



# **Contraceptive Counseling:** Delivering comprehensive, medically accurate information to increase LARC uptake



## Trainer Biographies



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# Webinar Agenda



- Brief overview of CHOICE key findings
- 20,000 feet view of CHOICE contraceptive counseling
- Role of non-clinician counselors
- Key components of contraceptive counseling training
  - Increasing accurate and evidence-based contraceptive knowledge
  - Taking a patient’s medical history
  - Essential counseling skills
  - Standardized contraceptive counseling script
  - Visual Aids
- Next steps and helpful resources



# The Contraceptive CHOICE Project



## Unintended Pregnancy in the U.S.



- Over 3 million unintended pregnancies
  - 59% mistimed
  - 39% unwanted
- 1.2 million abortions
- 367,752 births to teens 15-19 years
- Contraception
  - 52% non-use
  - 43% incorrect use

## The CHOICE Project: Objectives



- To promote LARC (IUDs and implant)
  - Remove financial barriers
  - Increase patient access
- To measure acceptability, satisfaction, side-effects, and rates of continuation across a variety of reversible contraceptive methods, including long-acting reversible methods

## The CHOICE Project: Objectives



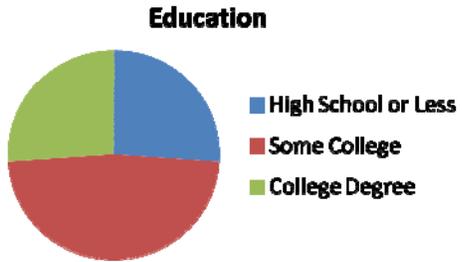
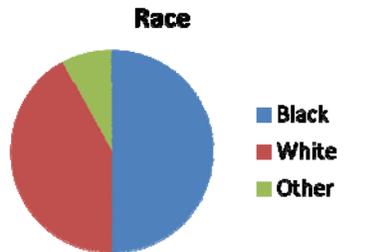
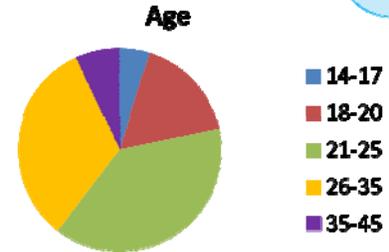
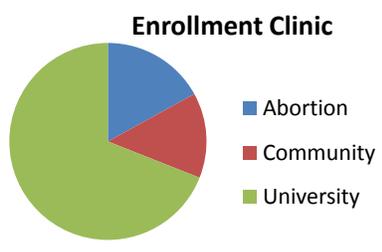
- To provide enough no-cost contraception to make a population impact on unintended pregnancies:
  - Measures
    - Teen pregnancy
    - Repeat abortion

## Study Inclusion Criteria



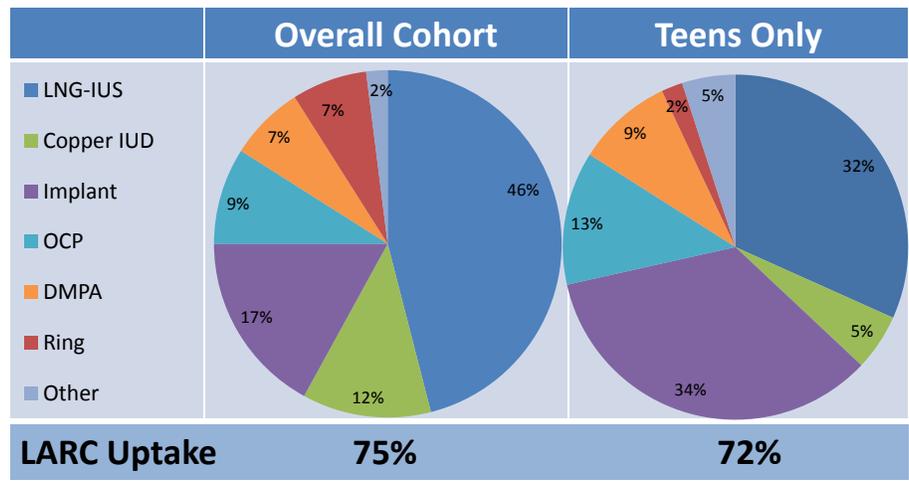
- 14-45 years
- Primary residency in STL City or County
- Sexually active with male partner (or soon to be)
- Does not desire pregnancy during next 12 months
- Desires reversible contraception
- Willing to try a new contraceptive method

