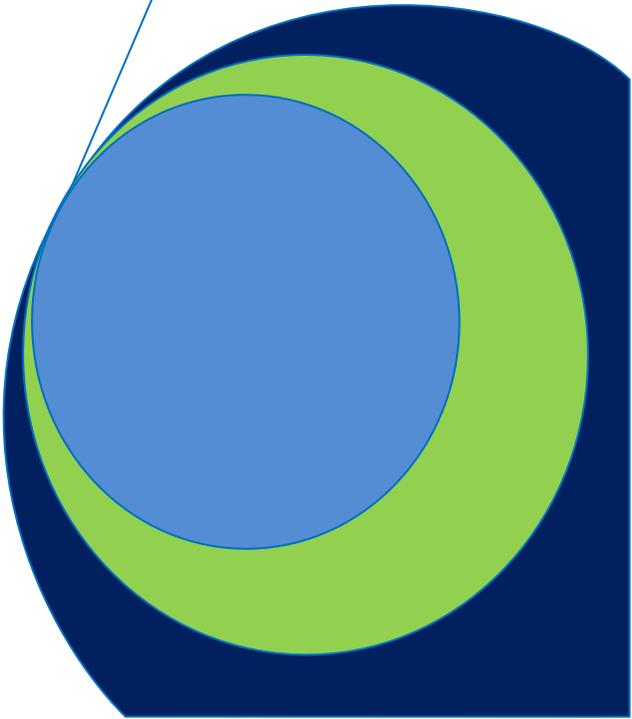
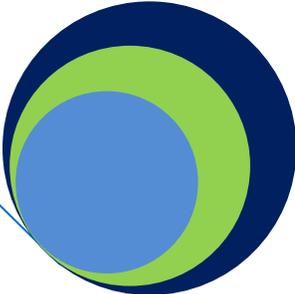
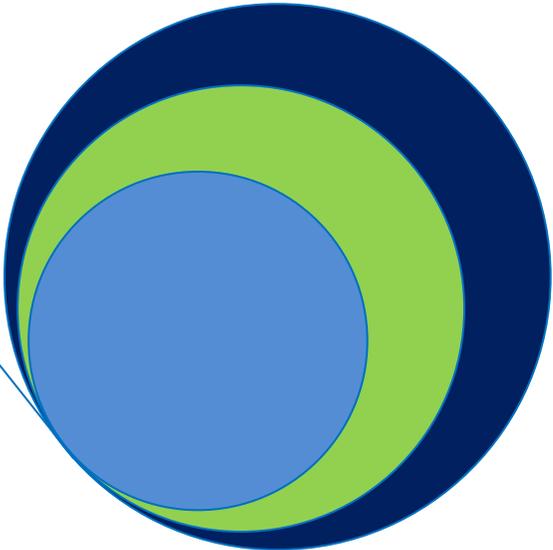


Module 2

Intrauterine Devices (IUDs)



Module training objectives

By the end of the training, participants will be able to:

1. Define IUD as a safe and effective family planning method.
2. Identify types of IUD (medicated vs. non-medicated).
3. Explore IUD's mechanism of action, effectiveness, indications and contraindications, advantages and disadvantages.
4. Identify eligibility criteria for IUDs users.
5. Follow basic guidelines in IUDs counseling, insertion, removal and follow up
6. Identify and manage the side effects and complications of IUDs.

Training methods and activities

It is expected that the trainer will utilize different interactive training methods and activities:

- Brainstorming, open discussions
- Work groups
- Worksheets
- Case studies
- Visual displays and PowerPoint presentations

Agenda:

Time	Session
09.00-9.30	Introductions, Expectations, Logistics and Ground Rules
09.30 – 09.45	Pre-test
09.45 – 11.45	Introduction to IUDs; definition, history, types, mechanism of action, effectiveness, indications and contraindications, advantages and disadvantages
11.45 – 12.00	Break
12.00 – 13. 15	Clinical guidelines in IUDs counseling, insertion, removal and follow up
13.15 -14.30	Management of side effects and complications
14.30-15.00	Post-test (and answers) Review participants expectations Closure
14.30 – 15.30	Lunch

Process:

1. Present the learning objectives of the module

Training Objectives

By the end of the training, participants will be able to:

1. Define IUD as a safe and effective family planning method.
2. Identify types of IUD (medicated vs. non-medicated).
3. Explore IUD's mechanism of action, effectiveness, indications and contraindications, advantages and disadvantages.
4. Identify eligibility criteria for IUDs users.
5. Follow basic guidelines in IUDs counseling, insertion, removal and follow up
6. Identify and manage the side effects and complications of IUDs.

