Impact of Structured Counseling with Trained Counselors in Choosing a Modern Contraceptive Method in India

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Abstract

Objective The study was designed to determine the impact of structured counseling by trained contraceptive counselors in a real-life clinical setting on the adoption of modern contraceptive methods in comparison with past contraceptive experience.

Methods Current study was a retrospective, non-interventional design, from the data collected in the time period of March to September 2013 across four clinics with predominant obstetric and gynecological practice. Three hundred and fifty-one women consulting for contraception were counseled by trained counselors using standardized counseling tools.

Results Of the 351 women counseled, 40.74 % ($n = 143$) had never used a contraceptive (no method) and 42.74 % ($n = 150$) women whose partner had or were using a “male condom.” Post-counseling by a trained counselor, there was a significant ($p < 0.001$) increase in modern contraceptive use (91.74 %, $n = 322$) versus prior

counseling (52.14 %, $n = 183$) proportion of women who had or were using a modern contraceptive. The change observed for each method pre-counseling (usage history) to post-counseling was as follows: combined oral contraceptive (COC) 1.99–5.41 %, progesterone-only pill (POP) 0.85–30.48 %; copper intrauterine device (Cu-IUD) 4.27–29.4 %; injectable contraceptive 1.71–20.51 %; male condom 42.74–1.42 %; no method 40.74–7.41 %; traditional 7.12–0.85 %; and sterilization 0.28–1.71 %.

Conclusion This study is a first of its kind, conducted in the private sector, and clearly highlights the benefits of a trained counselor in contraceptive counseling with a significant proportion of women choosing a modern contraceptive. With a busy private practice, a trained counselor facilitates the clinician's role and helped the women to choose a suitable modern contraceptive method.

Keywords Trained counselor · Counseling · Private practice

Introduction

Unmet need for family planning is an important indicator for assessing the potential demand for family planning services. As per the National Family Health Survey (NFHS-3), 69 % of married women in India had a demand for family planning, of which 81.5 % had their demand satisfied. The contraceptive prevalence rate in women age 15–49 years was 56 %, and the unmet need for family planning among married women was 13 % [1]. The contraceptive usage patterns vary widely across India with prevalence of modern contraception reported to be 48.5 %, which mainly includes 5.2 % of condoms, 3.1 % of pills, 1.7 % of intrauterine devices (IUD), 0.1 % injectable and the bulk being permanent sterilizations (male and female) 38.3 % [2]. This suggests that though a number of contraceptive choices are available, the usage of modern contraceptive methods is low. According to a recent study, only one-third of modern contraceptive users were informed about the side effects or drawbacks of their method and <30 % were ever informed about various family planning methods [1]. The most common reason for abortion in India is an unintended pregnancy [3].

According to recent estimates, if the unmet need for effective contraception in the developing world was satisfied (i.e., if all nonusers and all of those who are using traditional methods began to use modern methods), 54 million unintended pregnancies could be averted

annually, including 22 million unplanned births, 25 million induced abortions and 7 million miscarriages [4].

An Indian Council of Medical Research (ICMR) study evaluating contraceptive choice revealed that the majority of women after receiving balanced information could make an informed choice overriding a provider's bias [5]. The concept of family planning counselors although well established in public sector does not exist in the private sector. A recent study conducted by Family Welfare committee of Federation of Obstetric and Gynecological Societies of India (FOGSI) revealed that structured contraception counseling using standardized protocol and aids resulted in a significant increase in the selection of modern contraceptive methods [6]. However, in a private practice with a busy outpatient department, there is less focus on contraceptive counseling probably due to time constraint or provider motivations and lack of trained family planning counselors.

This study was the first of its kind to understand, if a similar model as implemented in the public sector with a trained counselor would have an impact on the selection of a modern contraceptive in the private sector. This would not only help to reduce the burden of the practicing Health Care Professional (HCP), but may also improve the compliance with the contraceptive chosen.

Methods

This was a non-interventional, cross-sectional, retrospective analysis of data collected across four clinics in New Delhi, India. This was part of a program initiated by Organon India Pvt. Ltd, to educate women on the various available modern contraceptive methods, motivate them to make an informed choice for a suitable contraceptive method and address the myths associated with contraception during March 2013–September 2013. Women were enrolled in the project after the completion of an informed consent form and agreeing to allow the family planning counselor to counsel on the various modern contraceptive methods in India (*combined oral contraceptive (COC), progesterone-only pill (POP), combined hormonal vaginal ring, injectable contraceptive, hormonal intrauterine system (IUS), copper intrauterine device (Cu-IUD), male condom and male and female sterilization*) using a tool developed based on WHO handbook for family planning (“Appendix”). This tool was translated in Hindi before use. No personal information was collected during the completion of the case record form and was verified by the gynecologist.

