# IUCD Reference Manual for Nursing Personnel



Family Planning Division

Ministry of Health and Family Welfare
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#### भारत सरकार स्वास्थ्य एवं परिवार कल्याण मंत्रालय निर्माण भवन, नई दिल्ली - 110011

GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
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#### **FOREWORD**

The Government of India, as part of its commitment towards provision of quality spacing services in Family Planning, introduced CuT380A in 2002 with an effective protection for 10 years replacing the earlier CuT 200B. Yet the acceptance of Intra Uterine Contraceptive Device (IUCD) continues to remain below 2%, out of the total Couple Protection Rate of 48.5% for the use of any modern contraceptive method (NHFS-3). One of the objectives of National Population Policy 2000 is to address the unmet need for contraception. Achieving population stabilization, gender and demographic balance through universal access to equitable, affordable and quality health care, which is responsive to the needs of the people is the objective of the National Rural Health Mission and RCH II launched in 2005. The latest NHFS-3 data shows an unmet need of 6% for spacing methods with a marginal decrease of 1% in the last 7 years.

Some of the major reasons identified for the low acceptance of IUCDs are lack of correct and complete information, both among the providers and acceptors; the advantages are understated, the disadvantages tend to be exaggerated; many myths and misconceptions prevalent in the community and among the providers leading to non acceptance; low insertion skills of the service providers and above all limited access to skilled service providers. One of the reasons for low knowledge and skills on IUD provision among health providers have also been due to the low priority given to comprehensive skill development of health providers in their basic training.

The basic training books of doctors and paramedical workers also do not provide detailed information on IUCDs and both knowledge and skill training are mandatory requirements for quality provision of this service.

This "Reference Manual on the IUCD 380 A for the Nursing Personnel" has been prepared with the objective of bridging this gap in knowledge on IUCD 380A and facilitate in repositioning it in the National Family Welfare Program. All the nursing personnel including the Auxillary Nurse Midwives who continue to be the main service providers for IUCD services in our country could use this book not only as manual but also as a reference book on Copper IUCDs. The efforts of the Family Planning Division in the Ministry in developing this manual, which gives an extensive knowledge on IUCD, is commendable.

I hope this manual will go a long way in scaling up the acceptance of IUCDs all over the country.

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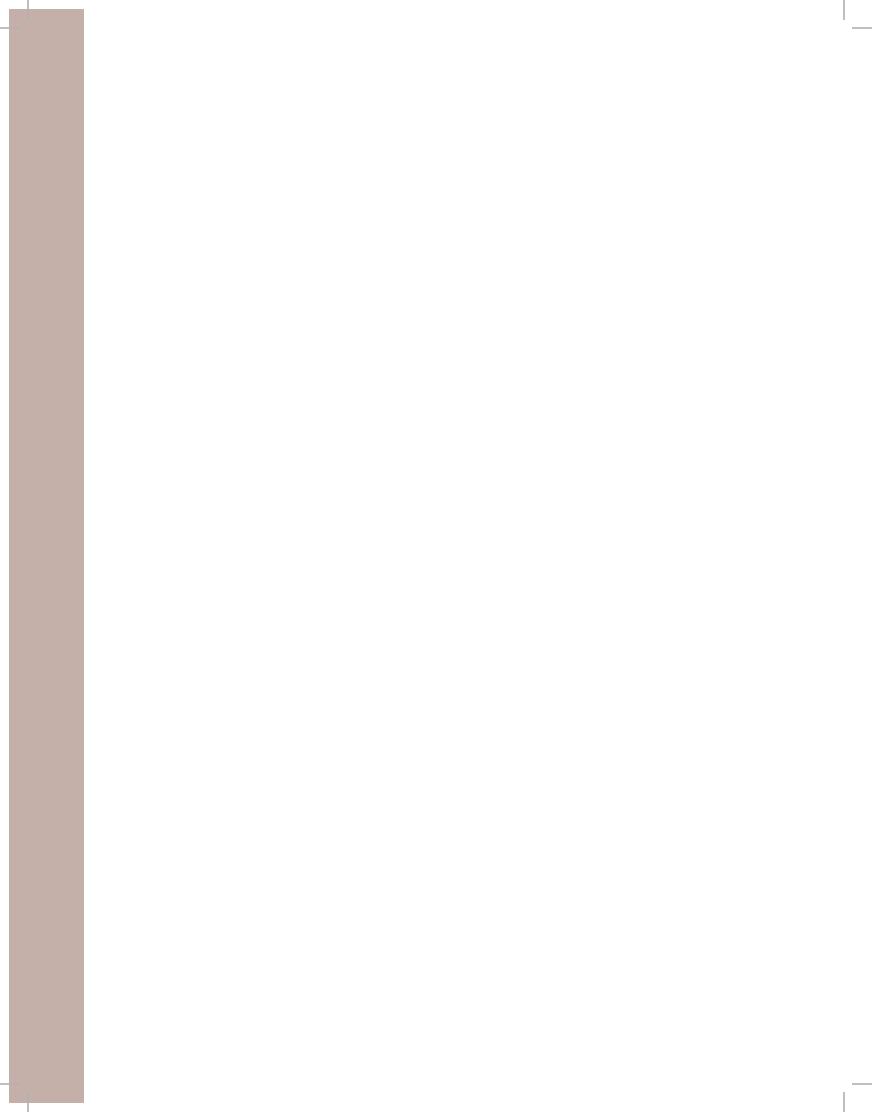
#### **ACKNOWLEDGEMENT**

A Manual on IUCD for Nursing Personnel has been developed as a new initiative from Government of India, as there has been a great felt need for such a manual among this section of service providers. The manual is a comprehensive book detailing the various aspects of IUCD service provision for the Nursing Personnel. This book is an expanded revision on the earlier 'Guidelines on IUCD insertion for ANMs', prepared by the division. It would also serve as a reference manual for the Nursing Personnel like the Staff Nurses, Lady Health Visitors and the Auxillary Nurse Midwives etc.

This endeavor has been made possible by the contribution of large number of professionals in this field. Shri Amarjeet Sinha, Joint Secretary in the Ministry has been a constant source of support and encouragement in bringing out this manual. The immense contribution of various experts in going over the manual minutely and repeatedly, though not mentioned individually, is acknowledged with deep gratitude. We are extremely thankful to various international bodies like USAID, JHPIEGO, WHO, UNFPA for their contribution in various forms. The contribution of USAID in printing the manual is deeply appreciated. WHO, UNFPA and Constella Futures have provided continuous technical inputs for which we are thankful to them.

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Dr. M.S. Jayalakshmi Deputy commissioner Family Planning Division



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# 1. Introduction

# 1.1. Background

India's population, which crossed one billion in 2000, is projected to reach 1.53 billion by 2050, making it the most populous country in the world. Women of reproductive age group (15-49 years) make up approximately 248 million. The Reproductive and Child Health (RCH) Program in India promotes responsible and planned parenthood through the Government's Family Welfare Program with voluntary use and free choice of contraceptive methods.

The current approach in Family Planning emphasizes on offering high quality contraceptive services among eligible clients on a voluntary basis. An important component of the program is promoting adequate spacing of births. The National Population Policy 2000 has recognized as its immediate objective the task of addressing the unmet need for contraception to achieve the medium term objective of bringing the Total Fertility Rate (TFR) to replacement level of 2.1 by 2010 so as to achieve the long-term goal of population stabilization by 2045.

As per NFHS –3, the contraceptive prevalence rate in India is 56.3 %, which varies widely among different states and the unmet need for family planning is high at 13% (6% for spacing).

Intrauterine Contraceptive Device (IUCD) is one of the most commonly used reversible methods of contraception among women of reproductive age worldwide. Results of recent studies and literature have confirmed that IUCDs provide very effective, safe and long-term protection against pregnancy and the health risks associated with the method are negligible.

#### 1.2. Global IUCD Usage

Recent estimates suggest that almost one in five married contraceptive users are currently using an IUCD because it:

- Offers highly effective, long-term protection against pregnancy, with prompt return to fertility upon removal;
- Is convenient—does not require daily action on the part of the user, or repeated clinic visits for supplies (Rivera et al. 2006).

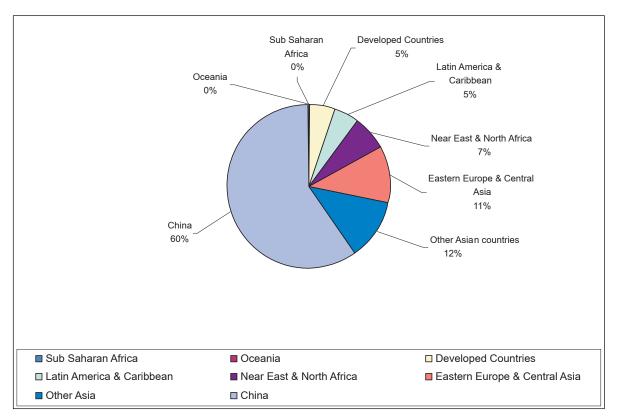


Figure 1.1 Global Use of IUCDs among Women of Reproductive Age.

Reference: Data Sources: World Bank, DHS, RHS, United Nations, US Census Bureau's International Database, and other nationally representative surveys

#### 1.3. IUCD use in the National Family Welfare Program of India

IUCDs in the form of Lippes Loop were introduced in the National Family Welfare Program of the Government of India (GOI) in 1965 and has always been considered an important spacing method. Based on the results of clinical trials conducted by the Indian Council of Medical Research in 1972, Copper T 200 B was introduced in the program in 1975. In 1997, ICMR conducted a comparative study between Copper T 200B and 380A based on which Copper T 380A was introduced in 2002, replacing IUCD 200B in the programme.

In India only 1.8% of married women of reproductive age use IUCDs, though the NFHS-3 has shown an increase in the net CPR to 56.3%. Despite the fact that the government offers IUCD services free of cost, it still remains largely underutilized.

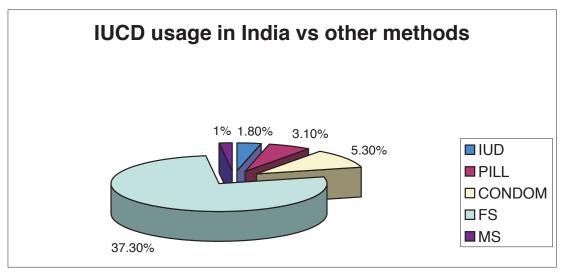


Figure 1.2 CPR contributed by use of any Modern Method (48.5%)

FS-Female Sterilization, MS-Male Sterilization Reference NFHS-3 (2005-06)

One of the main reasons that IUCD is under utilized in India is that many health service providers and potential clients lack accurate, up to date information about the IUCD. It is often found that the advantages are understated, the disadvantages tend to be exaggerated and many myths and misconceptions are prevalent in the community and among the providers too.

The high discontinuation rate is due to problems related to providers' knowledge and skills leading to improper selection of clients, poor counseling and lack of follow up, all resulting in poor quality of services.

There is an urgent need to address these programmatic concerns by improving infrastructure, updating guidelines that include evidence-based practices and increasing the pool of trained providers.

# 1.4. Purpose of this Manual

This manual seeks to ensure that all providers have the latest information on IUCDs and can provide high quality services that are safe and client centered. It is an attempt to revitalize the training aspect of IUCD services with a systematic plan of repositioning the IUCD in its rightful place in India's Family Welfare Program as a spacing method.

# 1.5. Target Audience

This training manual is meant for developing the knowledge and skills of the nursing personnel, who continue to be the main providers at the primary level of health care delivery, to provide quality IUCD services and thereby increase its acceptability by eligible couples. This will help to improve the continuation rates and lead to client satisfaction.

# 2. Overview of IUCD

#### 2.1. Basic Information on IUCD

The first IUCD was developed by Graffenberg in 1909. Subsequently, Jack Lippes developed the Lippes Loop in the 1960s, which became the best known and most widely used IUCD in developing countries. Currently many different types of IUCDs are being used all over the world. (refer Annexure 1)

#### Copper T 380A

The Copper T 380 A is one of the most widely used IUCDs in the world and is available in many countries. It is a T shaped device made of polyethylene and impregnated with barium sulfate for visibility on X-ray. It is 3.6 cm in length and 3.2 cm in width. As shown in Figure 2-1, there are small copper bands on eachhorizontal arm of the T, which ensure that copper is released high in the fundus of the uterus (Figure 2-2). The "vertical stem" is also wound with copper wire. A thin polyethylene string is attached to the bottom of the stem for easy removal. It is available pre packed with or without a loader (Figure 2.3).

Figure 2.1 CopperT 380A<sup>1</sup>

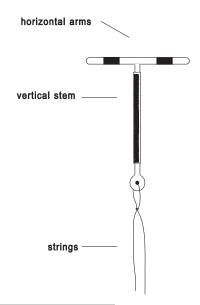
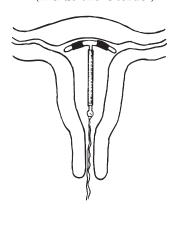


Figure 2.2 Copper T 380 A (Inside the Uterus<sup>1</sup>)



<sup>&</sup>lt;sup>1</sup> Source: The Population Council and the Program for Appropriate Technology in Health (PATH) 1989.

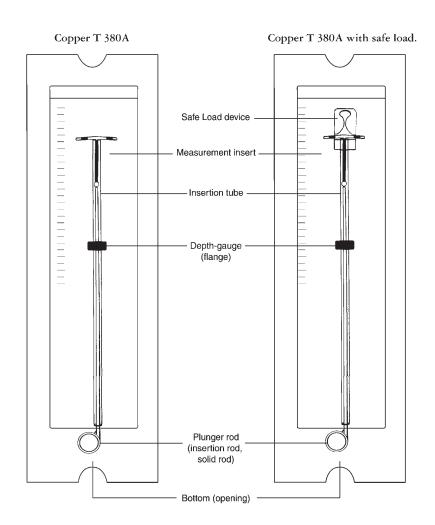


Figure 2.3: Copper T 380A and Copper T 380A with safe load.

The difference between Copper T 380A and the one with the safe load is only a small device at the top of the package to make loading IUCD in a sterile package easier. However, the information given in the manual applies to both Copper T 380A devices.

#### Basics of the Copper T 380A without safe load

The parts inside the package of a Copper T 380A are presented and labeled in Figure 2.3.

Key terminology is defined as follows:

- The clear insertion tube is used to guide the loaded IUCD through the cervical os and into the uterus.
- The white plunger rod (or insertion or solid rod) is held stationary while the insertion tube is pulled back to release the IUCD into the uterus (withdrawal technique).
- ♦ The blue length-gauge (or flange) is used to set the appropriate measurement (i.e., corresponding to the length of the uterus) on the insertion tube, and to ensure that the arms of the T unfold in the proper direction (i.e., along a horizontal plane) once they are released from the insertion tube.
- The measurement insert is used to set the blue length-gauge to the appropriate measurement on the insertion tube.

#### 2.2. Mechanism of Action

Copper-bearing IUCDs, such as the CuT 380A, act primarily by :

- Preventing fertilization (Rivera et al. 1999) as the copper ions decrease sperm motility and function by altering the uterine and tubal fluid environment, thus preventing sperm from reaching the fallopian tubes and fertilizing the egg.
- The device prevents implantation as it stimulates foreign body reaction in the endometrium that releases macrophages

#### 2.3. Effectiveness

The IUCD is a highly effective form of long-term, reversible contraception, with an associated failure (pregnancy) rate of less than 1% (0.8%) in the first year of use (Trussell 2004a). In a long-term, international study sponsored by the WHO, the average annual failure rate was 0.4% or less, and the average cumulative failure rate over the course of 12 years was 2.2%, which is comparable to that of tubal sterilization (United Nations Development Programme et al. 1997).

Effective Life: The effective life of Copper T380 A is 10 years from the date of insertion.

#### A Word about Shelf Life

It is important to note that the expiry date on the IUCD package refers only to the shelf life of the sterility of the package and not to the contraceptive effectiveness of the IUCD itself. This means that even if an IUCD is inserted on the day before the expiry date (provided the package is not torn or damaged), it is still effective for the full lifespan of contraceptive efficacy—a full 10 years from that date. On the expiry date the IUCD should be discarded.

