Adolescent Friendly and Confidential Health Services

Disclosure

- Drs. Kari Harris and Kerri Weeks:
  - have no relevant financial relationships with the manufacturers(s) of any commercial product(s) and/or provider of commercial services discussed in this CME activity
  - do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

Objectives

- Increase awareness of LARC and its use in teens
- Familiarize providers with EC and increase comfort in discussing and providing EC to teens
Why Focus on Adolescent Health?

- Reduce death and disease, now and for the rest of their lives
- Fulfill the rights of adolescents to comprehensive healthcare
- Increase the chances for healthy adulthood

Phases of Adolescence

- Early (11-14)
  - Growth spurt/ early sexual maturation
  - Early abstract thinking

- Middle (15-17)
  - Completion of puberty
  - Stronger identification with peers
  - Early reflective thinking

- Late (18+)
  - Continued maturation physically and mentally
  - Stronger self-identity
  - More settled ideas/opinions

External Barriers to Care

- Perceived lack of confidentiality and restrictions (parental consent/notification)
- Poor communication by providers
- Insensitive attitudes of care providers
- Lack of provider knowledge and skills
- Lack of money, insurance, and transportation
- Inaccessible locations and/or limited services
- Limited office hours
Discuss Confidentiality in Advance

- Inform parents about confidentiality policy before visit.
  - Letter home
  - Display materials discussing importance of doctor/patient confidentiality

Confidentiality in a Nutshell

- Know the state statutes.
- In Kansas, teens can consent to the most personal reproductive healthcare decisions.
- Lack of confidentiality care can inhibit adolescents from seeking healthcare.
- Ability to consent does not always mean that care is confidential.

Comprehensive HEEADSSS

- H: Home
- E: Education/Employment
- E: Exercise/Eating
- A: Activities
- D: Drugs
- S: Suicidality/Depression
- S: Sexuality
- S: Safety
- *Additional questions:
  - Strengths, Spirituality
Other Clinical Interview Tools

- **GAPS**: AMA Guidelines for Adolescent Preventive Services
- **Bright Futures**: Collaboration between AAP and Bureau of Maternal Child Health Care
- **Trigger Questionnaire**: Developed by Office of Managed Care in the New York State Department of Health
- **ACOG Tool Kit**: Designed by the ACOG Committee on Adolescent Health Care to help every office care for adolescent patients

Sexuality

- Menstrual history
- Sexual orientation
- Gender identity
- Age at first intercourse
- Vaginal, oral, anal sex history
- Contraceptive history
- Pregnancy history
- Timing of childbearing plans
- Number of lifetime sexual partners
- Number of partners in last 3–6 months
- History of STIs
- Sexual satisfaction
- History of survival sex, sexual victimization, unwanted or coerced sex

Sexual/Reproductive Health History
### Sexual Behavior Questions

**Don't**
- Ask “Are you sexually active?”
- Use gendered-biased pronouns when referring to sexual partners
- Use judgmental language
- Use slang unless patient offers it first

**Do**
- Assure confidentiality
- Explain why you are asking sensitive questions
- Ask patient to describe specific sexual behaviors
- Add “second tier” questions to assess comfort with behaviors

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### STI Screening in Adolescents

**USPSTF (US Preventive Service Task Force)**
- Annually screen all SA women <25 years
  - For chlamydia
  - For GC
  - High risk populations for syphilis and HIV
    - Multiple partners, sex for $, IVDA, prevention
- Males: High risk or symptomatic screening recommended
  - Multiple partners, unprotected sex

**Bright Futures (AAP)**
- SA female adolescents screened annually for
  - Chlamydia
  - GC
- High risk adolescents
  - Syphilis
  - HIV
- Suggests screening males with +WBCs in the urine
Nucleic Acid Amplified Tests

- Includes PCR, TMA, SDA
- Markedly amplifies target nucleic acids
- Increases sensitivity to >90% for cervical and urethral swabs
- All can be used on first 10–15 cc of urine specimens from men and women (Must be > 2 hours after last void)
- Self-collected vaginal swabs offer another sensitive specimen

