

Reproductive Life Planning

21th Lecture

Introduction

- The goal of FP is to enable couples and individuals to **freely choose how many children to have and when to have them.**
- Family planning offers freedom from fear of unplanned pregnancy and can improve sexual life, partner relations, and family well-being.
- Many contraceptive methods are available, including methods that are short- or long-acting, permanent or reversible, hormonal or non hormonal, and for use by women or men.

Types of Birth Control

Temporary methods

- Natural Family Planning or Periodic (NFP)
- Hormonal
- Barrier (Mechanical)
- IUD

Permanent methods

- Sterilization

Emergency contraception

- Emergency (Post coital) contraception

Temporary methods

Natural Family Planning or Periodic (NFPM):

- Abstinence (Fertility Awareness Method (Periodic))
- Withdrawal
- Lactational Amenorrhea Method (LAM).

1. Abstinence

- Abstains from sex during the calculated **fertile time**, Uses barrier methods during fertile time.

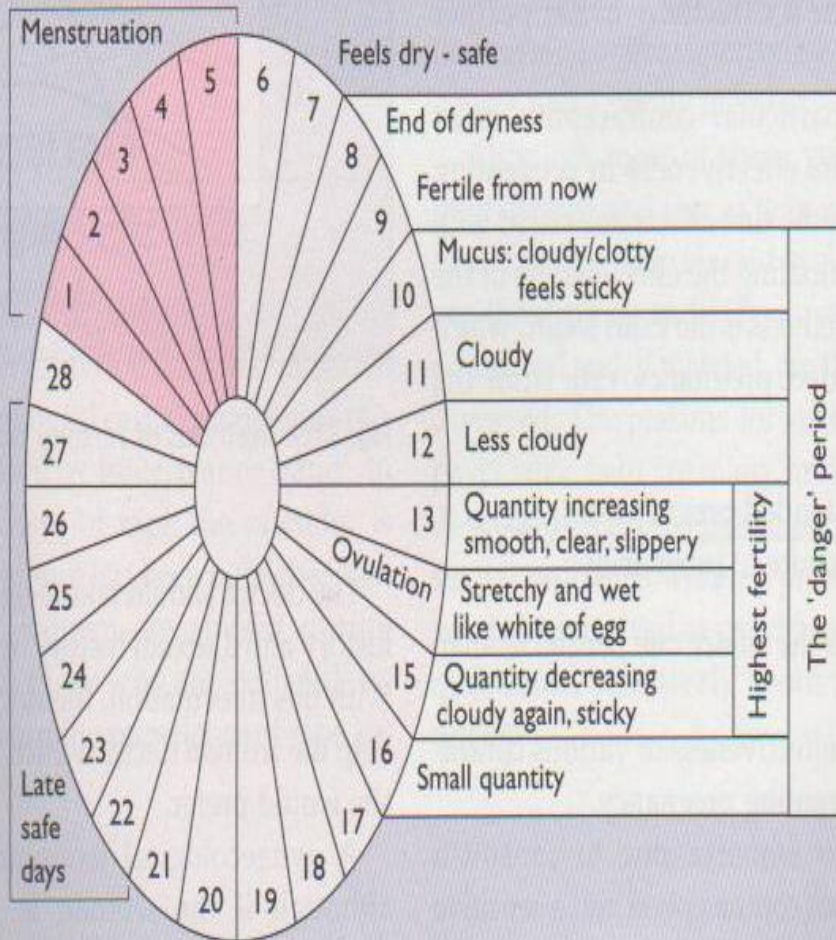
fertile times : In a woman with normal duration & regular menstrual cycle, ovulation occurs 14 ± 3 days before the start of the next cycle

Indicators for Fertile times

-During ovulation the BBT rises.

-During a fertile phase (about 6 days) the cervical mucus will be watery.