#### 2.4. Return to Fertility

A woman's fertility returns promptly after an IUCD is removed (Andersson et al. 1992; Belhadj et al. 1986). This message should be made very clear to clients having an IUCD removed i.e. they should have another IUCD inserted immediately after removal (if desired and appropriate) or immediately start another contraceptive method unless they want to get pregnant.

#### A Word about Tarnishing

Sometimes the copper on copper-bearing IUCDs tarnishes (i.e., the color darkens), causing concern among providers about the safety and effectiveness of the affected IUCD. All available evidence suggests that tarnished IUCDs are safe and effective and can be inserted and used in the same way as untarnished IUCDs. Therefore, unless the IUCD package is torn or opened (or the shelf life has expired), a tarnished IUCD is still sterile, safe to use and effective.

#### 2.5. Advantages of Copper IUCD

- Offers long term, highly effective reversible protection against pregnancy.
- Is effective immediately after insertion.
- Can be used by any woman who meets the eligibility criteria for use.
- Can be used as an emergency contraceptive if inserted within five days of the first act of unprotected sexual intercourse.(Refer to Annexure 2 for details)
- It can be replaced, without any gap, as many times as she desires, during her reproductive life.
- Does not require daily attention from the user or special attention before sexual intercourse.
- One time procedure and is cost effective
- Can be used by lactating women
- Does not interact with any medicines the client may be taking.
- Fertility returns promptly on removal.

#### 2.6. Limitations

- Pelvic examination before IUCD insertion is mandatory which is not so for other spacing methods.
- Requires a skilled provider for insertion and removal of the device.
- Does not protect against STIs/ HIV
- ♦ Cannot be inserted in the women who currently have active RTI/STI

#### 2.7. Side Effects

Side effects of IUCD may be unpleasant but are not harmful and in most women these subside or resolve within a few months after insertion. Some women may experience the following:

- Menstrual changes: There may be increase in the duration/amount of menstrual bleeding or spotting or light bleeding during the first few days or months after insertion. These usually subside with symptomatic treatment.
- Discomfort or cramps during insertion and for the next few days which subsides in due course.

#### 2.8. Potential Health Risks

Potential health risks which are uncommon or rare, are discussed below:

- ◆ Uterine perforation during insertion is a rare complication which occurs in 0.5 1.5 per 1000 insertions and is associated with the level of provider's skill and experience (Trieman et al 1995). Most perforations are silent and may go undetected. (Penny et al 2004). (Management in Chapter 8)
- Spontaneous expulsion is about 2-8 %. (Trieman et al 1995) and is most likely to occur during the first three months after insertion, and during menstrual periods. Nulliparity, heavy menstrual flow and insertion immediately postpartum or after second trimester abortion increase the chances of expulsion (Zhang et al 1992).
- Infection following insertion is less than 1%. This minimal risk is highest during the first 20 days after insertion, especially if aseptic precautions have not been taken, rather than due to the device itself. (Reference-Hatcher et al 2004)
- If pregnancy occurs with the IUCD in situ, there is a risk of spontaneous abortion, sepsis and ectopic pregnancy; however, IUCD is not reported to be having any adverse effects on the fetus.

# 3. Counseling the Client

Counseling is defined as a helping process where a person (in this case skilled service provider) explicitly and purposefully gives his/her time, attention and skills to assist a client to explore their situation, identify and act upon solutions within the limitations of their given environment.

#### 3.1. Counseling vs. Health education

Though the terms are used interchangeably, they are not the same. They both aim to:

- Influence behavior
- Use two-way communication and
- Rely heavily on communication skills

(Please Refer to Textbox 3.1 and 3.2 for tips on Effective Counseling and Effective Education)

#### Differences between Counseling and Health Education are:

| Counseling   | Health education   |
|--|--|
| Coping process where the client is helped to decide or make a choice | Provide factual information about anything.                            |
| Initiated by the client seeking the service                          | Initiated by the educator  |
| Done in one to one situation in very small groups                    | Dissemination of information in smaller but preferably larger audience |

The Nursing Personnel at the PHC level can impart Family Planning Education during:

- Village health and nutrition days through ASHAs and AWWs
- Antenatal and postnatal sessions in the health facilities/ hospitals
- Post partum visits
- During home visits to families.

#### 3.2. Counseling vs. Motivation

A motivator highlights just the advantages to motivate the client to take decisions about the method that the provider promotes, while a counselor talks of both advantages and disadvantages and thus facilitates decision making by the client.

#### 3.3. Counseling for family planning:

Counselling is one of the critical activities under family planning services. Every client should be counseled to help decide to plan her/his family and to choose a method based on informed choice.

#### Wherever possible spouse/partners should also be counseled.

#### Effective Family Planning Counseling involves:

- Building a rapport with the client by greeting the client and making the client feel comfortable.
- Identifying the client's needs by asking relevant questions recognizing both verbal and non verbal gestures:
- Detailed probing may be needed about personal, social, family, medical, reproductive health including reproductive tract infections/STIs, family planning goals and past/current use of family planning methods to facilitate the client to take decision.
- Providing information to the clients on:
- Benefits of family planning focusing on specific benefits for the woman, the children and family.
- Various contraceptive methods including their mechanisms of action, their benefits and disadvantages and timing for initiation and follow up.
- Where to go for care if the health facility does not provide a particular method.
- Helping the client choose a method and assessing whether the method chosen is appropriate. If the chosen method is not appropriate, explain the reason and help choose another method.
- Providing method-specific information and providing the contraceptive.
- Discussing when to return for supplies, follow up and in case of problems.

Confidentiality and privacy must be ensured at all counselling sessions.

#### 3.4. The Counseling Process

Counseling is not an isolated event but an ongoing process that should be part of every interaction with the client. Family planning counseling can be divided into three phases:

- General family planning counseling (during the initial contact with the client): the client is provided basic information on a range of methods and assisted in choosing a method that is appropriate for her;
- Method-specific counseling (prior to and immediately following provision of the method chosen): the client is provided more detailed information about the method, as well as instructions on how to use it safely and effectively; and
- Follow-up counseling (during return visits): the client's satisfaction with the method is assessed, and any problems or concerns are discussed.

In case of a client who comes to the nursing personnel for IUCD insertion, counselling plays a vital role not just at the time of insertion but also in certain other situations like:

#### 3.4.1. Counselling a client who is being referred for insertion to a higher level provider (MO/Gynaecologist):

It is important to counsel a client who is being referred. If the client is accompanied by husband/relative, explain the reason for referral to them.

- i) Explain why the client is being referred.
- ii) Explain where to go for referral and what procedures will be done at the referral site.
- iii) Give a referral letter with details of history and physical findings and the reason for referral, also a request for feedback.
- iv) Accompany the client in case of perforation or any serious complication.
- iv) Instruct the client to report after returning from the referral site.
- v) If the client is reluctant for the referral, counsel for other methods of family planning.
- vi) Give a packet of condoms in case there is delay in referral. Instruct how to use condoms and make sure the client understands the same.
- vii) Record the referral.

#### 3.4.2. Counselling on return visit/follow up:

Every time a client comes for follow-up, it is important to counsel the client to ensure continuation of the method.

- Ask the client whether she and her spouse/partner are satisfied with the method.
- Ask about problems and if complains of side effects/problems manage them.
- iii) Assess the client by history and examination for any new conditions that are contraindications for the use of IUCD.
- iv) If the client wants to continue with the method, repeat reasons for contacting doctor/health worker and when to return for follow up.
- v) Record the findings and decision.

#### 3.4.3. Counseling a client whose IUCD is being removed:

It is important to counsel a client whose IUCD is being removed because of request by the client or because of contra-indications/complications. It is important to tell clients about immediate return of fertility after removal of IUCD.

- i) If the client wants another child. Provide information on antenatal care, care during delivery and post-partum family planning
- ii) If the client is requesting for removal of the IUCD due to side effects, which have persisted in spite of management of the problem, counsel for other methods of family planning.
- iii) If the client is removing the IUCD because of dissatisfaction with the method, counsel (repeat benefits and side effects). If still not convinced, counsel for other methods of family planning.
- iv) If the client develops conditions that are contra-indications for use of IUCD, counsel about other methods of family planning.
- Record the findings, removal of IUCD and advice.

Health personnel should have information about referred cases and contact all the referred clients either by requesting them to return to the clinic or by making home visits.

#### 3.5. ELEMENTS OF THE COUNSELING PROCESS

The GATHER approach is an acronym designed to help staff remember important points in an effective counseling session. This approach in practice, should be tailored to the woman's individual needs and circumstances and thus may follow a different sequence or require other techniques

#### GATHER means:

- G Greet
- A Ask
- T Tell
- H Help
- E Explain
- R Return visit/Refer

The GATHER technique is outlined in Table 3.1. Points that are specific to or especially relevant to potential IUCD clients are **highlighted**.

Table 3-1 The GATHER Technique

| STEPS     | POINTS OF DISCUSSION/ACTIVITIES   | RATIONALE                                       |
|-----------|---|---|
| GREET the | Greet the woman with warmth and respect   | Sets a positive tone                            |
| woman     | • Ask why she has come and what she hopes to get out of the session.  | Clarifies expectations and roles                |
|           | <ul> <li>Make sure she understands that you are here to help<br/>her choose a family planning method that is right for<br/>her (not choose one for her).</li> </ul> |   |
|           | • Encourage her to talk and ask questions.  | Lays the foundation for a productive counseling |
|           | ♦ Make clear that you want to listen.   | session   |
|           | • Explain that you need her to speak openly about some private/personal matters so that you can help.   |   |
|           | • Assure her that the meeting will be confidential.   |   |

| STEPS                 | POINTS OF DISCUSSION/ACTIVITIES   | RATIONALE  |
|-----------------------|---|--|
| ASK her about herself | <ul> <li>Ask about any previous experiences with family planning (methods used, reason for discontinuing, etc.).</li> <li>Assess partner/family attitudes about family planning (whether she has discussed this with them, whether they are supportive, etc.).</li> </ul> | Provides information<br>you need to assist her<br>in choosing a suitable<br>method |
|                       | • Ask about her reproductive goals (how many children she wants, desire for birth spacing, desire for long-term protection against conception, etc.).   | Shows client that her needs and desires are important                              |
|                       | Ask about her need for protection against STIs  |  |
|                       | • Ask whether she is interested in a particular family planning method.   |  |
|                       | Important: Explain that all sexually active persons should consider their individual risk for HIV and other STIs, and whether they should use condoms, alone or along with another method, for protection.  |  |

| STEPS                          | POINTS OF DISCUSSION/ACTIVITIES  | RATIONALE  |
|--------------------------------|--|--|
| TELL her about family planning | Tip: Use support materials such as diagrams, brochures, and actual samples of different methods to emphasize and illustrate points. Encourage the woman to handle the materials. Handling a sample IUCD may be especially important, as many women may be surprised to see how small it is.  | Provides information she needs to make an informed decision about which method is suitable for her |
|                                | <ul> <li>Provide general information about family planning, focusing on the method in which the woman is interested (if any) and any other methods that may be appropriate. Information covered may include:         Effectiveness of the method         Mechanism of action         Side effects         Health benefits and potential risks         Protection from HIV and other STIs         Cost and convenience         Accessibility/availability of supplies needed         Whatever else may be relevant to the client</li> </ul> |  |
|                                | • Correct any misconceptions the woman may have about the method(s) she is considering. (Ask whether she has any concerns about the method, what she has heard, etc.)  |  |
|                                | Tip: Tailor information to the woman's desires, as well as to her individual needs and situation-based on what you have learnt.  |  |
|                                | For guidance on correcting common myths and misconceptons about the IUCD, see Annexure 3.  |  |

| STEPS                       | POINTS OF DISCUSSION/ACTIVITIES  | RATIONALE   |  |
|-----------------------------|--|---|--|
| HELP her select<br>a method | <ul> <li>Help the woman choose a method. Do not decide for her.</li> <li>Assess her knowledge about the selected method by having her repeat key details back to you, and by asking her questions. For potential IUCD users, it is especially important that they understand that:</li> </ul>          | Helps the woman consider the method(s) discussed in terms of her own needs and circumstances  |  |
|                             | <ul> <li>Menstrual bleeding pattern changes are<br/>a common side effect associated with the<br/>method.</li> </ul>  |   |  |
|                             | ♦ The IUCD offers no protection against HIV or other STIs; clients who are at risk should also use condoms for protection.   | Alerts the potential IUCD user to aspects of  |  |
|                             | • Encourage her to ask questions and state any remaining concerns about the selected method.   | the method that may be of concern to some women  Prepares the potential IUCD user for the medical assessment and IUCD insertion procedure |  |
|                             | ♦ After a method is selected, the client will undergo the appropriate medical assessment to ensure that there are no medical reasons why she should not use the method. Potential IUCD users should know that this will involve a pelvic examination to screen for possible STIs and other conditions. |   |  |
|                             | • Once the appropriate medical assessment is completed, the chosen contraceptive method is provided, if appropriate. A potential IUCD user should know that this will involve a minor procedure to insert the IUCD into her uterus.  |   |  |
|                             | ♦ Immediately before the IUCD insertion procedure, the client should receive preinsertion counseling.  |   |  |

| STEPS                        | POINTS OF DISCUSSION/ACTIVITIES  | RATIONALE  |
|------------------------------|--|--|
| EXPLAIN how to use the meth- | Immediately after the IUCD is inserted the client should receive post insertion instructions   | Provides information she needs to use the method   |
| od                           | Explain how to use the method, what to do if she experiences any problems or side effects, and provide any other basic information needed. For IUCD users, special emphasis should be given to menstrual bleeding changes, and the need for condoms to protect against STIs. | safely and effectively   |
|                              | Provide information on warning signs that indicate the need to return to the clinic immediately. For IUCD users, symptoms of infection, expulsion, and pregnancy are among such warning signs.   |  |
|                              | Provide specific return visit instructions. Be sure the woman knows where to go if she has problems, or whom to contact if she has questions. IUCD users should have a routine checkup after their first menstruation (in 3 to 6 weeks).                                     |  |
|                              | Ask the client to repeat all instructions.   |  |
|                              | • Encourage her to ask questions and state any remaining concerns.   |  |
|                              | • Provide additional information and reassurance as needed.  |  |
| RETURN VIS-                  | Assess client satisfaction.  | Provides information she   |
| IT/ REFER                    | • Check for concerns or problems. For IUCD users, emphasis is placed on menstrual bleeding changes, use of condoms to protect against STIs, and warning signs. (They also have a pelvic examination to check for infection and expulsion.)                                   | needs to continue using<br>the method safely and<br>effectively (or discon-<br>tinue using, as appro-<br>priate) |
|                              | • Reinforce client instructions for use of the selected method.  |  |
|                              | • Provide appropriate follow-up for any problems identified.   |  |
|                              | Refer the woman if needed.   |  |



# 4. Medical Eligibility Criterria (MEC) for IUCD

To provide quality care by properly selecting the clients as well as to promote use of IUCD among women World Health Organization (WHO) has come up with the Medical Eligibility Criteria which describes diverse conditions in which the women can and cannot use an IUCD. WHO's four-category system is intended to be used in the context of clinical judgment.

Category 1: Use the Method

Category 2: Generally use the method.

Category 3: Use of method not usually recommended unless other more appropriate methods are not available or acceptable.

Category 4: Method not to be used.

This has been adapted and modified according to the Indian situation, based on the skills, knowledge and availability of resources in our health delivery system. The modified four category system is placed below.

Category 1: gives the eligibility conditions for insertion by nursing personnel.

Category 2: gives the eligibility criteria for insertion by Medical Officer

Category 3: gives the eligibility criteria for insertion by gynecologist

Category 4: Conditions which are absolutely contraindicated for insertion of IUCD.

