

# Contraceptive Acceptability of Female Condom: A Prospective Study

Meenakshi Kanwar Bharadwaj

## ABSTRACT

**Background:** Female condom is the only available method that women and girls can initiate and, in some ways, control, that protects against both unwanted pregnancy and sexually transmitted infections. In this regard, it is an important supplement to the male condom.

**Materials and methods:** One-hundred women between the age of 18 and 40 years attending the gynecology OPD and needing any temporary method of contraception were recruited into the study for 6 months. Only women willing to participate in the study were recruited.

**Results:** In the study, of the 100 women, only 17 women had heard about sexually transmitted diseases (STD) and/or human immunodeficiency virus (HIV) and that use of male or female condoms can prevent their transmission. Seventy-eight percent of women continued with the use of female condoms. Of them, 83% women reported that they were satisfied by the use of female condoms and they would continue to use them if they were easily available. The satisfaction of the male partners was observed in 79% of them. When both partners were taken together, female condoms were satisfying to 78% of both.

**Conclusion:** The female condom is an important temporary method of female contraception which also protects from and HIV. It is a method that empowers women; hence, it must be integrated in reproductive health programs to save the lives of millions of women and men now.

**Keywords:** Female condom, Acceptability, Contraception, STD, HIV.

**How to cite this article:** Bharadwaj MK. Contraceptive Acceptability of Female Condom: A Prospective Study. *J South Asian Feder Obst Gynae* 2015;7(1):10-14.

**Source of support:** Nil

**Conflict of interest:** None

## INTRODUCTION

The female condom is a loose-fitting, soft, strong, transparent, polyurethane latex or nitrile sheath, i.e. 17 cm

long with a flexible ring at each end. Invented by Danish MD Lasse Hessel, it is worn internally by the receptive partner and physically blocks ejaculated semen from entering that person's body. It is prelubricated with a silicone based, nonspermicidal lubricant.

In 1993, the United States Food and Drug Administration (UNFDA) granted permission to market and distribute the female condom. World Health Organization (WHO) and Joint United Nation Programme on HIV/AIDS (UNAIDS) encouraged its introduction as an additional tool for protecting sexual and reproductive health. The female condom is gaining acceptance as an important choice for women. It is included in UNFPA supplies of reproductive health commodities and has been incorporated into national programming. The female condom is also promoted through the UN's program addressing human immunodeficiency virus/acquired immunodeficiency syndrome HIV/AIDS in the workplace.

Research shows that the female condom is comparable to other barrier methods in its effectiveness in preventing pregnancy and sexually transmitted infections. It provides an important alternative to the male condom and expands options for safer sexual behavior. Women can use female condoms effectiveness in pregnancy protection and promote its use to their husbands, who may be reticent to use a male condom.

It is an important technology that needs to be given a more prominent role in reproductive health programs and included in sexually transmitted infection (STI/HIV) and pregnancy prevention efforts worldwide. Integrating female condom programming into existing reproductive health program will increase the cost-effective distribution of the method; strengthen program and help make female condoms part of mainstream reproductive health programming.

## MATERIALS AND METHODS

Hundred women between the age of 18 and 40 years attending the gynecology outpatient department (OPD) and needing any temporary method of contraception were recruited into the study. Only women willing to participate in the study were recruited. Social and demographic characteristics, knowledge of female condoms, STIs and HIV and attitude toward female condom were analyzed.

Professor

Department of Obstetrics and Gynecology, Armed Forces Medical College, Pune, Maharashtra, India

**Corresponding Author:** Meenakshi Kanwar Bharadwaj Professor, Department of Obstetrics and Gynecology, Armed Forces Medical College, Pune, Maharashtra, India, e-mail: mkb.doc@gmail.com

The women were explained about the procedure of use of female condoms in detail. The method of insertion of female condom was demonstrated to the woman using a model of female pelvis and external genitalia (Figs 1 and 2). She was provided with eight condoms per month.

Since the outcome of the study was acceptability of the female condoms, pretested questionnaires were used to access the acceptability. Women were asked to report back in case of any difficulty in use or tearing of the condom during intercourse, missed periods or to replenish the stocks.

## RESULTS

Age distribution of women in the study is shown in Table 1. Mean age of the study population was 26.86 years with a standard deviation of 4.24 years. The minimum age was 20 years, and the maximum was 45 years.

Figure 3 depicts the knowledge about female condoms among them. Only 17 women had heard about STD and/or HIV and that use of male or female condoms can prevent their transmission. By occupation, 46 women were housewives, two were teachers, two farm laborers and 50 sex workers.