Periodic Abstinence



✓ **Advantages:** No devices; No cost; No chemicals; No adverse effects

✗ **Disadvantages:** Only for regular and predictable cycles; No protection against STDs

2. Withdrawal

- called coitus interruptus,
- requires a man to withdraw his penis from his partner's vagina **before** ejaculation
- **Adv.:** It does not affect breastfeeding, has no hormonal side effects, and can be used as a backup to other methods.
- **Disadv.:** Not all men can predict the pre ejaculation time.
- Efficacy: Has a failure rate of 30 – 40

3. Lactational Amenorrhea Method (LAM).

LAM is a very effective method if the following three criteria are met:

- The woman is amenorrheic
- The woman is fully breastfeeding (does not give the infant supplementary food).
- The baby is less than six months old .



Can Employed Women Use LAM?

- Women who are able to keep their infants with them at the work site or nearby and are able to breastfeed frequently can rely on LAM as long as they meet the three criteria for LAM.
- Women who are separated from their infants by work or for other reasons can use LAM if the separation is less than **four to five hours** at a time.
- Expressing breastmilk may not signal to stimulate milk production as well as suckling.

Hormonal Methods

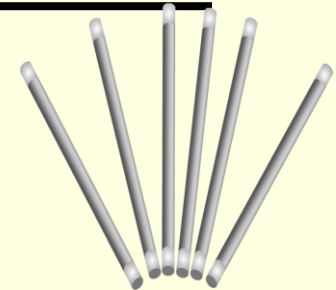
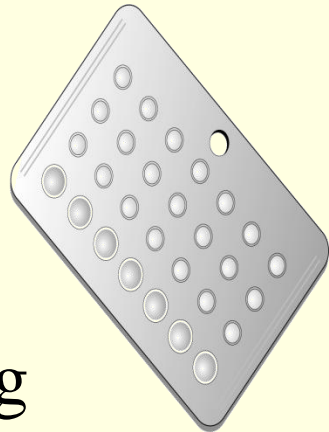
1- Combination estrogen & progesterone:

OCPs

Injections

Patches

Vaginal ring



Implants (Norplant)



upper outer arm

Injections (Depo-Provera)



2-Progesterone only

Useful during breastfeeding

How does Hormonal Methods work?

- Prevent LH surge (prevent ovulation) by suppression pitutary-gonadaL axis.
- Thickening of cervical mucus & inhibition of endometrial proliferation ;making fertilization & implantation less likely.



Table 27-4. Contraindications to the use of estrogen-containing contraceptives

	ABSOLUTE	Relative Contraindications*
Venous thrombosis	Endometrial cancer	Complicated, prolonged diabetes
Pulmonary embolism	Hepatic tumor or abnormal liver function	Estrogen-dependent neoplasms
Coronary vascular disease	Unexplained abnormal uterine bleeding	Depression
Cerebrovascular accident	Age >35 and cigarette smoking	Severe varicose veins
Current pregnancy	Uncontrolled hypertension	Hypertriglyceridemia
Breast cancer within last 5 years	History of melanoma	

*Requires clinical judgment and informed consent.

Positive Benefits of OCPs

- ✓ Prevents pregnancy
- ✓ Eases menstrual cramps
- ✓ Shortens period
- ✓ Regulates period & shortens (helps treat anemia)
- ✓ Not related to sexual intercourse
- ✓ Decreases incidence of ovarian cysts
- ✓ Decreases acne
- ✓ Reversible: Fertility is resumed very rapidly after discontinuation

Disadvantages

- **Side effects**: Nausea, Wt gain, headaches
- Effectiveness depends on regular use
- Continuity of supplies
- Not suitable for lactating women
- Mood changes
- Very rarely: thromboembolic complications
- Does not provide protection against STDs

When to Initiate the Pills

If Menstruating:

- Any day during the cycle provided that the provider is sure she is not pregnant

Post partum, Lactating:

- After weaning the baby or after 6 months

Post partum, Non lactating:

- 3-6 weeks post partum

Post abortion:

- First week post abortion



How to take the Pill

- Take one pill, by mouth at the same time everyday

If you use the 28-pill pack:

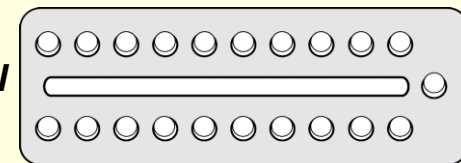
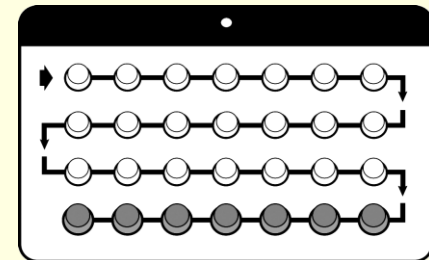
- Take all the pills, one each day
- Start new pack on the next day after finishing old pack

28-pill pack

If you use the 21-pill pack:

- Take all the pills, one each day
- Wait 7 days after finishing old pack
- Then start new pack on next day

21-pill pack



If you miss pills

ALWAYS:

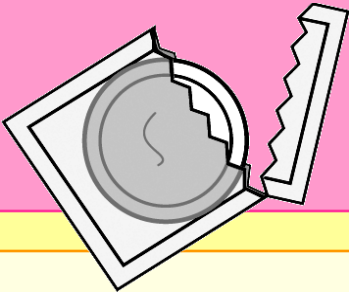
Take a pill as
1 soon as you
remember

Take the next
2 pill at the usual
time

Keep taking
active pills as
3 usual, one each
day

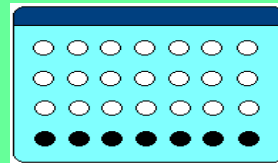
4 If you miss 2 or more pills, or start pack 2 or more days late,
you ALSO need to:

USE BACK-UP:
Avoid sex or use
condoms for 7 days



AND

SKIP WEEK 4: (inactive pills
or pill-free week)
and go straight to next pack



Inactive Pills



What to Remember

- Use condoms for first month
- Use condoms when on antibiotics

See a doctor or nurse AT ONCE if:

Severe, constant pain in uterus, chest, or legs

Very bad headaches; Brief loss of vision, seeing flashing lights or zigzag lines; Yellow skin or eyes

Injections

- 0.5-cc injection administered IM once monthly
- It is 99.7% effective.
- It is reversible.
- No daily pills to remember

Clients who choose injectable

- Do not massage injection site
- Expect bleeding:
- Return if problems arise
- No protection from STIs, including HIV



Positive Benefits

✓ Advantages:

- ✓ Safe; highly effective; easy to use
- ✓ Long-acting but reversible
- ✓ No action at time of intercourse
- ✓ Can be used by breastfeeding women
- ✓ Non-contraceptive health benefits (Ca; ectopic; yeast infection; PID; fibroids)

✗ Disadvantages:

- ✗ Delay in return to fertility
- ✗ No STI/HIV protection

SIDE EFFECTS

- Extremely irregular menstrual bleeding and spotting for 3-6 months!
- NO PERIOD 😊 after 3-6 months
- Weight change
- Breast tenderness
- Mood change

*NOT EVERY WOMAN HAS SIDE-EFFECTS!

Ortho-Evra patch

- Birth control patch is a once-a-week birth control option .
- Serious risks: include blood clots, stroke or heart attacks and are increased if pt smokes cigarettes.
- Patches do not provide protection against STDs.



Vaginal Ring



- Thin, transparent, flexible ring that inserted into the vagina, usually around the cervix.
- Exact placement is not essential. Obtained by prescription only, the ring is left in the vagina for **three weeks**, slowly releasing estrogen and progestin hormones into the body.
- It is worn continuously for three weeks followed by a week off which triggers menstruation.
- Each vaginal ring provides one month of birth control, even during the week when the ring is not worn.
- The ring does not provide protection against STDs

Progesterone only



1-OCPs-mini pills: The pills are taken daily

Good for: Lactating woman; Women over 40 years

SE: Menstrual changes ,spotting then amenorrhea; Wt changes.; Headache; Mood changes.

2-Injections: Depo provera (DMPA):IM inection / 3 months

Can be up to 4 weeks early or late

Advantages: effictive ,easy ,decrease mens.bl.,decrease PID ,candidal infection & endomet. Ca.

Disadvantages: as mini pills

3-Implants

4-IUDs

Implants (Norplant)

- 6 subdermally siliastic tubes filled with the progestin physically inserted in simple 15 minute outpatient procedure under the skin in the arm (subdermal
- Recommended period of use is 5 years.
- Higher failer rate with women wt more than 70 kgs.