Thus according to the 4 category system, conditions in which IUCD insertion can be performed by nursing personnel are stated as follows:

| Category 1: Use the  | Category 2: Generally use the   | Category 3: Use of method not  | Category 4: Method not to be used.  |
|--|---|--|---|
| Method   | method.   | usually recommended unless   |   |
|  |   | other more appropriate methods   |   |
|  |   | are not available or acceptable.   |   |
| NURSING  |   | L OFFICER AND CAT 3 TO   | DONOT INSERT  |
| PERSONNEL CAN  |   | DLOGISTS   | (ABSOLUTE   |
| INSERT   | `   | TRAINDICATIONS)  | CONTRAINDICATIONS)  |
| <ul> <li>Any woman in her reproductive age group who has borne a child, wanting to space or prevent pregnancy</li> <li>Post menstrual insertion any time in the cycle after reasonably excluding pregnancy. See Annexure 4 for details</li> <li>More than 6 weeks postpartum provided there is no evidence of infection.</li> <li>Women having Lactational Amenorrhea after reasonably excluding pregnancy</li> <li>Following first menstrual period after induced/spontaneo us abortion.</li> <li>As emergency contraception</li> <li>Genital infections with mild nonpurulent discharge to be inserted and treated simultaneously (e.g., bacterial vaginosis, candida albicans, trichomoniasis). See Annexure 5 for diagnosis and management of common RTI/STIs in India*</li> </ul> | Women who are less than 20 years of age (and nulliparous) or are nulliparous, as there is a slightly greater risk of expulsion due to the smaller size of the uterus.  Women with heavy/prolonged or painful menstruation, endometriosis, or severe dysmenorrhea,  Women who are immediately following a second-trimester abortion (spontaneous or induced), provided there is no evidence of infection. However, the IUCD should be inserted only by a specially trained provider (because of the increased risk of expulsion).  Women who are less than 48 hours postpartum, provided there is no evidence of infection. However, the IUCD should be inserted only by a specially trained provider (because of the increased risk of expulsion).  Women who have anatomical abnormalities of the reproductive tract that do not distort the uterine cavity in a way that might interfere with IUCD insertion or placement (e.g., cervical stenosis).  Women who have STIs other than gonorrhea or chlamydia (e.g., herpes, syphilis).  Women who have a history of PID without a subsequent pregnancy (assuming there are no known current risk factors for STIs).  Women who have AIDS, are on ARV therapy, and are clinically well. | Women with benign trophoblastic disease. Women who have ovarian cancer should not have an IUCD inserted (although they are Category 2 for continuation). Women who have a high individual risk for gonorrhea or chlamydia should not have an IUCD inserted (although they are Category 2 for continuation). Women who have AIDS but are not on ARV therapy should not have an IUCD inserted (although they are Category 2 for continuation). | Women who have infection or signs/symptoms of infection within 6 weeks postpartum (puerperal sepsis), or immediately following an abortion (immediate post-septic abortion).  Women with malignant trophoblastic disease.  Women with cervical or endometrial/uterine cancer should not have an IUCD inserted (although they are Category 2 for continuation while awaiting evaluation).  Women who have anatomical abnormalities of the reproductive tract or uterine fibroids that distort the uterine cavity in a way that might interfere with IUCD insertion or placement.  Women who have pelvic tuberculosis.  Women with unexplained vaginal bleeding should not have an IUCD inserted (although they are Category 2 for continuation while awaiting evaluation).  Women who have current PID, purulent cervicitis, chlamydia, or gonorrhea should not have an IUCD inserted (although they are Category 2 for continuation while awaiting evaluation or undergoing treatment.) |

- History of Pelvic Inflammatory Disease (PID) with subsequent pregnancy (assuming there known are no current risks for STIs) \*
- Women who have breast disease, including cancer.
- Viral hepatitis or malaria.
- Controlled diabetes, "uncomplicated" valvular hypertension, valvular heart disease.\*
- Women who smoke or are obese.

\*INSERT WITH CAUTION/ REFER

- valvular heart disease (e.g., artificial shunts, rheumatic heart disease), although prophylactic antibiotics are advised for IUCD insertion to prevent endocarditis.
- Women with anemia (including thalassemia, sickle cell disease, and iron-deficiency anemia), although there is some concern about increased menstrual blood loss with copper-bearing IUCDs. and thus in these conditions should be given iron supplements. Those with  $I^{st}$  and  $2^{nd}$  degree
- uterine prolapse
- Those with Rectovaginal fistula
- Immediately following a firsttrimester abortion (spontaneous or
- Benign ovarian tumors (or cysts) or uterine fibroids that do not distort the uterine cavity.
- Women with a history of ectopic pregnancy



# 5. Client Assessment

Careful client assessment is necessary to provide quality health care and family planning services. This chapter focuses on identifying characteristics and conditions that may affect a woman's eligibility for Copper IUCD use.

Key objectives of assessment of potential IUCD clients are to:

- Ensure that the woman is not pregnent.
- Determine the length and direction of uterus (for IUCD insertion)
- Ensure that she does not have Gonorrhea and Chlamydia, and is not at a high individual risk of these STIs
- Identify other characteristics or conditions that may affect her eligibility for IUCD use
- Identify any other problems that may require further assessment or treatment

#### 5.1 History

History should be taken very carefully and should include the following:

#### Contraceptive history:

Past experience with family planning, desire for spacing, or long-term contraception

Last method used and enlist causes of discontinuation

Previous use of CuT and any Side effects experienced

#### Menstrual history:

Date of last menstrual period.

Periods – regular or irregular, flow excessive or normal/painful or not.

Bleeding/spotting between periods or after intercourse.

#### Obstetric history:

Details of deliveries and abortions/Medical Termination of Pregnancy.

Details of post partum period(6 weeks post delivery)

Recent history of postpartum/post-abortion infections.

Details of breast-feeding.

#### Reproductive/ sexual history:

History of intertility, ectopic pregnancy, vasicular mole.

History of pelvic infections or sexually transmitted diseases (abnormal vaginal discharge, lower abdominal pain).

History of pelvic tuberculosis and genital tract cancer.

#### Medical history (general):

History of any medical illness/abdominal /pelvic surgery

If history of any contra-indicated condition, do not insert the Copper T.

#### 5.2 Physical Examination

After history taking, conduct a focused physical examination that should include:

#### General and systemic examination

- Check for pallor, pulse rate and blood pressure
- Check for lower abdominal tenderness and masses

#### Pelvic examination (this includes):

- External genitalia examination
- Bimanual examination
- Speculum examination of the vagina and cervix

NOTE: Normally, a speculum examination is completed before the bimanual examination. However, in most IUCD clients, this would mean two speculum insertions (one for the speculum examination; another, after the bimanual examination, for IUCD insertion), which can be unpleasant for the woman. The following guidelines have been developed especially for the IUCD client:

- If findings from the history and visual inspection are normal (infection is not suspected), perform the bimanual examination first and the speculum examination second; then, with the speculum still in place, proceed directly to sounding the uterus and IUCD insertion.
- If findings from the history or visual inspection are not normal (infection is suspected), perform the speculum examination first and the bimanual examination second. Proceed to sounding the uterus and IUCD insertion only if indicated.

#### Pelvic examination:

#### Preparation:

- Ensure that the equipments and supplies for pelvic examination are ready.
- Ensure client's privacy.
- Explain the various procedures to the client and continue to explain before each step.
- Ask the client to empty her bladder and lie down on the table on her back with knees flexed.
- Wash and scrub hands. Alternately one could do an alcohol rub. (Details of both given in Infection Prevention Chapter in Textbox 7.1)
- Wear sterile/ HLD gloves taking care that the outer side of gloves does not get contaminated.
   (Refer to Annexure 9.A. for correct technique of wearing gloves)

#### External genitalia examination:

Inspect the external genitalia: labia majora, minora and introitus for redness, patches, ulcer, growth, warts, swelling and discharge.

Do not insert IUCD in presence of infection. Refer to Medical Officer or a specialist.

#### Bimanual examination:

Perform bimanual examination as follows:-

- Separate the labia.
- Introduce two fingers of the right hand into the vagina and put the other hand on the

abdomen above the pubic symphysis.

- Using the two fingers in the vagina, follow the anterior vaginal mucosa into the anterior fornix and locate the cervix.
- Feel the cervix for consistency, mobility, tenderness on movement irregular or hard area on the cervix and any bleeding to touch.

Do not insert if the movement of the cervix is painful as it is indicative of PID or if the cervix is not mobile or hard or bleeds to touch, it may be indicative of cervical pathology. In such cases refer to Medical Officer or specialist.

Using the fingers placed on the lower abdomen, gently apply pressure downward above the pubic symphysis to steady the pelvic organs. Place the fingers in vagina anterior to the cervix and feel the uterus between the fingers of both hands as shown in Fig 5. If the uterus is anteverted (lies anterior to the cervix), the entire uterus will be felt between both the hands. If the uterus is not palpated anteriorly, then the uterus may be retroverted.

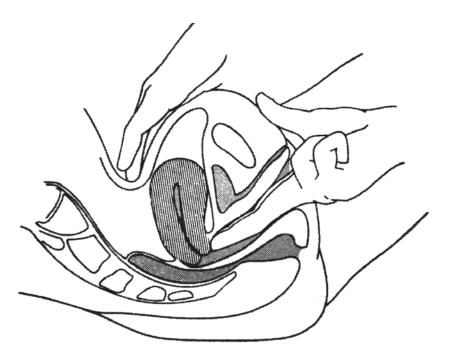


Fig. 5 Bimanual examination for anteverted uterus

• If the uterus is not felt anteriorly, then place the fingers in the vagina posterior to the cervix as shown in Fig 6. A retroverted uterus is readily felt in the posterior fornix. In such cases, the cervix usually points forwards.

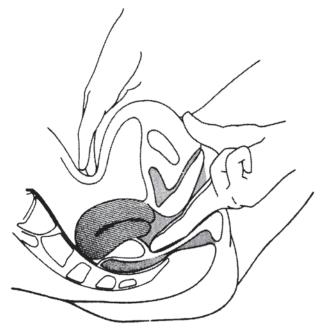


Fig 6. Bimanual examination in case of retroverted uterus

• Continue the pelvic examination to determine the size, shape, consistency and mobility of the uterus.

Do not insert the IUCD if the uterus is enlarged, irregular, soft or not mobile as it may be due to pregnancy or some pathology. Refer to Medical Officer or a specialist.

- Feel the adenexa for ovary and fallopian tube as follows:
- Move the fingers over the abdomen to one side of the uterus and both the fingers in the vagina to the lateral fornix on the same side as shown in Fig.7. Press the adenexa towards the fingers and with the fingers in the vagina gently feel for any mass or thickening or tenderness along the side of the uterus. Repeat the same on the other side.

Do not insert the IUCD if there is any tenderness or mass in the adenexa as it is indicative of PID. Refer to medical officer or a specialist.

• If not proceeding to insert IUCD put the speculum for decontamination and sterilization. Wash the gloved hand and remove the gloves. Put the gloves for decontamination and sterilization. Wash hands after removing the gloves.



Fig 7. Palpation of the adnexa

#### Speculum examination:

Do a speculum examination as follows:

- Clean the introitus with antiseptic solution.
- Separate the labia and insert speculum so that the blades slip into the vaginal canal. When the blades are halfway, turn them to the horizontal position. In case of Cusco's speculum, gently open the blades to find the cervix, taking care not to injure any tissue. In case of Sim's speculum, use the anterior vaginal wall retractor to visualize the cervix. The ANM can seek help from the AWW or any other paramedical female staff in case she is using the Sim's speculum. Apply little downward pressure on the posterior (lower vaginal) wall and gently move the speculum further closer to the cervix. The view is as given in Fig 8.
- Inspect the vagina and cervix for ulcer, abnormal discharge, cysts, polyp, growth and bleeding sites

Do not insert the Copper T if any of the above are present. Refer to Medical Officer or a specialist. Counsel as in Section 2

• Remove the speculum by turning the blades obliquely (close the speculum first in case of Cusco's) and keep in the sterile kidney tray.

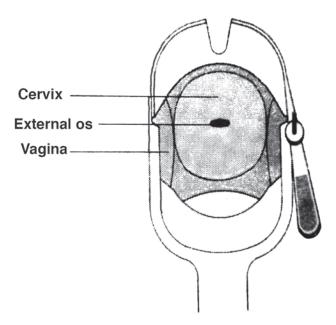


Fig. 8 View on speculum examination

#### Laboratory tests:

It is advisable to get hemoglobin of the client estimated.

#### Record:

Record the findings in the IUCD case record, register and follow-up card.(see Annexure 11 & 12)



# 6. IUCD Insertion and Removal

# 6.1. Background

IUCD insertion and removal procedures are simple and need to be learnt properly. There are several, discrete steps to be performed in a specific sequence, as detailed in this chapter. These steps must be integrated with the appropriate infection prevention and counseling measures to help ensure the safety and well being of the woman.

Key objectives of IUCD insertion and removal services are to:

- Perform IUCD insertion and removal procedures properly in a manner that is safe and as comfortable as possible for the woman
- Provide the woman with information she needs to ensure safe and effective use of the IUCD (or to discontinue the method/switch to another method, if appropriate)

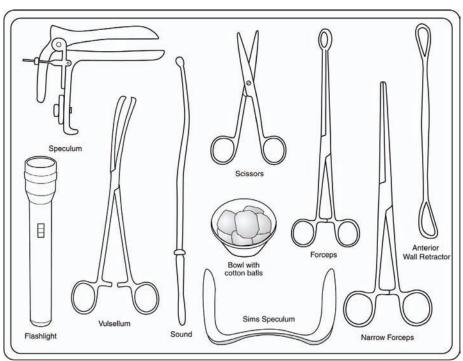
# **6.2.** Physical Requirement

#### Equipment and Supplies recommended for IUCD insertion

- Examination table with clean cover
- Drape Linen/ cloth to cover the woman's pelvic area
- Cheatle's forceps
- Sponge holding forceps
- Sim's/Cusco's speculum
- ♦ Anterior vaginal wall retractor
- Volsellum/Allis forceps
- ♦ Uterine sound
- ♦ Long Sharp cutting scissors (Preferably curved 7-8" long)
- Long artery straight forceps (for IUCD removal)
- ♦ Kidney tray

- Stainless Steel (SS) tray with cover
- Gloves (high-level disinfected surgical gloves or examination gloves)
- Dry gauze or cotton swabs
- Stainless Steel Bowls -2
- Antiseptic solution (chlorhexidine or povidone iodine)
- Plastic bucket for decontamination
- Clean sanitary pads
- Autoclave/Steriliser/Boiler/Container with lid for boiling
- Light source sufficient to visualize cervix (e.g., flashlight)
- IUCD (in an unopened, undamaged, sterile package that is not beyond its expiry date and has been stored in a cool dry place.)

Figure 6.1 Basic Minimum Instruments for IUCD insertion



#### **6.2.1.** Timing of the Insertion

- Anytime during the menstrual cycle provided the service provider is reasonably sure that woman is not pregnant.
- Immediately or within 48 hours after delivery (by a provider who is trained in inserting IUCDs during this time) or more than 6 weeks post partum.
- Concurrently with 1st trimester medical termination of pregnancy.
- After 1st menstrual period following spontaneous/medical/second trimester abortion
- In a woman with Lactational amenorrhea provided pregnancy can be ruled out (Annexure 4).
- Within 5 days of unprotected sex as an emergency contraception (Annexure 2).

#### **6.2.2.** Place of Insertion

IUCD could be inserted at subcenter, primary health center, community health centers or hospital facility by a trained health care provider.

# **6.2.3.** Appropriate Setting for IUCD services

An examination room in an outpatient clinic or a minor surgery room in a hospital is a suitable setting for IUCD insertion or removal. If possible, the room should be located away from heavily used areas of the facility, offer privacy, and:

- Contain an Examination or procedure table with a washable surface
- Be adequately lit and well-ventilated (with tight-fitting screens on any open windows)
- Be clean, orderly, free of dust and insects
- Have tile or concrete floors to facilitate cleaning
- Provide leak-proof containers (with tight-fitting lids) or plastic bags for disposal of contaminated waste items
- Have nearby hand washing facilities, including a supply of clean water (i.e., clear, not cloudy or with sediment)

## 6.2.4. Appropriate Attire for Clients and Staff

IUCD insertion and removal are minor procedures, therefore:

- Clients can wear their own clothing.
- It is not essential for staff members to wear a cap, mask, or gown.