# CHOICE Study Participants



Peipert Obstet Gynecol 2012

# Contraceptive Method Chosen



# 12-Month Continuation

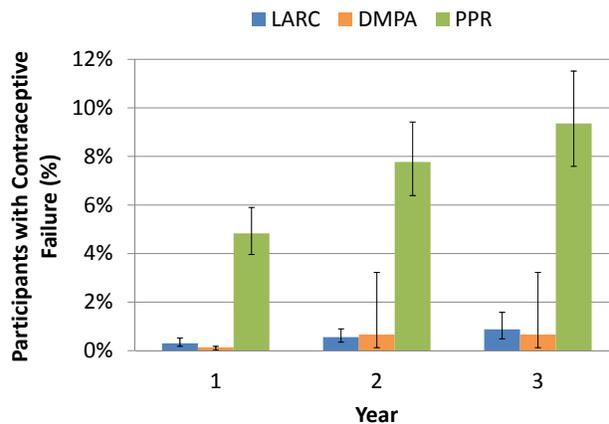


Method	Continuation Rate (%)
LNG-IUS	87.5
Copper IUD	84.1
Implant	83.3
Any LARC	86.2
DMPA	56.2
OCPs	55.0
Ring	54.2
Patch	49.5
Non-LARC	54.7



Peipert Obstet Gynecol 2011

# Unintended Pregnancy by Contraceptive Method

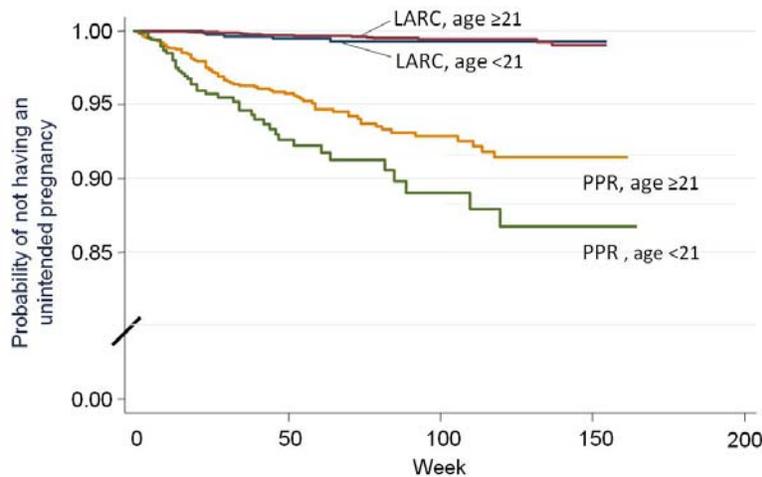


HR<sub>adj</sub> = 22.3  
95% CI 14.0, 35.4



Winner NEJM 2012

## Method Failure by Age



## CHOICE Compared to U.S.



- Teen birth rate (age 15-19 years)
  - 6.3 per 1,000 teens
  - Compared to 34.3 per 1,000 nationally
- Abortion rate (women ages 15-44)
  - 6.0 per 1,000 women
  - Compared to 19.6 per 1,000 nationally
- Unintended pregnancy rate
  - 15.0 per 1,000 women
  - Compared to 52.0 per 1,000 nationally

## Main Findings from CHOICE



- LARC methods associated with higher continuation & satisfaction than shorter-acting methods
  - Regardless of age
- LARC methods associated with lower rates of unintended pregnancy
- Increasing LARC use can decrease unintended pregnancy in the population

## The Secret: 3 Key Ingredients



- ***Education regarding all methods, especially LARC***
- *Access to providers who will offer & provide LARC*
- *Affordable* contraception

## Case Scenario #1



A 16 year old patient who has never been on birth control and never given birth arrives for her contraceptive counseling session. What methods do you discuss with her?

