IUD - Intra-Uterine Device

- LARC! Gaining popularity
- Used by about 12% of women in US
- Device inserted into the fundus of the uterus through the cervical os
- IUDs currently marketed use progestin or copper to optimize contraceptive effect.
IUDs of the Past
Current IUDs - Hormonal

- IUDs impregnated with progestin
Progestin IUDs

- Slowly releases progestin into the uterus
- Length of effectiveness - 5 (maybe 6 or 7) years for Mirena, Liletta and Kyleena; 3 years for Skyla
- Different levels of progestin (levonorgestrel):
  - Mirena – 52 mg (20 mcg/day)
  - Liletta – 52 mg (18.6 mcg/day)
  - Kyleena – 19.5 mg (19.5 mcg/day)
  - Skyla – 13.5 mg (14 mcg/day)
Progestin IUDs

- Mechanisms of action:
  - Thickens cervical mucus
  - Impedes sperm transport
  - Inhibits build-up of endometrium
  - Blood levels too low to block ovulation reliably (20 mcg/day vs 150 mcg/day for pill)
Copper T - ParaGard

- Plastic T-shaped IUD with an exposed area coated with copper
- Length of effectiveness - 12 years
Contraceptive Actions of Copper

1. Decreases sperm viability
2. Decreases sperm motility
3. Decreases likelihood of fertilization through effects on both sperm and ovum
4. May block implantation if fertilization takes place
IUD - Advantages

- Very effective - 95-99%
- Non-intrusive
- Long-Term
- Dec. 2017 report (Obstetrics & Gynecology on-line) – IUD use associated with decreased risk of cervical cancer
Progestin IUDs - Advantages

- Reduced dysmenorrhea
- Decreased menstrual blood loss / amenorrhea
Copper IUDs - Advantages

- Very long-term effectiveness
- No hormones
- Excellent emergency contraceptive
  - Insertion effective within 5 days of unprotected intercourse
IUD - Disadvantages

- Some danger of uterine perforation on insertion and removal.
- Increased risk of Pelvic Inflammatory Disease (PID) which can lead to infertility.
- May increase the risk of vaginal infections.
IUD - Disadvantages

- NO protection from STDs.
- May increase susceptibility to STDs during the first 3 months after insertion.
IUD - Disadvantages

ParaGard:

- Increased menstrual blood loss.
- Increased dysmenorrhea.
  - Effects lessen and may abate over first 6 months of use
More effective
Less than 1 pregnancy per 100 women each year

Less than 1 per 100
- Vasectomy
- Female Sterilization
- IUD
- Implant

2-8 per 100
- LAM (Breastfeeding)
- Shot
- Pill
- Ring
- Patch

<1/2*
- LAM (Breastfeeding)
<1/3
- Shot
<1/8
- Pill
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- Ring
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- Patch

15-25 per 100
- Male Condom
- Diaphragm
- Female Condom
- Cervical Cap
- Sponge
- Fertility-Awareness Based Methods

2/15
- Male Condom
6/16
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About 30 per 100
- Withdrawal
- Spermicide

4/27
- Withdrawal
15/29
- Spermicide

A/B:
A = always used correctly
B = not always used correctly

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Contraceptive Methods

- Total abstinence from heterosexual intercourse
- Hormonal contraceptives
- Mechanical/Barrier contraceptives
- Timed Abstinence
- Sterilization
Diaphragm, Cervical Cap

- Designed to hold spermicide near the cervical os such that sperm must travel through it on the way to the uterus or blocks sperm passage to uterus.
Diaphragm
Cervical Cap

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

- Effectiveness: Varies with training of user, reliability of user, and frequency of intercourse - 80-90%
Advantages

- Readily reversible.
- Can be inserted hours before intercourse so need not directly interfere with sex.
Disadvantages

- Intrusive: You must remember to use the device each time. With diaphragm, spermicide must be added to vagina (not diaphragm) if more than one bout of intercourse at a time.
- Must remain in place for hours after sex.
- Must be fitted by competent and practiced practitioner.
Risks

- Diaphragm by itself provides no protection from STD/STI transmission.
- Use of spermicide (nonoxyl 9) may increase the risk of transmission of HIV through irritation of and compromise of the vaginal lining. Genital lesions are more common in spermicide users.
- Should use condom in addition to diaphragm.
Disadvantages

- Diaphragm: may increase the risk of bladder or urinary tract infections particularly with poor fit.

- Cervical Cap: may cause abnormal cells development of cervix. Need regular PAP smears!

- Both: may have allergy to latex, silicone or to spermicide
Today you have the freedom to choose...

- No Hormones
- No “pill” side-effects
- No Prescriptions
- 24 Hour Protection

**Buy Online - 15% off!**

Free shipping when you buy 12+ sponges!
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**or get up to 20% off + FREE Shipping**
Join SpongeWorthy Club Today!