In the present study, of the 100 women, 22 women did not continue with the use of female condoms. The reasons for it are shown in Figure 4. Reduction in sexual pleasure was reported by 24 women (Fig. 5) and two of them found the insertion of female condom difficult or painful. No women reported tearing or slipping of condom during the study period.

Despite these difficulties, 83% women reported that they were satisfied by the use of female condoms and they would continue to use them if they were easily available. The satisfaction of the male partners as reported by the women was seen in 79% of them (Fig. 6). When both partners were taken together, female condoms were satisfying to 78% of both, 5% of female partner only, 1% of male partner only and unsatisfying to 16% of both partners. There were women who reported that their male partners did not like them to use this new method without giving any clear reason for it. This was also reported by women whose male partners were satisfied with the use of female condoms.

The women who continued to use female condoms were followed up for 6 months but it was found that many

were inconsistent in their use. Despite the counseling that they use only female condoms during the study period, they used male condoms also. However, in the women who were followed up, no pregnancy was reported.

## DISCUSSION

The female condom was developed as an alternative to the male condom, and it was hailed as a method that would enable women to have greater control over their own protection from pregnancy and disease. Several small studies, including the few randomized, controlled trials on female condom use, indicate that female condoms confer as much protection from STIs as male condoms. Studies in Kenya, Thailand, and the United States found that the prevalence of STIs declined by about the same amount among women who were given female or male condoms as among those who were given only male condoms.<sup>1,2</sup>

Early studies of female condom acceptability reported high rates, ranging from 37 to 96%.<sup>3</sup> Acceptability in the present study was 83% which is within the range reported in these studies. These studies examined only short-term acceptability as was the case in the present study. Although these findings highlight the short-term demand for a barrier method that women can use, they do not necessarily indicate widespread acceptance.

Only a few intervention studies have tracked patterns of female condom use over a substantial period between 6 months and 1 year, while also examining overall levels of protection. These studies were conducted among population at relatively high risk: female sex workers in Thailand,<sup>4</sup> STI clinic attendees in the United States<sup>5,6</sup> and Zambia,<sup>7</sup> and family planning clients in an HIV epicenter in the United States.<sup>8</sup> Interventions included individual counseling, couples counseling, group sessions and structural changes. Of these five studies, four showed an increase, albeit small, in the level of protected sex among participants who were offered female condoms.

In one well-conducted study, 1,159 STI clinics' clients, in the US state of Alabama received a female condom promotional message, were given the opportunity to practice insertion under the guidance of a nurse and were given take-home materials, including a promotional video to show their partner.<sup>5,9</sup> After 6 months, the overall proportion of episodes of sex that were condom-protected (adjusted for women who had dropped out) was significantly higher, at 50%, compared with 40% at baseline. Approximately, 25% of episodes were female condom protected. Male condom use did not decline, and most female condom users also used the male condom; those who reported 100% protection were most likely to be users of both methods. In the present study also, women

**Table 1:** Age distribution of women

| Age category | Frequency | Percentage |
|--------------|-----------|------------|
| 20-25        | 29        | 29         |
| 25-30        | 53        | 53         |
| 30-35        | 11        | 11         |
| >35          | 7         | 7          |
| Total        | 100       | 100        |

