EVIDENCE-BASED PRACTICE: GUIDELINES TO ENHANCE ACCESS TO REPRODUCTIVE HEALTH CARE FOR ADOLESCENTS

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Disclosures

- I have no real or perceived vested interests that relate to this presentation nor do I have any relationships with pharmaceutical companies, biomedical device manufacturers, and/or other corporations whose products or services are related to pertinent therapeutic areas.
Learning Objectives

After completing this webinar, participants will be able to:

1. Utilize understanding of adolescent development (including brain development) to inform our approach to the delivery of contraceptive and reproductive health care to adolescents in the clinical setting.

2. Identify evidence based clinical practices that can enhance access to care for adolescents.

3. Identify key messages to communicate to adolescents related to reproductive health care and contraceptive choices.
Stages of Adolescent Development

- Early Adolescence
  - Females: 9 - 13 years
  - Males: 11 – 15

- Middle Adolescence
  - Females: 13 - 16
  - Males: 14 – 17

- Late Adolescence
  - Females: 16 - 21
  - Males: 17 - 21
Brain Development

Source: Tapert & Schweinsburg, 2005
Adolescent Brain Growth and Change

12 years old

15 years old

20 years old
Prefrontal lobe

- "CEO of brain": reasoning ability, planning, decision-making, impulse control, goal setting/priorities
  - last part of brain to myelinate
  - pruning (decrease in number of synapses or connections) takes place in early adolescence
  - Use it or lose it?
  - Stimulus which triggers prefrontal lobe activity in adults triggers the amygdala to respond in early adolescents
  - The part of the prefrontal lobe linked to the ability to inhibit impulses, weigh consequences, prioritize and strategize does not reach full development until the mid-to-late 20's
Brain Maturation in Adolescence

- Improved Brain Function
  - Increased efficiency of local computations
  - Increased speed of neuronal transmission
Characteristics of Concrete Thinking

- Present orientation
- Seeing is believing/my (my friend’s) experience is what counts
- Ability to project into future limited
- Cannot perceive long-range implications of current decisions
Characteristics of Abstract Thinking

- Ability to:
  - Envision alternatives
  - Evaluate alternatives
  - Engage in perspective taking
  - Reason about chance and probability
  - PRIORITIZE!
Adolescent vs. Adult Brain: Reading Emotions
Early Adolescence
Early Adolescence: Cognitive Development

- Highly active period of brain development

- Transitional thinking: Biological basis
  - Concrete thinking transitioning to abstract thinking
Early Adolescence: Sexual Development

- Sexual intercourse is not common among youngest teens (3.1% of girls and 8.4% of boys <13 y.o.) but increases to 31.6% of 9th graders (YRBS 2009)

- Of those who are sexually active, 18% report unwanted sex and 53% report “mixed feelings” about having had sex at ≤ 14 y.o. (NSFG 2009)
Tips for Early Adolescence

- Communication tools must be very specific
- Use visual explanations and materials
- Focus on issues that most concern the youth – physical appearance, acne, peer acceptance
- Early and late maturation can lead to difficulties
- Be alert to the significant risks associated with early sexual debut
Middle Adolescence
Middle Adolescence
Sexual Development

- Dating
- Sexual experimentation with “outercourse” and oral sex (55% of males and 54% of females 15-19 y.o., NSFG)
- Sexual intercourse common: 53% of 11th graders and 62.3% of 12th graders have had intercourse (YRBS 2009)
Tips for Middle Adolescence

- Friendly relationships between providers and teens are key to creating trust
- Use healthcare messages and tools that a teen can identify with to ensure follow through and success
- Peer counseling can be very effective
- Focus on supportive adult connections, health promotion and harm reduction
- Avoid “preaching”
- Look for the “hidden agenda”
Late Adolescence
Late Adolescence
Sexual Development

- Sexual intercourse common
  - 62.5% by age 19 and 89% by 20-24, with the median age of sexual debut of 16.9 y.o. for males and 17.4 y.o. for females (NSFG 2008)
- Sexual relationships more stable with possible future orientation
- Sense of commitment accompanies intimacy
Tips for Late Adolescence

- More abstract reasoning allows for more traditional approaches that rely on knowing consequences of behaviors.
- Provide the option to include close friends and/or partners for office visits.
- Prioritizing, problem-solving skills and impulse control are still not fully developed...
Respect is Key

- Respect for the youth’s
  - Confidentiality
  - Preferences
  - Choices
  - Self-efficacy
  - Self-determination
CONFIDENTIALITY/CONSENT – WHAT’S THE BIG DEAL?