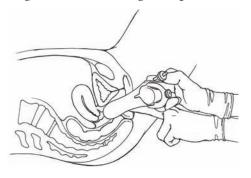
# 6.3. Steps in IUCD Insertion

#### Step 1: Prepare the client:

- Give the woman a brief overview of the procedure, encourage her to ask questions, and provide reassurance as needed.
- Remind her to let you know if she feels any pain.
- Confirm that the woman has undergone appropriate counseling and assessment to ensure she is eligible for IUCD insertion at this time.
- If the woman has serious concerns about discomfort, offer her an NSAID, such as paracetamol /ibuprofen /mefenemic acid /dicyclomine 30 minutes before the procedure
- Conduct the physical examination as already explained in Chapter 5 and if the client is eligible for the use of CuT, using gentle, "no-touch" (aseptic) technique throughout, perform the subsequent steps.

Step 2. Keeping the already inserted high-level disinfected (or sterile) speculum in the vagina Figer 6.2 proceed to the next step as shown in Fig 6.3.

Figure 6.2 Inserting the Speculum



#### Step 3: Cleanse the cervix and vagina with an appropriate antiseptic:

Thoroughly apply an appropriate antiseptic (e.g., povidone iodine or chlohexidine) two or more times to the cervix and vagina starting with the cervical canal. If povidone iodine is used, ensure that the woman is not allergic to iodine and wait 2 minutes for the solution to act.

Step 4: Gently grasp the anterior lip of cervix with the high-level disinfected (sterile) volsellum and apply gentle traction: (i.e., pull gently), which will help straighten the cervical canal for easier insertion of the IUCD. Close the volsellum *only to the first notch* to minimize discomfort. (fig 6.3)

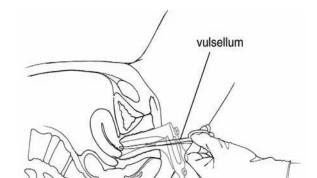


Figure 6.3 Gently Grasping the Cervix with the Volsellum

Step 5. Carefully insert the high-level disinfected (or sterile) sound: While maintaining gentle traction on the volsellum, carefully insert the tip of the sound into the cervical os. Hold the sound between the finger and thumb, the curve of the sound facing upward in case of anteverted uterus and backwards in case of retroverted uterus (fig 6.4 & 6.5). Be careful not to touch walls of vagina or the speculum blades with the tip of the sound.

Fig. 6.4 Sounding an anteverted uterus

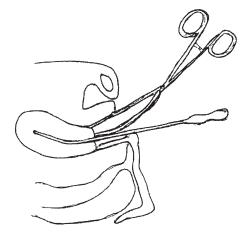
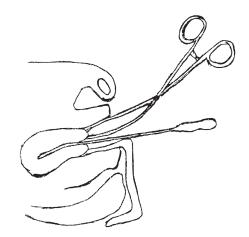


Fig. 6.5 Sounding a retroverted uterus



# Step 6. Gently advance the sound into the uterine cavity, and STOP when a slight resistance is felt:

- Advance the sound carefully and gently into the uterine cavity at the appropriate angle (based on your assessment of the position of the uterus during bimanual examination).
- Continue to pull steadily downward and outward on the volsellum, which should enable the sound to pass through the os more easily
- If any resistance is felt at the level of the internal os, use a smaller sound, if available. Do not attempt to dilate cervix
- If the woman begins to show signs of fainting, STOP advancing the sound into the uterine cavity.
- When you feel a slight resistance, STOP advancing the sound into the uterine cavity. (A slight resistance indicates that the tip of the sound has reached the fundus.)

#### Do not use force at any stage of this procedure

• If a sudden loss of resistance is felt, the uterine length is greater than expected, or the woman is experiencing unexplained pain, STOP advancing the sound into the uterine cavity.

#### Do not pass the sound into the uterus more then once

#### Step 7. Determine the length of the uterus:

• Determine the length of the uterus by noting the level of mucus or wetness on the sound. (The average uterus is between 6 and 8 cm in length. If the uterus is less than 6.5 cm in length, the woman may be at increased risk for IUCD expulsion.)

**Step 8** Determine the angle /direction of the uterine cavity and also rule out any obstruction in the cervical canal.

• Place the sound in 0.5% chloring solution for 10 minutes for decontamination.

#### Step 9. Loading the IUCD in its Sterile Package

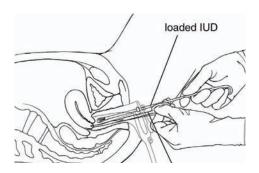
#### Brief overview of the procedure:

- Partially open the package.
- Place the plunger rod in the insertion tube.
- Place the "arms" of the "T" inside the insertion tube.
- Set the length-gauge.
- Align the length-gauge and folded arms of the T to horizontal position.
- Remove the IUCD from the package.
- Rationale: This simple but critical step prevents the IUCD from being contaminated before it is inserted, further reducing the risk of post insertion infection.
- Refer to Annexure 7 for detailed steps for loading Regular Cu T 380A.

#### Step 10. Keep communicating with the client to keep her comfortable

Step11. Apply gentle traction on the carvix with the volsellum: Hold the loaded IUCD with one hand so that the blue length-gauge is in the horizontal position, while grasping the volsellum (still in place after sounding the uterus) with the other hand and gently pull outwards and downward. (This will help straighten the cervical canal for easier insertion of the IUCD.)

Figure 6.6 Inserting the Loaded IUCD

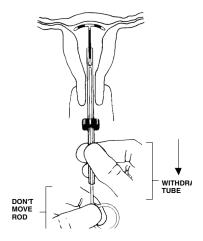


Step 12. Insert the loaded IUCD: Carefully insert the loaded IUCD into the vaginal canal (Figure 6.6), and gently push it through the carvical os and into the uterine cavity at the appropriate angle (based on your assessment of the position of the uterus when sounding the uterus). Be careful not to touch the walls of the vagina or the speculam blades with the tip of the loaded IUCD.

Step 13. Gently advance the loaded IUCD into the uterine cavity, and STOP when the blue length-gauge comes in contact with the cervix or slight resistance is felt. (Fogure 6.6) Be sure that the blue length-gauge is still in the horizontal position.

Step 14. While holding the volsellum and plunger rod stationary (in one hand), withdraw the insertion tube downwards (with your free hand) until it touches the circular thumb grip of the white plunger rod (Figure 6.7). (This will release the IUCD in the woman's uterus.) This is the withdrawal technique to minimize perforation.

Figure 6.7 Withdrawing the insertion tube to release IUCD arms



Step15. Remove the white plunger rod, while holding the insertion tube stationary. The plunger should be removed before the insertion tube is pulled out, otherwise the threads may be caught between the tube and the plunger resulting in downward displacement or expulsion of the IUCD from the uterus.

Step 16. Gently push insertion tube: Once the plunger rod has been removed, very gently and carefully push the insertion tube upward again, toward the fundus of the uterus, until you feel a slight resistance (Figure 6.8a). (This step ensures that the arms of the T are as high as possible in the uterus, as shown in Figure 6.8b.)

Figure 6.8a Positioning IUCD high in the uterus

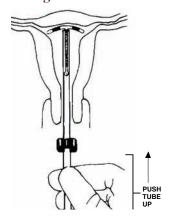
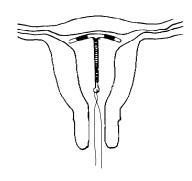


Figure 6.8b IUCD fully inserted in uterus



Step 17. Use high-level disinfected (or sterile) sharp scissors to cut the IUCD strings at 3 to 4 cm of length:

- Partially withdraw the insertion tube from the cervical canal until the strings can be seen extending from the cervical os, and use sharp scissors to cut the strings at 3 to 4 cm from the cervical opening. (This technique ensures that the pieces of cut-off string will stay in the insertion tube for easy disposal.)
- Place the insertion tube and scissors in 0.5% chlorine solution for 10 minutes for decontamination.

Step 18. Gently remove the volsellum with open ends and place it in 0.5% chlorine solution for 10 minutes for decontamination.

Step 19. Examine the woman's cervix for bleeding: If there is bleeding where the volsellum was attached to the cervix, use high-level disinfected (or sterile) forceps to place a cotton (or gauze)

swab on the affected tissue, and apply gentle pressure for 30 to 60 seconds and ensure to remove the cotton after the bleeding stops.

Step 20. Gently remove the speculum and place it in 0.5% chlorine solution for 10 minutes for decontamination.

Step 21. Allow the woman to rest. Advise the woman to remain on the examination table for 5-10 minutes since occessionally a fainting spell may occur on getting down from the table immediately after insertion. Begin performing the post-insertion steps (below) while she is resting.

Refer to Annexure 8 for Key messages for clients after IUCD insertion

#### **6.3.1.** Post insertion Processing

Before removing your gloves:

Place all used instruments in 0.5% chlorine solution for 10 minutes for decontamination if not already done.

Dispose off waste materials (e.g., cotton balls) by placing them in an appropriate container (with tight-fitting lid) or plastic bag.

Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out.

If disposing of the gloves, place them in an appropriate plastic bag.

If reusing the gloves (not recommended), submerge them in 0.5% chlorine solution for 10 minutes for decontamination.

Wash your hands thoroughly with soap and water; dry them with a clean, dry cloth or allow them to air dry.

After the client has left, wipe the examination table with 0.5% chlorine solution to decontaminate it. Change the linen with every client, if feasible.

Ensure that all instruments, gloves, and other reusable items are further-processed according to recommended infection prevention practices.

#### **6.3.2.** Post insertion Assessment

- Ask the woman how she is feeling, and whether she is experiencing any of the following symptoms: lower abdominal pain/cramping, dizziness or fainting (rare)
- If the woman is experiencing any of these symptoms, provide reassurance and allow her to remain on the examination table to rest until she feels better.

#### Do's and Dont's about IUCD insertion:

In case of IUCD insertion by nursing personnel, these are the essential tips that should be borne in mind before carrying out the procedure in order to ensure quality in this service provision.

| Do's:   | Don'ts:  |
|---|--|
| Explain the safety of the IUCD.                 | Do not insert the IUCD if there is a suspicion of pregnancy.                       |
| Explain the reversibility of IUCD.              | Do not insert the IUCD if menstrual periods are excessive or very irregular.       |
| Counter rumours about IUCD.                     | Do not insert the IUCD if there are signs of moderate to severe pelvic infection   |
| Insert the IUCD any time during the             | Do not insert the IUCD if there is history of septic abortion/puerperal sepsis in  |
| menstrual period after reasonably               | the last 3 months.   |
| excluding pregnancy                             |  |
| Follow strict infection prevention              | Do not insert the IUCD if there is suspicion of tumor.                             |
| procedures while inserting/ removing IUCD.      |  |
| Always do a pelvic examination before.          | Do not insert the IUCD if uterine length is less than 6 centimeters or more than 9 |
| inserting the IUCD                              |  |
| Use 'No touch technique' when loading           | Do not insert the IUCD if any of the contents of the package become                |
| the IUCD.                                       | contaminated prior to insertion, discard the package and use a new IUCD package.   |
| Uterine sound should be used to measure         | Do not keep the loaded IUCD in the inserter tube for more                          |
| the length of the cavity of the uterus and the  | than five minutes before insertion.  |
| blue flange must be adjusted accordingly.       |  |
| The blue flange should be in the same plane.    | Do not push the plunger to insert the IUCD but apply the withdrawal technique.     |
| as the plane of the uterus                      |  |
| Pull the plunger completely out of the          | Do not remove the plunger and inserter tube together.                              |
| inserter tube before removing it from the       |  |
| uterus.   |  |
| Tell the client what to do in case of bleeding, |  |
| pain or expulsion of the IUCD.                  |  |
| Reassure the client about mild side effects.    |  |
| Schedule the return visit.                      |  |
| Attend sympathetically to every complaint       |  |
| and invite queries and clear the doubts.        |  |
| Maintain complete records.                      |  |

#### 6.4. IUCD Removal

IUCD removal is usually an uncomplicated and relatively painless routine procedure. Unless an IUCD is removed for a medical reason or because the woman wishes to discontinue the method, a new IUCD can be inserted immediately after removing the old one, if she so desires. Appropriate assessment and care, before and after the procedure, depend on the reason for IUCD removal, and whether the woman is having another IUCD inserted or is starting a different method. Note also that pre-procedure preparations and post-procedure processing steps are essentially the same as for IUCD insertion, and are not repeated here.

#### **6.4.1.** Indications for IUCD removal

Personal reasons (or offers no reason at all) The woman has a right to discontinue the method at any time, regardless of the reason.

Wants another child provide information on antenatal care, care during pregnancy, labor and delivery.

IUCD to be replaced (i.e., at the end of its effective life of 10 years or before if she desires) - ensure that she has undergone appropriate assessment to determine whether she is eligible for IUCD reinsertion at this time.

Medical reasons (e.g., pregnancy, heavy menstrual bleeding) - ensure that she has undergone the appropriate assessment to determine whether routine IUCD removal is safe for her at this time. Refer if needed.

Starting a different method ask when her LMP began. This will help her choose an appropriate back-up method. (refer Text Box 6.2)

#### Menopause

Evidence of IUCD displacement

# Ensure that she understands the following key points about having her IUCD removed, as appropriate:

"She can get pregnant immediately after IUCD removal."

"If she does not want to become pregnant, she should immediately have another IUCD inserted or start another contraceptive method."

"No rest period is needed between IUCDs."

#### 6.4.2. Equipments and supplies

• All the equipments and supplies as used for insertion

#### 6.4.3. Steps for IUCD Removal

Using gentle, "no-touch" (aseptic) technique throughout, perform the following steps to remove IUCD:

#### STEP 1: Prepare the client:

- Give the woman a brief overview of the procedure, encourage her to ask questions, and provide reassurance as needed.
- Remind her to let you know if she feels any pain.

#### STEP 2: Put clean/ high-level disinfected gloves on both hands.

# STEP 3:Insert a high-level disinfected (or sterile) speculum and visualize the cervix and the IUCD strings.

• If the strings cannot be seen, manage as Missing Strings.

#### STEP 4: Cleanse the cervix and vagina with an appropriate antiseptic:

Thoroughly apply an appropriate antiseptic (e.g., povidone iodine or chlohexidine) two or more times to the cervix (wiping from inside the os outward) and vagina. If povidone iodine is used, ensure that the woman is not allergic to iodine and wait 2 minutes for the solution to act.

#### STEP 5: Alert the woman before you remove the IUCD:

- Ask her to take slow, deep breaths and relax.
- Inform her that she may feel some discomfort and cramping, which is normal.

#### Do not use force at any stage of this procedure.

#### STEP 6: Grasp the IUCD strings and apply gentle traction:

- Grasp the strings of the IUCD with a high-level disinfected (or sterile) straight artery forceps (Figure 6.10 left panel).
- Apply steady but gentle traction, gently pulling the strings toward you with the forceps (Figure 6.10, Right panel). (The device can usually be removed without difficulty.)
  - If the strings break off but the IUCD is visible, grasp the device with the forceps and remove it.

If removal is difficult, do not use excessive force. (refer text box 6.1)

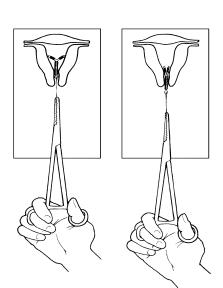


Figure 6.10 Removing the IUCD

Text Box 6.1 Guidelines for Difficult IUCD Removals

If you have partially removed the IUCD but have difficulty drawing it through the cervical canal:

- Attempt a gentle, slow twisting of the IUCD while gently pulling.
- Continue as long as the woman remains comfortable.

If the IUCD can still not be removed, refer the woman to a specially trained provider who can dilate the cervix.

