywhere. The lady will only need to guide you into it and once you enter you have a smooth ride and your mind is at rest. More so, the female condom has more lubricant than male condom which makes for easy entry; no matter how big your penis is the lubricant will make it enter easily”* (Male interview participant).

### **Factors affecting repeated non-use of female condom**

#### **Negative first experience**

Findings show that the experiences of most of the participants, especially the women, were generally negative which were mainly related to:

1. Perceived complexity (difficulty of insertion);
2. The time it takes to complete the insertion process;
3. Discomfort experienced in the process of use like pains from the inner ring;
4. Fear of possibility that it might slip inside the vagina and;
5. Intimidation as a result of the size of the FC.

Some of such experiences are relived through the following statements:

*“Mine was positioning, I tried all the positions in your chart. By the time I got the best position I was already tired. Inserting it was another thing. I had to summon courage to try again; I relaxed a little before i could successfully insert it”* (Female interview participant).

*“It was only the insertion that was the problem but after that it was a free flow but for her she complains because the information we heard was not enough and the fixing was not okay”* (Male interview participant).

### **Resistance to change and fact that it is a “new” product**

Some participants’ reasons for not using female condom continuously is that they are used to male condom and do not just like to change.

*“It is just like the Gold Circle (a brand of male condom in Nigeria) it took time before it became accepted. They had to go down very well (create more awareness)”*(Female interview participant).

*“FC is a new product and response to any new thing is what we are experiencing about the product. What is important now is sensitization because it is not unexpected that people resist new things and find excuses for rejecting it* (Female interview participant).

### **Phobia for size and fears of possibility of FC sliding inside the vagina**

A good number of the female participants stopped out of fear that female condom is too large and could cause problems if it goes into the vagina. This is the reason why some females hold it during sex. Some of the women participants also complained that they experienced pain caused by the inner ring during sex.

*“The first thing when you open it especially for those who have never seen it is the surprise exclamation about the size that it is too big... The next thing they ask is ‘will it not go out or in during use?’”* (Female interview participant).

*“Somebody is having sex and you are afraid if the condom will not slip in. How will one explain it that after you have had a sex you are taken to the hospital to remove a condom? So, the fear this may happen did not make me enjoy it”* (Female interview participant).

### **Insertion difficulty and time it takes**

For some single men who stopped using it, the reason they gave was that it is too cumbersome and time wasting to get the woman ready for sex with a female condom. They said the urge for sex could not be sustained by the long process of complex insertion of female condom. Also, single men who stopped using it said that male condoms are faster to use than female condoms.

*“Another thing again is that... some stubborn men complain of time of insertion. They say the time is too*

*long and they cannot wait for all that cumbersome process before having sex. So time wasting and impatience is what happened here”* (A male IDI participant).

*“Another thing is the time taking to insert female condom, like I said earlier if not for the fact that it protects against STIs and help in FP, before the woman finishes inserting it, the man’s urge will have gone down and his penis will not get to the point of ejaculation”* (Male FGD participant).

### **Limited support for FC use**

A large number of FGD and IDI participants across the states mentioned lack of social support from friends and community members as a key factor why people initially use the female condom and then stopped. According to them, education will remove all fears, negative peer influence and perceptions.

*“If you come from that angle maybe they have used the product and they share their experience within colleague; their colleagues now starts to condemn the product and they may create the fear that was not there originally to make the person doubt her pleasant experience as fake. They may make her feel that she need not be deceived and so on. This could create fear within her without knowing that her colleagues are the deceivers. However, this action may result in creating wrong impression that may make the person to stop using it”* (A male FGD participant).

### **Suggestions and recommendations for improvement in the use of FC**

This section presents participants’ suggestions and recommendations on how to improve the low repeated use of FC. Their views are categorized into two: what should be done about the product and what should be done about the target users of the product.

