



Post Abortion Family Planning Technical Update



March 2016



Family Planning Division
Ministry of Health and Family Welfare
Government of India



Post Abortion Family Planning

Technical Update



March 2016



Family Planning Division
Ministry of Health and Family Welfare
Government of India

First Edition March 2016

Ministry of Health & Family Welfare

Government of India, Nirman Bhawan, New Delhi -110101

Any part of this document may be reproduced and excerpts from it may be quoted without permission provided the material is distributed free of cost and the source is acknowledged.

Prologue

Women's control over their own child birth forms the foundation of reproductive rights and is the mainstay of the family planning program in India. However, the challenge of vicious cycle of repeated unintended pregnancies and unwanted births or abortions remains largely unattended. This contributes to increased morbidity and mortality among mothers and newborns. Studies reveal that 90% of the maternal mortality related to unsafe abortions could be averted by use of contraceptives in the post abortion period. Also the unmet need for family planning in the post abortion period is very high which if bridged, can save many mothers from morbidity and mortality related to abortions and ease off burden from the health system.

Keeping this in consideration, this technical update has been developed with a view to streamline the efforts in providing family planning service in post abortion period at the field level. It also details all the family planning methods available for women in the post abortion period and would therefore act as a technical tool for the service providers for providing quality post abortion family planning services.

Contents

1. Background	7
2. Rationale	7
3. Counseling for Post Abortion Contraception	7
4. Eligibility for Post Abortion Family Planning Methods	8
5. Return to Fertility after Abortion	9
6. Time of Initiation of Contraceptive Methods after Abortion	9
7. Post - Abortion IUCD	11
7.1 Eligibility Criteria	11
7.2 Clinical Assessment and Screening of Client	11
7.3 Technique of Post Abortion IUCD Insertion	11
7.4 Advise for Follow - up Visit	12
8. Post-Abortion Female Sterilization	13
8.1 Eligibility Criteria	13
8.2 Steps for Post Abortion Female Sterilization	13
9. Other Methods of Contraception	16
Overview of Post Abortion Family Planning Methods	17
References	20
List of Contributors	21

1. Background

Post abortion family planning is the initiation and use of family planning methods at the time of management of an abortion or before fertility returns after the abortion. The World Health Organization estimates that globally, around 210 million women become pregnant each year, of which 75 million pregnancies end in either induced or spontaneous abortions or still births. Majority of these women do not want to become pregnant again in the near future. WHO also recommends spacing of at least 6 months between abortion and next pregnancy. Therefore, providing family planning services as a part of post-abortion care can improve contraceptive acceptance and help break the cycle of repeated unwanted pregnancies.