Session 1 :(9.45 – 12.00)

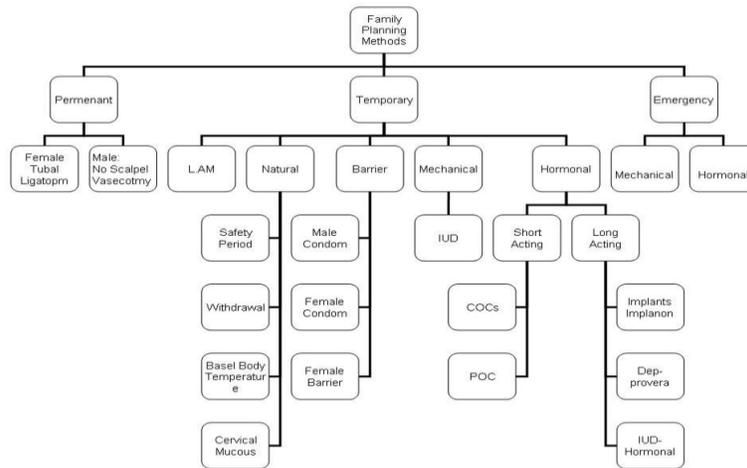
Introduction to IUDs; definition, history, types, mechanism of action, effectiveness, indications and contraindications, advantages and disadvantages

Length	75 minutes
Overview	This session introduces Injectable contraception
Learning outcomes	By the end of the session, participants should be able to: <ul style="list-style-type: none">✓ Share the background of IUCD.✓ Define IUD as a family planning method.✓ Identify types of IUD (medicated vs. non-medicated).✓ Explore IUD's mechanism of action effectiveness, indications and contraindications, advantages and disadvantages.✓ Identify eligibility criteria for IUDs users
Materials	- Markers and flip charts or whiteboards - printed Annexes 1(contraception map) and annex 2 (WHO eligibility criteria)
Methodology	Interactive presentation

2. Present the slide showing the FP methods classification map

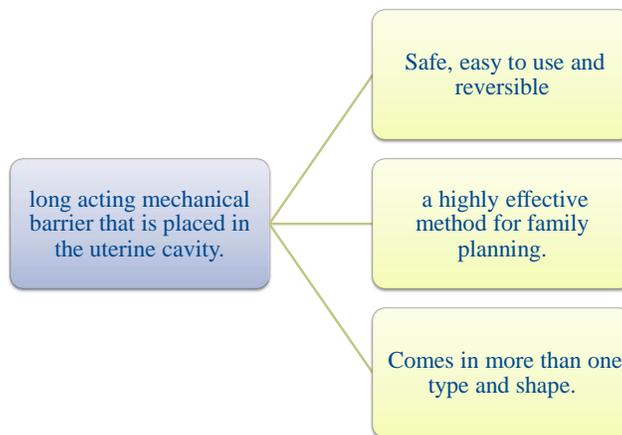
Discuss the map with the participants

Family Planning Map



3. Read and stress on the components of IUDs definition

Definition



4. Read the slide showing overall characteristics of IUDs as family planning method

IUDs as family planning methods

- Mechanical method
- Long term
- Safe in most women
- Second most common reliable contraception worldwide (after condom).
- Can be used as an emergency contraception
- IUD insertion must be performed by well trained health care providers
- Inexpensive and available worldwide

5. Ask the participants if they know the origin of IUDs (the Arabs used to insert a rock in the womb of the female camel during long trips to prevent pregnancy)

Present the slide

Read the slide about the history of IUDs

History

The first IUD, a ring of silk, was described in 1909.

In 1930s, metal devices were described.