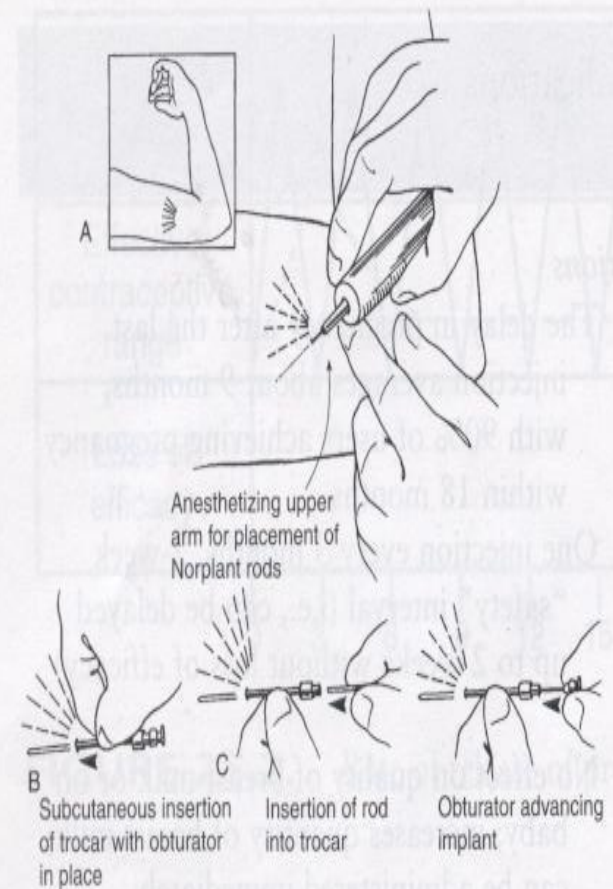


FIGURE 25.3. Insertion of Norplant.

Norplant: *Characteristics*

Advantages

safe;
highly effective;
easy to use

no action at time
of intercourse

long-acting;
but reversible

can be used by
breastfeeding women

non-contraceptive
health benefits

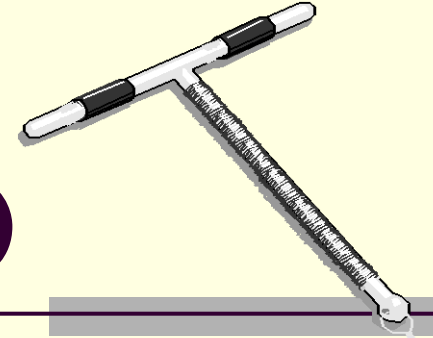
Disadvantages

side effects common
Bleeding vs Amenorrhea

cannot be initiated
or discontinued
without provider

insertion and removal
require minor surgery

no STI/HIV protection



Intrauterine Device (IUD)

- Small T- shaped device, containing copper or the hormone progesterone, implanted high in uterine fundus by a health care professional.
- Ideal time of insertion during menstrual cycle, or immediately after vaginal or cesarean delivery if no infection or Hge (within 48 hours or delay 6 weeks)
- Has anylon thread (tail) for the purposes of detection & future removal.
- Extremely effective > 97 %
- IUDs increase risk for pelvic inflammatory disease (PID), uterine perforations, and ectopic pregnancy, Dysmenorrhea in addition to possibility to expulsion
- No protection against STDs.