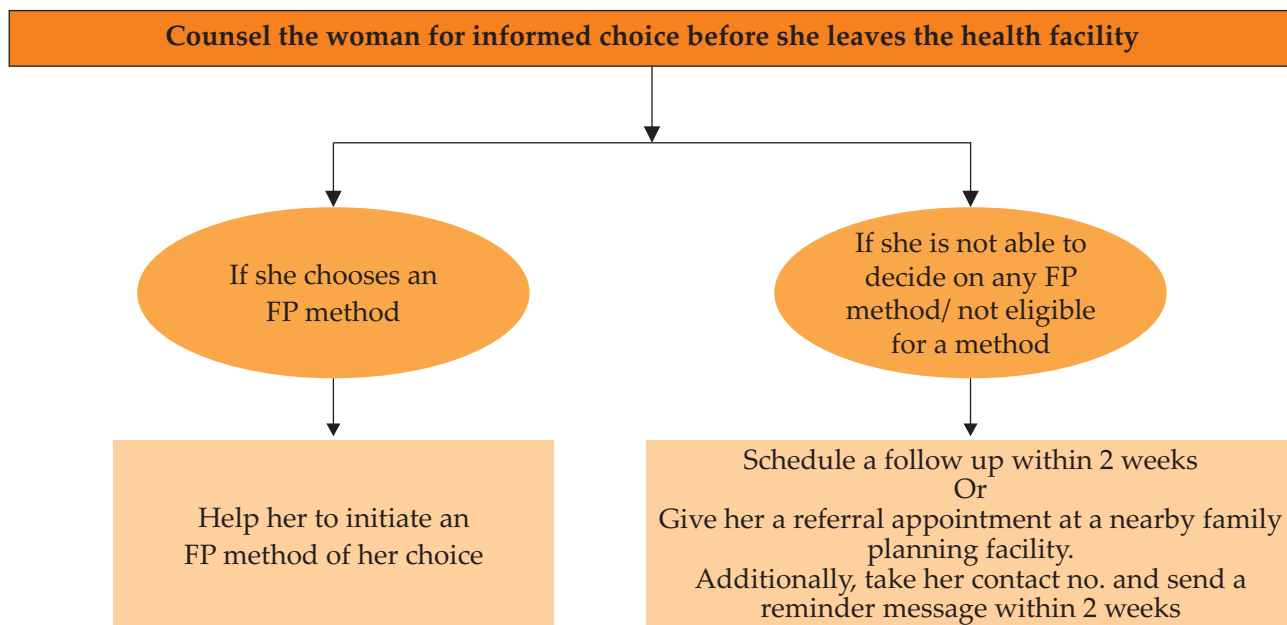
2. Rationale

Post abortion family planning can avert unintended pregnancies and abortion associated problems. Abortions account for approximately 8% of maternal mortality in India and family planning could prevent 90% of maternal mortality associated with unsafe abortions. Since women receiving abortion services at a facility usually do not return for family planning services even though they do not want to become pregnant again in the near future, immediate post abortion period when the woman is still at the facility or in contact with the health care provider is the opportune time to provide family planning counseling and services.

3. Counseling for Post Abortion Contraception

Counseling is a critical component in providing quality post-abortion family planning services and involves communication between a service provider/ counselor and a client. It helps the client to understand the essential concepts of family planning, to have options for contraceptive methods and to choose a method based on her needs and preference.

- **Timing of Counseling:**
 - ◆ Before the abortion procedure, it should be checked that the woman's physical condition and emotional situation is appropriate for counseling on contraception. Provider/counselor should respect her right to accept or refuse post abortion contraception and services are provided accordingly. Counseling before the abortion procedure offers the woman options of adopting various contraceptive methods. Thus she would have a chance for immediate IUCD insertion procedure or sterilization procedure while she is still on the table after the completion of abortion.
 - ◆ After the abortion procedure once the woman settles down, counseling on available contraceptive methods may also be provided.
- **Assess Individual Situation:** The service provider/counselor should consider both, the woman's clinical condition and personal situation and discuss any potential barriers to the successful adoption of contraception in a sensitive manner.
- **Information on Methods:** The service provider/counselor should explain the characteristics, use (how it works), side effects and effectiveness of the available methods.
- **Method Specific Counseling:** The service provider/counselor should aid/support the woman in selecting the contraceptive method which best suits her.



Post Abortion Family Planning Counseling Messages

- **She should wait at least 6 months before trying to conceive again** as it reduces the chances of low birth weight, premature birth and maternal anemia.
- **Fertility returns quickly** - within 10 to 11 days after first trimester abortion or miscarriage and within 4 weeks after a second trimester abortion or miscarriage.
- **She can choose from available family planning methods that can be started at once.**
- **If a woman decides not to use contraceptives at this time, providers can offer information on all available methods** and from where to obtain them. Also, providers can offer condoms, oral contraceptives or emergency contraceptive pills for women to take home and use later.
- **To avoid infection, she should not have intercourse until bleeding stops** - If being treated for infection or vaginal/ cervical injury; she should wait until she is fully healed.
- **Method specific counseling should follow** if she chooses any family planning method.

4. Eligibility for Post Abortion Family Planning Methods

For providing a family planning method to a woman after abortion, it is important to ensure:

- There are no current severe complications of abortion requiring further treatment.
- The woman is offered choice on contraceptive options available, receives adequate pre-abortion counseling and gives informed consent.
- The provider screens the eligibility of woman for the particular family planning method that the woman has opted for.