- Adolescents are going through tremendous physical, cognitive, emotional, sexual changes.
- Teens strive for autonomy and independence.
- Privacy is a key issue.
- Confidentiality is the cornerstone of alliance.
- *Know the law in your state!*
Principles of Communicating Conditional Confidentiality

- Define confidentiality
- Provide a quick overview of the “service exceptions” to the general consent law (areas where minor consent may apply)
- Provide *specific information* regarding when confidentiality might be breached prior to asking questions that could result in disclosure of reportable information
Strive for CLEAR Communication

- Keep information
  - simple
  - specific to the individual youth you are working with
- Use developmentally appropriate language and concepts
Evidence-Based Practices and Adolescent Care

Considering adolescent development in prioritizing care
Ruby

- Ruby is 16 years old and tells you that she is in a panic because she is afraid that she may have gotten pregnant. She is certain that she does not want to be pregnant. She uses condoms and is satisfied with her method. She had sex 3 days ago and used a condom but it broke.
What to do with Ruby...

- Based on the information provided in this brief vignette, what can you do for Ruby?
  - A. Convince her to switch to a more reliable method, like birth control pills
  - B. Dispense a supply of condoms, and counsel her on how to store them properly
  - C. Send her to the clinic for STI testing
  - D. Help her figure out how to get Emergency Contraception
BACK UP YOUR BIRTH CONTROL WITH EC

BE PREPARED TO PROTECT YOURSELF IN CASE:
- THE CONDOM BREAKS
- YOU FORGOT TO TAKE YOUR PILL
- OR, YOU HAD SEX WHEN YOU DIDN'T WANT OR PLAN TO

Using Emergency Contraception within 120 hours of unprotected sex can prevent pregnancy—but the sooner the better. Ask your healthcare provider about an advance supply of EC (Emergency Contraception).

1-888-NOT-2-LATE
backupyourbirthcontrol.org
Why is EC access such a big issue?

- Adolescent often do not plan their sexual activity:
  - “it just happened…”

- Adolescents do not have well-developed refusal skills:
  - “I didn’t really want to, but…”

- Adolescents have not developed their ability to prioritize and delay gratification:
  - “I know we should have waited since we didn’t have a condom, but…”
Indications for EC

- After unprotected intercourse
- After under-protected intercourse
  - After barrier method “accidents”
  - After missed OCPs (>2)
  - After missed progestin-only pills (1)
  - >14 weeks since last DMPA (Depo) shot
  - Transdermal patch detached >24 hrs.
  - Vaginal ring expelled/removed >3 hours
  - Vaginal spermacide used alone
Levonorgestrel EC prevented:

- 95% of pregnancies when used within 24 hours of intercourse,
- 85% when used 25 to 48 hours after intercourse, and
- 58% when used 49 to 72 hours after intercourse.
What does EC do?

Theoretically, EC could interfere with:

- Follicle maturation;
- The ovulatory process;
- Cervical mucus;
- Sperm migration;
- Corpus luteum sufficiency;
- Endometrial receptivity;
- Fertilization;
- Zygote development, transport, and adhesion.
Myths and Facts about EC

**MYTH!**

- *Emergency contraceptive pills cause a “mini-abortion.”*

**FACT!**

- *Emergency contraceptive pills have no effect on an established pregnancy.*
- *They act prior to implantation and therefore are not abortifacients.*
More Myths and Facts about EC

- **MYTH!**

  If emergency contraceptive pills are too easy to obtain, women will “abuse” them.

- **FACT!**

  Women who are supplied with emergency contraceptive pills in advance of need will use them appropriately and are not more likely to abandon regular forms of birth control.
More Myths and Facts about EC

- **MYTH!**
  - Emergency contraceptive pills have high doses of hormones and are dangerous to use.