Table 1 Contraceptive methods (history of use vs. post-counseling)

Methods	Contraceptive method				Difference	<i>p</i>
	History of use		Post-counseling			
	Women (%)	(95 % CI)	Women (%)	(95 % CI)		
Combined oral contraceptive (COC)	1.99	0.72–5.37	5.41	2.90–9.88	−3.42	0.0186
Progestrone-only pill (POP)	0.85	0.19–3.67	30.48	24.08–37.75	−29.63	<0.0001
Combined hormonal vaginal ring		NA	6.27	3.51–10.95	−6.27	–
Injectable contraceptive	1.71	0.58–4.96	20.51	15.14–27.18	−18.80	<0.0001
Hormonal intrauterine system (IUS)	0.28	0.03–2.72	3.99	1.93–8.07	−3.70	0.0003
Copper intrauterine device (Cu-IUD)	4.27	2.12–8.44	21.94	16.39–28.72	−17.66	<0.0001
Male condom	42.74	35.56–50.23	1.42	0.44–4.55	41.31	<0.0001
Sterilization	0.28	0.03–2.72	1.71	0.58–4.96	−1.42	0.0588
Traditional	7.12	4.14–11.99	0.85	0.19–3.67	6.27	<0.0001
No method	40.74	33.66–48.23	7.41	4.35–12.33	33.33	<0.0001

Denominator is the number of women who underwent contraceptive counseling

The *p* value is calculated using McNemar's test at 5 % level of significance

The simultaneous 95 % confidence intervals are based on multinomial probability distribution

The following steps were followed during the patient visit and counseling;

- Step 1 Explaining the need for contraception (with need-based psychological counseling), providing information on fertility after abortion and delivery, informing birth interval for women's reproductive health and psychological impact of recurrent induced abortion (only for selected patients)
- Step 2 Provider-guided information on nine modern contraceptive methods
- Step 3 Motivate the patient to choose a method based on the information received and her needs

The women enrolled were classified as: “post-abortion,” “postpartum” and “general” desiring contraceptive counseling depending on their reproductive need. Three hundred and fifty-one women were counseled during the time frame. The counselors were trained to collect only specific information for further assessment. No patient-identifying information (viz. name, age and contact details) was inquired or documented. The patient form for data included fields on patient's category (post-abortion, postpartum, in general counseling), contraceptive history (ever used), previous method failure, type of method chosen after counseling and type of method prescribed. The last field was to be filled by the gynecologist followed by a signature for validation. The forms were retained by the gynecologist

after giving the prescription/administering the method and were collected by the counselor at the end of the day. Patient data collection forms that were collected during the project were entered into the database for analysis.

An independent ethics committee approval for analysis was obtained, and the trial was registered as a retrospective analysis on the CTRI website. All procedures performed in studies involving human participants were in accordance with the ethical standards of national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Protocol approved by SPECT (Society for Promotion of Ethical Clinical trials, New Delhi, dated: September 5, 2014; CTRI Registration: CTRI/2014/12/005311).

Inclusion and Exclusion Criteria for Analysis

Women who underwent counseling during the project and incomplete patient data collection forms, respectively.

Outcome Measures

Primary end point was to compare proportion of women choosing one of the modern contraceptive after counseling with their past contraceptive history.

Secondary end points of the study were to evaluate proportion of women opting for any of the contraceptives

after counseling and proportion of women opting each of the modern contraceptives after counseling in different profile of women (post-abortion, postpartum and general group [without postpartum and postpartum]).

Statistical Analysis

Underlying assumption: Based on the assumption that the survey should detect at least a 25 % [6] increase in proportion of women choosing the modern contraceptive methods (COC, POP, combined hormonal vaginal ring, injectable contraceptive, hormonal IUS, Cu-IUD, male condom and male and female sterilization) after counseling as compared to contraceptive method used in the past, sample size of 170 is needed for 80 % power. Underlying assumption is that 25 % of women will switch from traditional contraceptive method (withdrawal, fertility-based awareness techniques, improper lactation amenorrhea method) or no contraception use to modern contraceptive methods (COC, POP, combined hormonal vaginal ring, injectable contraceptive, Cu-IUD, IUS, condoms) after counseling.