In 1960s the first plastic IUD was introduced, and since the 1970s IUDs containing copper have been popular

IUD in Jordan

Cu IUDs are the most common contraceptive methods used in Jordan (22% users rate) with relatively low discontinuation rate (12% in the first year)

6. Open a discussion on known IUDs common to the participants, then show the slide

Ask the participants to identify each type

Types of IUDs

I. Non Medicated:

1. Inert: (no inert IUDs are now marketed in Jordan)
 - a. Ring device made of stainless steel (used in china)
 - b. Lippes loop (widely been used)



II. Copper-Bearing

- a) Copper T-380A 10 years
- b) Multiload Cu 375 5 years
- c) Nova-T 5 years



III. Hormonal

(Levonorgestrel IUD)



7. Ask the participants to discuss openly the mechanism of action of IUDs

Differentiate between Cu IUDs and Mirena

Mechanism of Action

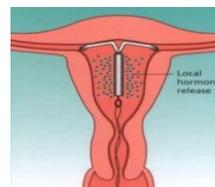
The contraceptive effect of IUDs is not fully understood, but appears to be the result of a variety of mechanisms:

IUD interferes with implantation by producing endometrial changes incompatible with pregnancy, but it also interferes with the reproductive process before the ova reach the uterine cavity

Studies showed that

1. Copper enhances the foreign-body reaction in the endometrium. Copper affects endometrial enzymes, glycogen metabolism and oestrogen uptake and may inhibit sperm transport.
2. Steroid-releasing IUDs (Mirena) suppress the endometrium in a way similar to the progestogen-only pill, and inhibit ovulation
3. The number of spermatozoa reaching the upper genital tract are fewer in IUD users.

4. Reduced numbers of fertilized ova recovered from the Fallopian tube compared with non-IUD users, and ova are virtually absent from the uterus. It is likely that uterine and tubal fluids are altered and impair the viability of the gametes. Copper probably potentiates these effects.
5. IUDs have little effect on prostaglandin metabolism and probably do not affect tubal motility.



8. Explain 100 woman/year (pearl index), no of 100 women users that will get pregnant in one year time

Effectiveness

- TCU-380, have failure rates of less than 1 per 100 woman/year.
- The failure rates of the Nova-T and Multiload-250 are between 1 and 2 per 100 woman/year.
- A levonorgestrel-releasing device (Merina) has a failure rate of less than 2 per 100 woman/year and probably less than one.

Rates of Unintended Pregnancies per 100 Women in the First-Year

Family planning method	Consistent and correct use	As commonly used	Key
Implants	0.05	0.05	0-0.9
Vasectomy	0.1	0.15	Very effective
Levonorgestrel IUD	0.2	0.2	1-9
Female sterilization	0.5	0.5	Effective
Copper-bearing IUD	0.6	0.8	10-25
Combined oral contraceptives	0.3	8	Moderately effective
Progestin-only oral pills	0.3	8	26-32
			Less effective

9. Divide the participants into 3 groups

Ask each group to select a reporter

Group 1: indications, advantages and disadvantages of IUD use, Group 2: Relative contraindications, Group 3: Absolute contraindications

Instruct the groups to discuss the group theme and report on a flip chart to other groups

Time allocated 15 minutes

After each group presentations present corresponding slide (18, 19, 20,21,22)

Indications

IUDs can be used safely for most women regardless of age, parity or medical illnesses

- Parous women who do not wish to take oral contraceptives or in whom their use is contraindicated.
- Nulliparous women unable or unwilling to use another form of contraception.
- Older women coming off the pills who do not wish to use another method or be sterilized.
- The forgetful.
- Women who see their partners sporadically.

Advantages

- The method is reversible, and there is no delay in return of fertility after removal.
- Once inserted, little patient compliance is required.
- It requires no extra supplies to get or use once inserted.
- Women who cannot use hormonal methods can use the copper IUD.
- The IUD does not interfere with lactation.
- The IUD causes no systemic side-effects
- progesterone-releasing IUDs decrease menstrual blood loss and the incidence and intensity of dysmenorrhea and PID.

Disadvantages

- Needs a clinical facility that is well equipped, special insertion set and applying a strict infection control procedure
- Needs a trained health provider for insertion

Absolute Contraindications- 4

- Known or suspected pregnancy.
- Undiagnosed abnormal vaginal bleeding.
- Suspected malignancy of the genital tract. After local therapy for certain early lesions of the cervix (CIN II, carcinoma in situ) an IUD can be fitted.
- Active pelvic inflammatory disease (PID). Fitting an IUD will increase the severity of infection.
- Active STDs.
- Copper allergy (rare) or Wilson's disease (for copper devices only).