## Case Scenario #2



A 32 year old patient with a history of abortion and five live births (1 intended, 4 unintended) arrives for her contraceptive counseling session. What methods do you discuss with her?



## CHOICE Contraceptive Counseling



## What is CHOICE counseling?

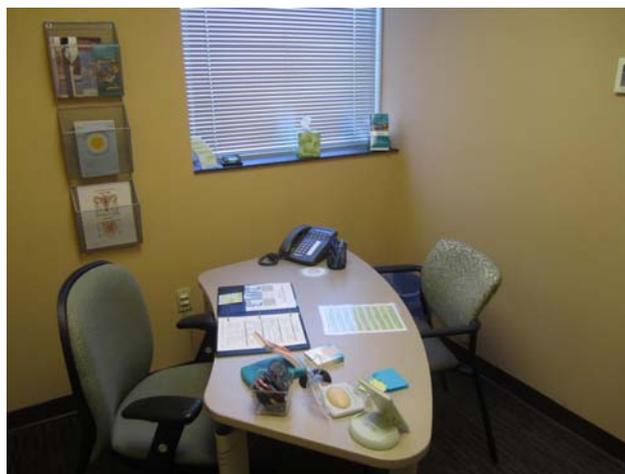
- Standardized script read to all participants **regardless of age or medical history**
  - Included commonly used reversible methods
    - All women heard about all the methods
  - Tiered counseling = start with **most effective** methods first
  - Evidence-based using CDC medical eligibility criteria
- Provided by trained non-clinicians
- Additional teaching aids used

## The Counseling Process



- Greet patient, ht/wt, BP, medical history
- Provide counseling
- Present to clinician
- Review chosen method Fact Sheet
- Explain how to use the method

## CHOICE Counseling Room



## Why non-clinician counselors?



- Saves time
  - Clinicians can see a higher volume of patients
- Team-based approach
  - All staff become key players in contraceptive visit
- Follow-up patient care
  - Counselors can provide follow-up reassurance; answer a wide variety of follow-up patient questions

## Counseling Training



- Increasing accurate & evidence-based contraceptive knowledge
- Taking a patient's medical history
- Essential counseling skills
- Standardized contraceptive counseling script
- Visual Aids



## Increasing accurate & evidence-based contraceptive knowledge



## Contraception

- Reversible Methods
  - Hormonal
    - Estrogen/Progestin
      - Pills, ring, patch
    - Progestin only
      - Pills
      - Injections
      - IUD
      - Implant
  - Non-hormonal
    - Barrier
    - Copper IUD