Chlamydia Diagnosis

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>70%</td>
<td>85%–95%</td>
</tr>
<tr>
<td>NAAT</td>
<td>85%–90%</td>
<td>&gt;98% Preferred</td>
</tr>
<tr>
<td>EIA</td>
<td>50%–65%</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>DFA</td>
<td>65%–70%</td>
<td>95%</td>
</tr>
<tr>
<td>DNA Probe</td>
<td>65%–70%</td>
<td>95%</td>
</tr>
</tbody>
</table>

Gonorrhea Diagnosis

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>90%</td>
<td>99%</td>
</tr>
<tr>
<td>NAAT</td>
<td>85%–90%</td>
<td>&gt;98% Preferred</td>
</tr>
<tr>
<td>Typical Gram Stain</td>
<td>80%</td>
<td>98%</td>
</tr>
<tr>
<td>DNA Probe</td>
<td>35%–45%</td>
<td>99%</td>
</tr>
</tbody>
</table>
**CDC HIV Screening Guidelines**

- Screening recommended for all patients at least once unless patient opts out
- All patients seeking treatment for STIs should be screened routinely for HIV
- All persons likely at high risk* for HIV should be tested at least annually
- Separate written consent for HIV testing and prevention counseling should not be required

*MMWR 2006;55(RR14):1–17

**Causes of Recent Decline in Teen Pregnancy**

- Teen pregnancies are on the decline.
- 2006 analysis concluded that for 15–19 year olds:
  - 14% due to Decrease in Sexual Activity
  - 86% due to Increase in Contraceptive Use


**Intrauterine Contraception (IUC)**

- **TCu 380A (Copper T)**
  - Made of polyethylene with barium sulfate

- **LNG-IUS (Mirena & Skyla)**
  - Release levonorgestrel directly into the endometrial
  - 20 mcg/day Mirena
  - 14mcg/day Skyla

*PRCH 2012*
### IUC Mechanism of Action

**Tcu 380 IUD:**
- Causes increase in uterine and tubal fluids containing copper ions, enzymes, prostaglandins, and macrophages that impair sperm function and prevent fertilization.

**LNG-IUS:**
- Thickens cervical mucus, suppresses endometrium and may suppress ovulation (~50%).

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### Intrauterine Device & Intrauterine System

**Duration**
- **Tcu 380:** Approved 10 yrs
- **LNG-IUS:** Approved 5 yrs

**Efficacy**
- **Tcu 380:** Cumulative 12-year failure rate between 0.7–2.2 pregnancies per 100 women
- **LNG-IUS:** Cumulative 7-year failure rate between 0.5–1.1 pregnancies per 100 women

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### IUC and Adolescents

WHO criteria do not contraindicate IUC during adolescence (Tcu 380 indicated for ≥16 yrs up)

Nulliparous women have increased risk of expulsion with Tcu 380

IUC is not recommended if patient has:
- Current diagnosis of an STI or PID in past three months
- Purulent cervicitis
- Uterine anomaly
- Wilson's disease (for Tcu 380 IUD)

If STI SCREENING, Can place IUD at same visit!
IUC and PID

- Flaws in early research exaggerated risk of infection
- Randomized controlled trials found that risk of infection among IUC users is low
- Insertion process, not the device, poses a transient risk of infection for 21 days post-insertion

IUC: Additional Concerns

<table>
<thead>
<tr>
<th>Perforation risk:</th>
<th>Expulsion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Very low—1 per 1000 insertions or less</td>
<td>• &lt;5% of IUC users spontaneously expel in the first year</td>
</tr>
<tr>
<td></td>
<td>• Comparable rates for nulliparous and parous women with Mirena</td>
</tr>
</tbody>
</table>

