



INTRAUTERINE DEVICES (IUD) - PART I

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Objectives

- Describe the types of Intrauterine Devices (IUDs)
- Describe the efficacy of IUDs
- Discuss the mechanism of action of IUDs
- Discuss the advantages and disadvantages of IUDs
- Describe the common misconceptions attributed to IUDs
- Identify eligible and not eligible clients for IUD



Intrauterine Devices (IUD)

- Globally, the 2nd most commonly used modern method
- Very low use in Sub-Saharan Africa (Ethiopia, 2%)
- Small flexible plastic devices
- Two kinds:
 - Copper-containing
 - Hormone-containing

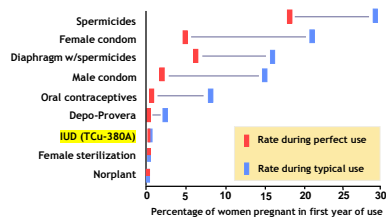


Duration and Efficacy of IUDs

| | Copper-releasing | Progestin/Levonorgestrel-releasing |
|----------------------------------|----------------------------------|------------------------------------|
| Duration | 12 yrs (Paragard Copper T 380A)* | 5 yrs (Mirena) |
| Perfect user failure rate | 0.6% | 0.1% |
| Typical user failure | 0.8% | 0.2% |

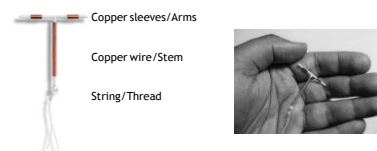


Pregnancy Rates by Method



Source: Hatcher, 2004

Parts of IUDs (TCu 380A)



Mechanism of Action

| Mechanism of Action | Copper T IUD | LNG IUD |
|---------------------|---|--|
| Primary | <ul style="list-style-type: none"> Prevents fertilization Reduces sperm motility and viability Impairs oocytes | <ul style="list-style-type: none"> Inhibits fertilization Causes cervical mucus to thicken Inhibits sperm motility and function |
| Secondary | <ul style="list-style-type: none"> Inhibits implantation | <ul style="list-style-type: none"> Inhibits implantation |

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Benefits of Copper IUDs

- Highly effective
- Long term
- Do not require ongoing effort
- Effective immediately after insertion
- Cost-effective
- Fast return to fertility



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Benefits of Copper IUDs (con't)

- Do not affect breastfeeding
- Not user/partner dependent
- Can be used for emergency contraception (EC) within 120 hours of unprotected intercourse
- Lack of hormonal exposure, continued menstrual cyclicity
- Some protection against endometrial cancer



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Disadvantages/Side Effects of Copper IUDs

- No protection against upper genital tract infections and HIV
- Average monthly blood loss increased by up to 50% with spotting and cramping in first few weeks of insertion
 - Improves after 6 months
- Psychological discomfort of foreign body inside
- Trained provider dependent
- Risk of PID increased with recent STI or high-risk lifestyle
- Syncope/vasovagal episode during insertion (rare)



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Rare Complications (to be discussed in part II)

- Missing strings/Expulsion of IUD
- Pregnancy (intrauterine or ectopic)
- Perforation (< 1/1000 cases)
- PID with or without tubo-ovarian abscesses



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Myths and Misperceptions

- Unsafe:
 - Infection
 - Infertility
 - Ectopic pregnancy
 - Pain
 - Abortion
 - Anemia
- Requires restriction of physical activity
- Cannot be used by nulliparous or adolescent women
- Will migrate to the abdomen or will get buried in the uterus
- May increase HIV transmission to partner or PID if used by HIV positive woman



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Eligibility



Categories of Medical Eligibility Criteria for Contraceptive Use

| Category | Eligibility |
|----------|--|
| 1 | A condition for which there is no restriction for the use of the contraceptive method. |
| 2 | A condition for which the advantages of using the method generally outweigh the theoretical or proven risks. |
| 3 | A condition for which the theoretical or proven risks usually outweigh the advantages of using the method. |
| 4 | A condition that represents an unacceptable health risk if the contraceptive method is used. |



Case: Nulligravida Adolescent

- 17-year-old high-school senior
- Has been sexually active with a boyfriend for 3 months
- Has been using condoms for birth control
- Does not want to use hormonal method of contraception



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Would you consider IUD?



Who Can Use IUDs (Categories 1 and 2)

- Any parity
- Any age
- Immediately after abortion or delivery/c-section
- Not yet sure about permanent method (VSC)
- HIV positive
- Emergency contraception
- Women who cannot use hormonal methods (Copper IUD)
- Women with previous STI can use unless they are currently at high risk



Who Should Not Use IUDs (Categories 3 and 4)

- Pregnant (known or suspected)
- Unexplained vaginal bleeding
- Post partum: Between 48 hours-4 weeks
- Post partum/post abortion with sepsis
- Current PID, STI (purulent cervicitis)
- Women with high risk of STI



Who Should Not Use IUDs (Categories 3 and 4) (con't)

- Women living with severe or advanced HIV clinical disease (WHO stage 3 or 4)
- Current pelvic tuberculosis
- Gestational trophoblastic disease or cervical/endometrial cancer
- Severe uterine cavity distortion from myoma or congenital abnormalities



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Copper-T IUD is an option



To be continued...