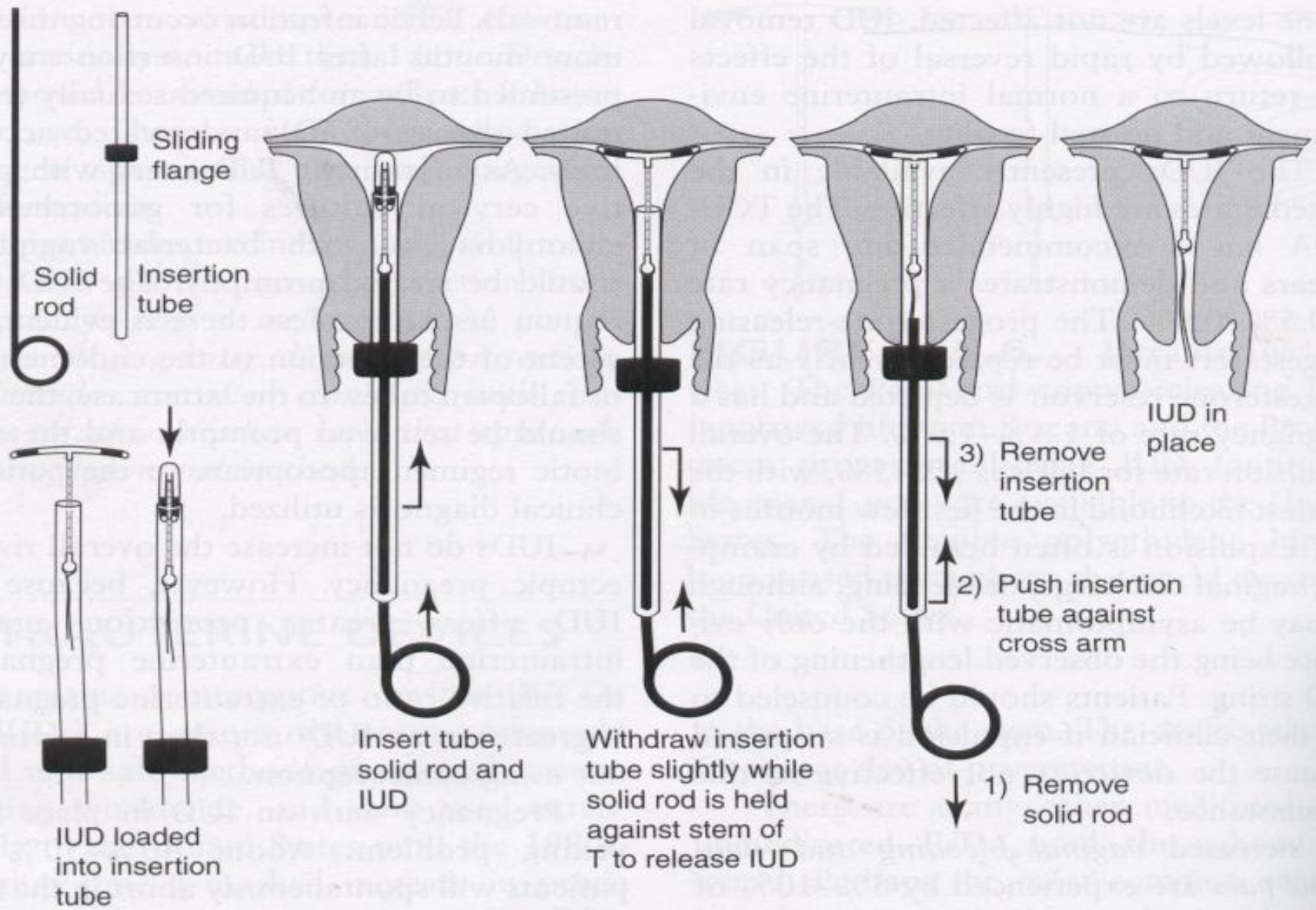


FIGURE 25.7. Insertion of an IUD.

menses who are anticoagulated or who

proper inserter removal while leaving the

IUD Use and Follow-up

Teach client to check for strings

- After each menses (expulsions are most likely in first 6 months)

Schedule follow-up visits at:

- 3 to 6 weeks to check for placement & if any infection
- 1 year; yearly thereafter

Encourage to return to clinic for questions, problems or signs of complications

Copper IUDs: *Characteristics*

Advantages

very safe and highly effective

no action at time of intercourse

long-lasting, reversible, rapid return to fertility

no systemic side effects; complications are rare

can be used by breastfeeding women

Disadvantages

side effects, including cramping and heavy bleeding

insertion and removal require trained provider

not suitable for women at risk for STIs

no STI/HIV protection

Barrier Methods

- Prevent the sperm from meeting the egg
- Barrier methods have higher failure rates than hormonal methods due to design and human error