Counseling Issues and Facilitating Use

- Counsel regarding myths and misconceptions
- To reduce risk: Remove and replace only when necessary
- Counsel regarding symptoms of PID and expulsion
- Give each woman an ID card with IUC name, a picture of the IUC, as well as insertion and recommended removal dates
**Implantable Contraception**

- A single 4 cm long implant with time-released etonogestrel
- Implanted in the upper arm
- Inserted and removed by a clinician
- Provides up to three years of protection against pregnancy

**Benefits of Nexplanon®**

- Highly effective
  - Perfect and typical failure rate 0.1%
- Cost effective over time
  - $350–$600
- KS Medicaid covers 1 LARC q 3 years
- Discreet (concerns exist about visibility)
- May improve acne in current sufferers

**Concerns for Teens**

- Small weight gain (Implanon)
  - 2.8 lbs in year one, and 3.7 lbs. year two
- Irregular bleeding patterns
- Insertion and removal requires office visits
- Initial expense
**Quick Start for Hormonal Methods**

**Quick Start Method:**
She starts the method the day she fills the prescription
- Ensure that she:
  - Is not pregnant
  - Understands risks and benefits of method and when protected

**Depo Now:**
Give first injection at that office visit
- >5 days = pregnancy test
- <5 days = EC
Follow up any Quick Start Method in 21 days

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**Patient requests new method of contraception**

**Quick Start Initiation of Hormonal Contraception**

First day of LMP five or fewer days ago?

- Yes
  - Urine pregnancy test negative
  - Unprotected sex since LMP?
    - No: Initiate method today; advise use of backup method during first week
    - Yes: Five or fewer days ago
      - Offer hormonal EC today
      - Advise that negative pregnancy test is not conclusive

- No
  - Patient wants to start new method today?
    - No
      - Provide prescription for chosen method
    - Yes
      - Initiate method today

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<table>
<thead>
<tr>
<th>Method</th>
<th>% Experiencing an Unintended Pregnancy within the 1st Year Use</th>
<th>% Continuing Use at 1 Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>No method</td>
<td>85</td>
<td>85</td>
<td>N/A</td>
</tr>
<tr>
<td>Condoms</td>
<td>15</td>
<td>2</td>
<td>20¢ to $2.50 each</td>
</tr>
<tr>
<td>COCs</td>
<td>8</td>
<td>0.3</td>
<td>$30–$50/month</td>
</tr>
<tr>
<td>Patch</td>
<td>8</td>
<td>0.3</td>
<td>$30–$50/month</td>
</tr>
<tr>
<td>Ring</td>
<td>8</td>
<td>0.3</td>
<td>$30–$50/month</td>
</tr>
<tr>
<td>DMPA</td>
<td>3</td>
<td>0.3</td>
<td>$30–$75/injection + visit</td>
</tr>
<tr>
<td>IUD (ParaGard)</td>
<td>0.8</td>
<td>0.6</td>
<td>$250–$300/10 yrs + visit</td>
</tr>
<tr>
<td>IUD (Mirena)</td>
<td>0.2</td>
<td>0.2</td>
<td>$300–$400/5 yrs + visit</td>
</tr>
<tr>
<td>Nexplanon</td>
<td>0.2</td>
<td>0.2</td>
<td>$300–$500/3 yrs + cost</td>
</tr>
</tbody>
</table>
Emergency Contraception

What Is Emergency Contraception (EC)?

- A safe and effective way of preventing pregnancy in cases of:
  - Contraceptive failure.
  - No contraceptive use.
  - Unplanned or forced intercourse.
  - Some methods very effective up to 120 hours after unprotected intercourse.

Adolescents Need EC

- The U.S. has one of the highest teen pregnancy rates in the industrialized world.

- 82% of teen pregnancies are unplanned.
Unprotected sex happens

- Sexually active high school females ages 15–19 report:
  - 21% used no method at first intercourse
  - 16% used no method at most recent intercourse (YRBS data 2013 is 15.7%)
- 13% of adolescents experience a contraceptive method failure during their first year of use

Sexual Assault and EC

- >50% of all rapes occur in young women under 18 years old.
- For teens, 5.3% of rapes lead to a pregnancy.
- Emergency contraception should be offered to all survivors of sexual assault.