Relative contraindications -3

- Menorrhagia.
- Previous ectopic pregnancy.
- Cervical or vaginal infection.
- Abnormality of the uterine cavity (congenital or due to fibroids)
- a recent history of treated pelvic infection.
- Uterine scars from surgery other than caesarean section.
- Anemia.
- Valvular heart disease.(cover with antibiotics)

10. Present slides (23, 24) and indicate that a detailed description of side effects and management will be presented later

Side Effects

- **an increase in the amount of bleeding and/or the length of the period**, the average loss in a normal cycle is 35 ml, with a copper IUD the loss is 50-60ml.
- **Menstrual irregularities**. For the first few months intermenstrual bleeding or spotting may occur. This gets less with time. Premenstrual spotting for 2-3 days is also common.
- **Lower abdominal pain**. This may occur at insertion, particularly in nulliparous women, and last for a few days. Cramps may accompany periods for the first few months and, if severe, may necessitate IUD removal.

Complications

- **Perforation of the wall of the uterus by the IUD or an instrument(ut. Sound) at insertion**
Usually heals spontaneously and uneventfully, if the IUD penetrated the uterine wall an emergency laparoscopic removal should be performed.
- **Infection (PID) within 1 month of insertion**
Result from non compliance to standard precautions.
if not complicated, treat as outpatient with triple antibiotics.
- **Miscarriage, preterm labour or infection if get pregnant on top of IUD**
Remove once pregnancy diagnosed.

11. Specific information which should be obtained as part of the medical history includes:

Diabetes, AIDS, or other immunological disorders. Symptomatic valvular or rheumatic heart disease, a history of endocarditis, cardiopulmonary shunts or artificial heart valves.

Menstrual history (pain, amount and duration of bleeding) and date of last menstrual period (LMP).

Parity, pregnancy outcomes and desire for more children. Previous use of contraception. PID (substantiate if possible) or ectopic. Postpartum or postabortal endometritis. Cervical or uterine malignancy.

In general ex, look for signs of anemia

In breast ex, look for masses

In abdominal ex, look for tenderness and abnormal masses

In external pelvic ex, look for signs of RTI/STIs

In bimanual ex, Determine size, shape and position of uterus and adnexal masses and tenderness

Clinical assessment

Medical assessment for potential IUD users should include a brief history, a limited general examination and a complete pelvic examination

- Medical history
 - Physical examination
 - General ex.
 - Breast ex
 - Abdominal ex.
 - Pelvic ex
 - Bimanual ex
-

12. This chart (quick reference chart for the WHO medical eligibility criteria for contraception use) should be available in the participants files when providing training on any modern contraception method.

Category 1; no restriction

Category 2 ; generally use with follow up

Category 3; usually not recommended, use clinical judgement

Category 4; method should not be used

The purpose of the history is to detect and document: baseline health status, problems requiring treatment or referral

WHO eligibility criteria for contraception use

Quick Reference Chart for the WHO Medical Eligibility Criteria for Contraceptive Use – initiate or continue use of combined oral contraceptives (COCs), depot-medroxyprogesterone acetate (DMPA), progestin-only implants, copper intrauterine device (Cu-IUD)

