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Article in *Asian Journal of Research in Social Sciences and Humanities* - January 2015

DOI: 10.5958/2249-7315.2015.00238.5

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## Acceptability and Utilization of Female Condom among Couples attending Family Welfare Clinics in Mumbai

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DOI NUMBER-10.5958/2249-7315.2015.00238.5

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### Abstract

One of the major goals of the National Population Policy, 2000 is to address the unmet need for contraception. The unmet need for contraception in India (NFHS-3, 2005 - 06) is about 13% of which 6.3% for spacing and 6.8 % for limiting the family. Introducing a new modern method of contraception increases the prevalence by 3% and reduces the unmet need by 1.6%. In India, introducing and integrating female condom in Family Welfare programme may expand the contraceptive choices for women. There is dearth of literature available in Indian context on acceptability of female condom and perception of women in Family Welfare clinic settings. The aim was to explore the acceptability of female condom and possibility of introducing FC in Family

Welfare programme. Objectives of the study were 1) To study awareness and acceptability of female condom among the couples attending family planning clinics. 2) To understand attitudes and perceptions of the couples towards female condom. Sample size: The sample size was calculated, based on contraceptive users attending two Family Welfare clinics. 110 women were enrolled. Study Design: Prospective clinic based study. Sampling Technique: simple random sampling technique was adopted. Outcome of the study: Out of total 176 women screened, 110 were enrolled for the study. Among these more than 50% completed the study and less than 50% of women dropped out. 29.6% women dropped out due to reasons related to method and dropout rate in 70.4 % women was due to non method related reasons.

**Keywords:** Female Condom, Family Planning, Contraception, Acceptability, Feasibility.

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## Introduction

The unmet need for contraception in India (NFHS-3, 2005 -06) is about 13% of which 6.3% for spacing and 6.8 % for limiting the family. It has been reported that introducing a new modern method of contraception increases the contraceptive prevalence by 3% and reduces the unmet need by 1.6%<sup>1</sup>. Female Condom (FC) is a female barrier method that prevents unintended pregnancies and the transmission of Sexually Transmitted Infections (STIs), including Human Immunodeficiency Virus (HIV)<sup>2,3,4,7</sup>.

The female condom is a strong, soft, transparent polyurethane sheath that is 17 cm long (about 6.5 inches, the same length as a male condom) 0.05 mm thin with two flexible rings, one inside at the closed end which serves as an insertion mechanism in the vagina and internal anchor to prevent dislodgement. At the open end the flexible ring lies outside the vagina. FC is lubricated with non - spermicidal lubricant. Therefore insertion becomes easy and allows smoother intercourse. FC can be inserted into the vagina up to eight hours before sexual intercourse and does not interrupt sexual spontaneity; is not dependent on the male erection and does not require immediate withdrawal after ejaculation. Data from the 2007 World Health Organization family planning handbook indicates that FC is 95% effective in preventing pregnancy with consistent and correct use, while in typical use the failure rate is 21%<sup>8-11</sup>. The Japanese study on contraceptive efficacy of the Reality® female condom reported that the failure rate was 25% during imperfect-use-exposure; no comparable literature is available<sup>9</sup>. Gross cumulative pregnancy rates of 12.4% in USA and 22% in Latin America at six months duration were found in a large multi centre study<sup>11</sup>. In a study conducted in rural Tanzania among 521 women with incomplete abortion, the female condom was accepted by 39% and 30% women used the FC. The women were generally satisfied with the method, and the majority intended to use it again<sup>12</sup>. Breakage rate for female condoms was very low (<1 in 100 female condoms used) and the slippage rate was 5.6%. Similarly a randomized trial reported that total clinical failure rate (breakage during sex, turned completely or partially inside out, slipped completely out, outer ring displacement, and misplaced penetration by the penis) was 5.24%<sup>10</sup>.

In developing countries like India increasing population day by day is a major problem. The current contraceptive prevalence rate has been increased from 47.7% to 52%, but as per 11<sup>th</sup> five year plan the desired goal is to achieve 60%. Although unmet need for family planning services

reduced from 19.5% to 15.9% the current desired goal is to bring it down to 10%<sup>13</sup>. A study conducted by National Institute for Research in Reproductive Health (NIRRH) on contraceptive and sexual practices among HIV concordant and discordant couples, reported that 85% participants did not know alternative method to male condom and 40% expressed the need for female condoms<sup>14</sup>. Since female condom is comparatively a new method of contraception in many settings, particularly in India, there is a need to create more awareness on correct use of method through extensive counselling. Although many studies have been conducted over a decade internationally<sup>5,6,10,12</sup>, in India there is no published literature on female condom in family planning settings among general population as a contraceptive choice.