## Contraceptive Use in the US

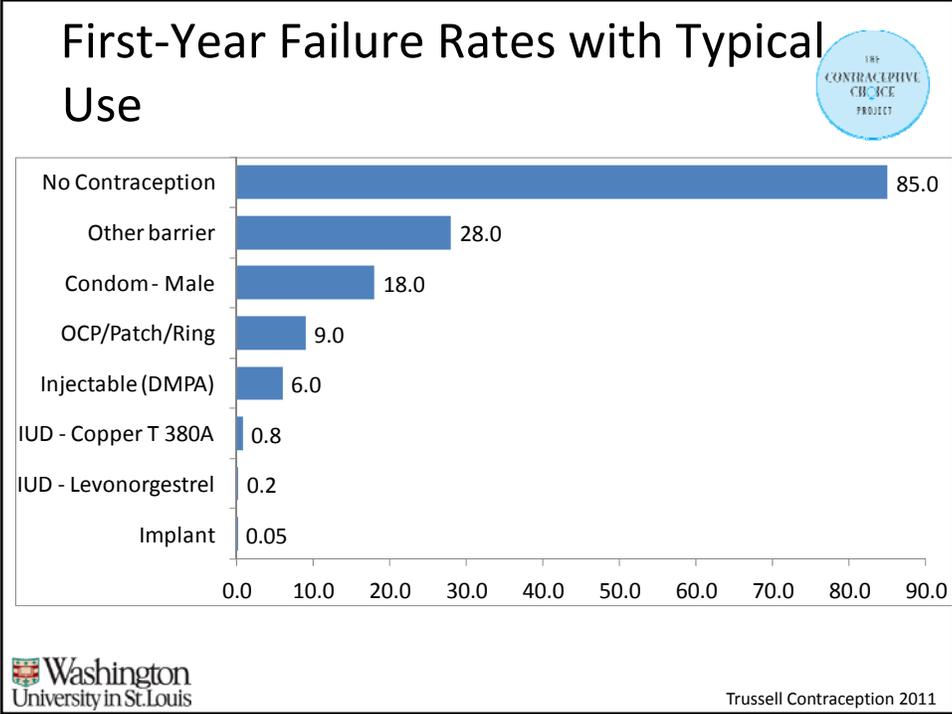
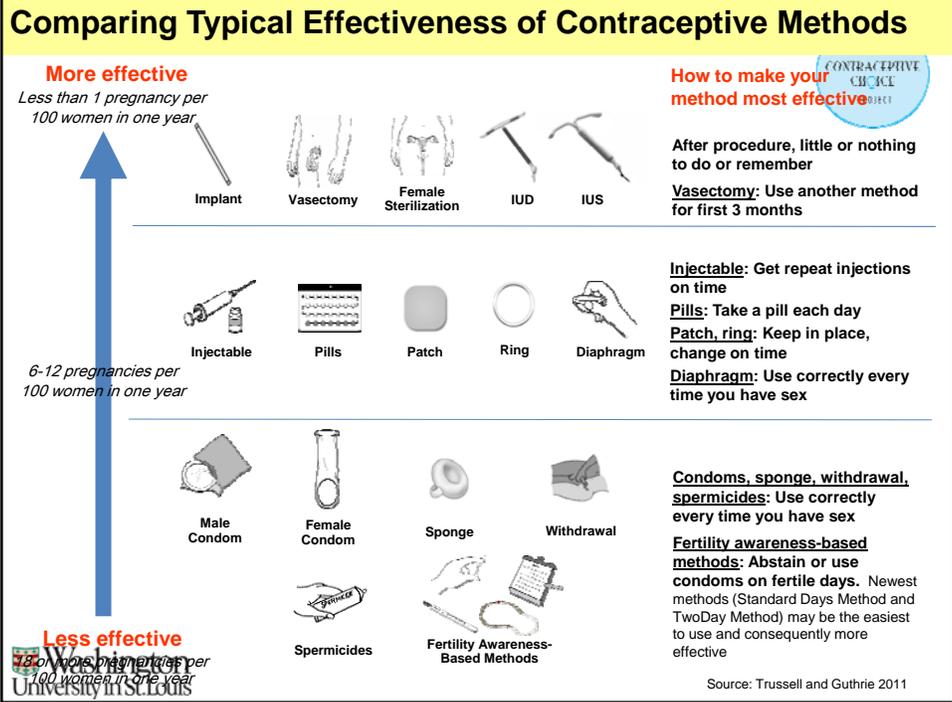


- 6 in 10 women between 15 and 44 years use a contraceptive method
  - 28.0% used oral contraception (COC)
  - 27.1% relied on female sterilization
  - 16.1% used male condoms
  - 9.9% relied on male sterilization
  - 5.5% relied on IUDs
  - 10.6% relied on other methods
    - Implants, injectables, diaphragms, natural methods, withdrawal, female condoms

## Contraceptive Efficacy vs. Effectiveness



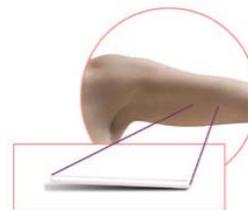
- **Efficacy:** How well can it work?
  - ideal/perfect use: Method used exactly as prescribed
  - example: COC have **efficacy** of >99%
    - Failure = 3:1000
- **Effectiveness:** How well does it work?
  - typical use: What happens in the real world
  - actual **effectiveness** of COC is closer to 91%
    - Failure rate = 9:100