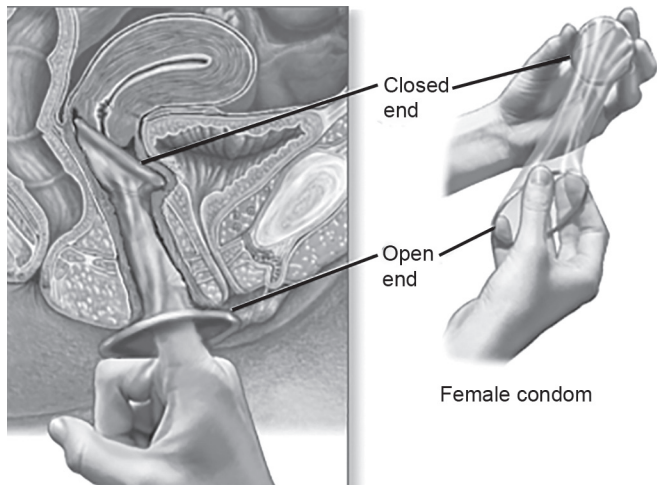


Fig. 1: Normal position of female condom in female genital tract



Fig. 2: Female condom

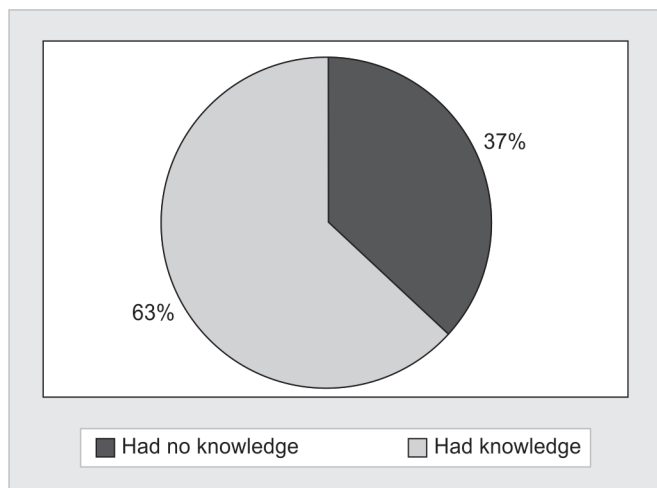


Fig. 3: Frequency distribution as per knowledge regarding female condoms

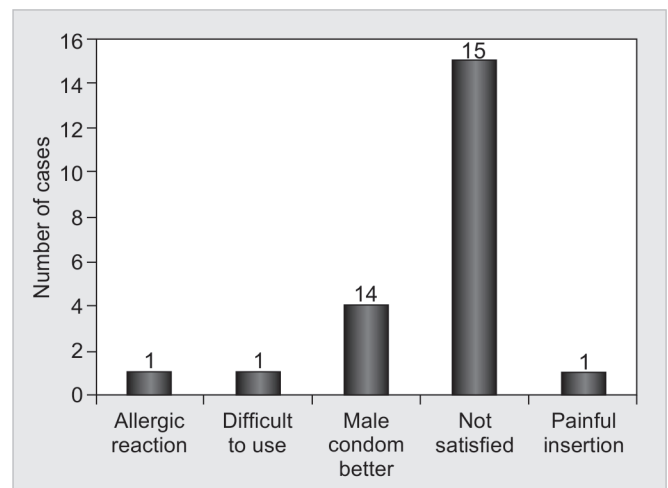


Fig. 4: Frequency distribution of reasons cited for not using female condom

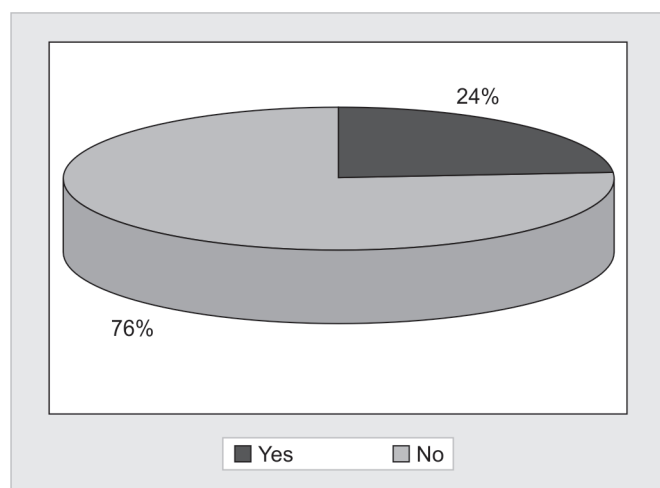
continued to use male condoms and no case of pregnancy was reported by any of the 100 women.

In the present study, 2% of women had difficulty in insertion. Short-term acceptability studies consistently reveal insertion difficulties for some users.<sup>3</sup> Proportions of users finding the female condom difficult to insert were as large as 33 to 50% in some studies<sup>10,11</sup> Difficult insertion had been associated with less consistent use.<sup>12,13</sup> However, with practice and increased use, many of the insertion problems disappear. In the Alabama study, the proportion of female STI clients reporting insertion difficulty decreased from 25 to 3% after women practiced inserting the condom in an anatomic model and then in themselves under nurse guidance.<sup>14</sup> Other negative aspect commonly reported for female condoms were the lubricant and the appearance.<sup>15</sup> This was not reported by any women in this study.