5. Return to Fertility after Abortion

Time of Abortion	Method of management for abortion	Review of return to fertility
First-trimester abortion	After vacuum aspiration	Woman may ovulate within 10 days of an abortion (Boyd et al., 1972) and can become pregnant if she resumes sexual intercourse without using any
	After medical abortion with mifepristone and misoprostol	On an average, a woman will ovulate within 20 days of a medical abortion with mifepristone and misoprostol, but can ovulate as early as in 8 days (Schreiber, Sober, Ratcliffe & Creinin, 2011)
Second-trimester abortion	After medical abortion with mifepristone and misoprostol	Within 4 weeks after a second-trimester abortion or miscarriage

6. Time of Initiation of Contraceptive Methods after Abortion

After First-trimester Abortion		
	Family Planning Method	Time of Initiation after Abortion
Spontaneous abortion or vacuum aspiration (for incomplete / induced)	Combined oral contraceptive pills	Can be started immediately
	Progestin only pills	Can be started immediately
	Centchroman Pills	Can be started immediately
	Injection DMPA	Can be started immediately
	Condoms	Can be started immediately by the male partner
	IUCD	Can be inserted immediately , when infection and injury to the genital tract are ruled out or resolved
	Female sterilization	Can be performed concurrently or within 7 days post abortion provided woman is eligible by the minilap as well as laparoscopic methods.
After medical abortion with mifepristone and misoprostol	Combined oral contraceptive pills	Can be started on 3rd day or 15th day of medical abortion protocol , as long as there are no medical contraindications.
	Progestin only Pills	
	Centchroman Pills	Can be started immediately on the 3 rd day.
	Injection DMPA	Can be started on the 3 rd day of medical abortion protocol.
	Condoms	Can be used by the male partner as soon as sexual activity is resumed.
IUCD	Can be inserted once the abortion is complete (around Day 15th) and the presence of infection is ruled out.	

	Family Planning Method	Time of Initiation after Abortion
		(Note: on Day 15, the provider should take relevant history and carry out pelvic examination to ensure completion of abortion. If pelvic examination does not confirm the expulsion of POC or completion of abortion process or bleeding continues, the provider should assess clinical condition of the client and manage accordingly. USG is also an option available to check for retained POCs/ completion of abortion process).
	Female sterilization	Can be performed after the first menstrual cycle.
After Second-trimester Abortion		
	Family Planning Method	Time of Initiation after Abortion
Spontaneous abortion or dilatation and evacuation	Combined oral contraceptive pills	Can be started immediately
	Progestin only pills	Can be started immediately
	Centchroman Pills	Can be started immediately
	Injection DMPA	Can be started immediately
	Condoms	Can be started immediately by the male partner
	IUCD	Can be inserted immediately, when infection and injury to the genital tract are ruled out by a specially trained provider as per postpartum IUCD insertion technique.
	Female sterilization	Can be performed concurrently or within 7 days post abortion (uncomplicated abortion), if she has made a voluntary, informed choice in advance. In this case the woman is eligible for sterilization by minilap method only. (Laparoscopic tubal occlusion is contraindicated as there are chances of injury to the fallopian tubes/uterus since the tubes are oedematous. There is also the possibility of slipping of the rings from the tubes leading to failures).

*The National Family Planning programme offers male sterilization services also which can be availed of by the male partner anytime.

7. Post-Abortion IUCD

The provider should ensure that the woman has received counseling and made an informed choice prior to IUCD insertion in the post abortion period. Cu IUCD 380 A/Cu IUCD 375, providing contraception for 10 years/5 years respectively, can be inserted as per the preference of the client.

7.1 Eligibility Criteria

Condition	MEC Category for IUCD insertion
Immediately following first trimester abortion (spontaneous/induced) (Provided there is no evidence or potential for infection)	1
Immediately following second trimester abortion (Spontaneous/Induced) (Provided there is no evidence or potential for infection, bleeding and other contraindications)	2

7.2 Clinical Assessment and Screening of Client

Assessment for immediate post-abortion IUCD is done in two phases:

- ◆ The first assessment is a review of the woman's general, medical, reproductive, contraceptive and obstetric history and eligibility for the method along with pre-procedure assessment.
- ◆ A second assessment is done immediately prior to insertion to rule out current genital tract infection, risk of infection or hemorrhage and genital tract injury.