CONDITION	COC	DMPA	Implan	Cu-IUD	CONDITION	COC	DMPA	Implan	Cu-IUD
Pregnancy	NA	NA	NA	NA	Regressing or undetectable β-hCG levels				
Breastfeeding					Persistent elevated β-hCG levels or malignant disease				
Less than 6 weeks postpartum				NC	Cervical sampling treatment				I, C
6 weeks to < 6 months postpartum					Endometrial				I, C
6 months postpartum or more					Ovarian				I, C
Postpartum					Breast disease				
Less than 21 days, non-breastfeeding					Undiagnosed mass	+	+	+	+
< 48 hours including immediate post-placental					Current cancer				
≥ 48 hours to less than 4 weeks	NC	NC	NC		Past w/ no evidence of current disease for 5 yrs				
Puerperal sepsis					Uterine distortion due to fibroids or anatomical abnormalities				
Postabortion					STIs/PID				
Immediate post-septic					Current gonorrhea, chlamydia, gonorrhoea				I, C
Age ≥ 35 years, < 15 cigarettes/day					Chlamydia				
Age ≥ 35 years, ≥ 15 cigarettes/day					Current pelvic inflammatory disease (PID)				I, C
Multiple risk factors for cardiovascular disease					Other STIs (excluding HIV/hepatitis)				
Hypertension					Increased risk of STIs				I, C
History of (where BP cannot be evaluated)					Very high individual risk of exposure to STIs				I, C
BP is controlled and can be evaluated					Pelvic tuberculosis				
Elevated BP (systolic ≥ 160 or diastolic ≥ 95)					Diabetes				
Elevated BP (systolic ≥ 160 or diastolic ≥ 100)					Non-vascular disease				
Vascular disease					Vascular disease or diabetes for > 20 years				
Deep venous thrombosis (DVT) and pulmonary embolism (PE)					Symptomatic gall bladder disease (current or medically treated)				
History of DVT/PE					Cholelithiasis (history of)				
DVT/PE established on anticoagulant therapy					Related to pregnancy				
Major surgery with prolonged immobilization					Related to oral contraceptives				
Known thrombotic mutations					Hepatitis				
Ischemic heart disease (current or history of) or stroke (history of)					Acute or flare	I, C			
Known hyperlipidemia					Chronic or client is a carrier				
Complicated valvular heart disease					Cirrhosis				
Systemic lupus erythematosus					Mild				
Positive or unknown antiphospholipid antibodies					Severe				
Severe thrombocytopenia					Liver tumors (hepatocellular adenoma and malignant hepatoma)				
Immunosuppressive treatment					HIV				
Headaches					High risk of HIV or HIV infected				
Non-migrainous (mild or severe)	I, C				AIDS				
Migraine without aura (age < 35 years)	I, C				No antiretroviral therapy (ART)				
Migraine without aura (age ≥ 35 years)	I, C				Clinically well on ART therapy				use drug interactions
Migraines with aura (at any age)	I, C				Not clinically well on ART therapy				use drug interactions
Vaginal bleeding patterns					Nucleoside reverse transcriptase inhibitors				
Irregular without heavy bleeding					Non-nucleoside reverse transcriptase inhibitors				
Heavy or prolonged, regular and irregular					Ritonavir, ritonavir-boosted protease inhibitors				
Unexplained bleeding (prior to evaluation)					Bilastine or rilastine				
					Anticoagulant therapy**				

■ Category 1 There are no restrictions for use.
■ Category 2 Generally safe; some follow-up may be needed.
■ Category 3 Usually not recommended; clinical judgment and continuing access to clinical services are required for use.
■ Category 4 The method should not be used.

Unlike previous versions of the MEC Quick Reference Chart, this version includes a complete list of all conditions (classified as Category 3 and 4 by WHO).
 I/C (Initiation/Continuation): A woman may fall into either one category or another, depending on whether she is initiating or continuing to use a method. For example, a client with current PID who wants to initiate IUD use would be considered as Category 4, and should not have an IUD inserted. However, if she develops PID while using the IUD, she would be considered as Category 2. This means she could generally continue using the IUD as long as she has the IUD in place. Where I/C is not marked, the category is the same for initiation and continuation.
 NA (Not applicable): Women who are pregnant do not require contraception.
 NC (Not classified): The condition is not part of the WHO classification for this method.
 ** Anticoagulants include phenytoin, carbamazepine, lamotrigine, phenobarbital, topiramate, oxcarbazepine, and tenofovir. Lamotrigine is a category 1 for implants.



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13. Bring in WHO sheet (annex 1) and include it in the participants files

Category 1;hx of PID or ectopic, previous explosion, previous C/S, breast feeding, Current or past cardiovascular diseases, Headaches, including severe headaches and migraines, Current or past breast cancer or benign breast disease, Current or past liver or gallbladder disease, obesity, smoking

Category 2; Less than 48 hours postpartum, Childless or age 20 or younger, Heavy or prolonged menstrual bleeding without anemia, Severe menstrual cramps, anatomical abnormality that does not distort the uterus, Endometriosis, Sickle cell disease,

Category 3; High risk for STIs, Heavy menstrual bleeding anemia, Between 48 hours and four weeks postpartum, HIV infection

Category 4; Pregnancy, Active STD, abnormal vaginal bleeding, Severely distorted uterine cavity, Cervical, endometrial, or ovarian cancer and Pelvic TB

Eligibility Guidelines For Copper IUDs (who)

■ **WHO Category 1:**

Safe and effective to use Copper Bearing IUD

■ **WHO Category 2:**

Advantages generally outweigh theoretical or proven disadvantages, and copper-bearing IUD generally can be provided without restriction

■ **WHO Category 3:**

Conditions, in which copper-bearing IUDs are usually not recommended, but doctor or nurse may make an exception in individual cases