- Spermicides
- Condoms
- Diaphragm
- Cervical cap



SPERMICIDES



- **Chemical** compounds act to inactivate sperms in the vagina before it can move into the upper genital tract
- Available as creams, films, foams, gels, jellies, suppositories, or tablets. They may come in tubes with plastic applicators.
- Must be reapplied each time there is intercourse.
- Insert deep into vagina to cover the cervix well 10 minutes (5-30 min) before sexual intercourse
- Only 76% effective (used alone), should be used in combination with another method i.e., condoms
- Does not require a prescription
- May be discontinued at any time
- May cause irritation in the vagina or on the penis, can increase UTI in women.
- Not recommended for preventing STIs



MALE CONDOM



- Membranous sheath thin latex rubber; dry or lubricated with a water-based lubricant or spermicide that covers the penis and catches the sperm before it enters the vagina.
- Typical effectiveness rate = 88%
- Combining condoms with spermicides raises effectiveness levels to 99%
- **No medical side-effects**
- **Inexpensive, easily accessed**
- **Protecting against STDs (Latex)**
- **Disadvantages**: ↓ enjoyment ; Latex allergy; Breakage and slippage ; Oil-based lubricants may damage the condom; heat; humidity or light.

FEMALE CONDOM

- Made as an alternative to male condoms
- Physically inserted in the vagina
- Typical rate = 79%
- Woman can use female condom if partner refuses
- **Has two flexible rings**
- *NO male condom with a female condom
- *A new condom every time
- *Inserted for up to 8 hours

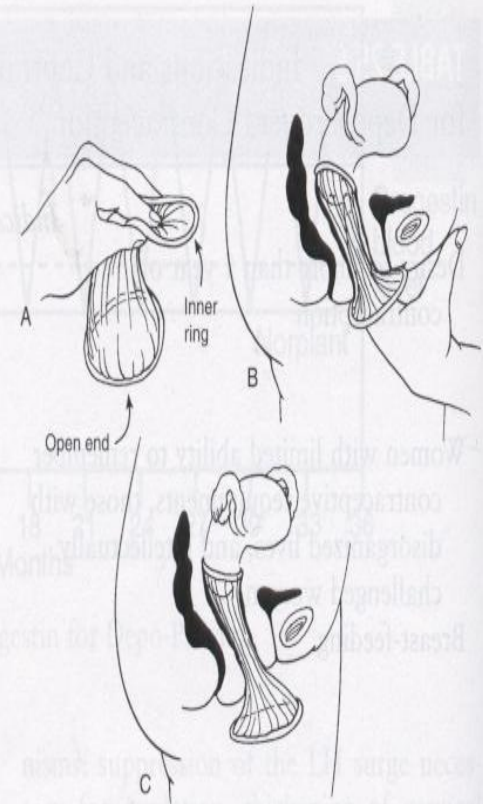


FIGURE 25.4. The female condom. (A) Preparation for insertion. (B) Insertion. (C) Condom in proper position.

Diaphragm:

- It is a dome-shaped latex device that covers the cervix and part of the vaginal wall, and is held in place by a flexible rim.

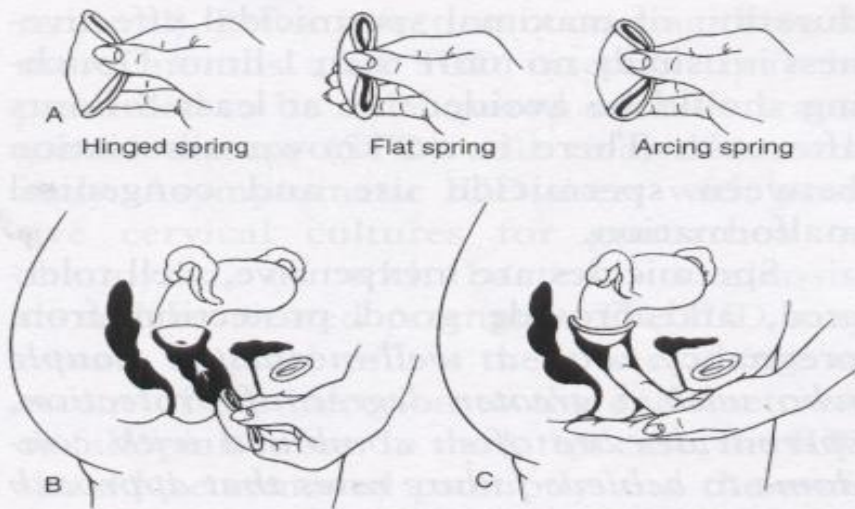


FIGURE 25.5. Diaphragms. (A) The three types of diaphragms. (B) Insertion of the diaphragm. (C) Checking to ensure that the diaphragm covers the cervix.