#### If there seems to be a sharp angle between the uterus and cervix:

- Place a high-level disinfected (or sterile) volsellum on the cervix, and apply gentle traction downward and outward.
- Attempt a gentle, slow twisting of the IUCD while gently pulling.
- Continue as long as the woman remains comfortable.

If the IUCD can still not be removed, refer the woman to a specially trained provider.

STEP 7: Show the woman the IUCD, and place it in 0.5% chlorine solution for 10 minutes for decontamination.

STEP 8: Insert a new IUCD, if the woman so desires and there are no contraindications to continued use. If she is not having a new IUCD inserted, gently remove the speculum and place it in 0.5% chlorine solution for 10 minutes for decontamination.

#### 6.4.4. Post Removal counselling

• Ask the woman how she is feeling, and whether she is experiencing any of the following symptoms:

Nausea, Mild-to-Moderate lower abdominal pain/cramping, Dizziness or fainting (rare)

If the woman is experiencing any of these symptoms, provide reassurance and allow her to remain on the examination table to rest until she feels better.

**Important:** Although most women will not experience problems after IUCD removal, all women should remain at the clinic for 15 to 30 minutes before being sent home as a precaution.

• If the woman is starting a new contraceptive method, it should be provided now—along with a back-up method if needed (Textbox 6.2).

# Textbox 6-2 Guidelines for Switching to Another Contraceptive Method and Need for Back-Up Methods\*

• If the woman is switching to combined oral contraceptives (COCs), and:

The IUCD is being removed within 5 days since her LMP started, no back-up method is needed.

The IUCD is being removed at any other time, and:

She has been sexually active in this menstrual cycle, delay IUCD removal until her next period.

She has not been sexually active in this menstrual cycle, provide a back-up method\* for her to use for the first 7 days after starting the COCs.

• If the woman is switching to any other method, and:

The IUCD is being removed within 7 days since her LMP started, no back-up method is needed. The IUCD can be removed at this time.

If it is more than 7 days since her LMP started, and:

She has been sexually active in this menstrual cycle, delay IUCD removal until her next period.

She has not been sexually active in this menstrual cycle, provide a back-up method\* for her to use for the first 7 days after starting the new method.

<sup>\*</sup> Back-up methods include abstinence, male and female condoms and withdrawal method. Note that the IUCD can be left in place as the back-up method and removed during the next period.



# 7. Infection Prevention

**Key objectives** of infection prevention in providing IUCD services are to:

- Reduce the risk of infection due to IUCD insertion
- Reduce the risk of disease transmission to IUCD clients and potential IUCD clients
- Protect health care workers at all levels—from physicians and nurses to housekeeping staff—from getting infection.

It is mandatory to practice appropriate infection prevention procedures at all times with all clients to decrease the risk of transmission of infection including Human Immunodeficiency virus (HIV), Hepatitis C (HCV), and Hepatitis B (HBV).

Standard Universal Precautions of infection prevention include:

- 1. Hand Washing
- 2. Self protection such as wearing gloves and physical barrier
- 3. Safe Work Practices (Prevent injuries from sharps)
- 4. Maintain correct environmental cleanliness
- 5. Correct processing of instruments and other items
- 6. Proper waste disposal practices and handling, transporting and processing used/soiled linen correctly

#### 7.1. Standard Precautions in case of IUCD

Standard Precautions are designed for the safety and care of all people in a health care facility—whether a hospitalized patient, a woman receiving IUCD services, or a health care worker.

• Washing hands: Routine hand washing should be done before wearing gloves, after examination or after having any direct contact with a client, and after removing the gloves. Plain or antiseptic soap should be used for routine hand washing. Hands should be rinsed in

a stream of running water and dried with a clean personal towel or air-dried. Towel should not be shared. Practices such as using a common basin where a number of people or even one person washes or dips his/her hands repeatedly is dangerous and must be abandoned. (Refer Text box 7.1 for for text and Annexure 9A for pictoral presentation)

- Use of gloves: In the context of IUCD services, gloves are worn during the pelvic examination of a potential IUCD user, before and after inserting or removing an IUCD.
- Use antiseptic agents: Before IUCD insertion/removal apply a water-based antiseptic to the cervix and vagina two or more times
- Safe disposal of infectious waste materials and to protect those who handle them is mandatory

#### Text Box 7.1 Steps in Hand washing

#### Lather soap

Rub the palms, dorsum, nails of both hands; scrub the thumbs and fingers, webs and then the wrists.

Continue to do so for 10-15 seconds.

Then wash hands upto the wrists in running water.

If running water is unavailable use a big vessel with a tap or arrange for someone to pour water with a tumbler.

Alternatively alcohol hand rubs could be used in high volume clinics and clinics where access to water is limited. Alcohol hand rub can be prepared by adding 2 ml of glycerin to 100 ml of 60-70% alcohol. Three ml of alcohol hand rub should be applied to the hands and hands should be rubbed till alcohol dries up. Alcohol hand rub should be used before and after every client contact, and before and after removing gloves. Hands should be washed with clean water and soap once the hands feel sticky due to residual glycerine.

# 7.2. Processing of Equipment, Instruments and Other Reusable Items:

This includes 4 steps which are described as follows

#### Step 1: Decontamination

Immediately after use, fully immerse all instruments in a plastic container filled with 0.5% chlorine solution for 10 minutes. (This step helps prevent transmission of HBV and HIV to staff. It should be done before staff is allowed to handle or clean instruments.)

**Note:** If the instruments will not be cleaned immediately after decontamination, rinse them with water and dry them with a clean towel to minimize possible corrosion of the instruments due to chlorine.

- Wipe all **large surfaces** (e.g., procedure table, instrument stand) that could have been contaminated by blood or other body fluids with a 0.5% chlorine solution.
- While still wearing **gloves** dispose of waste, briefly immerse both gloved hands in the bucket containing the 0.5% chlorine solution and then carefully remove them by turning them inside out.
- If disposing of gloves, place them in a leak-proof container (with tight-fitting lid) or plastic bag.
- If reusing surgical gloves, submerge them in the chlorine solution and soak them for 10 minutes.

#### Step 2: Cleaning and Rinsing

After decontaminating instruments:

- a. Thoroughly scrub them under water with a soft brush (e.g., a toothbrush) and liquid soap or detergent. Pay special attention to teeth, joints, and screws, where organic material may collect.
- b. After cleaning, rinse items well to remove all soap or detergent. (This step is important because some detergents can leave a residue that interferes with the action of chemical disinfectants used for HLD [or sterilization].)
- c. After rinsing, air dry or dry items with a clean towel.
- d. Once items are dried, proceed with HLD (or sterilization). Wash large surfaces (e.g., procedure table, instrument stand) with soap and water if organic material remains on them after decontamination.

#### STEP 3: HLD (Recommended for IUCD Services)

After decontaminating (instruments and surgical gloves) and cleaning and rinsing instruments, High-level disinfect them using one of the following processes:

#### Boil items for 20 minutes and dry:

- a. Open or take apart items.
- b. Fully immerse items in water in a covered pan and heat.
- c. Bring water to a rolling/bubbling boil, and boil for 20 minutes in a pot with a lid.

- d. Do not add anything to the pot after boiling begins.
- e. Remove items using high-level disinfected forceps, and place in a high-level disinfected container.
- f. Allow items to cool and air dry.
- g. Use objects immediately or store them in a covered airtight, dry high level disinfected container for up to 7 days. If stored in an ordinary covered container, it can be used up to 24 hours.

#### Alternatively, soak items in special chemicals for 20 minutes, rinse, and dry:

- a. Fully immerse items in an appropriate high-level disinfectant (i.e., 2% glutaraldehyde or 0.1% chlorine solution).
- b. Soak them for 20 minutes.
- c. Remove items using new/clean examination or high-level disinfected surgical gloves, and high-level disinfected forceps.
- d. Rinse items three times with boiled water.
- e. Place them in a high-level disinfected container and air dry.

#### Alternate Step 3: Sterilization (Not essential for IUCD services if HLD is available)

Sterilization by steam: After decontaminating and cleaning and rinsing instruments, sterilize them by autoclave (121°C [250°F] and 106 kPa [15 lb/in] for 20 minutes if unwrapped and 30 minutes if wrapped; or by dry-heat (170°C [340°F] for 60 minutes).

Note: Dry-heat sterilization can be used only for metal or glass instruments, not gloves.

Sterilized packs can be used up to one week if kept dry and intact and drum is not opened. Once drum is opened, use only for 24 hours.

#### Sterilization by chemical method

- Decontaminated, cleaned and dried items are put in 2 per cent glutaraldehyde solution for at least 8 to 10 hours.
- Items such as scissors and forceps should be put into the solution in an open position.
- Do not add or remove any items once timing starts
- Items should be rinsed well with sterile water (not boiled water), air-dried and stored in a covered sterile container for up to seven days. Sterile water can be prepared by autoclaving water for 20 minutes at 15 lb/sq inches in an autoclave.

#### Preparation of 0.5% Chlorine Solution Using 30% Bleaching Powder.

Mix 15 gm of commercially available bleaching powder in one liter of tap water. Stir well and filter the water to remove rest of the powder before using the solution. The solution needs to be changed once in 24 hours or whenever it becomes milky white in color.

Annexure 9B gives the pictorial details of Chlorine solution preparation

Annexure 9C contains detailed instructions on making chlorine solutions for decontamination and HLD.

#### Step 4: Storage

Use high-level disinfected instruments and gloves immediately, or store them for up to 1 week in a high-level disinfected container with a tight-fitting cover. (Sterilized instruments not used immediately should be stored in a dry, sterile container with a tight-fitting cover.)

Important: Although alcohols and iodophors are inexpensive and readily available disinfectants, they are no longer classified as high-level disinfectants (Rutala 1993). Alcohols do not kill some viruses, and Pseudomonas species have been known to multiply in iodophors. These chemicals should be used for disinfection only when high-level disinfectants are not available or appropriate.

#### Waste Disposal

- After completing a procedure (e.g., IUCD insertion or removal), and while still wearing gloves, dispose off **contaminated waste** (e.g., gauze, cotton, disposable gloves) in a properly marked leak-proof waste container (with a tight-fitting lid) or plastic bag.
- The waste should be disposed off properly. It is better to be buried or burnt. Burning should preferably be done in an incinerator or steel drum as opposed to open burning.
- If burning is not possible, waste should be put in a pit and buried but never be thrown outside or left in open pits.
- For waste that is to be picked up by the municipalities, these should be contained in closed dumpsters prior to removal.

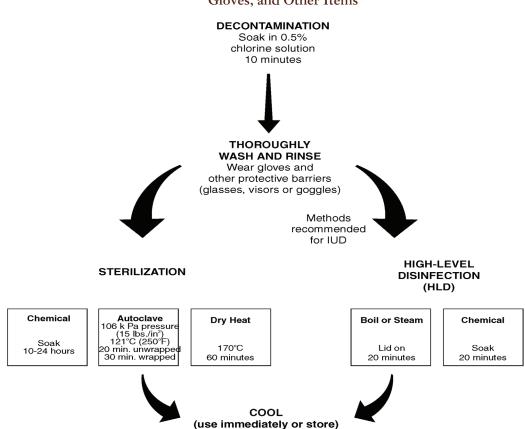


Figure 7.1 Flow Chart summarizing processing Surgical Instruments, Gloves, and Other Items\*

# 7.3. Specific Infection Prevention Tips for IUCD Insertion or Removal

# 7.3.1. Before IUCD Insertion or Removal (as Applicable)

- Ensure that instruments and supplies are available and ready for use.
- Ensure that the IUCD package is unopened and undamaged. The IUCD package should not be opened until the final decision to insert the IUCD has been made.
- Do not shave her pubic hair.
- Place a dry, clean cloth between buttocks and the surface of the examination table.
- Wash hands thoroughly with soap and water; dry them with a clean, dry cloth or allow them to air dry.
- Put high-level disinfected (or sterile) surgical gloves on both hands.

<sup>\*</sup> Adapted from: WHO 1990.

#### 7.3.2. During IUCD Insertion or Removal (as Applicable)

• Before sounding the uterus and inserting the IUCD (after performing the speculum examination, with the speculum still in place), thoroughly apply a water-based antiseptic (2.5% povidone iodine or chlohexidine) two or more times to the cervix and vagina before beginning the procedure. Cleanse from the inside of the cervical os outward.

If povidone iodine is used, allow 1 to 2 minutes before proceeding.

Iodophors such as povidone iodine require contact time to act.

Do not use alcohol. Alcohol is painful for the woman, and also dries and damages the mucous membranes, which may support the infectious process.

- ♦ Load the IUCD in its sterile package.
- Throughout the procedure, use the "no-touch" technique to reduce the risk of contaminating the uterine cavity. Using the "no-touch" technique during IUCD insertion means that the uterine sound and the loaded IUCD:
  - Are not allowed to touch the vaginal walls or the blades of the speculum (or any other nonsterile surface that may contaminate them); and
  - Are not passed through the cervical os more than once.

#### 7.3.3. After IUCD Insertion or Removal

• Before removing your gloves:

Place all used instruments (they should be in the open state) in 0.5% chlorine solution for 10 minutes for decontamination, if not already done.

Dispose off waste materials (e.g., cotton balls) by placing them in a leakproof container (with tight-fitting lid) or plastic bag.

Immerse both gloved hands in 0.5% chlorine solution. Remove gloves by turning them inside out.

- If disposing of the gloves, place them in the leak-proof container or plastic bag.
- If reusing the gloves (not recommended), submerge them in 0.5% chlorine solution for 10 minutes for decontamination.

- Wash your hands thoroughly with soap and water; dry them with a clean, dry cloth or allow them to air dry.
- After the client has left, wipe the examination table with 0.5% chlorine solution to decontaminate.

# 8. Follow-up care and Management of Potential Problems

# 8.1. Background

Routine follow-up for many IUCD users may involve little more than answering questions and reinforcing key messages. Some users, such as those who are bothered by side effects, may require additional care and support. Serious problems related to IUCD use are uncommon, but when they do occur, prompt and appropriate management is essential.

Key objectives of follow-up care for IUCD clients are to:

- Assess the woman's overall satisfaction with the IUCD
- Identify and manage potential problems
- Address any questions or concerns the woman may have
- ♦ Reinforce key messages

# 8.2. Follow-up Visits

The recommended follow up schedule is first visit after the first menstrual period or after one month whichever is earlier. Subsequent visits after 3 months and thereafter once a year. Visits when ever required.(Annexture-12 Follow up Card)

Health personnel of the area should make a home visit in case the client has not come for the first follow up visit within 1 week.

Follow up home visits can be done by ANM supported by ASHA or AWW.

# 8.2.1. Follow Up Care

#### Follow-up care for new users must include:

• Assessing for menstrual changes (most common side effect of IUCD use), which often subside within a few months of insertion;

- Assessing for infection, which is uncommon but most likely to occur in the first 20 days after IUCD insertion; and
- Checking for IUCD expulsion, which is very uncommon but most likely to occur within the first few months after insertion.
- In addition for a continuing user, on the other hand, it may be more critical to assess for significant changes since her last visit, such as in her overall health, reproductive goals, or individual risk for HIV and other STIs.

#### 8.2.2. Routine Follow-Up Assessment

#### History

- Assess the woman's overall satisfaction with the method, and check for problems:
- Assess for common side effects (e.g., an increase in the amount or duration of menstrual bleeding, increase in pain/cramping with period, or spotting/light bleeding between periods).

Screen for warning signs (PAINS): (Please refer to Annexure 9)

Ask whether she has checked for IUCD expulsion.

Ask whether she has been using condoms for protection against STIs, as needed.

#### Physical Examination

- For the first routine checkup, perform a pelvic examination to ensure that the IUCD is still in place and check for signs of infection.
- For all other return visits, perform a pelvic examination as indicated

#### 8.3. Management of Problems

Most side effects associated with the use of IUCDs are not serious and will resolve spontaneously. Some problems, however, require specific management. The purpose of the guidelines below is to assist the clinician in providing appropriate support for a woman experiencing such side effects or problems. In most cases, the woman can continue to use the IUCD while awaiting or undergoing evaluation.