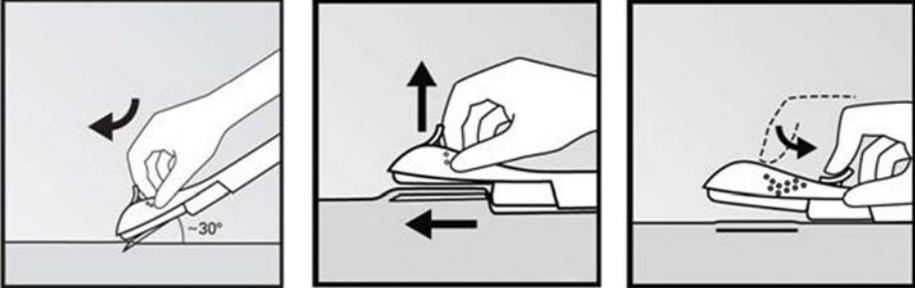


## Long-Acting Reversible Contraception (LARC)

### Implant

- Single rod etonorgestrel implant
  - 60 mcg/day
- Implanted in upper arm
  - 4cm long
- Up to 3 years of protection
- Pregnancy rate
  - 0.1/ 100 women/year
- Side effects:
  - Spotting, amenorrhea, bleeding





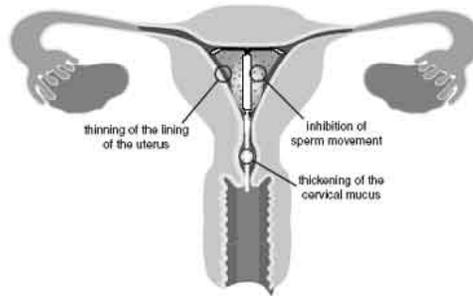
## The Intrauterine Device (IUD)



## Levonorgestrel IUD



- Up to 5 years of protection
  - Releases 20 mcg LNG/day
- Pregnancy rate
  - 0.2/ 100 women/year
- Reduces menstrual blood loss
- No long-term effect on fertility



Mechanism of action:

- Thickens cervical mucus
- Suppresses endometrium
- Does not reliably suppress ovulation



## Levonorgestrel IUD: Non-Contraceptive Benefits



- Improvement of heavy periods
- Improvement of painful periods
- No periods
- Treatment of fibroids and endometriosis



## Levonorgestrel IUD: Side Effects



- Bleeding irregularities
- Amenorrhea
  - 30% at 1 year
- Expulsion rate
  - 5% over 5 years
- Perforation
  - uncommon, approx 1/1000

## Copper IUD



- Up to 10 years of protection
- Increase in copper ions, inflammatory chemicals in uterine and tubal fluids
  - impairs sperm function and prevents fertilization
- Pregnancy rate
  - 0.8/ 100 women/year
- No long-term effect on fertility



## Copper IUD: Side Effects



- No systemic side effects
  - no effect on fertility
- Cramping/heavy bleeding
  - most common in first 3 months
  - manage with nonsteroidal anti-inflammatory agents (NSAIDs)
- Expulsion rate:
  - 2-10%
- Perforation
  - uncommon, approx 1/1000

## IUD: Contraindications



- Known/suspected pregnancy
- Unexplained vaginal bleeding
- Active cervicitis
- Pelvic inflammatory disease in past 3 months
- Postpartum or post-abortal endometritis in past 3 months
- Uterine abnormalities (that interfere with insertion)
- Genital tract cancer

## IUD and Risk of PID



- Risk of PID is greatest in first 20 days after insertion
- Highest in women with cervicitis at time of placement
  - Consider screening for gonorrhea and chlamydia at time of placement
  - If positive , treat and leave IUD in place
- Aseptic technique is important

## IUD: Insertion



- Insert any time in cycle as long as pregnancy can be ruled out
  - No benefit to waiting until patient has menses
- Insert immediately after 1st or 2<sup>nd</sup> trimester abortion or postpartum
  - increased expulsion immediately postpartum
  - consider placing under ultrasound guidance



# Hormonal Contraception



## Combined Hormonal Contraception (CHC)

- Contain estrogen and progestin
- 3 methods currently available
  - Combined oral contraceptives or COC
  - Contraceptive vaginal ring
  - Transdermal contraceptive patch