■ **WHO Category 4:**

Conditions that rule out use of copper-bearing IUDs:

14. Read the slide

Comments related to medicated IUDs (Mirena)

- The levonorgestrel Intrauterine Device is a T-shaped polyethylene device. The cylindrical reservoir around the vertical stem contains a mixture of silicone and 52 mg of levonorgestrel
 - Mirena has an effective life of 5 years
 - With few exceptions, the mechanism of action, indications, precautions, side effects and complication, and time of insertion are same as copper IUDs.
 - Mirena has many noncontraceptive benefits. It has beneficial effect on menorrhagia, dysmenorrhea and reduces the risk of pelvic inflammatory disease. It also reduces the risk of endometrial cancer by 50%.
 - women having active liver disease, liver tumor, known or suspected carcinoma of the breast or genital actinomycosis should not use Mirena
 - The ovarian cysts are three times more common in Mirena users
-

Session 2 :(12.00 – 13.00)

Management guidelines in IUDs counseling, insertion, removal and follow up

Length	60 minutes
Overview	This session introduces Management guidelines in IUDs counseling, insertion, removal and follow up
Learning outcomes	By the end of the session, participants should be able to: <ul style="list-style-type: none">✓ Provide IUD pre-insertion counseling to the client.✓ Identify timing for IUD insertion.✓ list the steps for IUD insertion✓ Identify post-insertion and follow-up care for the client✓ Provide pre and post-removal counseling to the client✓ Identify timing and indications for IUD removal.
Materials	- Markers and flip charts or whiteboards
Methodology	Interactive presentation

1. Ask the participants to identify main components in IUD counseling

Report the answers on a flip chart

Pre-insertion counseling

Counseling should provide specific information about:

- How it prevents pregnancy.
 - Advantages and disadvantages including side effects (particularly those related to menstrual bleeding, cramping and expulsion) and other problems.
 - Insertion/ removal procedure and effective life of the Copper T 380A IUD.
 - Timing of insertion and which contraceptive method to use if insertion is delayed.
 - Freedom of the client to discontinue the method whenever desired.
 - No delay in return of fertility after removal.
-

2. Ask the participants:”when to insert IUD?”

Collect answers on a flip chart and show the slide and discuss each point

Timing for IUD insertion

- I. Any time during menstrual cycle, if you are reasonably certain the client is not pregnant.
 - II. Immediately postpartum (within 10 minutes) following delivery of the placenta, during or immediately after a cesarean section.

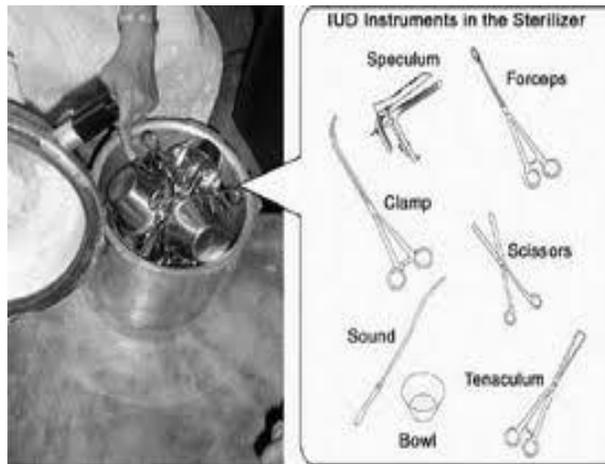
Insertions after one week of delivery and before four weeks post partum should be avoided because of the higher risk of uterine perforation
 - III. Immediately post abortion (or within 7 days from abortion)
-

3. Show IUD set

Stress the fact that sterilization should follow the universal standards

Stress the fact that this particular training will not cover practical training on IUD insertion

IUD insertion set



4. immediate problems may include:

- Nausea
- Mild to moderate lower abdominal pain (cramping)
- Syncope (fainting), rarely.

Because of these potential problems, it is recommended that all clients remain at the clinic for 15 minutes before being discharge

Post-insertion and follow-up care

Most clients will not experience problems immediately following IUD insertion.