*Effectiveness comparable to other barrier birth control methods*
More information on warnings, effectiveness, and directions.
Sponge

- Over-the-counter contraceptive
- Made of polyurethane foam and impregnated with spermicide
- One size fits all
- Contains enough spermicide to last for 24 hours even with repeated intercourse
Sponge

- Spermicide risk!!!!!
- More expensive in the long run than diaphragm or cervical cap
- One size means that it can slip out of place – must be kept in place for at least 6 hours after last intercourse
- Less effective in women who have given birth
Condom

- Renewed interest with HIV/AIDS
- Barrier between sperm and ovum
- Only readily available reversible contraceptive for use by males
- Effectiveness (preventing pregnancy): depends on reliability and training of user - 85-90%
Advantages

- Readily available without prescription
- Effects on fertility readily reversible
- Decreased transmission of STDs/STIs including HIV
- Should be used with other contraceptive methods to reduce STD/STI transmission
- Can be used as fertility aid as well as contraceptive
Disadvantages

- Intrusive
- Can decrease sensitivity and/or stimulation of male or female (can improve if condom is lubricated)
- Natural animal condoms DO NOT protect against STDs
- May be allergy to latex (alternatives Trojan Supra – polyurethane; SKYN - polyisoprene) or lubricant
Female or Internal Condom

- Designed for STI protection but also works as contraceptive
- Polyurethane device which lines the vagina or rectum
Female or Internal Condom

- Effectiveness as contraceptive: 70-85% (higher with training and reliable use)
- Advantages and disadvantages similar to male condom
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Less than 1 pregnancy per 100 women each year

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Natural Family Planning (NFP)
Fertility Awareness (FA)

- Involves monitoring and charting Basal Body Temperature and cervical changes in order to judge the start and stop of the fertile period
Basal Body Temperature

- Body temperature immediately after awakening
- Ovulating women have a biphasic BBT
- BBT low during preovulatory phase (96.5-97.5° F)
- Postovulation BBT increases about 1° F (to 97.6-98.6° F).
Basal Body Temperature

- Postovulatory increase in BBT mediated by progesterone.
- Ovulation occurs 2-3 day before the increase of BBT
- BBT alone is a poor contraceptive device!
Cervical Changes

- Cervical mucus become thin and slippery as woman approaches ovulation (wet)
- Cervical Position:
  - Cervix rises in body (high) (estrogen causes ligaments holding uterus in place to tighten, moving uterus forward and raising the cervix).
  - Cervical os widens (open)
  - Cervix softens (soft)
Cervical Changes

- Soft
- High
- Open
- Wet
Natural Family Planning (NFP)
Fertility Awareness (FA)

- Cervical changes (SHOW) mark the beginning and end of fertile period
- Basal body temperature increase marks the end of the fertile period
Standard Days Method

- Calendar method
- Works only for women who always have cycles between 26 and 32 days long
  - Won’t work if one cycle per year shorter than 26 days or longer than 32 days
- Abstain from unprotected sex on day 8 through day 19 of cycle
TwoDay Method

- Relies entirely on monitoring cervical mucus

- Cervical mucus examined twice every day
  - Did I find (wet) cervical mucus today? If yes, I can get pregnant?
  - Did I find (wet) cervical mucus yesterday? If yes, can get pregnant.

- If answer to both questions is no, safe period indicated.
Natural Family Planning (NFP)
Fertility Awareness (FA)

- Effectiveness: varies widely with training and dedication of users
- Typically rated at 70-85% but can be higher
Advantages

- Makes woman and her partner very aware of her monthly cycle and its effects on her body
- Readily reversible
- NFP faces no religious objections
- Can be used to increase probability of conception as well as decrease it
Disadvantages

- No prevention of STI transmission.
- Serious training by a specialist required.
- Patience is necessary to collect and record daily data (time required is very short but it has to be done reliably).
- Self-control and assertiveness necessary to avoid sex or use other method during fertile period.
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Sterilization

- Guttmacher 2015 – used by 23% of all women practicing contraception (another 7% rely on vasectomy of partner)
- Typically involves blocking ovum transport through the oviducts by cutting and then tying, clipping (clamping) or burning the cut ends.
- Can be done under local or general anesthesia.
Sterilization

- Essure – a spring-like device intended to cause scar tissue to block the oviduct
- Need to test for complete blockage after 3 months
- Some women report long-lasting pain or discomfort after procedure
Sterilization

- Male form: vasectomy
- Cutting and clamping, tying, or burning the vas deferens (tube that transports sperm from the testis)
- Doctor’s office procedure with local anesthetic
Vasectomy

Before vasectomy

Semen (contains sperm)
Urethra
Vas deferens (tube)
Testicle
Sperm cells

After vasectomy

Semen (contains no sperm)
Tube is occluded
Sperm cells
Advantages

- Very effective - 99% (males must have at least 2 sperm-free tests prior to assuming the surgery a success. Females using Essure need to have proven blockage.)
- Permanent - never have to think of contraception again
- Not intrusive during sex
Disadvantages

- Risks of surgery and anesthesia (higher for female but present for both).
- Must be considered permanent: Low probability of reversal (but it is increasing)
- No protection from STI transmission.
- Regret highest among those uncertain about being sterilized or who are not committed to having no additional children
### More effective
Less than 1 pregnancy per 100 women each year

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About 30 pregnancies per 100 women each year

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