There is no published data available in Indian context on acceptability and utilization of female condom in family planning settings. Present study was conducted to study awareness & acceptability of female condom among the couples attending family planning clinics and also to understand attitudes & perceptions of couples towards female condom.

## **Material and Methods**

This study was conducted in urban based two family welfare clinics of the NIRRH located in central Mumbai. One Family Welfare Clinic is located in private hospital OPD and another clinic is located in the community. These clinics had well qualified experienced health care providers (senior gynaecologist, counsellor, nurse, and field worker). These clinics have been providing contraceptive services for last three decades. Based on the clinic attendance for last three years and dropout rate of 50% it was decided that 120 women will be enrolled for the study. Duration of the study was 24 months (April 2012 to March 2014).

A training programme for all the project associates was organized discussing the study protocol, demonstration of condom use and how to conduct interview for collection of data and data collection tools were tested.

Following inclusion and exclusion criteria was used to enrol the study participants:

### ***Inclusion Criteria***

- Age group 20-40 yrs.
- Contraceptive users (oral pills, IUD, Injectable contraceptive or Male/Female sterilization)
- Sexually active couple (coital frequency 3-6 per month)
- Not planning pregnancy during the study period
- Willing to sign an informed consent form
- Willing to use female condom
- Willingness of the spouse

- Willing for follow ups

**Exclusion Criteria:** Pregnancy and planning for pregnancy.

The couples attending family welfare clinics were informed about the study procedure. Study was conducted with valid informed consent of the participants. The investigators administered enrolment schedule for the women. Each participant was educated for correct use of female condom visual based demonstration and provided 6 pieces of female condoms. The participants were asked to come for follow up every month for the duration of six months. At each follow up the women were asked to produce coital frequency and female condom use diary and return the unused female condoms. At the discontinuation /end of the study period the women was assessed by the investigator using semi structured in-depth interview schedule. All interview schedules were assessed by project coordinator for quality data.

Data was collected on age, parity, education, occupation socio-demographic profile, acceptability, attitude and perception of condom use by using a standard questionnaire. Data analysis was done by using SPSS software16.0.

### Results

During the study period it was expected to enrol 120 women however because of resource constraints only 110 women could be enrolled for the study. Out of 110 women who used the female condoms, the mean age in completed years was 29.38 (minimum 20 and maximum 39, SD = 4.70), mean parity (number of children) was 1.74 SD = 0.78; mean of coital frequency was 9.12, SD=3.78. 34.5% of women completed their secondary level school education, 77.3% were house wives and only 20.9% were working women.

Out of 110 women who used the female condom, 82.7% had IUD as backup contraceptive method, 7.3% were Oral pill users, 8.2% permanent method (TL) users and only 1.8% used injectable contraceptive.

**Table 1: Acceptability of Female Condom among Women who attended Family Planning Clinic**

Acceptability (N=56)	Highly acceptable N (%)	Acceptable N (%)	Somewhat acceptable N (%)	Unacceptable N(%)	Highly unacceptable N(%)
Appearance of FC	12 (21.4)	40 (71.4)	1 (1.8)	-	3 (5.4)
Size of FC	8 (14.3)	40 (71.4)	4 (7.1)	2 (3.6)	2 (3.6)
Lubricant during insertion	16 (28.6)	35 (62.5)	4 (7.1)	1 (1.8)	-
Feel of condom material	19 (33.9)	31 (55.4)	2 (3.6)	-	4 (7.1)
General Fit	11 (19.6)	39 (69.6)	3 (5.4)	-	3 (5.4)
General appearance after insertion	7 (12.5)	40 (71.4)	5 (8.9)	1 (1.8)	3 (5.4)
Smell of FC	9 (16.1)	43(76.8)	3 (5.4)	-	1 (1.8)
Removal of FC after use	17 (30.4)	28(50.0)	8 (14.3)	1 (1.8)	2 (3.6)

Regarding acceptability, 71.4% of women expressed that the appearance & size of female Condom was acceptable, 35% expressed that feel of lubricant and condom material was acceptable, 76.8% expressed that the smell and 50% expressed that the appearance of Female condom after insertion was acceptable to them (Table 1) .

Out of 56 women who completed the study and used minimum criteria of 18 female condoms, 54.3% expressed that they were comfortable to use female condom and FC was not at all noisy during the use. 68.6% women were satisfied in sexual pleasure after using female condom.

Out of 56 women who completed the study 80.4% women felt that inserting female condom was not difficult for them and 60.7% of women expressed that their husband helped in insertion of female condom. Misdirection of penis and slippage during the sexual act was reported by 8.9% & 14.3% participants respectively. All of the 56 women who completed the study recommended the inclusion of female condom in the National Family Welfare Programme (Table 2).