## How Do They Work?



- Estrogen:
  - Suppress release of hormones from brain (FSH, LH) → prevent follicle recruitment and ovulation
  - Changes to uterine lining (endometrium)
- Progestin:
  - Thickens cervical mucus
  - Thins endometrium

## CHC: Non-Contraceptive Benefits



- Menstrual benefits:
  - shorter, more regular menses
  - lighter flow and decreased anemia
  - less painful periods
  - decreased number of periods per year
- Treatment of endometriosis
- Improvement of acne
- Prevention of functional ovarian cysts
- Decreased risk of ovarian and endometrial cancers

## CHC: Efficacy & Effectiveness



- COC
  - ideal use: Failure rate 1/100 in first year
  - typical use: Failure rate 9/100 in first year
  - discontinuation: 11% in 1st month, up to 50% 1st year
- Patch and ring
  - some studies show higher discontinuation rates for patch, lower for ring

## CHC: Contraindications



- Smoker  $\geq 35$  years
- Personal history of venous or arterial thrombotic event (DVT/PE-blood clot, MI-heart attack, CVA-stroke)
- Complicated diabetes
- Migraine with focal neurologic symptoms
- Any migraine headache if  $\geq 35$  years
- Hypertension
- Coronary artery disease
- Active liver disease
- Breast Cancer

## CHC: Side Effects



- Breakthrough bleeding
- Nausea
- Breast tenderness
- Headaches
- Mood changes/decreased libido
- Hypertension
- Weight gain

## CHC: When to Start



- “QuickStart”
  - start immediately and use backup x 7 days
  - may improve continuation
  - **Preferred method of the CHOICE Project**
- Day 1 start
  - decrease risk of ovulation if start on Day 1 of cycle
- Sunday start
  - backup x 7days if > day 5 of cycle
- Anytime start is fine
  - use backup x 7days if > day 5 of cycle
- Switch from another method → start immediately

## Combined Oral Contraceptives (COC)



- Most commonly used reversible method of birth control in the US (~28%)
- Many different brands of pills, almost all contain same form of estrogen
  - low dose ( $\leq 35$  mcg EE) most common
  - progestin component varies

## COC Use



- Typical
  - 21 days active pill, 7 days no/inactive pill
  - 7 days pill-free --> 23% of women will produce an ovulatory follicle
- 24 day regimens
  - 24 days active pill, 4 days no/inactive pill
- Extended regimens and continuous use
- **Take pill at same time every day for maximum effectiveness**

## Contraceptive Vaginal Ring



- Etonorgestrel (120 mcg qd) and ethinyl estradiol (15 mcg qd)
- Effective in 24 hours
- 21 days in, 7 days out
  - extended regimens possible
- Can remove for up to 3 hours in a 24-hour time period



## Contraceptive Transdermal Patch



- Norelgestromin (150 mcg qd) & ethinyl estradiol (20 mcg qd)
- Wear patch x 7 days for 3 weeks, then off x 7 days
- Side effects:
  - detachment 2%
  - site reaction 20%
- Less effective in obese women
  - women >198lbs accounted for 3% of study population, but 33% of pregnancies





## Progestin-Only Contraceptives



## Progestin-Only Contraceptives

- Levonorgestrel IUD
- Implant
- Progestin-only pill (POP)
- Injectable



## Mechanism of Action

- Primary Mechanism:
  - Thickens and decreases cervical mucus (prevents sperm penetration)
  - Thins endometrium
- Big doses of progestin can inhibit of ovulation by suppressing mid-cycle peak of LH and FSH



## Progestin-Only Methods: Benefits

- Few medical contraindications
- No effect on breastfeeding
- Lighter or less painful periods

## Progestin-Only Methods: Contraindications



- Breast cancer
- Cirrhosis/ liver tumors/ active liver disease
- Unexplained vaginal bleeding