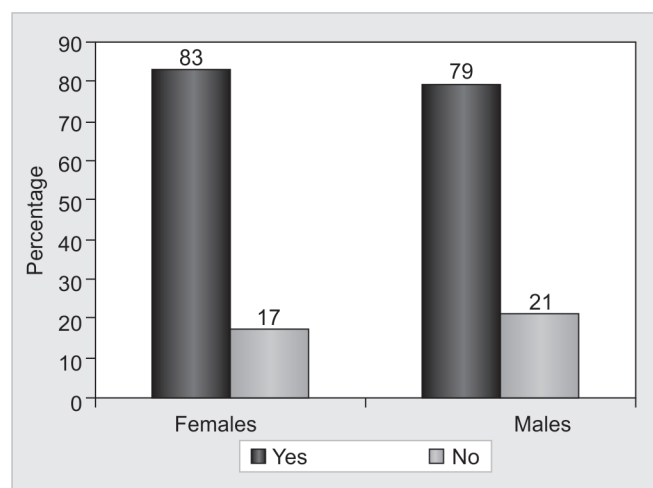
Another challenge relates to negotiation with male partners. The female condom was designed to give women greater control over their own protection, without having to rely on their partners to use a condom.

However, many studies confirm that partner cooperation is necessary for women to use the female condom successfully. In the present study, 79% of the male partners were satisfied by the use of female condoms but some women reported that their male partners did not like them to use this new method without giving any clear reason for it. Attitudes of men toward the female condom obtained indirectly from women's reports<sup>11,16-18</sup> or directly from men<sup>19-22</sup> are generally positive. Men's positive attitudes and willingness to use the method may even enhance its acceptability to women.<sup>8</sup>

Reliable evidence shows that the polyurethane female condom is highly efficacious in preventing both pregnancy and STIs. Several studies show that the female condom provides about the same protection from pregnancy as the male condom. WHO-supported studies comparing the effectiveness<sup>23</sup> of female and male condoms show that the two types of condoms are substantially equivalent in preventing unintended pregnancies. Effectiveness rates for typical use among study participants in China, Panama, and Nigeria, ranged from 94 to 98% for the



**Fig. 5:** Percentage distribution of respondents depicting reduction in sexual pleasure by use of female condom



**Fig. 6:** Satisfaction/acceptability of female condoms as per sex

female condom and from 92 to 96% percent for the male condom.<sup>24</sup> Six-month failure rates for the female condom range from 0.8% (among 190 women in Japan who used it correctly and consistently)<sup>7</sup> to 9.5% (among 115 women in three Latin American locations).<sup>16</sup>

Although the female condom alone cannot alter women's control of their sexuality in the way that the pill or access to safe abortion did, female-initiated methods give women greater control than male-initiated methods. Qualitative studies consistently show that women view female condom use as a means of enhancing their safer-sex bargaining power within the relationship, particularly when they obtain it in the context of an intervention focused on women's sexuality and empowerment.<sup>24</sup>

The female condom can contribute in many ways to improved health if programmed appropriately. In addition to reducing a woman's risk of disease and pregnancy, it can lead to women's increased knowledge of their bodies, improved sexual communication and negotiation skills and empowerment. These benefits are difficult to measure, but they can have significant impact on women's overall quality of life.<sup>25</sup> Far greater education and outreach is needed to increase the demand for female condoms by potential users. This involves reaching out to women and men who are not normally the focus of condom promotion. Targeting the female condom to young people can help them incorporate this risk-reducing strategy early in their sexual experience to protect against pregnancy, disease and infertility (a sequel of STIs, such as chlamydia).

## CONCLUSION

Female condom remains the only female-initiated means of preventing both pregnancy and sexually transmitted infections (STIs), including HIV. Access to this method is a public health right that needs to be ensured for all

couples. The female condom is not just a promise, but an important, complementary technology that must be given a more prominent place in reproductive health programs to save the lives of millions of women and men now.

The present study revealed an acceptability of female condom in 83% women and in 79% of their male partners. There is evidence from this study and many other sources that effective promotion of the female condom is possible. Hence, we recommend the integration of female condom into existing family welfare programs.<sup>5</sup>

Attitudes toward female condom are sometimes based on gender beliefs about who hold the responsibility for contraception and social stigma surrounding women's use of contraception. Widespread promotion of the female condom will help to accept this method as a potential contraceptive method for all sexually active women and men, and not just for those who engage in high-risk sexual behavior or one living with HIV or AIDS.