**Table 2: Experience of Women about the use of Female Condom**

<b>Experience of female condom use (N=56)</b>	<b>Yes (%)</b>	<b>No (%)</b>
Difficulty in FC Insertion	11 (19.6)	45 (80.4)
Husband helped in FC Insertion	34 (60.7)	22 (39.3)
Misdirection of penis during sexual intercourse	5 (8.9)	51 (91.1)
Slippage of FC during sexual intercourse	8 (14.3)	48 (85.7)
Perception on FC as contraceptive method	51 (91.1)	5 (8.9)
Including FC in the National FP programme	56 (100)	0
Willingness to recommend to friends/ relatives	53 (94.6)	3 (5.4)

Out of 110 women participated in the study 54 women dropped out. Method related drop outs (29.6%) were as, 16.6%. Husband did not like using female condom, 9.2% were uncomfortable to use female condom, 3.8 % had no privacy to use female condom. 70.4% were drop out which was not related to method which includes shifting of the residences, planning pregnancy, discontinuation of the backup method (Table 3).

**Table 3: Reasons for Discontinuation of Female Condom**

<b>Reasons for discontinuation (N=54)</b>	<b>Number of women (%)</b>
<b>Method Related (n=16)</b>	
Husband not willing to use FC	09 (16.6)
Uncomfortable to use FC	05 (9.2)
No privacy	02 (3.8)
<b>Non method Related ( n=38)</b>	
Shifted residence (distance)	08 (14.8)
Planning pregnancy	02 (3.8)
Lost to follow up	23 (42.5)
Discontinuation due to backup method (CUT,OC pills)	04 (7.4)
Undergone surgery (ovarian cyst)	01 (1.9)

## **Discussion**

Despite the fact that many women experienced problems initially while using the female condom but after intensive counselling the rate of continuation was increased. Hence counselling can play an important role to improve the acceptability of Female condom method, the women were in general, positive towards the method and all of them stated that it should be included in the National Family Welfare Programme. Similarly experiences in Brazil, Ghana, Zimbabwe and South Africa, where the female condom was promoted, suggested that the effective programs can generate demand and acceptability<sup>11</sup>. A study conducted by National Institute for Research in Reproductive Health (NIRRH) on contraceptive and sexual practices among HIV concordant and discordant couples, reported that 85% participants did not know alternative method to male condom and 40% expressed the need for female condoms<sup>13</sup>. From the point of sexual pleasure, more than 68.6% of the women participated were satisfied after using Female condom. However, some of the women expressed that use of Female condom was noisy. It was also very interesting to note that women who discontinued use of Female condom method faced difficulties during insertion and had trouble during sexual intercourse. Their husbands were not satisfied, so sexual pleasure is a concern for some of the women who discontinued. In the present study, we observed that 49% women discontinued from the study. Our data indicates that the method related reasons for drop out were 16 (29.6%) & 38(70.4%) were non method related. The dropout rate related to method can be minimised by providing counselling to the couple. Most of the women were established contraceptive users (82.7% had IUD as backup contraceptive method, 7.3% were Oral pill users, 8.2% permanent method (TL) users and 1.8% used injectable contraceptive) continued using the backup method along with Female Condom. This enhanced the confidence to accept and use Female Condom, though it is a new method for the couples.

Out of 54 women who participated, method related drop outs were as follows.16.6% husband did not like using female condom, 9.2% were uncomfortable to use female condom, 3.8% had no privacy to use female condom. 70.4% drop outs were not related to method which includes shifting of the residences, planning pregnancy, discontinuation of the backup method.

Majority of the women in the study were satisfied with the method and accepted the method positively therefore in spite of some of the limitations in our study.

## **Conclusion**

Almost three fourth of women (71%) in the study were satisfied with the method and accepted the method positively therefore in spite of some of the limitations in our study we suggest that Female condom should be considered as a contraceptive choice in National Family Welfare programme.

## **Recommendations**

It is extremely important to give wider publicity for female condom as a contraceptive option, through media both electronic and print creating awareness among health workers, providers and general population. Women need to be made familiar to use female condom along with the other available options in family planning programme to assure positive experiences in future. Further study should be conducted in bigger setting having defined client catchment area so that the client

enrolment can be maximised, dropout rate will be minimum. The study recommend to the policy provider to include female condom as contraceptive choice.

### **Limitations of the Study**

Findings from this study may have limited generalizability because of the small sample size. Due to high mobility of the urban population lost to follow up rate was more. No cases of user failure detected as women were already using another regular contraceptive method. Though it is a female controlled method, partner involvement plays a vital role in accepting a contraceptive method.

**Conflict of Interest:** Nil

**Source of Funding:** Indian Council of Medical Research, New Delhi

**Ethical Considerations:** Study was approved by Institutional Ethics Committee of NIRRH.

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