CERVICAL CAP

- Cup-shaped rubber device that covers the cervix & inserted in vagina before intercourse
- Fill with spermicidal jelly prior to use
- Can be left in body for up to a total of 48 hours
- Must be left in place six hours after sexual intercourse
- Typical effectiveness rate = 80%

Side effects

- *Toxic shock syndrome
- *Unpleasant odour
- *Discomfort
- *Accidental dislodgment & requires training

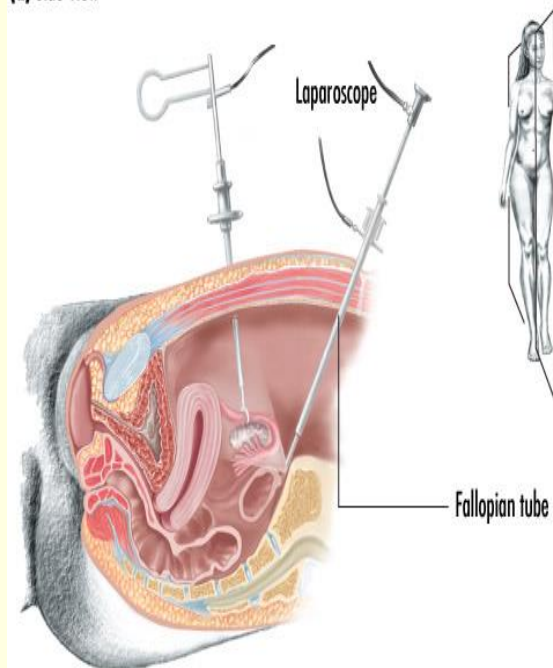


Barrier method:
The cervical cap fits snugly over the cervix, preventing sperm from entering the uterus

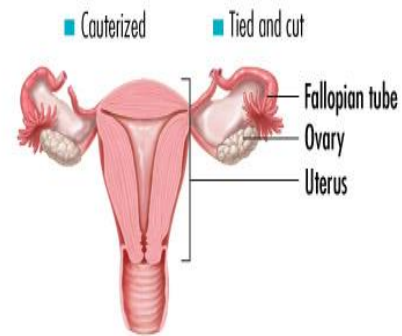
STERILIZATION

- Procedure performed on a man or a woman permanently sterilizes
- **Female = Tubal Ligation:** the fallopian tubes are cut, sealed off, or clamped. Most are performed under local anesthesia
- Two types of abdominal tubal ligation include minilaparotomy and laparoscopy.
- Failure rates vary by procedure, from 0.8%-3.7%;
- Risks of tubal ligation include bleeding, infection, and other complications.

(a) Side View



(b) Front View



Male Sterilization: VASECTOMY

- Involves cutting and tying the vas deferens; when the tubes are cut, sperm cannot be emitted during ejaculation.
 - It is a simple, 20 minute procedure done in a doctor's office.
 - No effect on a man's sexual desire, erections, or sexual performance.
 - Uncomplicated and causes few problems
 - No-scalpel technique available
 - Faster and easier recovery than a tubal ligation
 - Failure rate = 0.1%, more effective than female sterilization

Emergency Contraception

- a form of contraception that women can use to prevent pregnancy after unprotected intercourse.

- Two types:

1-emergency contraceptive pills (ECPs):

Taken in 2 doses:

(1) 2 pills taken within 72 hours of unprotected intercourse

(2) 2 pills 12 hours later

2-emergency copper-bearing IUD insertion:

can be used up to five days after unprotected intercourse .

THANK YOU