Past contraceptive method use (history) and the method opted by women post-counseling program were analyzed using McNemar's Chi-square test. The contraceptive methods opted after counseling program were summarized using the absolute frequencies and the simultaneous 95 % confidence intervals (based on multinomial probability distribution). Method adopted by different categories (postpartum, post-abortion or in general desiring counseling) of women after counseling program was summarized using the absolute frequencies. A sensitivity analysis for difference in proportions of women using modern method of contraception compared to proportion of women with no use of contraception (in the past) was analyzed using McNemar's Chi-square test. All other analyses are considered exploratory. For the exploratory analyses, a two-sided significance level of 5 % will be used. A method shift in nonusers, traditional users and condom users post-counseling is presented in shift table.

Power/Sample Size: The type I error probability associated with this test of this null hypothesis was 0.05. These sample sizes need to be adjusted upward with 20 % to compensate for non-evaluable case, subjects without consent and erroneous survey entry. This results in a target sample size of minimum 170 women. Since 351 underwent counseling and the patient forms are available, data of 351 women were analyzed.

Results

Three hundred and eighty-one women were referred by the practicing gynecologist to the trained counselors for contraception counseling in the specified time. Data for 351 women are presented in this study while the remaining 30 were excluded due to incomplete case record forms.

Proportion of women in each of the categories is as follows: post-abortion ($n = 35$ {9.97 %}); postpartum ($n = 253$ {72.08 %}) or general contraception ($n = 63$ {17.95 %}). Providing counseling by trained counselor to women resulted in statistically significant (p value < 0.0001 , McNemar's test) with the differences between proportions of women opting for modern contraceptive method after the counseling with their past contraceptive history (Table 1).

Pre-counseling the predominant method used in the post-abortion group was "no method" in 48.57 % ($n = 17/35$) followed by male condom in 40 % ($n = 14/35$). Similarly, the postpartum group the predominant method used in the past was male condom in 44.6 % ($n = 113/253$) and "no method" in 41.90 % ($n = 106/351$). In the general counseling group, 36.5 % ($n = 23/63$) were using a male condom followed by a "no method" in 31.75 % ($n = 20/63$). Overall, the most common method used (history) in the three groups was the male condom by 42.7 % ($n = 150$) of the women enrolled followed by "no method" in 40.7 % ($n = 143$) of women (Table 2).

Post-counseling with a trained counselor, 91.74 % ($n = 322$) opted for any form of a modern hormonal contraceptive method irrespective of the groups as compared to 52.14 % ($n = 183$) (Table 3). The most common method adopted by the post-abortion group was Cu-IUD {25.71 % ($n = 9/35$)}; the postpartum women adopted the POP 42.29 % ($n = 107/351$) and the general counseling group adopted the Cu-IUD 30.16 % ($n = 19/63$) (represented in Figs. 1, 2, 3).

Post-counseling, POPs were chosen by 30.48 % (95 % CI 24.08–37.75), injectable contraceptives were chosen by 20.51 % (95 % CI 15.14–27.18) and Cu-IUD was chosen by 21.94 % (95 % CI 16.39–28.72). A significant shift in the choice of method chosen was noted ($p < 0.0001$) after counseling for women who had used the male condom (42.74–1.42 %), in the women who had "no method" and traditional method as their choice (40.74–7.41 %; 7.12–0.85 %, respectively) pre-counseling (Table 1).

There was no difference between the choice of the method chosen by the women and the method prescribed by the gynecologist. Prior modern contraceptive experience (> 6 months prior to enrollment) was existent in 52.14 %