7.3 Technique of Post Abortion IUCD Insertion

Condition	Technique of insertion immediately after abortion
After surgical evacuation when uterine size is below 12 weeks (or uterus size after evacuation is similar to the size of first trimester pregnant uterus)	<p>Interval IUCD insertion technique (no touch and withdrawal technique) with little adaptation</p> <ul style="list-style-type: none"> • Use of uterine sound for measuring the height of uterus for fundal placement is not recommended, as it may cause perforation. • Right after the confirmation of the completion of evacuation in vacuum aspiration and before withdrawing the cannula, check the depth of uterus using the last cannula before completely withdrawing the cannula. • Then, load the IUCD inside the sterile package and fix the blue gauge at the length measured by the cannula • Rest of the steps are same as in interval IUCD insertion technique <p>(Note: Dilatation and curettage (D & C), the previously used technique, is no longer a recommended method of surgical evacuation as it is more invasive, has higher risk of injury, including perforation. However, for IUCD insertion after D & C, the height of uterus can be confirmed by introducing the last curette up to the fundus before completely withdrawing the curette and keeping the index finger on the curette at the cervical os. Measure the length of the last curette up to the index finger and matching this with the gradations on measurement insert in IUCD package. After loading the IUCD by 'No Touch' technique, fix the blue gauge at a length corresponding to the measured length of uterus with the last curette.)</p>

Condition	Technique of insertion immediately after abortion
<p>After surgical evacuation when uterine size is above 12 weeks (or uterus size after evacuation is similar to the size of second trimester pregnant uterus)</p>	<p>The technique of insertion is same as that of postpartum IUCD insertion with little modification</p> <ul style="list-style-type: none"> The insertion can be done with ring forceps or sponge holders because it might be difficult to introduce PPIUCD insertion forceps through the cervical os. (The height of uterus after evacuation is smaller as compared to the size of uterus after full term vaginal delivery and the cervical os may be tighter. So it might be difficult to introduce PPIUCD insertion forceps into the cervix. Therefore, it is advisable to do the insertion with ring forceps/sponge holder following the same technique as that of immediate postpartum IUCD insertion).
<p>After medical abortion (Mifepristone + Misoprostol), which can be offered to eligible women within 7 weeks of gestation, as per Govt. of India guidelines</p>	<p>The technique of insertion is same as that of interval IUCD insertion</p> <ul style="list-style-type: none"> The provider should be very careful while introducing uterine sound to measure the length of uterus. Uterine sound should be introduced gently by holding it like a pen/pencil, moving it in the right direction till the resistance is felt without applying any force.

7.4 Advise for Follow-up Visit

- Before the woman leaves the health facility, she should be advised to
 - Come for post abortion follow up within one to two weeks for
 - Assessment of her physical condition,
 - Ruling out continuing pregnancy, sepsis and incomplete abortion
 - Any problem with IUCD.
 - Come for a routine follow-up of IUCD after 1 month, preferably after the next menstrual bleeding.
 - Come back immediately if any warning signs appear.
- Follow-up care and management of problems of IUCD will be same as that of interval IUCD.

Important:

- A back- up method is not needed
 - If the IUCD is inserted within 12 days after first or second trimester spontaneous or induced abortions, when there is no infection.
 - If it is more than 12 days after first or second trimester spontaneous or induced abortion, no infection is present and the IUCD has been inserted after it is reasonably ascertained that the woman was not pregnant.
- If infection is present, treat or refer and help the woman choose another method. If she still wants an IUCD, it can be inserted after the infection has completely resolved.
- If insertion is delayed, a backup method is needed.

8. Post-Abortion Female Sterilization

Post-abortion female sterilization should be performed after confirming that the woman has received counseling and made an informed choice. The procedure should be performed only by providers who have been trained to perform the procedure. Post abortion female sterilization can be performed through minilap tubectomy procedure after first as well as second trimester abortions. Laparoscopic tubal occlusion is not recommended following second trimester abortions as there are chances of injury to the fallopian tubes/uterus.*

8.1 Eligibility Criteria

Post-abortion condition	MEC Categories for Female sterilization
Uncomplicated	A
Post-abortal sepsis or fever	D
Severe post-abortal hemorrhage	D
Severe trauma to genital tract, cervical or vaginal tears	D
Uterine perforation	S
Acute heamatometra	D

A = (accept): there is no reason to deny sterilization to a person with this condition.

C = (caution): the procedure is normally conducted in a routine setting, but with extra precautions.

D = (delay): the procedure is delayed until the condition is evaluated and/or corrected

S = (special): the procedure should be undertaken in a setting with an experienced surgeon and staff; equipment is needed to provide general anesthesia, another back-up medical support.