Some of the problems associated with IUCD use that require specific management include:

- Changes in menstrual bleeding patterns
- Cramping or pain
- ♦ Infection
- IUCD string problems (missing strings or possible IUCD expulsion)
- Partial or complete expulsion IUCD (confirmed)
- ♦ Pregnancy with an IUCD in place
- Uterine perforation

## 8.3.1. Change in menstrual bleeding patterns

Change in menstrual bleeding pattern is a common side effect among users of copper-bearing IUCDs. These changes are usually not harmful to the woman and diminish or disappear within the first few months after IUCD insertion. If, however, these symptoms are severe, persistent, or accompanied by certain other signs/symptoms, they require special follow-up.

#### Possible Signs/Symptoms:

- Increase in amount of menstrual bleeding
- Increase in duration of menstrual bleeding
- Spotting/light bleeding between periods

#### Management:

Manage as appropriate based on findings:

- If bleeding is mild and less than 3 months after insertion and no evidence of pathology or pregnancy, reassure the client and give iron and folic acid tabs for a month.
- If her menstrual bleeding lasts twice as long / is twice as heavy than usual, then refer.

If her menstrual bleeding changes have continued beyond 3 to 6 months after IUCD insertion and a gynecologic problem is suspected, refer.

#### **8.3.2.** Cramps or pain during menstruation

Increased cramping or pain associated with menstruation is another common side effect among users of copper-bearing IUCDs. Special follow-up is needed, however, if these symptoms are bothersome, severe, or associated with other signs/symptoms that suggest they are not related to menstruation conduct appropriate assessment (including pelvic examination) to identify or rule out other possible causes of the symptoms, such as infection, partial IUCD expulsion, uterine perforation, and pregnancy/ectopic pregnancy. When other possible causes of the symptoms are ruled out, manage as appropriate based on findings. If cramping or pain, provide reassurance and recommend paracetamol (500 mg every 4-6 hours) or another NSAID immediately before and during menstruation to help reduce symptoms. If it still persists, remove the IUCD.

#### 8.3.3. Infection

According to the latest research, the risk of infection after IUCD insertion, while very low, is highest within the first 20 days after insertion. It is important to note that a pelvic infection does not necessarily develop into PID (PID refers to any infection that ascends into the woman's uterus and fallopian tubes), and that it is caused due to infection with Gonorrhea or Chlamydia, not due to IUCD. However, because PID can lead to infertility and other serious problems, and because diagnosis of PID can be difficult, providers should treat all suspected cases. The following guidelines are intended to assist the provider in identifying pelvic infection, including suspected cases of PID, and treating accordingly.

#### Possible Signs/Symptoms:

- Lower abdominal pain
- Painful intercourse
- Postcoital, intermenstrual or contact bleeding
- Pain associated with periods (especially if this symptom was absent during the first few months after IUCD insertion but developed later)
- Abnormal vaginal discharge
- Painful urination (dysuria)
- Fever
- Nausea and vomiting

Management: Refer to Medical Officer/ a specialist.

## 8.3.4 IUCD String Problems (or Possible IUCD Expulsion)

Missing, shorter, or longer strings may indicate a variety of problems, including IUCD expulsion or malposition and uterine perforation, or may not indicate a problem at all. Sometimes, for example, the IUCD strings may curl up into the cervical canal and uterine cavity for no known reason. Strings that are too short or too long may bother the woman's partner during sexual intercourse. Guidance for following up on all these potential problems is provided below.

#### For missing strings:

Rule out pregnancy.

Once pregnancy has been ruled out: Probe the cervical canal using a high-level disinfected (or sterile) long artery forceps to locate the strings, and gently draw them out so that they are protruding into the vaginal canal. Manage as appropriate based on findings:

- If the strings are **located** and drawn out, and the woman wants to keep the IUCD, leave it in place (provided it seems properly placed).
- If the strings are located and drawn out, and the woman does not want to keep the IUCD, remove the IUCD
- If the strings are **not located** in the cervical canal (or cannot be drawn out), and the woman does not want to keep the IUCD, **refer** her for IUCD removal by a specially trained provider. (A specially trained provider can use a sound to check whether the IUCD is in place, being very careful not to injure the uterus. If the IUCD is still in place, the strings can be drawn out using a long artery forceps.)
- If indicated, **refer** the woman for an ultrasound (or X ray, if ultrasound is unavailable) to help determine whether the IUCD is still in place, is malpositioned, or has been expelled.

# 8.3.5. Partial or Complete IUCD Expulsion (Confirmed)

Partial or complete IUCD expulsion can occur unnoticed or may be associated with other signs/ symptoms, such as irregular bleeding, pain with intercourse (for either woman or partner), unusual vaginal discharge, and/or bleeding after sex. Missing or longer IUCD strings and delayed or missed menstrual period are other possible indications. The following guidelines address management of confirmed partial or complete IUCD expulsions.

#### Possible Signs/Symptoms:

- Expelled IUCD seen (complete expulsion)
- IUCD felt/seen in the vaginal canal (partial expulsion)

**Management:** In case of complete expulsion remove the IUCD

In case of partial expulsion it can be removed by gentle traction, if not possible, refer

## 8.3.6. Pregnancy with an IUCD in place

This may be due to contraceptive failure.

#### Possible Signs/Symptoms:

- Delayed or missed menstrual period
- Other signs/symptoms of pregnancy

#### Management:

- Confirm pregnancy.
- Rule out ectopic pregnancy.
- When ectopic pregnancy has been ruled out, determine whether the woman wants to continue her pregnancy.
- If the woman does not wish to continue her pregnancy and she is in permissible period of termination (i.e. upto 20 weeks), refer to MO.
- If she wishes to continue the pregnancy, advise the woman that the IUCD may be removed if strings are visible. Inform the woman on the risks involved of IUCD with pregnancy:
- Leaving the IUCD in place can cause second-trimester miscarriage, infection, and preterm delivery. Removing the IUCD slightly increases the risk of miscarriage

#### **8.3.7.** Uterine Perforation

Uterine perforations occur very rarely, with most occurring resulting from poor insertion technique. It could be detected during the insertion procedure or much later after the procedure. Risk is higher in case of post abortion or immediate post partum clients and in clients where the uterine size measures less than 6 cm.

#### Possible Signs/Symptoms of a suspected uterine perforation:

#### During insertion procedure

- Sudden loss of resistance to the uterine sound or IUCD insertion device during IUCD insertion
- Uterine length greater than expected from uterine sound (during IUCD insertion)

#### Detected after insertion procedure:

- Unexplained abdominal pain
- Missing threads
- ♦ Confirmed by UCG/X-ray

#### Management:

#### 1. Suspected perforation during Insertion:

Stop the procedure immediately, and gently remove the instrument/object that may have perforated the uterus (e.g., sound, assembly unit)

- In case of perforation during sounding, stop the procedure and gently remove the sound and observe.
- If perforation has occurred with the assembly unit and CuT has not been released, stop the procedure and remove the assembly unit and abandon the procedure.
- If perforation has occurred with the assembly unit and CuT has been released and the threads are visible then try to remove the CuT by applying gentle traction. If you feel any resistance, then abandon the procedure and refer to a specialist.

Have the woman rest and monitor her vital signs (blood pressure, pulse, respiration, and temperature) and level of discomfort until stable. For the first hour, check her vital signs every 15 minutes.

If her vital signs are not stable (e.g., elevated pulse, falling blood pressure), or there is bleeding or new/increased pain, refer/transport the woman for emergency care.

If her vital signs remain stable after 1 hour, check for signs of intra-abdominal bleeding (e.g., test hematocrit/hemoglobin). If there are signs of intra-abdominal bleeding, refer/transport the woman for emergency care.

When the woman's vital signs have been stable for 24 hours, she can go home. Advise her to avoid having sex for 2 weeks, provide a back-up method, and arrange for appropriate follow-up.

#### 2. Perforation detected late (missing strings/persistent pain/pregnancy)

Refer the woman to a specialist or higher facility for management



# 9. Improving the Quality of IUCD Services

Quality of care refers to the way in which individuals and couples are treated by the health care system providing services. The objective of this chapter is to provide service providers and clinic managers with basic information and tools on how to improve quality of health services.

The key areas to be addressed and the standards for measuring their performance for achieving quality in IUCD services are given below:

| S.No | Key Areas  | Performance standards  |  |
|------|--|--|--|
| 1    | Human and Physical Re-                           | The provider is trained to provide IUCD and other FP services  |  |
|      | sources  | The clinic has adequate clean space for providing the services.  |  |
|      |  | The clinic has an area where counseling can be done in privacy.  |  |
|      |  | The clinic has instruments and equipment to provide IUCD services.   |  |
|      |  | The clinic has sufficient supplies of IUCDs.   |  |
|      |  | The clinic has Infection Prevention supplies and record keeping and reporting materials to provide family planning services. |  |
|      |  | Good storage principles are applied to contraceptives, essential drugs and medical supplies.                                 |  |
| 2    | Client focused IEC materials for Family Planning | The clinic has informational posters or panels on the family planning services offered and clinic timing.                    |  |
|      |  | There is information on client's rights regarding family planning.   |  |
|      |  | The clinic has flip charts/ IEC material and samples of family planning methods for counseling.                              |  |
| 3    | Management Systems                               | There are written routine protocols/ instructions for the delivery of Family planning services. Screaning and followp cards  |  |
|      |  | The clinic has a simple FP client record system registers.   |  |
|      |  | The records are reviewed and analysed regularly.   |  |

| S.No | Key Areas  | Performance standards  |  |
|------|--|--|--|
| 4    | Infection Prevention prac-                             | There is clean running water available in the clinic.  |  |
|      | tices  | Facility for hand hygiene is readily available.  |  |
|      |  | The availability and use of antiseptics for skin and/or mucous membranes are as per the standards.   |  |
|      |  | The decontamination of instruments and other articles (immediately after use and before cleaning) is performed according to the standards. |  |
|      |  | The waste disposal system is according to standards.   |  |
| 5    | Family Planning Services/<br>New Client –General Coun- | The provider uses adequate interpersonal communication skills during the entire visit.   |  |
|      | selling  | The provider gives information about the contraceptive methods available in the clinic and confirms the woman's choice.                    |  |
|      |  | The provider rules out pregnancy.  |  |
|      |  |  |  |
| 6    | Providing IUCD to a New                                | The provider assesses the woman's eligibility to use the IUCD.   |  |
|      | Client   | The provider explains about the warning signs with the IUCD.   |  |
|      |  | The provider performs the pre insertion tasks and inserts the IUCD as per guidelines   |  |
|      |  | The provider gives instructions about the return and/or follow up visits.  |  |
| 7    | Follow up Visit and Manage-                            | The provider verifies the woman's satisfaction with the IUCD.  |  |
|      | ment of IUCD side effects and problems                 | The provider identifies the side effects or problems with the IUCD.  |  |
|      |  | The provider manages side effects and problems with IUCD.  |  |
|      |  | The provider gives instructions about the return and/ or foll up visits for the IUCD.  |  |
| 8    | IUCD Removal   | The provider prepares for the procedure.   |  |
|      |  | The provider removes the IUCD following the standard procedure guidelines.   |  |
|      |  | The provider performs the post removal tasks and counseling on other family planning methods.  |  |

This section has outlined eight key areas and some standards under each key area, which will guide effective delivery of IUCD services.



#### Different types of IUCD

#### First Generation IUCDs: Lippes Loop

Inert device made of polyethylene or other polymers, appeared in different shapes and sizes-loops, spirals, coils, rings and bows.

Types: according to size could be A, B, C and D, D being the largest. Larger the size, greater the antifertility effect and a lower expulsion rate but a lower continuation rate due to side-effects like pain and bleeding.

#### Second Generation IUCDs

Earlier devices: Cu-7

Cu T-200

Newer devices: (Variants of T device)

T Cu-200 B

T Cu-380A (currently provided under the National Family Welfare Program)

Nova T: (Multiload devices)

ML-Cu-250

ML-Cu-375

#### Third Generation IUCDs

(These are hormonal – available on a limited scale)

Progestasert: T shaped device filled with 38mg of Progesterone, releasing 65mcg daily

LNG 20 (Mirena) T shaped IUCD releasing 20mcg of Levonorgestrel – More potent

#### Guidelines for use of CuT as Emergency Contraception

Emergency contraception refers to back-up methods for contraceptive emergencies which women can use within the first few days after unprotected intercourse to prevent an unwanted pregnancy.

#### Use of Emergency Contraception is advocated:

- After voluntary sexual act without contraceptive protection.
- Incorrect or inconsistent use of regular contraceptive methods:
  - failure to take oral contraceptives for more than 3 days
  - being late for contraceptive injection
- In case of contraceptive failure or mishaps: miscalculation of infertile period, expulsion of an Intrauterine device and failed coitus interruptus, or in case of slippage /leakage of condom
- In the event of sexual assault.

#### Methods of emergency contraception:

- All hormonal oral contraceptive pills (combined as well as single) like: high doses of progestogen only pill containing levonorgestrel and high doses of combined oral contraceptive containing ethylestradiol and levonorgestrol (Yuzpe regimen)
- Copper releasing Intrauterine devices (IUCD) such as CuT 380A

A copper releasing IUCD can be used as a very effective method of preventing pregnancy if used within five days of the first episode of unprotected sexual intercourse.

#### Mechanism of action

The mechanism of action is the same as for contraception and it primarily acts by preventing fertilization and implantation

#### Advantages of CuT as an Emergency contraception

- The woman who has accepted the CuT as an emergency contraception has the option to continue to use the same CuT as a regular contraceptive thereby contributing to the reproductive health of the woman.
- The time limit for the effective post coital use of the method for preventing pregnancy is longer ie.five days or 120 hours for CuT and only 72 hours in the case of EC pills.
- It is effective even in situations of multiple episodes of unprotected sexual intercourse.

#### Counseling

Counseling on emergency contraception is no different from counseling on other Family Planning methods. As it is a relatively new back-up method, and most clients do not know much about it, it is important that potential clients are properly informed. The steps for counseling are same as in Chapter 3. A special attention should be paid to the following issues/areas:

- A proper counseling will help to provide emotional support to the client/couple who is worried about a pregnancy due to unprotected sexual intercourse.
- It establishes rapport and confidence in the provider as the provider is helping them in a critical need.
- It provides an opportunity to help the client start using a regular contraceptive method of their choice with full information as well as ensure sustained correct use of the same.
- Making the client feel psychologically comfortable in the case of sexual assault and to be nonjudgmental in such cases

Once the client is sure to use the IUCD follow the steps in method specific counseling

#### Eligibility criteria

They are the same as when CuT is used for regular contraception but special care should be taken in the case of sexual assault cases as presence of STIs increases the risk of PID.It is also important to find out the first act of unprotected sexual inter course while eliciting the history. The IUCD can then be used for continuing contraception, or removed at the next menses.

Client assessment: Get accurate information of the timing of first unprotected intercourse

In the case of contraceptive accident find out how the method was used. Provide information on all methods of EC available in the country and the comparative advantages of each

#### Insertion of CuT

Timing of insertion is critical (within 5 days of first act of unprotected sexual intercourse). The steps of insertion and infection prevention practices are the same as in Chapters 6. Follow up care of all women after the first menstrual period is critical to make sure that the client is not pregnant and that CuT is in situ.

Management of complications/side effects same as in chapter and the follow up visits to be ensured when the client decides to continue the same method as a regular contraception.

#### Myths and misconceptions regarding IUCD

The following are some of the more common rumors/myths about the IUCD:

Rumor/myth: The IUCD might travel through the woman's body, maybe to her heart or her brain.

**Response**: Explain that the IUCD usually stays in the uterus until it is removed. If it does come out by itself, it comes out through the vagina. In the rare event that the IUCD perforates the uterus (travels through the wall of the uterus) it will remain in the abdomen. An IUCD is too big to travel to the heart or to the brain. (Show her a picture or Model of the uterus with the IUCD in it.)

Rumor/myth: IUCDs prevent pregnancy by causing abortion.

**Response**: Explain that recent studies show that copper IUCDs works by preventing sperm from fertilizing a woman'segg, rather than by destroying a fertilized egg.