Instruct the patient on *Early IUD Warning Signs*

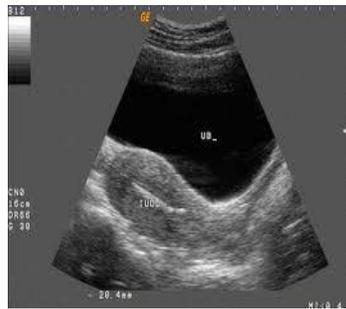
Early IUD Warning Signs	
P	- Period late (pregnancy), abnormal spotting or bleeding
A	- Abdominal pain, pain with intercourse
I	- Infection exposure (any STD) abnormal discharge
N	- Not feeling well, fever, chills
S	- String missing, shorter or longer

5. discuss the follow up plan

Follow-up:

1. The patient should be seen 4-6 weeks after insertion, 3 months, 6 months and annually thereafter, unless symptoms develop necessitating an earlier appointment.
2. At each visit she should be asked about her menstrual pattern, pelvic pain and vaginal discharge.
3. Pelvic examination should be carried out to exclude any abnormality, to confirm that the IUD is in position and to take a cervical smear if screening guidelines dictate.

6. show Pictures demonstrate ultrasound finding post insertion and thread checking in follow up visits (ultrasound finding and speculum examination)



7. Indicate that most common cause for IUD removal is poor counseling upon insertion and management of side effects

Read the slide for medical and personal indication for removal of IUDs and discuss briefly each point

Indicate that more details will be provided in the session management of side effects/ complications

Indications for IUD removal

Medical:

- Known or suspected pregnancy if the thread is visible and pregnancy less than 13 weeks:
- Excessive bleeding.
- Severe anemia (hemoglobin less than 9 gm/dl).
- Unacceptable lower abdominal pain associated with menstrual cramping.
- Signs of pelvic inflammatory disease (PID).
- Known or suspected uterine or cervical neoplasia.
- Partial expulsion.
- Menopause.

Cont.

Personal:

- Anytime the client requests- for any stated reason, or if no reason at all.
- Change of method.
- Desire for pregnancy.
- No need for protection against pregnancy.

8. Read the slide and discuss each point

Pre and post-removal counseling

Pre removal counseling:

- Greeting clients.
- Ask her for the cause of removal.
- Discuss with her whether the causes of removal are related to side effect, as many could be managed.
- Discuss her reproductive plan
- Explain the procedure to the client.

IUD may be removed at any time during the menstrual cycle

9. Read the slide

General Guidelines for IUD removal

- IUD removal is usually a routine uncomplicated and painless procedure.
 - To avoid breaking the strings, apply gentle, steady traction and remove the IUD slowly.
 - To minimize the risk of infection with IUD removal, follow the same infection prevention practices as for IUD insertion.
 - Instruments and equipment for removal are the same as for the insertion.
-

Session 3 :(13.15 – 14.30)

Management of side effects and complications

Length	75 minutes
Overview	This session introduces Management of side effects and complications
Learning outcomes	By the end of the session, participants should be able to: <ul style="list-style-type: none">• Manage the side effects and complications of DMPA according to standards
Materials	- Markers and flip charts or whiteboards Printed copies of annex 4 (IUDs side effects) and annex 3 (cas studies)
Methodology	Interactive presentation

1. Read the learning outcomes

Divide the participants into 5 groups

Instruct each group to nominate a reporter

Distribute the previously printed case studies (1-5) (annex 3)

Instruct the groups to read the case study, answer the questions and present to other groups

The time allocated to group work is 20 min

Case study 1

A 30 years old women, P3, presented to your clinic after 3 months of IUD (Cu T 380) insertion, complaining of premenstrual spotting and heavy cycle

- 1. What would be pertinent questions to be asked?*
- 2. What to look into in the physical ex?*
- 3. How to manage this case?*

1. Find out more about woman's symptoms (clinical assessment)

2. Manage as appropriate based on findings;

If her menstrual bleeding changes are within normal range (e.g., the first 3 to 6 months after IUD insertion), provide reassurance and advice.

If her menstrual bleeding changes are very bothersome to the woman and she wishes to have the IUD removed, remove the IUD as soon as possible.