## REFERENCES

1. Feldblum PJ, Kuyoh MA, Bwayo JJ, et al. Female condom introduction and sexually transmitted infection prevalence: results of a community intervention trial in Kenya. *AIDS*. 2001;15(8):1037-1044.
2. Fontanet A, Saba J, Chandelying V, et al. Protection against sexually transmitted diseases by granting sex workers in Thailand the choice of using the male or female condom: results from a randomized controlled trial. *AIDS*. 1998;12(14): 1851-1859.
3. World Health Organization (WHO), The female condom: a review, Geneva: WHO, 1997.
4. Fontanet AL, Saba J, Chandelying V, et al. Protection against sexually transmitted diseases by granting sex workers in Thailand the choice of using the male or female condom: results from a randomized controlled trial, *AIDS*, 1998;12(14): 1851-1859.
5. Artz L, Macaluso M, Brill I, et al. Effectiveness of an intervention promoting the female condom to patients at sexually transmitted disease clinics. *Am J Public Health* 2000;90(2): 237-244.

6. Latka M, Gollub E, French P, Stein Z. Male-condom and female-condom use among women after counseling in a risk-reduction hierarchy for STD prevention, *Sexually Transmitted Diseases* 2000;27(8):431-437.
7. Musaba E, Morrison CS, Sunkutu MR, Wong EL. Long-term use of the female condom among couples at high risk of human immunodeficiency virus infection in Zambia, *Sexually Transmitted Diseases*, 1998;25(5):260-264.
8. Hoffman S, Exner TM, Leu CS, Ehrhardt AA, Stein Z. Female condom use in a gender-specific family planning clinic trial. *Am J Public Health* 2003;93(11):1897-1903.
9. Macaluso M, Demand M, Artz L, et al. Female condom use among women at high risk of sexually transmitted disease, *Family Planning Perspectives*, 2000;32(3):138-144.
10. Sapire K. The female condom (Femidom): a study of user acceptability, *South African Med J* 1995;85(Suppl. 10): S1081-S1084.
11. Ruminjo JK, Steiner M, Joanis C, Mwathe EG, Thagana N. Preliminary comparison of the polyurethane female condom with the latex male condom in Kenya. *East African Med J* 1996;73(2):101-106.
12. Neilands TB, Choi K-H. A validation and reduced form of the female condom attitudes scale. *AIDS Education and Prevention* 2002;14(2):158-171.
13. Sly DF, Quadagno D, Harrison DF, Eberstein IW, Riehmman K, Bailey M. Factors associated with use of the female condom. *Family Planning Perspectives* 1997;29(4):181-184.
14. Artz L, Demand M, Pulley L, Posner SF, Macaluso M. Predictors of difficulty inserting the female condom. *Contraception* 2002;65(2):151-157.
15. Beksinska M, Smit J, Mabude Z, Vijayakumar G, Joanis C. Performance of the Reality polyurethane female condom and a synthetic latex prototype: a randomized crossover trial among South African women. *Contraception* 2006;73(4):386-393.
16. Farr G, Gabelnick H, Sturgen K, Dorflinger L. Contraceptive efficacy and acceptability of the female condom. *Am J Public Health* 1994;84(12):1960-1964.
17. Ray S, Wijgert JVD, Mason P, et al. Constraints faced by sex workers in use of female and male condoms for safer sex in urban Zimbabwe. *J Urban Health: Bulletin of the New York Academy of Medicine* 2011;78(4):581-592.
18. Ford N, Mathie E. The acceptability and experience of the female condom, Femidom, among family planning clinic attenders. *British J Family Planning* 1993;19(2):187-192.
19. El-Bassel N, Krishnan SP, Schilling RF, Witte S, Gilbert L. Acceptability of the female condom among STD clinic patients. *AIDS Education and Prevention* 1998;10(5):465-480.
20. Seal D, Ehrhardt A. Heterosexual men's attitudes toward the female condom. *AIDS Education and Prevention* 1999; 11(2):93-106.
21. Bounds W, Guillebaud J, Newman GB. Female condom (Femidom): a clinical study of its use-effectiveness and patient acceptability. *British J Family Planning* 1992;18(2): 36-41.
22. Hirky AE, Kirshenbaum SB, Melendez RM, Rollet C, Perkins SL, Smith RA. The female condom: attitudes and experiences among HIV-positive heterosexual women and men. *Women and Health* 2003;37(1):71-89.
23. Deperthes B. Effectiveness of the female condom in preventing HIV/STI transmission and pregnancy. Presented at. *Global Consultation on the Female Condom*, Baltimore, Maryland 2005 Sep;26-29.
24. Gollub EL. The female condom: tool for women's empowerment, *Am J Public Health* 2000;90(9):1377-1381.
25. WHO, UNAIDS. *The Female Condom: A Guide for Planning and Programming*. Geneva: WHO, UNAIDS; 2000. Available at: [www.who.int/reproductivehealth/publications/RHR\\_00\\_8/index.html](http://www.who.int/reproductivehealth/publications/RHR_00_8/index.html).