Rumor: The IUCD will interfere with sex.

**Response:** Explain that because the IUCD is located in the uterus, not the vaginal canal, neither the woman nor herpartner will feel it during sex. It is possible that the partner will feel the strings, but this can be easily corrected if itbecomes a problem.

Rumor/myth: The IUCD may rust inside the woman's body.

**Response:** Explain to the woman that the IUCD will not rust inside her body, even after many years.

Many misconceptions about the IUCD remain despite scientific evidence to the contrary. These are:

Misconception: IUCD increases a woman's risk of ectopic pregnancy.

**Response:** The IUCD reduces the risk of ectopic pregnancy by preventing pregnancy. Because IUCDs are so effective at preventing pregnancy, they also offer excellent protection against ectopic pregnancy. Women who use copper-bearing IUCDs are 91% less likely than women using no contraception to have an ectopic pregnancy (Sivin 1991).

Misconception: IUCD causes PID, and it needs to be removed to treat PID.

**Response:** Strict randomized controlled trials and literature reviews reveal that PID among IUCD users is rare (ARHP2004; Grimes 2000). Early studies that reported a link between PID and IUCD use were flawed and poorly designed. Inappropriate groups were used for comparison, infection in IUCD users was over-diagnosed, and there was a lack of control for confounding factors (Buchan et

al. 1990; Vessey et al. 1981). Women who have a history of PID can generally use the IUCD (the advantages generally outweigh the risks), provided their current risk for STIs is low.

Misconception: IUCD causes infertility.

Response: Infertility caused by tubal damage is associated not with IUCD use, but with chlamydia (current infection or—as indicated by the presence of antibodies—past infection) (Hubacher et al. 2001). Moreover, there is an immediate return to fertility after an IUCD has been removed (Belhadj et al. 1986). In one study, 100% of women who desired pregnancy (97 of 97) conceived within 39 Months of IUCD removal (Skjeldestad and Bratt 1988).

Misconception: IUCD is unsuitable for use in nulliparous women.

Response: Nulliparous women can generally use the IUCD (the advantages generally outweigh the risks). However, expulsion rates tend to be slightly higher in nulliparous women compared to parous women (Grimes 2004).

Misconception: IUCD cannot be safely used by HIV-infected women who are clinically well. **Response:** HIV-infected women who are clinically well can generally use the IUCD (the advantages generallyoutweigh the risks). A large study in Nairobi showed that HIV-infected women had no significant increase in the risk of complications, including infection in early Months, than HIVnegative women (Sinei et al. 2001). In another studyof HIV-infected and HIV-negative IUCD users with a low risk of STI, no differences were found in overall or infection-related complications between the two groups (Sinei et al. 1998).

Misconception: The IUCD interferes with ARV therapy.

Response: Women who have AIDS, are on ARV therapy, and are clinically well can generally use the IUCD (advantages generally outweigh the risks). Because it is a non-hormonal family planning method, the IUCD is not affected by liver enzymes and will not interfere with or be affected by ARV therapy (ARHP 2004; Hatcher et al. 2004).

#### **Ruling out Pregnancy**

How can the provider be reasonably sure that a woman is not pregnant?

Diagnosis of pregnancy is important. The ability to make this diagnosis early in pregnancy will vary depending on resources and settings. Highly reliable biochemical urine pregnancy tests are often useful, but not available in many areas. The test becomes positive within one week of missed period (in women who have regular periods) i.e when the concentration of HCG hormone in the urine reaches 100 units and above. Specificity of the test is as high as 95%. Pelvic examination (and bimanual examination too), where feasible, is reliable at approximately 8-10 weeks since the first day of the last menstrual period.

The provider can be reasonably sure that the woman is not pregnant if she has no symptoms or signs of pregnancy and meets any of the following criteria:

- Has not had intercourse since last normal menses
- Has been correctly and consistently using a reliable method of contraception.
- Is within the first 7 days after normal menses.
- Is within 4 weeks post partum for non-lactating women
- Is within the first 7 days post abortion or miscarriage
- Is exclusivley breast feeding, amenorrhoeic and less than 6 months post partum.

#### RTI/STIs: Causative organisms, presenting symptoms and management

In India female clients suspected of having RTI/STIs usually present with the following symptoms (one/more):

- Vaginal discharge
- Vesicular and/ or non vesicular genital ulcers
- Lower abdominal pain

In the following table depicts presenting symptoms, signs and clinical conditions in RTI/STI

| STI/RTI (causative organism)          | Signs and symptoms  |  |
|---------------------------------------|---|--|
| Gonorrhoea<br>(Neisseria Gonorrhoea)  | Purulent/mucopurulent vaginal discharge -Pain or burning on passing urine -Inflamed(red and tender) urethra |  |
| Trichomoniasis                        | May produce few symptoms  |  |
| (Trichomonas vaginalis)               | -Women have frothy(bubbly), foul smelling , greenish vaginal discharge                                      |  |
|                                       | Pruritus in 75% of cases  |  |
|                                       | Dysperaunia and dysuria in 20% of cases   |  |
| Chlamydia                             | Silent PID with few symptoms and upper genital tract infection  |  |
| (Chlamydia trachomatis)               | Purulent cervical discharge, frequently a beefy red cervix which bleeds easily                              |  |
| Bacterial vaginosis                   | Not necessarily sexually transmitted  |  |
| (anaerobes-eg. Gardnerella vaginalis) | Vaginal discharge with fishy odor and grayish in color  |  |
| Candidiasis                           | Curd-like Vaginal discharge, whitish in color   |  |
| (Candida albicans)                    | Moderate to intense vaginal or vulval itching   |  |
| Herpes (Herpes genitalis)             | Vesicles, presenting with pain  |  |
|                                       | History of recurrences  |  |
| Syphilis<br>(Treponema Pallidum)      | Primary Syphilis-:Initial painless ulcer(chancre): in women on the external genital genitilia(labia)        |  |

Reference: National Guidelines on Prevention, Management and Control of Reproductive Tract Infections including Sexually Transmitted Infections by NACO and MH division, GOI, Nov'06

**Please Note**: Having a vaginal discharge is normal. But can you differentiate between normal and abnormal vaginal discharge?

A vagina keeps itself healthy and clean by secreting normal vaginal discharges.

#### So what is a normal discharge?

Know, that all women experience some amount of vaginal discharge. The glands in vagina and cervix produce some amount of fluids that flows out of your vagina every day. This discharge helps to keep your vagina clean and infection free, as well as lubricated.

If the fluid looks clear or milky, is thin and stringy looking and has no foul odour, then it is a normal discharge.

#### Signs of Abnormal Discharge

Some signs that indicate you have abnormal discharge are:

- Increased or constant vaginal discharge, especially if it comes in a clot
- Itching, discomfort or rash in and around the vaginal area
- Burning sensation in vagina while urinating
- Blood in your discharge, especially when you are not menstruating
- When the consistency of the discharge is cottage cheese like
- Foul odour accompanied by green, yellow or grey discharge



Normal vaginal discharge as under microscope

#### Flowchart: Management of vaginal discharge in females

# SYNDROME: VAGINAL DISCHARGE VAGINITIS TRICHOMONIASIS CERVICAL HERPES CERVICITIS

#### Causative Organisms Vaginitis

- Trichomonas vaginalis (TV)
- Candida albicans
- Gardnerella vaginalis, Mycoplasma causing bacterial vaginosis (BV)

#### Causative Organisms Cervicitis

- Neisseria Gonorrheae
- Chlamydia trachomatis
- Trichomonas vaginalis
- Herpes simplex virus

#### History

- Menstrual history to rule out pregnancy
- Nature and type of discharge (amount, smell, color, consistency)
- Genital itching
- Burning while passing urine, increased frequency
- Presence of any ulcer, swelling on the vulval or inguinal region
- Genital complaints in sexual partners
- Low backache

#### Examination

- Per speculum examination to differentiate between vaginitis and cervicits.
  - a) Vaginitis:

Trichomoniasis - greenish frothy discharge Candidiasis - curdy white discharge Bacterial vaginosis - adherent discharge Mixed infections may present with atypical discharge

- b) Cervicitis:
  - Cervical erosion / cervical ulcer/ mucopurulent cervical discharge
- Bimanual pelvic examination to rule out pelvic inflammatory disease
- If Speculum examination is not possible or client is hesitant treat both for vaginitis and cervicitis

#### Laboratory Investigations (if available)

- · Wet mount microscopy of the discharge for Trichomonas vaginalis and clue cells
- 10% KOH preparation for Candida
- Gram stain of vaginal smear for clue cells seen in bacterial vaginosis
- Gram stain of endocervical smear to detect gonococci

#### Treatment

#### Vaginitis (TV+BV+Candida)

- Tab. Secnidazole 2gm orally, single dose or Tab. Tinidazole 500mg orally, twice daily for 5 days
- Tab. Metoclopropramide taken 30 minutes before Tab. Secnidazole, to prevent gastric intolerance
- Treat for candidiasis with Tab Fluconazole 150mg orally single dose or local Clotrimazole 500mg vaginal pessaries once

#### Treatment for cervical infection (chlamydia and gonorrhea)

- · Tab cefixim 400 mg orally, single dose
- Plus Azithromnycin 1 gram, 1 hour before lunch. If vomiting within 1 hour, give anti-emetic and repeat
  - > If vaginitis and cervicitis are present treat for both
  - Instruct client to avoid douching
  - Pregnancy, diabetes, HIV may also be influencing factors and should be considered in recurrent infections
  - > Follow-up after one week

#### Management in pregnant women

Per speculum examination should be done to rule out pregnancy complications like abortion, premature rupture of membranes Treatment for vaginitis (TV+BV+Candida)

In first trimester of pregnancy

- Local treatment with Clotrimazole vaginal pessary/cream only for candidiasis. Oral Flucanozole is contraindicated in pregnancy.
- Metronidazole pessaries or cream intravaginally if trichomoniasis or BV is suspected.

In second and third trimester oral metronidazole can be given

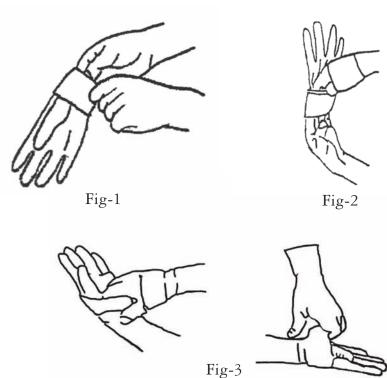
- Tab. Secnidazole 2gm orally, single dose or Tab. Tinidazole 500mg orally, twice daily for 5 days
- Tab. Metoclopropramide taken 30 minutes before Tab. Metronidazole, to prevent gastric intolerance

#### Specific guidelines for partner management

- Treat current partner only if no improvement after initial treatment
- If partner is symptomatic, treat client and partner using above protocols
- · Advise sexual abstinence during the course of treatment
- · Provide condoms, educate about correct and consistent use
- Schedule return visit after 7 days

#### Correct Technique of wearing gloves

- Select a glove packet with gloves that fit the hands of the user.
- Open the cover of the gloves
- With one hand pick up the gloves by the folded cuff, taking care not to touch the sterile portion of the glove i.e. the outer side of the glove, which is the side that will be touching the sterile instruments.
- ♦ Holding the glove with one hand put the other hand into the glove.(Fig 1)
- With the gloved hand, lift the other glove by inserting the gloved fingers between the cuff and sterile portion of the glove. Slip the other hand into the glove. (Fig 2)
- Make any adjustments as required to fit the glove properly taking care not to touch any unsterile part. (Fig 3)
- ♦ Always keep the gloved hand above the waist level and in sight to avoid contamination
- Wash the gloved hand before removing in 0.5% chlorine solution and put for decontamination and sterilization/High level disinfection (HLD).



# INSTRUCTIONS FOR LOADING THE REGULAR COPPER T 380A IN ITS STERILE PACKAGE

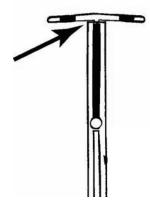
Do not open the IUCD's sterile package or load it (as instructed below) until the final decision to insert an IUCD has been made (i.e., until after the pelvic examination, including both bimanual and speculum exams, has been performed). In addition, do not bend the "arms" of the "T" into the insertion tube more than 5 minutes before the IUCD is to be introduced into the uterus.

While performing the following steps, do not allow any part of the IUCD or the IUCD insertion assembly to touch any non-sterile surfaces (e.g., your hands, the table) that may contaminate it:

#### STEP 1: Adjust the contents of the package

- Ensure that the vertical stem of the T is fully inside the insertion tube (Figure C1, arrow).
- Ensure that the other end of the insertiontube (farthest from the IUCD) is close to the sealed end of the package.

Figure C-1 Vertical Stem of T fully inside Insertion Tube



#### STEP 2: Partially open the package:

- Place the package on a clean, hard, flatsurface with the clear plastic side up.
- Pull up on the clear plastic cover from the end that is farthest from the IUCD (marked OPEN).
- Keep pulling the plastic cover until the package is open approximately half way to the blue length-gauge.

#### STEP 3: Place the white plunger rod in the clear insertion tube:

- Pick up the package, holding the open end up toward the ceiling so that the contents do not fall out.
- Starting at the open end of the package, fold the clear plastic cover and white backing "flaps" away from each other (as shown in Figure C-2a).
- Using your free hand, grasp the white plunger rod (behind the measurement insert) by the circular thumb grip and remove it from the package.

Do not touch the tip of the white plunger rod or brush it against another surface, as this will cause it to lose its sterility.

• Place the plunger rod inside the insertion tube (Figure C-2a) and gently push until the tip of the rod almost touches the bottom of the T (Figure C-2b, arrow).

Figure C-2a. Placing White Plunger

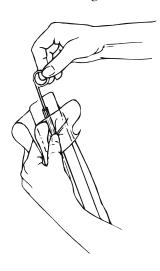
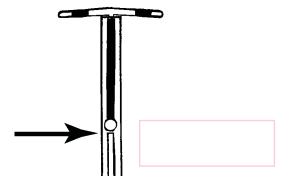


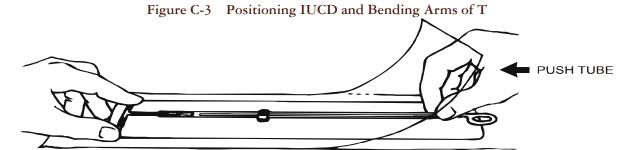
Figure C-2b. Plunger Rod almost Rod inside Insertion Tube, Touching Bottom of the "T"



#### STEP 4: Bend the "arms" of the "T" downward:

Do not bend the arms of the T into the insertion tube for more than 5 minutes before it is introduced into the uterus.

- Release the white backing flap so that it is flat again, and place the package back on the clean, hard, flat surface with the clear plastic side up.
- Through the clear plastic cover, place your thumb and index finger over the tips of the horizontal arms of the T to stabilize the IUCD (Figure C-3, open arrow).



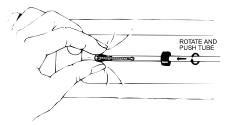
- At the open end of the package, use your free hand to push the measurement insert so that it slides underneath the IUCD and stops at the sealed end of the package.
- Still holding the tips of the arms of the T, use your free hand to grasp the insertion tube and gently push it against the T (Figure C-3, solid arrow). This pressure will cause the arms to begin bending downward, toward the stem of the T (as shown on the measurement insert).
- Finish bending the arms of the T by bringing your thumb and index finger together, and continuing to push against the T with the insertion tube.

STEP 5: Pull the insertion tube away from folded arms of the T: When the arms of the T are folded down enough to touch the sides of the insertion tube, pull the insertion tube out from between the arms.

#### STEP 6: Push the folded arms of the T into the insertion tube:

- Gently push and rotate the insertion tubeback over the **tips** of the folded arms of the T, so that both tips are caught inside the insertion tube (Figure C-4, Upper image).(As you maneuver the tips of the arms into the opening of the tube, it may help to slightly elevate the other end of the tube.)
- Push the folded arms of the IUCD into the insertion tube only as far as necessary to keep them fixed in the tube (Figure C.4, Lower image). Do not try to push the copper bands on the arms into the insertion tube, as they will not fit.