#### **What should be done about the product**

In response to perceived intimidating large size, hard, and painful outer ring, and the ugly, loose nature of female condom, majority of the participants suggested that the manufacturer of female condom (FC2) should reduce the size by making it smaller and of different sizes, remove or replace the inner ring with softer ring and manufacture what can hold the FC to the waist of the woman to keep it firm. Some also suggested that the texture should be made more sensitive and probably add

flavour to it to increase the sexual pleasure. Some FGD participants in two groups suggested the design of instrument that can aid insertion which will reduce the perceived stress of insertion that discourages repeated use:

*“My own (suggestion) is, if they could do it (FC) to give 100% assurance like if there is a way it could be glued to the woman’s body or something to hold it to the body so that the fear of it falling inside could be removed. That will help”* (A female FGD participant).

*“It can pull in sometimes when sexual intercourse is taking place. So if they can make it like underwear it will be better”* (Female FGD participant).

*“If they could make it like g-string underwear so that you just wear it. When you wear it the man will just push the condom inside and it will stay”* (Female FGD participant).

*“The lubricant should have a good fragrance like banana, apple etc. It should come in different colours”* (Female FGD participant).

To improve access, participants suggested that promoters of female condom should study channels used in distributing male condom and adopt similar channels to enable effective penetration. By this, more distributors and dealers will be expected to become interested in the female condom.

*“They have only one (distributor) here in Warri who buys from Benin ..... But if we have more distributor and you go to one who is selling at N1,000 per carton instead of N500, people will ask you to go to another distributor selling at N500. So, if customers did not come to you and you know that every day you are short by the number of the customers that used to come to you, those who sell at high prices will reduce their prices. So they should increase the number of distributors when the demand has started increasing”* (Male IDI participant).

Another suggestion was to get the product packaged into small units or sizes to allow for ease of carrying it around like most male condom. In their words, they suggested the following:

*“The size ... should be reduced...”* (Male FGD participant).

*“Packaging matters a lot. How you see it whether it is romantic, attractive, potable is very necessary”* (Male FGD participant).

Participants were very much concerned about the price of female condom. Many felt it is too expensive. To ensure

uniform price, participants recommended printing of the recommended price on the pack.

### ***What should be done about the target users***

Massive awareness to erase erroneous perceptions of female condom was suggested by all the participants across the states. The recommendations include increase in awareness and knowledge about female condom using interpersonal communication (IPC) activities such as rallies and road shows, one-on-one educational contacts, group meetings in strategy places such as market, religious houses, schools and seminars.

*“Yes we need to do something because most people are very ignorant... So in the aspect of education, you should organize seminars, workshops to enlighten them. You should go to the higher institutions even though they know about it, give them more orientation. You can also use TV shows, even on radio you can tell them about it”* (Female FGD participant).

*“There should be forums created and seminars especially for women so that they can experiment it and teach them on how to use it...”* (Female FGD participant).

For effective reach of targets, various mass media channels especially, TV, radio and billboards, below-the-line items like information, education and communication (IEC) materials, handbills, posters, souvenir were suggested as mediums of communication. Some of them recommended the use of audio and video drama in popular TV stations, with strong emphasis on Cable TV Channels.

*“In line with what my brother said now, we need strong advert in the media. For instance, African magic is a very strong media vehicle that is recommended because majority of women watch it and the primary target of female condom is women. The advert should carry the message educating people on the use, insertion process and the advantages. We noticed that even though the product is targeted at the women, they are the main people rejecting it because they don't know how to insert it. It is men that are even encouraging us to adopt it. Testimonial adverts strategy could be adopted whereby influential female character could be used to promote the advert on TV. This will attract more women to it”* (Female FGD participant).

## **DISCUSSION**

From the various views of participants and observations in the field, the study provided more insight into the use

and repeated use of female condom. Female condom presents the additional advantage of giving fulfilled sexual pleasure, protection against STI including HIV and prevention of unplanned pregnancy without any side effects. This study corroborates with some previous studies already cited in this study on reasons for low use and continuous use of female condom.

In Nigeria, out of excitement and curiosity or because they were given something free to try, many people (male and female) have tried to use female condom with inadequate knowledge and have ended up with erroneous perceptions about insertion and use of female condom. This first trial experience has negatively affected the repeated use of FC. Evidence suggests that adequate knowledge and skill to use a female condom are contributes to its repeated use. There is therefore, the need to provide adequate female condom education to potential users in order to maximize the benefits.