Table 2 Contraceptive usage history in different categories of women

Patient category contraceptive history	Total <i>N</i> = (351) <i>n</i> (%)
Number of women in category—post-abortion [1]	35 (9.97)
Combined oral contraceptive (COC) [2]	1 (2.86)
Progesterone-only pill (POP) [2]	0 (00.00)
Injectable contraceptive [2]	0 (00.00)
Hormonal intrauterine system (IUS) [2]	0 (00.00)
Copper intrauterine device (Cu-IUD) [2]	0 (00.00)
Male condom [2]	14 (40.00)
Sterilization [2]	1 (2.86)
Traditional [2]	2 (5.71)
No method [2]	17 (48.57)
Number of women in category—post-partum [1]	253 (72.08)
Combined oral contraceptive (COC) [2]	2 (0.79)
Progesterone-only pill (POP) [2]	3 (1.19)
Injectable contraceptive [2]	3 (1.19)
Hormonal intrauterine system (IUS) [2]	0 (00.00)
Copper intrauterine device (Cu-IUD) [2]	6 (2.37)
Male condom [2]	113 (44.66)
Sterilization [2]	0 (00.00)
Traditional [2]	20 (7.91)
No method [2]	106 (41.90)
Number of women in category—general counseling [1]	63 (17.95)
Combined oral contraceptive (COC) [2]	4 (6.35)
Progesterone-only pill (POP) [2]	0
Injectable contraceptive [2]	3 (4.76)
Hormonal intrauterine system (IUS) [2]	1 (1.59)
Copper intrauterine device (Cu-IUD) [2]	9 (14.29)
Male condom [2]	23 (36.51)
Sterilization [2]	0 (00.00)
Traditional [2]	3 (4.76)
No method [2]	20 (31.75)

[1] = Percentages of patient categories are based on total number of subjects in the full analysis set population

[2] = Percentages of method history and method failures are based on total number of subjects in the corresponding patient category

(*n* = 183/351) women. But this number increased significantly after counseling with a trained counselor as noted by the adoption of any modern contraceptive methods (91.74 % *n* = 322/351) (Table 3).

A method shift in nonusers, traditional users and condom users post-counseling is presented in shift table (Table 4).

Discussion

Numerous studies have been conducted where the benefits of counseling have been highlighted. The counseling has been provided by either a physician or a trained counselor [6, ICMR]. The government sector has been relying on the services of a trained counselor for the delivery of health and contraceptive services across the urban as well as the rural settings through the ASHA (*Accredited Social Health Activist*) workers [7]. There has been a considerable success which has been achieved evident with the increased awareness and the falling fertility rate across India.

The Government of India has been strengthening its reach and spread of health services across India, despite the fact that this huge section in the society relies on the services of a private health care practitioner. This dependence in certain sections of the society and places is extremely high, which not only burdens the individual HCPs but may reduce the interaction time which the physician can provide to the women, especially for contraceptive counseling at various life stages, e.g., postpartum. In fact, one study conducted by FOGSI had an average counseling time of 24 min by a gynecologist for five of the available contraceptive methods (POP, OCP, ring, injections and medicated IUS) [6]. A similar study in postpartum women, the counseling time was as high as 40 min per women [8]. This time spent for counseling may be extremely unrealistic in a busy private practice.

This study clearly identified the advantages of a trained counselor, who spent a certain time visiting a clinic and counseling women on the various contraceptive methods. There was a significant shift which was noted in the choice of the contraceptive selected after counseling by a

Table 3 Comparison of contraceptive selected post-counseling versus history of contraceptive use

Characteristic	Total (<i>N</i> = 351) <i>n</i> (%)
Proportion of women selecting modern method of contraception	322 (91.74)
Proportion of women with use of contraception (in the past) (<i>p</i> 2)	183 (52.14)
Chi-square <i>p</i> value [1]	<0.0001

[1] = *p* value is obtained using McNemar's Chi-square test for analyzing the difference between proportions of women using modern method of contraception compared to proportion of women with no use of contraception (in the past)

[2] = Percentages are based on number of subjects in full analysis set population