If bleeding changes are accompanied by anemia (diagnosed or suspected), provide oral iron supplementation

If her menstrual bleeding changes have continued beyond 3 to 6 months after IUD insertion and a gynecologic problem is suspected, or began long after IUD insertion, conduct evaluation and provide treatment accordingly

If her menstrual bleeding lasts twice as long or is twice as heavy as usual, conduct further evaluation and provide treatment accordingly

Case study 2

A 25 years old woman, P1, presented to your clinic for IUD check. Complained of menstrual cramps since IUD insertion 6 months ago that is annoying her

- 1. What would be pertinent questions to be asked?*
- 2. What to look into in the physical ex?*
- 3. How to manage this case?*

Find out more about the woman's symptoms (clinical assessment)

Conduct appropriate assessment (including pelvic examination) to identify or rule out other possible causes of the symptoms

If cramping or pain is severe, remove the IUD

If the IUD was improperly placed or looks abnormal, advise the woman that inserting a new IUD may solve the problem

If cramping or pain is not severe, provide reassurance and advise, Explain that it is generally not harmful, and usually lessens in the first few months after IUD insertion. -Recommend ibuprofen (200-400 mg every 4-6 hours) or another NSAID immediately before and during menstruation to help reduce symptoms

Case study 3

In the emergency room, a 26 year old patient presented to you with 2 days lower abdominal pain and fever. The patient gave hx of IUD insertion 1 week ago.

- 1. What would be pertinent questions to be asked?*
- 2. What to look into in the physical ex?*
- 3. How to manage this case?*

Conduct appropriate assessment (including abdominal and pelvic examination) to identify or rule out other possible causes of the symptoms, such as ectopic pregnancy and appendicitis.

If diagnosis of PID confirmed, Advise the woman that she should begin treatment immediately to avoid serious potential consequences of the infection, and that the IUD does not need to be removed during treatment (unless symptoms do not improve within 72 hours).

If the woman does not want to keep the IUD in during treatment, arrange to have the IUD removed 2 to 3 days after antibiotic treatment has begun.

If the woman's symptoms of acute infection, such as pain, fever, and chills, have not improved, refer/transport her to a hospital.

Case study 4

A 30 years old woman - with a hx of IUD (Cu 380) insertion 3 years ago- presented to your clinic with 6 weeks amenorrhea.

- 1. What would be pertinent questions to be asked?*
- 2. What to look into in the physical ex?*
- 3. What needed investigations to be requested?*
- 4. If the pregnancy test was positive how to manage this case ? what precautions need to be taken?*

Conduct appropriate assessment (including abdominal and pelvic examination). Rule out ectopic pregnancy

advise the woman that the IUD should be removed immediately

Counsel the woman on the benefits and risks involved:

- Removing the IUD slightly increases the risk of miscarriage. Leaving the IUD in place can cause second – trimester miscarriage, infection and preterm delivery**

Make clear that removing IUD is the healthiest option for her and her baby

Case study 5

A 32 years old patient presented to you for an IUD check (was inserted 1 month ago), the pt. indicated that the insertion was painful and she has spotting on and off

1. *What would be pertinent questions to be asked?*
2. *What to look into in the physical ex?*
3. *What needed investigations to be requested?*

In performing U/S ex, the uterus was empty and no IUD visualized

1. *How to manage this case?*

Identified by Sudden loss of resistance to the uterine sound or IUD insertion device (during IUD insertion) or Unexplained pain

Suspected Uterine Perforation During IUD insertion Procedure:

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

If resistance is encountered, stop pulling and refer the woman immediately for laparoscopy for evaluation and/or removal by a qualified surgeon.

If the IUD is outside the uterus refer the woman immediately for laparoscopic for IUD removal by a qualified surgeon

Uterine perforation discovered within a few days or weeks of IUD insertion:

If necessary, confirm the perforation / degree of perforation by X-ray or ultrasound

If the IUD is embedded in the wall of the uterus (partial perforation), refer the women for IUD removal by a specially trained providers.

If the IUD is outside of the uterine cavity (complete perforation) , refer the woman immediately for IUD removal by a surgeon qualified to perform laparoscopy or laparotomy.

Uterine Perforation Discovered 6 weeks or more after IUD insertion

If necessary, confirm the perforation and the degree of perforation by X-ray or ultrasound

If the IUD is embedded in the wall of the uterus (partial perforation) refer the woman for IUD removal by a specially trained provider

If the IUD is outside the uterine cavity (complete perforation):Do not remove the IUD. Advise the woman that it is safer to leave the IUD where it is than to remove it

If the IUD is outside of the uterine cavity (complete perforation) and the woman has symptoms such as abdominal pain with associated diarrhea, or excessive bleeding, refer the woman immediately for IUD removal by a surgeon qualified to perform laparoscopy or laparotomy