8.2 Steps for Post Abortion Female Sterilization

Step 1: Clinical assessment and screening of client	History taking (Medical, obstetric and contraceptive history), physical examination and laboratory examination; if not done earlier
Step 2: Written informed consent	Provider must ensure that the client has signed the consent form for sterilization before surgery. The operating surgeon must ensure that the medical record and checklist are filled properly after reviewing the client's suitability for sterilization and conducting final assessment prior to surgery. Refer Medical Record checklist provided in 'Reference Manual for Female Sterilization (2014)'.
Step 3: Preoperative Instructions	Provide preoperative instructions to the client. Client should be advised to bathe, not consume anything 6 hours prior to surgery and empty her bowel and bladder before entering the Operation Theatre.
Step 4: Part preparation & Pre-medication	<p>Part should be trimmed or shaved, if warranted, just prior to surgery. The operative site should be prepared immediately preoperatively with an antiseptic solution, such as iodophor (Povidone iodine) or chlorhexidine gluconate.</p> <ul style="list-style-type: none"> Usually premedication is discouraged and in anxious clients reassurance is sufficient. However, if needed, preferably Tablet Alprazolam (0.25 to 0.50 mg) or Tablet Diazepam (5 to 10 mg) can be given before the operation. For sedation/Analgesia: dosage according to body weight is recommended (Pethidine 0.5 to 1 mg/Kg or Petazocine 0.5 mg/kg and Promethazine 0.3 - 0.5

	<p>mg/kg). Refer to 'Reference Manual for Female Sterilization (2014)' for dosage and regimes. The drugs should be diluted with equal quantity of normal saline or distilled water before IV administration.</p> <ul style="list-style-type: none"> • Lignocaine is the recommended local anaesthetic and the recommended concentration is 1% lignocaine without adrenaline.
Step 5: Surgical procedure	<p>The routine surgical procedure for sterilization (Minilap or Laparoscopic) to be followed as mentioned in 'Reference Manual for Female Sterilization (2014)'. Approach to incision for Minilap and Laparoscopic sterilization depends on the timing and type of abortion:</p> <p>Minilap Tubectomy:</p> <ul style="list-style-type: none"> • Supra pubic: in case of an uncomplicated first-trimester abortion or with medical termination of pregnancy (MTP) • Sub umbilical: in case of immediate uncomplicated second trimester abortion, depending on the size of uterus <p>Laparoscopic Tubal occlusion:</p> <ul style="list-style-type: none"> • Inferior Umbilical: in case of first trimester abortion or MTP up to 12 weeks
Step 6: Postoperative care	<p>In the postoperative period, the client should be kept under observation of a nurse/doctor for about 4-6 hours. The client should be monitored for vitals and dressing at all stages and never be left unattended.</p>
Step 7: Discharge	<p>The client can be discharged after 4 hours, when the vital signs are stable and the client is fully awake, passed urine, can talk, drink or walk. The provider should evaluate the client and ensure that she is accompanied by a relative or friend. Postoperative and follow up instructions should be given along with postoperative instruction card at the time of discharge of the client.**</p> <p>Following should be emphasized at the time of discharge:</p> <ul style="list-style-type: none"> • The client can resume sexual intercourse one week following sterilization if bleeding has stopped or whenever she feels comfortable provided there is no bleeding. • She should return for a follow-up visit on the 7th day of surgery or as early as possible after 7 days. The client is also advised to return to the clinic, if there is any missed period/suspected pregnancy within two weeks to rule out pregnancy.
Step 8: Certificate of Sterilization	<p>The certificate of sterilization should be issued one month after the surgery or after the first menstrual period, whichever is earlier, by the medical officer of the facility. If the client does not resume her period even after one month of surgery, rule out pregnancy before issuing sterilization certificate</p>

Note: In the unlikely events of failure, complications or deaths attributable to sterilization operations, Family Planning Indemnity Scheme indemnifies the clients of sterilization and doctors performing the procedure in public health facilities and accredited private/NGO facilities.[#] The client or her kin reports the incidence to the District Quality Assurance Committee/District FP Indemnity Sub Committee which is responsible for processing and settlement of claims and reporting these incidences to the State Quality Assurance Committees/State FP Indemnity Sub Committee for final settlement.

* refer 'Reference Manual for Female Sterilization, (2014)'

**refer to Annexure 3 in 'Standards and Quality Assurance in Sterilization Services, (2014)'

refer 'Manual for Family Planning Indemnity Scheme, (2013)'

9. Other Methods of Contraception

Other methods of contraception like combined oral contraceptive pills (OCPs), Progestin-only-pills (POPs), Centchroman, injection DMPA, condoms and Male Sterilization can be started immediately (as mentioned in earlier section), after appropriate method specific counseling.