Table 4 Shift in use of contraception method after counseling

Methods (past history)	Shift in use of contraception method after counseling <i>n</i> (%)										Total
	Combined oral contraceptive (COC)	Progestrone-only pill (POP)	Combined hormonal vaginal ring	Injectable contraceptive	Hormonal intrauterine system (IUS)	Copper intrauterine device (Cu-IUD)	Male condom	Sterilization	Traditional	No method	
Combined oral contraceptive (COC)	0	1 (0.28)	1 (0.28)	1 (0.28)	1 (0.28)	3 (0.85)	0	0	0	0	7 (1.99)
Copper intrauterine device (Cu-IUD)	0	0	3 (0.85)	0	3 (0.85)	8 (2.28)	0	0	0	1 (0.28)	15 (4.27)
Hormonal intrauterine system (IUS)	0	0	0	0	1 (0.28)	0	0	0	0	0	1 (0.28)
Injectable contraceptive	2 (0.57)	1 (0.28)	1 (0.28)	1 (0.28)	0	0	0	0	0	1 (0.28)	6 (1.71)
Male condom	6 (1.71)	50 (14.25)	10 (2.85)	29 (8.26)	4 (1.14)	29 (8.26)	5 (1.42)	3 (0.85)	1 (0.28)	13 (3.70)	150 (42.74)
No method	8 (2.28)	45 (12.82)	6 (1.71)	34 (9.69)	4 (1.14)	32 (9.12)	0	3 (0.85)	1 (0.28)	10 (2.85)	143 (40.74)
Progestrone-only pill (POP)	1 (0.28)	1 (0.28)	0	1 (0.28)	0	0	0	0	0	0	3 (0.85)
Sterilization	0	0	0	0	0	1 (0.28)	0	0	0	0	1 (0.28)
Traditional	2 (0.57)	9 (2.56)	1 (0.28)	6 (1.71)	1 (0.28)	4 (1.14)	0	0	1 (0.28)	1 (0.28)	25 (7.12)

Percentages are based on number of subjects in FAS population

Fig. 1 Method selected post-counseling in post-abortion group **Fig. 2** Method selected post-counseling in postpartum group

counselor. Though it is understood that counseling by a physician has a significant impact on adoption of contraception as identified in previous studies [6, 9], a trained counselor will not only facilitate the counseling but will

also free up the limited time which the HCP may have in his daily practice.

This study had a few limitations, namely it being a retrospective, non-randomized study with no follow-up on

Fig. 3 Method selected post-counseling in general group

the compliance and no involvement of the male partner in the counseling process. Perceptions regarding the choice of the method were not recorded. Physicians were involved only in the referral and the subsequent prescription of the contraceptive method chosen. Despite the limitations, this study had an advantage of being conducted across clinics which catered to women utilizing only the private setup and provision of nearly all modern methods available with counselors who were trained on contraception counseling material based on the World Health Organization.

In conclusion, we could clearly outline the opportunity which is available for “task sharing” in private practice, where non-core activities may be covered by a trained paramedical staff, which will not only improve the time management in the clinic, but will also provide an opportunity for a personalized follow-up with a possible improvement in treatment compliance. Strategies implemented in the government sector may very well be adapted in the private sector for the benefit of the women visiting these clinics.

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Compliance with Ethical Standards

Conflict of interest Shakuntla Kumar, Dipti Nabh, Rupam Arora and Praveen Garg declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Protocol approved by SPECT (Society for Promotion of Ethical Clinical trials, New Delhi, dated: September 5, 2014; CTIRI Registration: CTIRI/2014/12/005311.

Appendix: Counseling Tool

See Table 5.

Table 5 Counseling aid for contraceptive methods

	Combined oral contraceptive pill	Combined vaginal contraceptive ring	Progestrone-only pill	Depot injectable ^a	Hormonal intrauterine device ^b	Copper intrauterine device ^c	Female sterilization	Male sterilization	Barrier ^d

Description	Pill pack of 21 tablets each containing estrogen and progestogen	A flexible, vaginal plastic ring containing estrogen and progestogen	Progestogen-only method. A pack of 28 pills each containing only progestogen	Progestogen-only method. An injection of long-acting progestogen	Progestogen-only method. A plastic frame intrauterine device containing progestogen	Non-hormonal method. A plastic frame intrauterine device with copper wire around it.	Non-hormonal method. Fallopian tubes are surgically blocked or cut	Non-hormonal method. Vas deferens are surgically closed off	Non-hormonal method. Sheaths or coverings that fit on a man's erect penis
Effectiveness	99 %	99 %	99 %	99 %	99 % (over 5 years of use)	For first year 99% ^e For 10 year 98 %	99 %	97–99 %	98 %
Side effects	Some women may experience: Headaches Nausea Dizziness Weight changes Breast tenderness Acne (can improve or worsen, usually improves) Changes in bleeding pattern	Some women may experience: Headaches Irritation, redness or inflammation of the vagina (vaginitis) White vaginal discharge Changes in bleeding pattern	Some women may experience: Headaches Dizziness Breast tenderness Abdominal Pain Nausea Mood changes Changes in bleeding patterns	Some women may experience: Weight gain Headaches Dizziness Abdominal bloating and discomfort Mood changes Less sex drive Changes in bleeding patterns	Some women may experience: Acne Headaches Breast tenderness or pain Nausea Weight gain Dizziness Mood changes Changes in bleeding patterns Possibility of ovarian cyst	Some women report changes in bleeding pattern. Uncommon health risk includes anemia if woman has low iron blood stores before inserting the intrauterine device. Rarely, pelvic inflammatory disease may occur if the woman has chlamydia or gonorrhea at the time of insertion.	None. Known health risks include uncommon to extremely rare complications of surgery and anesthesia	Side effects are none. Uncommonly might experience severe pain in scrotum or testis lasting for a month to year. Very rarely might experience infection at incision site or bleeding and bruising under the skin	Side effects are none. In extremely rare situations, might cause severe allergic reactions in people with latex allergy