Indications for EC
Human Error

- Inconsistent contraceptive use
- Incorrect contraceptive use
- Unplanned/forced intercourse

Method Failure: Patch

- Patch off for 24 hours or more during patch-on weeks
- More than two days late changing a patch
- Late putting patch back on after patch-free week

Method Failure: Ring

- Taken out for more than three hours during ring-in weeks
- Same ring left in more than five weeks in a row
- Late putting ring back after ring-out week
Method Failure: Others

- Condom breaks or slips
- Two or more missed active OCPs
- DMPA shot 14 or more weeks ago
- Expelled IUD
- Three or more hours late taking a POP
- Diaphragm or cervical cap dislodges

Methods of EC

- Plan B One-Step®, My Way®, Take Action™, Next Choice One Dose™
  - FDA approved July 2009 with restrictions
  - Approved for OTC use with no restrictions in 2013
  - Single tablet formulation 1.5 mg of levonorgestrel
  - Family planning aisle
- Generic formulations still available by Rx
  - 2 – 0.75 mg tabs
  - Take at once

Levonorgestrel ECPs
### Brand Name

**Ulipristal Acetate EC**

- **ella®**
  - FDA approved in August 2010
  - Single tablet of 30 mg ulipristal acetate
  - Only available by prescription at specific pharmacies or not-2-late.com

### Combined Oral Contraceptives as ECPs – Yuzpe Method

- Combined oral contraceptive pills (OCPs) containing combined ethinyl estradiol and either norgestrel or levonorgestrel
- 2 doses 12 hours apart
  - Each dose = minimum 100 µg EE and 0.5 mg LNG
  - Multiple tables available for dosing

### The Copper-T Intrauterine Device

- Insert within five days
- Highly effective: Reduces risk of pregnancy by more than 99%
- Rarely used for EC alone
- Cannot use levonorgestrel IUD (Mirena) for EC
Effectiveness of EC Methods

If 1000 women have unprotected sex once during Week 2 or 3 of their cycle

<table>
<thead>
<tr>
<th>Method</th>
<th># of Pregnancies</th>
<th>% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>No treatment</td>
<td>80</td>
<td>-</td>
</tr>
<tr>
<td>Combined ECPs</td>
<td>20</td>
<td>75%</td>
</tr>
<tr>
<td>Progestin-only ECPs</td>
<td>10</td>
<td>88%</td>
</tr>
<tr>
<td>IUD Insertion</td>
<td>1</td>
<td>99%</td>
</tr>
</tbody>
</table>

Trussell J, Raymond EG. 2007.

Mechanism of Action – Combined EC

- Theoretically prevents pregnancy by several mechanisms
- Studies consistently show that EC inhibits or delays ovulation
- No clinical data consistently supports other theories:
  - Thickening of cervical mucus
  - Alterations of tubal transport
  - Direct inhibition of fertilization
- Early studies showed possible alterations of the endometrium, but this finding has not been consistently replicated in more recent studies.

MOA - LNG

- Inhibit or delay ovulation
- No changes on endometrium or endometrial receptivity
- If taken prior to LH surge, then may inhibit fertilization as secondary means.
**MOA - UPA**

- Primarily delays or inhibits ovulation
  - Even when given after the LH surge
- 1 study showed an alteration in endometrium but did not conclude whether this change would affect implantation.