Figure C.4 Inserting Folded IUCD Arms into Insertion

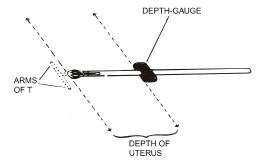




STEP 7: Set the blue length-gauge to the appropriate measurement: With the loaded IUCD still in the partially unopened package, set the blue length-gauge to the corresponding measurement obtained from sounding the uterus:

- Move the length-gauge so that its inside edge (the edge closest to the IUCD) is aligned with the appropriate centimeter mark on the measurement insert (e.g., 6 cm, 7.5 cm, 8 cm).
- Press down on the length-gauge with the thumb and index finger of one hand to keep it in place, while sliding the insertion tube with your other hand until the tip of the IUCD (the top of the folded T) aligns with the tip in the diagram on the measurement insert. This is the "0" centimeter mark.
- Ensure that the distance between tip of the IUCD and the inside edge of the length-gauge is equal to the length of the uterus as determined by uterine sounding (Figure C-5).

Figure C-5 Using blue length-gauge to set length of uterus on insertion tube



STEP 8: Align the length-gauge and the folded arms of the T so that they are both in a "horizontal" position (i.e., flat against the measurement insert).

#### STEP 9: Remove the loaded IUCD from the package:

• Finish peeling back the clear plastic cover from the white backing in one brisk, continuous movement with one hand, while holding the insertion assembly down against the white backing on the table (at the open end of the package) with the other hand.

• Lift the loaded IUCD from the packaging, keeping it level so that the T and white plunger rod do not fall out (Figure C.6). Be careful not to push the white rod toward the T, as this will release the IUCD from the insertion tube.

Do not let the IUCD or IUCD insertion assembly touch any non-sterile surfaces that may contaminate it.

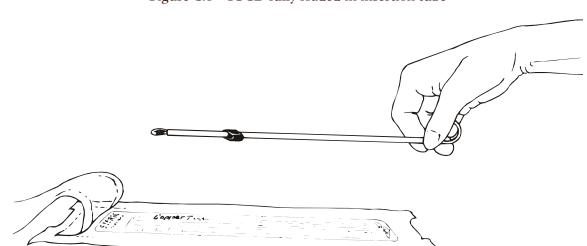


Figure C.6 IUCD fully loaded in insertion tube

You are now ready to insert the IUCD, as instructed in Chapter 6

### Key messages for women who have just had an IUCD inserted

| TOPIC   | MESSAGES  |
|---|---|
| Basic facts about your IUCD   | <ul> <li>You have Copper T IUCD and it should be replaced in 10 years, but you can come back to have it removed for any reason whenever you wish.</li> <li>It is effective immediately. You can have sexual intercourse as soon as you desire.</li> <li>Keep the IUCD card and take it with you when you visit any healthcare facility for any reason.</li> </ul>   |
| No protection against STIs  | <ul> <li>The IUCD provides no protection against HIV or other STIs.</li> <li>If you think you or your partner could be at risk for exposure to HIV or other STIs, you should use a condom for protection every time you have sex.</li> <li>Feel free to bring your partner to the clinic to further discuss this issue at any time.</li> </ul>  |
| Possible side effects  Important: Be clear about the possibility of menstrual changes with the IUCD. If the woman knows what to expect, she is more likely to be satisfied with her choice and less likely to worry about side effects if they occur. | <ul> <li>You may experience pain, light bleeding, and/or cramps immediately after IUCD insertion. The cramping may last for a few days.</li> <li>Many women experience heavier bleeding, longer bleeding, and or more cramping than usual during their menstrual periods, and or spotting between their periods. These symptoms usually lessen or go away within the first few months after IUCD insertion.</li> <li>Generally, these symptoms are not harmful and do not indicate a problem.</li> <li>Return to the clinic if these symptoms become bothersome.</li> <li>If you experience bleeding that is twice as long or twice as heavy as usual, return to the clinic immediately.</li> </ul> |

| TOPIC   | MESSAGES   |
|---|--|
| Warning signs (PAINS)   | <ul> <li>The following signs/symptoms (which spell the word PAINS) are warning signs for IUCD users and may indicate a serious problem:         <ul> <li>P: Period-related problems or pregnancy symptoms</li> <li>A: Abdominal pain or pain during intercourse</li> <li>I: Infections or unusual vaginal discharge</li> <li>N: Not feeling well, fever, chills</li> <li>S: String problems</li> </ul> </li> <li>If you experience any of these warning signs (or PAINS), return to the clinic immediately.</li> </ul> |
| Checking for possible IUCD expulsion  | If IUCD was inserted immediately after childbirth or a second trimester abortion tell the woman the following,   |
| New Thinking about<br>Checking IUCD Strings:<br>IUCD expulsion is un-<br>common, and undetected<br>IUCD expulsion is rare.<br>Thus, unless the IUCD                   | <ul> <li>IUCD expulsion is most likely to occur within the first few months after IUCD insertion (especially during menstruation).</li> <li>Check your strings occasionally during the first few months after IUCD insertion (preferably after your menstrual period).</li> </ul>  |
| was inserted immediately after childbirth or a second-trimester abortion the provider should minimize this aspect of counseling and focus more on the other messages. | <ul> <li>Check your menstrual cloth/pad/tampon and the latrine for an expelled IUCD during your first few menstrual periods.</li> <li>If you can not feel your IUCD strings or suspect that your IUCD has been expelled, begin using a back-up contraceptive method and return to the clinic immediately.</li> </ul>   |

# When to return to the clinic ◆ "A single routine checkup is recommended after your first postinsertion menstrual period (3 to 6 weeks) but not later than 3 months after insertion." ◆ "You should return immediately if you experience warning signs (PAINS)." ◆ "You CAN return at any point (days, months, years) if you want the IUCD removed, there are changes in your reproductive goals or overall health, or you suspect STI exposure." ◆ "You should return in 10 years to have your IUCD removed/replaced." ◆ "You CAN return if you have any problems or concerns, or for any

reason at all."

# Annexure 9 A

#### Handwashing Technique with Soap and Water



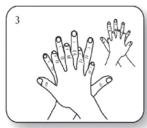
Wet hands with water



apply enough soap to cover all hand surfaces



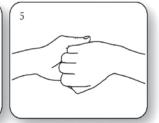
rub hands palm to palm



right palm over left dorsum with interlaced fingers and vice versa



palm to palm with fingers interlaced



backs of fingers to opposing palms with fingers interlocked

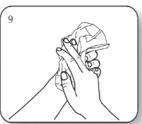


rotational rubbing of left thumb clasped in right palm and vice versa



rotational rubbing, backwards rinse hands with water and forwards with clasped fingers of right hand in left palm and vice versa





dry thoroughly with a single use towel

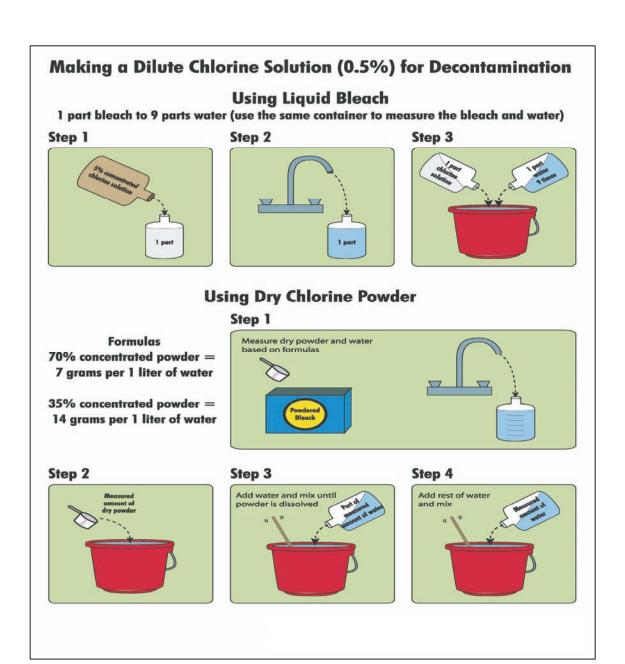


use towel to turn off faucet



...and your hands are safe.

# Annexure 9 B



# Annexure 9 C

Steps in Processing Instruments, Gloves, and other items used in IUCD Services\*

| Instruments/Item   | Decontamination  | Cleaning  | HLD*   | Sterilization <sup>b</sup>   |
|--|--|---|--|--|
|  | (Decontamination is the first step in handling dirty instruments; reduces risk of HBV and HIV transmission.) | (Cleaning removes all visible blood, body fluids, and dirt.)  | (Recommended method of final-<br>processing; HLD destroys all vi-<br>ruses, bacteria, parasites, fungi,<br>and some endospores.)   | (Alternative method of final-processing; sterilization destroys all microorganisms, including endospores.)   |
| Examination table top and other large surface areas  | Wipe off with 0.5% chlorine solution.  | Wash with soap and water if organic material remains after decontamination.   | Not necessary.   | Not necessary.   |
| Surgical gloves  | Soak in 0.5% chlorine solution for 10 minutes before cleaning. Rinse or wash immediately.                    | Wash with soap and water. Rinse with clean water and check for holes. If to be sterilized, dry inside and out (air or towel dry) and package. | Steam for 20 minutes and allow to air dry in steamer for 4 to 6 hours.   | <ul> <li>Autoclave at 121°C (250°F), and 106 kPa (15 lbs/in²) for 20 minutes.</li> <li>◆ Do not use for 24 to 48 hours.</li> </ul>                 |
| Instruments used in pelvic exam and IUCD insertion or removal (e.g., speculum, volselum, forceps, uterine sound) | Soak in 0.5% chlorine solution for 10 minutes before cleaning. Rinse or wash immediately.                    | Using a brush, wash with soap and water. Rinse with clean water. If they will be sterilized, air or towel dry and package.                    | <ul> <li>Steam or boil for 20 minutes.</li> <li>Chemically high-level disinfect by soaking for 20 minutes. Rinse well with boiled water and air dry before use or storage.</li> </ul>                                | ◆ Dry heat for 1 hour after reaching 170°C (340°F), or Autoclave at 121°C (250°F) and 106 kPa (15 lbs/in²) for 20 minutes (30 minutes if wrapped). |
| Storage containers for instruments   | Soak in 0.5% chlorine solution for 10 minutes before cleaning. Rinse or wash immediately. <sup>b</sup>       | Wash with soap and water. Rinse with clean water, air or towel dry.   | Boil container and lid for 20 minutes. If container is too large:  Fill container with 0.5% chlorine solution and soak for 20 minutes.  Rinse with water that has been boiled for 20 minutes and air dry before use. | ◆ Dry heat for 1 hour after reaching 170°C (340°F), or Autoclave at 121°C (250°F) and 106 kPa (15 lbs/in²) for 20 minutes (30 minutes if wrapped). |

<sup>&</sup>lt;sup>a</sup> In the context of IUCD services, HLD (as opposed to sterilization) is the recommended method of final-processing.

<sup>&</sup>lt;sup>b</sup> If unwrapped, use immediately; if wrapped, may be stored up to 1 week before use.

c Avoid prolonged exposure (More than 20 minutes) to chlorine solution (More than 0.5%) to minimize corrosion of instruments and deterioration of rubber or cloth products.

<sup>\*</sup> Adapted from: Perkins 1983.

#### **CASE RECORD**

The following details should be properly filled before insertion.

Name of Heath Centre: District: State: Reg. number:

Name of the client: Age:

Address:

Menstrual history

Age at menarche: Date of last menstrual period:

Menstrual cycle: regular/irregular Flow: Scanty/moderate/heavy

Duration: days Pain:

Obstetrical history

Total number of pregnancies: Total number of living children: F.... M....

Number of abortions: Induced Spontaneous:

Date of last delivery/C-section/abortion:

History of ectopic pregnancy:

History of puerperal infection after or abortion:

Breast feeding

Currently breast feeding: Duration:

Gynecological history

Inter-menstrual bleeding: Post-coital bleeding:

History of cancer of the cervix or uterus:

History of pelvic tuberculosis:

History of RTIs/STDs/HIV

Discharge per vagina: Colour of discharge:

Itching: Ulcers of the genitalia: Swelling of the genitalia or groin:

Abdominal mass: Lower abdominal pain:

#### Medical bistory

History of heart disease:

History of chronic cough/tuberculosis:

#### General and systemic examination

Pulse:

BP:

Presence of anaemia:

Heart:

Abdomen:

#### Pelvic examination

External genitalia: Normal/abnormal

Abnormal discharge/redness/patches/ulcer/growth/warts/swelling

Per speculum examination: Normal

Discharge/bleeding/ulcer/growth

Bimanual examination

Cervix: Pointing backwards/forwards

Soft/firm/hard,

tenderness on movement/freely mobile, smooth/irregular surface,

bleeds to touch

Uterus: Normal

Anteverted/retroverted

Normal/bulky/small, smooth/irregular surface, soft/firm, mobile/

fixed

Adenexa: Normal

Tenderness, mass

#### Laboratory examination:

Haemoglobin: Vaginal smear:

Pap smear:

#### Details of IUCD insertion

Type of IUCD inserted:

Date of insertion:

Any difficulty during insertion:

Date advised for follow up:

# Annexure 11 IUCD insertion record register

| Follow up                      | (10 YEARS)                 |                |           | 12 3 4 5 6 7 8 9 10 |
|--------------------------------|----------------------------|----------------|-----------|---------------------|
| Signature                      | of the                     | Client         |           |                     |
|                                | Jo                         | doctor         | with sig. | 11                  |
| No. of Age of LMP Date of Name | insertion                  |                |           | 10                  |
| LMP                            |                            |                |           | 6                   |
| Age of                         | youngest                   | child          |           | ∞                   |
| No. of                         | living                     | children child |           | 7                   |
| Education                      | of husband living youngest | / wife         |           |                     |
| Address                        |                            |                |           | 9                   |
| Age of                         | wife                       |                |           | $\sim$              |
| Yearly Month ECR Name of Age   | husband/wife               |                |           | 4                   |
| ECR                            | No.                        |                |           | w                   |
| Month                          | No.                        |                |           | 2                   |
| Yearly                         | No.                        |                |           | -                   |

#### IUCD (380 A) follow up card

|                   |           | Name of Centre | S. No                   |
|-------------------|-----------|----------------|-------------------------|
| Name:             |           |                |                         |
| Age (years):      |           |                |                         |
| Husband's r       | name:     |                |                         |
| Address:          |           |                |                         |
| Contact no.       | (if any): |                |                         |
| Obstetric status: |           | LMP LCB        |                         |
| Dater of inse     | ertion:   |                |                         |
| S No.             | Date      | Remarks        | Name/Signature of staff |
| 1ST visit         |           |                |                         |
| 2                 |           |                |                         |
| 3                 |           |                |                         |
| 4                 |           |                |                         |
| 5                 |           |                |                         |
| 6                 |           |                |                         |
| 7                 |           |                |                         |
| 8                 |           |                |                         |
| 9                 |           |                |                         |
| 10                |           |                |                         |

Date of removal:

Reason for removal: desire for pregnancy/ pain/ bleeding/ others

If you experience any of these warning signs (or PAINS), return to the clinic immediately.

- P: Period-related problems or pregnancy symptoms
- A: Abdominal pain or pain during intercourse
- I: Infections or unusual vaginal discharge
- N: Not feeling well, fever, chills
- S: String problems

# References

- 1. IUD guidelines for Family Planning Service Programme, by JHPIEGO
- 2. Medical Eligibility Criteria for Contraceptive Use (2004), World Health Organization, Geneva.
- 3. Guidelines for IUCD insertion for Medical Officers, by Ministry of Health and Family Welfare, Government of India, New Delhi 2003
- 4. Standards for female and male sterilization services, by Ministry of Health and Family Welfare, Government of India, New Delhi 2006
- 5. National guidelines on Prevention, Management and Control of RTI including STI by NACO and MH division, Government of India, New Delhi November 2006