Table 5 continued

	Combined oral contraceptive pill	Combined vaginal contraceptive ring	Progestrone-only pill	Depot injectable ^a	Hormonal intrauterine device ^b	Copper intrauterine device ^c	Female sterilization	Male sterilization	Barrier ^d
Will fertility resume after stopping its use?	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Changes in bleeding pattern	Some users may report: lighter, fewer days of bleeding, irregular, infrequent or no monthly bleeding.	Some users may report: lighter, fewer days of bleeding, irregular, infrequent, prolonged or no monthly bleeding.	Changes in bleeding pattern would include: frequent bleeding, infrequent bleeding, irregular bleeding, prolonged bleeding or no monthly bleeding. In breast-feeding women, longer delay in return of monthly bleeding after childbirth (lengthened postpartum amenorrhea). Breast-feeding also affects the bleeding pattern	Changes in bleeding pattern include: First 3 months: Irregular bleeding Prolonged bleeding At one year: No monthly bleeding Infrequent bleeding Irregular bleeding	Changes in bleeding pattern include: Lighter bleeding and fewer days of bleeding Infrequent bleeding Irregular bleeding No monthly bleeding Prolonged bleeding	Changes in bleeding pattern in the initial 3–6 months include: prolonged and heavy monthly bleeding, irregular bleeding or more cramps and pain during monthly bleeding	No changes	NA	NA

Table 5 continued

Combined oral contraceptive pill	Combined vaginal contraceptive ring	Progestrone-only pill	Depot injectable ^a	Hormonal intrauterine device ^b	Copper intrauterine device ^c	Female sterilization	Male sterilization	Barrier ^d
How to use Take one tablet/day orally: From Day 1 of period to 21 days Stop taking the pill: Day 22 to Day 28 (total 7 days). You may find that you get a withdrawal bleeding during this time. Start taking the next pack on the 8th day even if your period continues.	Choose the position for inserting that is most comfortable to you, like standing with one leg up, squatting or lying down. Press the opposite sides together and insert the ring into the vagina. Inserting it deeply helps it stay in place and less likely to be felt.	It is to be taken orally for 28 days, consecutively. Each time you finish a pack, you must begin the next one without missing a day.	One injection administered in the muscle in hip, arm or buttocks. Next injection to be taken after 13 weeks (3 months)	Should be inserted by a specifically trained provider. It is inserted into the uterus through the cervix	Should be inserted by a specifically trained provider. It is inserted into the uterus through the vagina and cervix	To be done by a specifically trained provider. The process includes tying and cutting of the 2 fallopian tubes through the two small incisions above the pubic hair line. Procedure done under local anesthesia and light sedation	Through a puncture or small incision in the scrotum, the trained provider locates each of the two tubes that carries sperm to the penis and cuts or blocks it by cutting and tying it closed or by applying heat or electricity. The procedure is done under local anesthesia	Before physical contact, a condom to be placed on the tip of the erect penis with rolled side out and then unrolled to the base of the erect penis. Condom to be slid off after ejaculation without spilling semen

Reference: World Health Organization. Family planning A global handbook for providers. 2011

The methods would be effective as mentioned in */ie chart if used as per /ie/r* respective prescribing information

^a Injection contains depot medroxyprogesterone acetate

^b Levonorgestrel-containing device approved for 5 years

^c Copper-bearing intrauterine devices with varied efficacy for 3, 5, and 10 years

^d Male condom

^e Please check the prescribing information for the approved duration of use or contact your Health Care Provider

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