- If the woman is starting OCPs, POPs, Centchroman and Injection DMPA within 7 days after first or second trimester miscarriage or induced abortion, there is no need for a backup method.
- If it is more than 7 days after first or second trimester miscarriage or induced abortion, she can start OCPs or POPs or Centchroman or Injection DMPA any time if it is reasonably certain she is not pregnant. She will need a backup method for the first 7 days for OCPs or Injection DMPA or Centchroman and for the first 2 days in case of POPs.

Overview of Post Abortion Family Planning Methods

Family Planning Methods	Advantages	Limitations	Contraceptive Effectiveness
Condoms	<ul style="list-style-type: none"> • Only method that protects against both pregnancy and STIs, HIV • No hormonal side effects • Used as a temporary or back up method • Can be used without seeing a health care provider 	<ul style="list-style-type: none"> • Some people may have allergy to latex • Require correct use with every act of sex 	Fairly effective. Failure rate: 2 pregnancies/100 women*
Combined Oral Contraceptives (COCs)	<ul style="list-style-type: none"> • Can be provided by all health workers • Does not interfere with sexual activity • Immediate return to fertility on discontinuation 	<ul style="list-style-type: none"> • Must be taken every day • Re-supply must be available • Not suitable for women, who is breast-feeding her baby of less than 6 months old • Not suitable for women with certain medical illnesses • Medications like Rifampicin, Dilantin, and Griseofulvin^R have drug interactions and lower the effectiveness of OCPs • Changes in menstrual bleeding like lighter bleeding, dizziness, nausea, headaches, and breast tenderness 	Highly effective. Failure rate: < 1 pregnancy/100 women (0.3/100)*, when no pills are missed
Progestin only Pills (POP)	<ul style="list-style-type: none"> • Can be provided by all health workers • Does not interfere with sexual activity • Immediate return to fertility on discontinuation • Suitable for women below six weeks post-partum and breast feeding 	<ul style="list-style-type: none"> • Less effective for women not breast feeding • Must be taken every day • Re-supply must be available • Not suitable for women with certain medical illnesses • Changes in menstrual bleeding like lighter bleeding, dizziness, nausea, headaches, and breast tenderness 	Breast feeding women: Failure rate: 1 pregnancy/100 women (.3/100)*, when no pills are missed Less effective in non-breast feeding women: Failure rate: < 1 pregnancy/100 women (.9/100)*, when no pills are missed

Centchroman	<ul style="list-style-type: none"> • Can be used safely by lactating mothers • Does not require daily action and does not interfere with sex. Taken orally twice a week in first 3 months and then once a week • Can be provided by non-medical staff • Immediate return of fertility on discontinuation • No hormonal side-effects 	<ul style="list-style-type: none"> • Prolongation of menstrual cycle • Requirement of regular supply • Cannot be provided to women with Polycystic ovarian disease, cervical hyperplasia, Tuberculosis, renal disease, clinical evidence of jaundice/ liver disease and severe allergic states 	Fairly effective. Failure rate: 1.63 pregnancy /100 women (1.63/100)
Injection DMPA	<ul style="list-style-type: none"> • Does not interfere with sexual activity • Suitable for women after six weeks post-partum and breast feeding 	<ul style="list-style-type: none"> • Client must return for injection every 3 months • May cause irregular bleeding, spotting and amenorrhea • Return of fertility after stopping Inj DMPA takes an average of 4 to 6 months longer than with most other reversible methods. This means women can become pregnant on average 7-10 months after their last injection • Reversible reductions in bone density, but users are not likely to have more fractures 	Highly effective. Failure rate: <1 pregnancy/100 women (0.3/100)*, when women take injections on
IUCD	<ul style="list-style-type: none"> • Effective as soon as it is inserted • Long term contraception, effective for 5 years (IUCD Cu 375) or 10 years (IUCD CU 380A) • Immediate return to fertility on removal • Does not require daily action and does not interfere with sex 	<ul style="list-style-type: none"> • Increased menstrual bleeding and pain during the first few months • Trained provider needed for insertion and removal • Cannot be provided to women with current pelvic infections 	Highly effective. Failure rate: <1 pregnancy/ 100 women (0.6/100)*