Most women who have used and still use female condom did use it because of their partner, to keep their marriages. This is a reflection of the value most women place on marriages. Could the same be expected from men? It is important that this is reciprocal. In addition, there are still lots of misconceptions about female condom. For example, some interviewees said they hold the female condom during sex out of fear. Definitely, it will be challenging to enjoy sex while holding it to prevent it from slipping in. Again this is a possible reflection of limited understanding on how to use female condom.

Experiences from females were generally negative. Very few seem to be happy with the use of female condom. Some males said their female partners used it because they insisted. While the support of males is very important, acceptance of female condom by females is also very important. It is important they are convinced that female condom empowers them. The limited distribution channels and unstable prices experienced by some users were identified as factors that are affecting low repeated use of the product, unstable prices not from the programming team but from community distributors who want to maximise all possible gains in the course of distributing the commodity.

## **Conclusions**

In line with recommendations by the participants, the major solution to the problems of low repeated use of FC lies primarily in awareness creation through more education on how to use. The following recommendations are forwarded:

1. Frontline staff's (IPC conductors) capacity should be built to effectively communicate the benefit of the use of female condom and skills on how to use female condom.

There is need for training and re-training of frontline staff. The training should among others focus on their understanding of the female anatomy, right insertion of female condom, addressing fears and myths concerning the use of female condom and negotiation skills.

2. Programmes should aim at increasing knowledge and positive attitudes towards female condom by stressing the advantages and promoting the 'natural' sexual pleasure and no-side-effect attributes of the FC. Most women who use female condom do so because of the perceived benefits which they get using female condom. These benefits include the fact there is no side effect when using female condom when compared with other methods; the almost natural feeling when female condom is used properly; the security from infection due to the unfaithfulness of a partner; and the security it brings to marriage as women can have sex with their spouse even during menstruation.

3. Building community and social support: Engagement with community leaders and the general public is highly recommended to create social support for the use of female condom. Well placed female individuals could be engaged to publicly declare their support for the use of female condom.

4. Considering that acceptance of female condom is still low, more efforts should be on creating demand than on placing target on number of female condoms to be distributed. The desire to meet these targets is resulting to frontline staff not properly educating people on its use. In some cases, the product is just given out without proper education on how to use it. These have very high possibility of recruiting a huge army of unsatisfied users which ultimately will make female condom programming unsuccessful.

5. Female condom is still very largely subsidized. This needs to be continued, as general acceptance is still low and price of male condom also low.

## LIMITATION OF THE STUDY

The study was a qualitative study and all limitations associated with qualitative studies apply to it.

## ACKNOWLEDGEMENTS

Our sincere gratitude to Society for Family Health, Nigeria, Oxfam and Universal Access to Female Condom.

## REFERENCES

- Artz L, Demand M, Pulley L, Posner SF, Macaluso M (2002). Predictors of difficulty inserting the female condom. *Contraception* 65 (2):151-157.
- Beksinska M, Smit J, Joanis C, Usher-Patel M, Potter W (2010). Female condom technology: New products and regulatory issues. *Contraception* 83(4):316-21.
- Brown H (2003). The Female Condom: Women control STI protection. Population Reference Bureau.
- Choi KH, Hoff C, Gregorich SE, Grinstead O, Gomez C, Hussey W (2008). The efficacy of female condom skills training in HIV risk reduction among women: a randomized controlled trial. *Am. J. Public Health* 98(10):1841-1848.
- Fernandez ML, Garrido JM, Alvarez AC. (2006). A qualitative study of the viability of usage of the female condom among university students. *Int. J. Clin. Health Psychol.* 6 (1):189-199. <http://www.columbia.edu/itc/hs/pubhealth/modules/reproductiveHealth/contraception.html>
- Napierala S, Kang MS, Chipato T, Padian N, van der Straten A (2008). Female condom uptake and acceptability in Zimbabwe. *AIDS Educ. Prevent.* 20(2):121-134.
- Peters A, Jansen W, Driel Van F (2010). The female condom: the international denial of a strong potential. *Reprod. Health Matters* 18(35):119-128.
- SFH (2009). Report of the baseline survey on knowledge, attitudes, practices, coverage and quality of coverage of the female condom in Nigeria.
- Warren M, Anne P (2003). Expanding safer sex options: introducing the female condom into national programmes. *Reprod. Health Matters* 11:130-139.