- **FACT!**
  - The one-time dose of hormone in emergency contraceptive pills is extremely safe and can be used by virtually any woman who needs it.
Levonorgestrel Only ECPs

- Brand name (Plan B OneStep) packaged as a single 1.5 mg dose
- Generic (Next Choice) packaged as two 0.75 mg doses
- Either can be used as a single dose (1.5 mg) within 120 hrs of unprotected intercourse
- Approved for over-the-counter purchase by anyone ≥17 years old
Ulipristol acetate ECP

- Brand name “ella” packaged as a single 30 mg dose
- Take within 120 hours (5 days) of unprotected/under-protected sex
- Use only once in a menstrual cycle
- ONLY available by prescription
Contraindications to Progestin-Only ECP

- Pregnancy (confirmed by urine HCG)
- Hypersensitivity to any component
- Undiagnosed abnormal vaginal bleeding
- Previous use and frequent use of EC are NOT medical contraindications
Adolescent Messages for EC Use

- As soon as possible after unprotected or under-protected intercourse
  - Sooner works better
- Effective up to **5 days** (120 hours) after event
  - It’s not just the morning after
- Can take both pills at once if using Next Choice
  (package instructions are 1 pill followed by 2nd pill 12 hours later)
  - This is safe and effective, even though it’s not what the box says
Adolescent Messages for EC Use

- Next menses may be earlier, later, and/or heavier
- Return for pregnancy test if no menses in 3 weeks
- Discuss STI screening and effective contraceptive plan as appropriate
  - EC reduces the chance of pregnancy, but is not as effective as a regular method
Access to EC: YOU have an essential role

- Counsel **ALL** teens about EC
  - Males and females
  - Current contraceptive users
    - Barrier users
    - Hormonal method user
  - Non-contraceptors
  - Youth who are not sexually active

- Assess for current risk
- Provide on-site access when possible
- Offer prescription along with a list of local pharmacies where EC can be obtained
Clinical Services: What happens when you send a teen to the clinic
Marlene is 17 years old and wants to start birth control pills. She has been sexually active for 3 years, using withdrawal to avoid pregnancy. This will be her first visit for reproductive health care, and she is very frightened about having a pelvic exam.
What to do with Marlene...

- Based on the information provided in this brief vignette, what can you tell Marlene to expect?

- A. She will need a Pap Smear
- B. She can’t get birth control if she doesn’t have a pelvic exam
- C. She will also need a clinical breast exam
- D. She will need vital signs (height, weight, blood pressure), a health history, and STI screening
- E. All of the above
Key Points

- The most important information needed before prescribing hormonal contraception is obtained through:
  - Obtaining an adequate and appropriate health history
  - Measuring blood pressure
- A pelvic exam is NOT indicated unless the client has complaints or needs a Pap smear
- A clinical breast exam is not indicated prior to prescribing hormonal contraception
- STI screening can be done without a pelvic exam

Algorithm from the Healthy Teen Initiative: NYC

1. Focused medical history

2. Medications that decrease efficacy of Combined Hormonal Contraception

3. Blood pressure

Westhoff and Gibson
Algorithm from the Healthy Teen Initiative: NYC

1. Ask about UNUSUAL bleeding patterns
   - Also consider STI’s

2. A weight is required for Patch only

3. If the answer is no to all prior questions, it is SAFE to start combined hormonal contraception

Westhoff and Gibson
Pap Smears

- Begin screening in immunocompetent women at 21 years old
- A Pap Smear is NOT required prior to initiating ANY contraceptive method

Paps: Special Cases

- Begin Paps earlier if the client:
  - Is HIV+/has AIDS
  - Is immunocompromised
  - Was exposed to DES in utero
Chlamydia Screening

- All sexually active females <25 should be screened annually for CT.
- Clinicians may consider screening adolescent/young adult males in clinical settings associated with high chlamydia prevalence (e.g., adolescent clinics, correctional facilities, and STD clinics).
- All positives should be treated and then screened for re-infection 4 months after treatment.
- Option of partner delivered therapy to facilitate treatment of all sexual contacts.

