Family Planning in the Patient-Centered Medical Home

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Linda Prine MD
Nearly half of pregnancies in the United States are unintended.

- Unintended, occur earlier than desired - 29%
- Unintended, occur after desired family size reached - 20%
- Intended - 51%
Outcomes of Unintended Pregnancies
Approximately 3.0 Million Annually

Bar chart showing:
- Abortions: 50%
- Births: 40%
- Miscarriages: 15%
Wanted versus unwanted pregnancy: consequences

Children born from unintended pregnancies are more likely to:
- Be exposed to tobacco, alcohol, & drugs in utero
- Have low birth weight
- Be abused as children
- Die during the first year of life

Planned/wanted children are more likely to:
- Succeed in school
- Avoid addiction and criminal behavior
- Enjoy healthier relationships
Half of women at risk are not fully protected from unintended pregnancy.

- Consistent, long-acting method use: 50%
- At-risk gap use: 15%
- Inconsistent use: 27%
- Nonuse all year: 8%

28 million U.S. women at risk for unintended pregnancy
Figure 1.2
Health Center Patients Are Predominately Low Income

- 100% FPL and Below: 70.4%
- 101-150% FPL: 14.3%
- 151-200% FPL: 6.7%
- Over 200% FPL: 8.6%

*Please refer to sources and methodology at the end for more information*

Source: Federally-funded health centers only. 2007 Uniform Data System, Bureau of Primary Health Care, HRSA, DHHS.
Note: Federal Poverty Level (FPL) for a family of three in 2008 was $17,170. (See http://aspe.hhs.gov/poverty/07poverty.shtml) Based on percent known. Percents may not total 100% due to rounding.
## Number of CHCs and Patients

<table>
<thead>
<tr>
<th>Year</th>
<th>CHC Sites</th>
<th>Patients Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1,400</td>
<td>5,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>3,200</td>
<td>10,000,000</td>
</tr>
<tr>
<td>2010</td>
<td>8,000</td>
<td>20,000,000</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>40,000,000</td>
</tr>
</tbody>
</table>

- CHCs got 2 billion in the stimulus bill
- They will get 11 billion more under the Affordable Care Act
CHCs and Family Planning

- Only 60% of CHC sites reported providing contraceptive care.
- Contraceptive services requiring special training are less available (45% offer IUD and 41% offered Norplant (1999))
- CHCs are less likely to offer evidence-based contraceptive care like de-linking pelvic exam to contraceptive access and quick starting hormonal contraception than other publicly funded clinics.
Why do women experience unintended pregnancies?
### Efficacy: Numbers & Categories Table

#### “Less Effective Methods”

<table>
<thead>
<tr>
<th>Effectiveness Group</th>
<th>Family Planning Method</th>
<th>Typical-Use Rate of Pregnancy</th>
<th>Perfect-Use Rate of Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Method</td>
<td>No method</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Less effective</td>
<td>Male latex condoms</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>Diaphragm</td>
<td>20%</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Cervical cap</td>
<td>20%-40%</td>
<td>9%-26%</td>
</tr>
<tr>
<td></td>
<td>Female condoms</td>
<td>21%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Spermicide</td>
<td>26%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Withdrawal</td>
<td>19%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>Fertility Awareness</td>
<td>20%</td>
<td>1%-9%</td>
</tr>
</tbody>
</table>
Contraceptive Methods: US

- **Pill**: 28
- **BTL**: 27
- **Condom**: 16
- **Vasectomy**: 9
- **IUD**: 5.5
- **Withdrawal**: 5.2
- **Depo**: 3.2
- **Ring**: 2.4
- **Implant, Patch**: 1.1
- **Abstinence**: 1.1

Method categories include:
- Pill
- BTL
- Condom
- Vasectomy
- IUD
- Withdrawal
- Depo
- Ring
- Implant, Patch
- Abstinence
Most unintended pregnancies occur when women fail to use contraceptives or use their method inconsistently.

- Nonuse: 52%
- Inconsistent or Incorrect use: 43%
- Consistent use, method failed: 5%

3.1 million unintended pregnancies, by women's contraceptive use during month of conception
What Can We Do?

One Key Question
Yolanda

17 year-old high school senior, comes in with a UTI

Requests pregnancy test

Had unprotected sex 4 days ago

Urine pregnancy test is negative.

What do you do next?
What should you offer?
Ask medical history:

PMH negative except bad headaches at times
Emergency Contraception: Mechanism of Action

Inhibits ovulation

Does NOT cause abortion
Emergency Contraception:

Levonorgestrel (Plan B)

Decreases risk of unintended pregnancy by 58-89%

Does not disrupt or harm an implanted pregnancy

No medical contra-indications!
Ulipristal acetate: a new emergency contraceptive option

- Decreases risk of unintended pregnancy by about 90%
- Maintains nearly full efficacy up to 5 days after unprotected intercourse
What else does Yolanda need?