## Progestin-Only Methods: When to Start



- “QuickStart”
  - start immediately and use backup x 7 days
  - Preferred method of the CHOICE Project
- Day 1 of cycle start
- Anytime start is fine
  - use backup x 7 days if > day 5 of cycle
- Switch from another method → start immediately
- If administering same day DMPA, should have repeat pregnancy test in 3 weeks

## Progestin-Only Oral Contraceptives



- Also known as the “mini-pill” or POPs
- May be less effective than COC
  - need for strict compliance
  - “27-hour rule”
- No “pill-free interval” – active pill taken every day
- Commonly used in breastfeeding women
- Side effects = irregular bleeding or no period

## Depo-medroxyprogesterone acetate (DMPA)



- Injectable, long-acting contraception
  - intramuscular injection: 150 mg
  - subcutaneous injection: 104 mg
- Typical failure rate = 6% in the first year
- 50 to 60% continuation at 1 year

## DMPA: Side Effects



- No periods
  - 17% at one year of use
  - 80% at 5 years of use
- Irregular bleeding
- Weight gain
- Decrease in bone mineral density (BMD)
  - Reversible after stops use
- Delayed return to fertility (7-12 months)

## DMPA: Non-Contraceptive Benefits

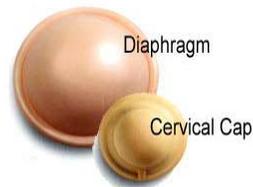


- Less heavy and less painful periods
- Improvement of fibroid or endometriosis symptoms
- No known drug interactions

## Barrier Methods



- Condoms (male & female)
- Diaphragm
- Cervical cap
- Sponge



## Facts about Barrier Methods



- Offer protection against STIs
- Do not contain hormones
- Mechanism of action: physical barrier blocks sperm from entering the uterus
- Require motivated user: must use at every act of intercourse

## Barrier Methods: First-Year Failure Rates



Method	Typical Use %	Perfect use %
Condoms <small>male vs female</small>	18-21	2-5
Diaphragm	12	6
Cap <small>(nullip vs. parous)</small>	20-40	9-26
Sponge <small>(nullip vs. parous)</small>	12-24	9-20

## Emergency Contraception



- Use after **unprotected** intercourse or **underprotected** intercourse
  - Up to 120 hours after
  - **Sooner is better**



## Methods of Emergency Contraception

- Oral levonorgestrel
  - Available over-the-counter for all ages
- Oral ulipristal
  - Progesterone receptor blocker
- Copper IUD



## EC: Mechanism of Action

- Prevents unintended pregnancy
  - will not interrupt an established pregnancy
- Prevents or delays ovulation
- Ineffective after implantation



## EC: Safety



- No reports of serious complications/death
- Side effects with oral LNG:
  - nausea 25%
  - vomiting 10%
  - irregular bleeding
- Repeated use appears safe
  - Opportunity for contraceptive counseling
- No scheduled follow-up is required
- No evidence of birth defects



## Counselors & Contraceptive Knowledge



- This is a lot of information!
- Counselors must be comfortable with this information prior to counseling
- Strategies to become proficient:
  - Review slide set with audio
  - Refer to Contraceptive Technology
  - Test your knowledge with a clinician on site
  - Know what you don't know



How long do you think it will take you to become proficient in the contraceptive knowledge component of counseling training?



Taking a Patient's Medical History



Do you have experience taking a patient's medical history?



## Medical History

- Most important information to find out:
  - Blood Pressure
  - Weight
  - Date of last menstrual period
  - Date of last sex
  - Current & past medical conditions
  - STI history (with dates if possible)



Is there a form/electronic-based system currently used in your office to collect this information?



POLL



Essential Counseling Skills



# Counseling Skills



<http://www.youtube.com/watch?v=P0QV6o8HAUQ>



# Contraceptive Counseling Script



# 'Which Method is Right for You?'



<http://www.youtube.com/user/wustlchoiceproject>



# Using Visual Aids



# Menu of Contraceptive Options



## Which contraceptive method is right for you?

### Hormonal IUD

It is inserted into the uterus by a health care provider. It can last up to 5 years. You do not need to use before sex. Periods are generally lighter and less painful. It does not provide protection against STD's.