**ALL EC MOA**

- Inhibit/delay ovulation
- Do not cause an abortion
- No effect on established pregnancy

**Side Effects & Complications: Comparing Hormonal Methods**

![Graph showing side effects and complications]

Significant at p<0.01
**Weight Limitations:**

- LNG –  
  - Decreased efficacy if > 160 lbs
- Upa –  
  - Decreased efficacy if > 190 lbs
  - Currently not manufactured

**EC Is Safe**

- No deaths or serious complications have been causally linked to EC
- No serious reactions have been reported
- WHO Medical Eligibility Criteria
  - No situations in which risk of using EC outweigh benefits

**Levonorgestrel EC Contraindications**

- Known or suspected pregnancy
  - Only because it is INEFFECTIVE, not because it is harmful
  - Will NOT increase the risk of miscarriage
- Hypersensitivity to any component of the product
- Undiagnosed abnormal genital bleeding
Ulipristal Acetate EC Contraindications

- Known or suspected pregnancy
  - Limited data suggests that ulipristal acetate will not affect an existing pregnancy
  - More research needs to be done to confirm

Adolescent Access to EC: Challenges & Opportunities

- Patient Level
  - Awareness
  - Understanding/misconceptions
  - Affordability
- Provider Level
  - Undereducated/unfamiliar
  - Misconceptions
- Health Systems and Public Policy Level

Challenges and Opportunities
Providers Can Remove Clinical Barriers to EC

- No pelvic examination or pregnancy test required by ACOG or FDA
- Pregnancy test prior to EC treatment is recommended only if:
  - Other episodes of unprotected sex occurred that cycle
  - LMP (last menstrual period) was not normal in duration, timing, or flow

To Facilitate Use, Providers Can

- Discuss EC with ALL patients
- Assess patient’s previous knowledge of EC
- Discuss patient’s definition of “unprotected sex”—when should patient fill/call in for prescription for EC
- Frame scenarios according to patient’s current contraceptive plan, how it might fail, and how and when to use EC

Providers Can Facilitate Use

- Instruct patient on use:
  - More effective the sooner it is taken
  - Taking two pills at once (when applicable) increases compliance and no increase in side effects
  - Call provider if there is no menstrual period within three weeks after taking EC
**Counseling Key Points**

- Taking EC once during the cycle does not protect women from pregnancy for the entire cycle.
- Having unprotected sex after EC use can increase pregnancy risk.
- To be effective, EC must be used each and every time a woman has unprotected sexual intercourse.

**Facilitating Use in Practice**

- Write: advanced prescription with multiple refills (12 recommended)
- Discuss: condoms and assess for STI risk
- Explain: EC is not an abortifacient, nor is it teratogenic; it will not protect from STIs

- Train office staff on EC
- Importance of timely appointments
- Lack of required exam for prescriptions
- LNG EC is OTC without age restriction
Opportunities for Bridging Contraceptive Services

- Cost of EC may prohibit multiple use within a cycle (~$25–$50)
  - Cost of ella® ~$60
- During visit, discuss alternative and ongoing methods of contraception that are more effective and less expensive

Initiating Contraception: Quickstart

- Consider QuickStart initiation of an ongoing birth control method on day of EC administration
  - Use backup method with ella® until next menstrual period
- Patient should bleed in ~two weeks
- If administering DMPA:
  - Patient should return in two weeks for pregnancy test

Provider Level: Ethical Obligations

- If provider does not feel comfortable or competent counseling patient or writing prescription for EC:
  - S/he must make a referral to someone who can
  - Refer patient to www.not-2-late.com
### Advanced Provision: No Increase in Risk Behavior

<table>
<thead>
<tr>
<th>Action</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive EC in advance</td>
<td>Advance Rx: ~twice as much EC use as control (15% vs. 8%)</td>
</tr>
<tr>
<td>2004 study of young women randomized to:</td>
<td>No decrease in condom or contraceptive use</td>
</tr>
<tr>
<td>Receive instructions on how to get EC</td>
<td>No increase in unprotected sex</td>
</tr>
<tr>
<td>Advance Rx: used EC sooner than control group (10 vs. 21 hrs)</td>
<td></td>
</tr>
</tbody>
</table>

### Conclusions

- EC: safe and effective method of preventing pregnancy
- Can prevent pregnancies when taken within indicated window
- Should be readily available to all women, especially adolescents
- Advanced provision and pharmacy access will not increase health risks for young women