CDC 2010 STD Treatment Guidelines
Gonorrhea Screening

- Screen all sexually active females at risk for infection annually (females aged <25 years are at highest risk for gonorrhea infection).
- Screen all pregnant women
- Any STD diagnosis is an indication for screening
HIV Screening Recommendations

- HIV screening is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines (opt-out screening).
- Persons at high risk for HIV infection should be screened for HIV at least annually.
- Separate written consent for HIV testing should not be required; general consent for medical care should be considered sufficient to encompass consent for HIV testing.
- Prevention counseling should not be required with HIV diagnostic testing or as part of HIV screening programs in health-care settings.
HIV Screening Recommendations

- All patients seeking treatment for STDs should be screened during each visit for a new complaint, regardless of known or suspected behavioral risks.
- Rapid HIV tests decreases the number of persons lost to follow-up.
- Positive rapid HIV test results are preliminary and must be confirmed before the diagnosis of HIV infection is established.
Adolescent Contraception
Julie

- Julie is 16 years old and due to deliver any day now. She is in a stable relationship with the 19 year old father of her baby. She has never used any form of contraception and has no medical problems.
Based on the information provided in this brief case vignette, what method is the best option for Julie?

- A. IUD/IUS
- B. Combined hormonal contraception (OCP, Patch, Ring)
- C. Implant
- D. DMPA
- E. Any of the above
Current Trends in Contraception that Meet Youth’s Needs

- Widening use of emergency contraception
- New delivery systems for hormonal methods
- Increasing access to a full range of options
- Increasing access by decreasing barriers
  - No need for routine pelvic before stating a method
  - Prescribing/dispensing a full year’s supply
- Emphasizing better adherence
  - Quick Start
  - Extended/continuous cycling

www.contraceptiononline.org
Intrauterine Contraceptives: Mirena and ParaGard

- Highly effective
- Lasts 5 years (Mirena), 10 years (ParaGard)
- Decreases bleeding (Mirena)
- May be particularly appropriate for teen parents
- Insertion may be more difficult in the woman who has never been pregnant
- Expulsion rates slightly higher in women who have never been pregnant
Vaginal Ring: NuvaRing

- Increasing interest among older teens
- Worn for 3 out of 4 weeks
- Self insertion and removal
- Highly effective
- Good cycle control
Contraceptive Patch: Ortho Evra

- Lots of initial interest among teens
- Teens tend to discontinue due to problems with adhesive
- Total estrogen exposure is 60% higher than 35 mcg pills, although peak levels are lower
- Rates of DVT, MIs and CVAs similar in patch and OC users
The Patch and Thrombosis: Theoretical Risk vs. Data

- ischemic stroke and acute myocardial infarction are rare among young women who use hormonal contraceptives
- the current data provide no suggestion of an increased risk of either ischemic stroke or acute myocardial infarction in users of the contraceptive patch compared with users of norgestimate OCs.

DMPA

- Popular among younger teens
- Associated with weight gain, particularly in obese users
- Associated with decreased bone density, calcium supplementation has no documented impact, adding estrogen back helps
- Impact on developing bone not well understood
Clinicians should continue to prescribe, with adequate explanation of benefits and potential risks.

Bone density is mostly regained after discontinuance.

FDA recommendation to counsel women regarding use longer than 2 years, but no evidence re: specific cut-off, as bone loss rate actually may slow with continued use.

Cromer BA, Depot Medroxyprogesterone Acetate and bone mineral density Society for Adolescent Medicine Position Paper.
Contraceptive Implant

- Limited experience with teens
- Highly effective, 3 year duration
- Pre-insertion counseling regarding unpredictable bleeding patterns essential
  - Most requests for removal related to bleeding patterns
- No impact on bone density
- Not associated with weight gain
Method Initiation
Lana

- Lana is 15 years old and wants to start contracepting with DMPA injections ("the shot"). Her LMP was 10 days ago, and she had unprotected sex both 1 week ago and yesterday.
What to do with Lana...

□ Based on the information provided in this brief vignette, can Lana start her DMPA injections today?

□ A. YES
□ B. NO
Quick Start Regimens:
Don’t Wait for the Next Menses

- Effective use of hormonal contraception is more likely if a teen can initiate the method right away
- If beyond day 6 of current cycle, condoms use is recommended for the next 7 days
- Emergency contraception should be offered if there has been unprotected intercourse in the prior 5 days
- A urine pregnancy test should be performed if an early pregnancy is a possibility
Quick Start Algorithm

Woman requests a new birth control method:

1. Pill, Patch, Ring, Injection

   - First day of last menstrual period (LMP) is:
     - 4-5 days ago
     - > 5 days ago