### Copper IUD

It is inserted into the uterus by a health care provider and can last up to 12 years. You do not need to use before sex. It does not provide protection against STD's.

### Implant

The implant is inserted into your arm by a health care professional, and lasts up to 3 years. Periods are usually lighter and less painful. You do not need to use before intercourse. The implant does not provide protection against STD's.

### Injections

Injections (a shot) are given by a health care professional every 3 months. Periods are generally lighter and less painful. You do not need to use before sex. Injections do not provide protection against STD's.

### Pills (Oral Contraceptives)

The pill must be taken at approximately the same time every day. You do not need to use before sex. Periods may become lighter and less painful. Oral Contraceptives do not provide protection against STD's.

### Patch

The patch is applied to the skin 1 time per week for 3 weeks, then it is removed for 1 week allowing for a period. Periods are usually lighter and less painful. The patch will not provide protection against STD's.

### Vaginal Ring

The vaginal ring is inserted into the vagina and lasts for 3 weeks. After that it is removed for 1 week allowing for a period. Periods are generally lighter and less painful. The vaginal ring does not provide protection against STD's.

### Condoms

The male condom is applied onto the penis just before sex. It must be used before every sexual encounter to provide protection against pregnancy and STD's.

### Emergency Contraception

Emergency contraception can help prevent pregnancy after unprotected sex or contraceptive failure. It comes in the form of a pill or the copper IUD. The pill can be taken up to 5 days after unprotected sex and the copper IUD can be placed up to 5 days after unprotected sex. It does not replace the consistent use of contraception. It does not provide protection against STD's.



# Method Models



## Using a method correctly



<http://www.youtube.com/watch?v=Z0vNqLDJmek>

## Disclaimer



- CHOICE counselors went through 7 hours of training, observed approximately 25 counseling sessions, and studied for 2 weeks prior to testing out as contraceptive counselors.
- This webinar should be supplemented with additional preparation time prior to counseling patients.

## Preparation to become a proficient counselor



- Role play counseling sessions with a partner (over and over again!)
- Watch the CHOICE contraceptive counseling training video (<http://www.youtube.com/watch?v=p-NBuHbMhb4>)
- Review slide sets

## Quality Assurance



- Test proficiency in:
  - Delivering counseling script
  - Contraceptive Knowledge
  - Implementing the entire counseling process

# CHOICE Resource Center



- Create online Resource Center to disseminate CHOICE materials: [www.larcfirst.com](http://www.larcfirst.com)
  - The Evidence
  - **Contraceptive Counseling**
  - Advanced Practitioner Resources
  - Patient Management
  - Effective Staffing & Management



Home Search LARC FIRST Evidence **Counseling** Practitioner Patient Staffing Contact

## Contraceptive Counseling

This module contains the tools necessary to successfully adopt CHOICE contraceptive counseling into your practice. It includes a training program for new contraceptive counselors, materials used during the counseling session, and protocols for testing and ongoing quality assurance. CHOICE contraceptive counseling uses a tier-based approach, presenting all methods in order of most to least effective.



### Training New Counselors

This section contains the program outline, activities, and materials necessary to train non-clinician staff to provide contraceptive counseling to all women, including teens. Medical assistants, health educators, and nurses may benefit from this training course.

[Learn More](#)



### The Counseling Session

This section contains the materials used by staff during a patient's contraceptive counseling session. This includes the instructions and forms for collecting a medical history, discussing contraceptive options, presenting a case to a clinician, and reviewing method choice.

[Learn More](#)



### Quality Assurance

This section contains essential testing materials administered by training staff and prescribing clinicians to trainees prior to becoming contraceptive counselors, and the quality assurance protocols for ongoing observation and evaluation of trained counselors in your organization.

[Learn More](#)

## Additional Resources



[www.choiceproject.wustl.edu](http://www.choiceproject.wustl.edu)



[www.facebook.com/choiceproject](http://www.facebook.com/choiceproject)



[www.twitter.com/wustlchoice](http://www.twitter.com/wustlchoice)



[www.youtube.com/user/WUSTLChoiceProject](http://www.youtube.com/user/WUSTLChoiceProject)