Female Sterilization	<ul style="list-style-type: none"> • Permanent method • Immediately effective • No long term side effects • No interference with sex 	<ul style="list-style-type: none"> • Woman must understand that it is a permanent method and reversal is difficult • Permanence of the method increases the importance of adequate counseling and fully informed consent. • Slight possibility of surgical complications 	<p>Highly effective. Failure rate: <1 pregnancy/ 100 women (0.5/100)*</p>
Male Sterilization (Vasectomy)	<ul style="list-style-type: none"> • Permanent method • No interference with sex • Enables man to take responsibility for preventing pregnancy 	<ul style="list-style-type: none"> • Not immediately effective. • Couple must use another FP method for at least the first 3 months. Semen analysis should be done after 3 months to confirm absence of sperms 	<p>Highly effective. Failure rate: <1 pregnancy/ 100 women (0.5/100)*</p>

References

1. Unsafe Abortion, Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008, 6th Edition, WHO
2. Population Reference Bureau: Unsafe Abortion, Facts and Figures, 2005
3. Trends in Maternal mortality: 1990 to 2013, Estimates by WHO, UNICEF, UNFPA, The world Bank and the United Nations Population Division, May 2014
4. Reference Manual for Female Sterilization (2014)'
5. Manual for Family Planning Indemnity Scheme, (2013)'
6. Annexure 3 in 'Standards and Quality Assurance in Sterilization Services, (2014)
7. Provider's Manual on Comprehensive Abortion Care, April 2014, Maternal Health Division, MOHFW, Govt. of India
8. Clinical Updates in Reproductive Health, July 2013, Ipas
9. Nguyen Thi Nhu Ngoc. Immediate post-abortion insertion of intrauterine devices: RHL commentary (last revised: 18 January 2005). The WHO Reproductive Health Library; Geneva: World Health Organization.
10. Handbook of Medical Methods of Abortion by Government of Madhya Pradesh and Ipas to expand access to new technologies for safe abortion, 2013
11. Family Planning, A Global Handbook for Providers, 2011 Update, USAID; Center for Communication Programs, Johns Hopkins Bloomberg School of Public Health, World Health Organization
12. Centchroman – A brief overview of contraceptive effect. Document, September 2015, Council of Scientific and Industrial Research (CSIR) – Central Drug Research Institute (CDRI), Lucknow, India
13. Centchroman, a Selective Estrogen Receptor Modulator, as a Contraceptive and for the Management of Hormone-Related Clinical Disorders, MM Singh, Division of Endocrinology, CDRI, Lucknow, India. Medicinal Research Reviews, Vol 21, No. 4, 302-347, 2001,

List of Contributors

Dr. Sunita Singhal

Senior Clinical Advisor
Engender Health
New Delhi

Dr. Saswati Das

Director
Clinical Services and Training
Jhpiego, New Delhi

Dr. Minati Rath

Senior Clinical Officer
Jhpiego
New Delhi

Dr. Alok Banerjee

Technical Advisor
Parivar Sewa Sanstha
New Delhi

Dr. Bimla Upadhyay

Director- Health Systems
IPAS Development foundation
New Delhi

Dr. Pratima Mittal

HOD, Obs and Gyn
Safdarjung Hospital
New Delhi

Dr. Basab Mukherjee

Chairperson
Family Welfare Committee
FOGSI

Dr. Jyoti Vajpayee

FP lead
BMGF
New Delhi

Dr. Bulbul Sood

Country Director
Jhpiego
New Delhi

Dr. Rupali Diwan

Dept. of Obs. And Gyn.
Safdarjung Hospital
New Delhi

Dr. Vasanthi Krishnan

Project Director
IPAS Development Foundation
New Delhi

Dr. Amit Shah

Reproductive Health Advisor
USAID
New Delhi

Dr. Rajkumar

Deputy Director
FW
Karnataka

Dr. S. K. Sikdar

Deputy Commissioner (In-charge)
Family Planning Division
MOHFW

Dr. Teja Ram

Deputy Commissioner
Family Planning Division
MOHFW

Ms. Shikha Bansal

Program Officer
National Technical Support Unit - FP
New Delhi

Dr. Pragati Singh

Senior Consultant
FP division
MoHFW

Dr. Nidhi Bhatt

Program Officer
National Technical Support Unit- FP
New Delhi

Mr. Nadeem Akhtar Khan

Program Manager
National Technical Support Unit- FP
New Delhi

Ms. Shilpa John

Consultant
FP Division
MoHFW

Developed with support from
National Technical Support Unit (NTSU), Family Planning Division,
Ministry of Health & Family Welfare, Government of India