     - Start method today
     - Urine pregnancy test: negative**
     - Unprotected sex since LMP:
       - 5 days ago
       - > 5 days ago
       - Birth control in past 5 days
       - None
         - Offer hormonal EC today*
         - Advise that negative pregnancy test is not conclusive, but hormones will not harm fetus
         - Offer hormonal EC today*
         - Start pill/patch/ring/implant today; use backup method 1st week

     - Patient wants to start new method now?
       - Yes
         - Start pill/patch/ring/implant; use backup method 1st week
         - Start pill/patch/ring on 3rd day of menses, start new method today
       - No
         - Give prescription for chosen method; advise patient to use barrier method until next menses
         - Two weeks later, urine pregnancy test is negative; continue pill/patch/ring/implant

* Because hormonal EC is not 100% effective, check urine pregnancy test 3 weeks after EC use.
** If pregnancy test is positive, provide options counseling.
2. Progestin IUD or Implant

First day of LMP (x):

- 5 days ago
  - Insert IUD/Implant today
- >5 days ago
  - Unprotected sex since LMP?
    - Yes
      - Either pill/patch/ing or hormone IUD/implant
      - Patient accepts pill/patch/ing?
        - Insert IUD/Implant today
    - No
      - Unprotected sex since LMP?
        - Yes
          - Insert IUD/Implant today
        - No
          - Insert IUD/Implant within 5 days of next menses

- 2 weeks later, urine pregnancy test is negative*
  - Insert IUD/Implant today

3. Copper IUD

First day of last menstrual period (LMP) (x):

- 5 days ago
  - Insert IUD today
- >5 days ago
  - Unprotected sex since LMP?
    - Yes
      - Insert IUD within 5 days of next menses
    - No
      - Insert IUD today

* Pill/patch/ing may be started as a bridge to copper IUD.
** If pregnancy test is positive, proceed with counseling.

Notes: These algorithms are based on the algorithm for injected progestin that appears in the 2009 Pocket Guide to Managing Contraception by Nathan RA, Zimet M et al, page 135.
Relationship Quality

The connection with pregnancy prevention
What does a healthy adolescent relationship look like?

- Responsible adolescent intimate relationships, like those of adults, should be based on shared personal values, and should be:
  - Consensual
  - Non-exploitative
  - Honest
  - Pleasurable
  - Protected against unintended pregnancies/STDs, if any type of intercourse occurs
FVPF Intervention/Education Tool

Ask yourself:

☐ Does my partner mess with my birth control?
☐ Does my partner refuse to use condoms when I ask?
☐ Does my partner make me have sex when I don’t want to?
☐ Does my partner tell me who I can talk to or where I can go?

If you answered YES to ANY of these questions, your health and safety may be in danger.
Adolescent Relationship Abuse and Pregnancy Prevention

- Teen relationship violence is associated with:
  - Birth control sabotage
  - Pregnancy coercion
  - Unintended pregnancy

Miller et al. 2010
Red flags for IPV in Reproductive Health

- contraceptive nonuse
- frequent STD testing
- repeated pregnancy testing
- multiple emergency contraception use
- multiple repeat pregnancies

DO NOT ASSUME KNOWLEDGE DEFICIT! ASSESS FOR IPV
Teen Dating Violence: Power & Control Wheel

- Intimidation: Bullying you to get their way
- Sexual Coercion: Deliberate pregnancy or forced sexual contact
- Isolation: Prevents you from spending time with friends or family
- Peer Pressure: He or she spreads rumors or secrets about you
- Anger: Controls you with his or her anger
- Blame: Blames you for his or her anger
- Threats: Threatens you, your family, or your friends
- Social Status: Using popularity to control relationship

Based on The Duluth Model
www.TheDuluthModel.org

Life. Love. Jennifer Ann's Group
The Jennifer Ann Crecente Memorial Group, Inc.
Goals of Intervention in Relationship Abuse

- Increase safety of victim
  - LEAVING OFTEN DOES NOT INCREASE SAFETY
- Convey Key Messages
  - No excuse for abuse
  - Not the victim’s fault
  - Not alone
  - Can be difficult
  - There is support
- Connect with resources
- Empowerment (NOT to “fix” or “rescue”)
- Follow-up/maintain contact
References


Cromer BA, Depot Medroxyprogesterone Acetate and bone mineral density Society for Adolescent Medicine Position Paper


References