- Treatment for her UTI
- She wants birth control pills – can we give them?
- What about antibiotics and oral contraceptives?
Hormonal Contraceptives
What is needed before prescribing?

**Medical history**
- REQUIRED

**Blood pressure**
- RECOMMENDED

**Pap smear**
- NOT REQUIRED

**Pelvic/breast exam**
- NOT REQUIRED

**STI testing**
- NOT REQUIRED

**Hemoglobin**
- NOT REQUIRED
WHO / CDC Medical Eligibility Criteria for Contraceptive Use

- Developed by WHO to define risk of birth control use with common medical conditions
- Adopted by CDC for US in 2010
- Risk of unintended pregnancy with given condition weighed against risk of method
WHO / CDC Medical Eligibility Criteria for Contraceptive Use

- Full reports condensed into summary table: www.reproductiveaccess.org
- Risk levels 1-4:

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Method can be used without restriction</td>
</tr>
<tr>
<td>2</td>
<td>Advantages generally outweigh theoretical or proven risks</td>
</tr>
<tr>
<td>3</td>
<td>Method not usually recommended unless other, more appropriate methods are not available or not acceptable</td>
</tr>
<tr>
<td>4</td>
<td>Method not to be used</td>
</tr>
</tbody>
</table>
Hormonal Contraceptives
Which women/teens can’t use estrogen?

Estrogen contraindications?
Yolanda is eligible for the pill.

When should she start?

[Calendar image]
Using the EHR

- BCP FACT SHEET
Should Yolanda get a prescription for EC, too?
Liz

21-year-old healthy college student

Takes oral contraceptive, but forgets pills often

Has trouble getting refills while at college, and now the pills are too expensive
Adherence with OCs: What Women Do!

Percent of Women (%)

Number of pills missed

Cycle 1
Cycle 2
Cycle 3

Diary
Electronic Device

Potter L et al. 1996.
What are the common reasons for missing pills?
Back to Liz…

She would like to try something easier to remember.

What information do you need?
# Efficacy: Numbers & Categories Table

## “Effective Methods”

<table>
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<th>Perfect-Use Rate of Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective</td>
<td>Birth control pills</td>
<td>8%</td>
<td>0.1%-0.5%</td>
</tr>
<tr>
<td></td>
<td>Transdermal patch</td>
<td>Unknown (8%)</td>
<td>0.3%-0.8%</td>
</tr>
<tr>
<td></td>
<td>Vaginal ring</td>
<td>Unknown (8%)</td>
<td>0.1%-0.5%</td>
</tr>
</tbody>
</table>
Estrogen/progestin vaginal ring

- Active for at least 3 weeks
- Lowest estrogen dose: 15 mcg / day
- Same efficacy and contraindications as OCs
- May remove for up to 3 hours
- QuickStart same as with OCs
Estrogen / Progestin Patch

• 1 patch weekly for 3 weeks, then one week off
• Same efficacy & contraindications as OCPs
• OK to shower, swim, exercise with patch on
• Failures in trials were in women over 198 pounds, but still rare
• Higher risk of clots? Conflicting studies…
How many refills should we give Liz?
Rosa

16 years old

Doesn’t want to get pregnant until she finishes school

Wants contraception that she can hide from her mom

What are her choices?
## Highly Effective Methods

**NOT USER DEPENDENT**

<table>
<thead>
<tr>
<th>Effectiveness Group</th>
<th>Family Planning Method</th>
<th>Typical-Use Rate of Pregnancy</th>
<th>Perfect-Use Rate of Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Effective (for all users)</td>
<td>Male and female sterilization</td>
<td>0.2%-0.5%</td>
<td>0.1%-0.5%</td>
</tr>
<tr>
<td></td>
<td>Implants</td>
<td>0.1%</td>
<td>0.1%</td>
</tr>
<tr>
<td></td>
<td>Hormone shot</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>Intrauterine devices</td>
<td>0.8%-2%</td>
<td>0.6%-1.5%</td>
</tr>
</tbody>
</table>
Depo Provera & Bone Density

Weighing risks and benefits:

No need to restrict Depo Provera use
Quick Start Depo

- Depo is the one method shown to prevent unintended pregnancies with Quick Start
- If pregnant - not a teratogen
- For return depo visits – keep in mind it works for 16 weeks
# Intrauterine Devices

## Which IUD is right for me?

<table>
<thead>
<tr>
<th></th>
<th>Copper IUD</th>
<th>Progestin IUD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand name</strong></td>
<td>Paragard™</td>
<td>Mirena™</td>
</tr>
<tr>
<td><strong>How long can you use it?</strong></td>
<td>10-12 years</td>
<td>5-7 years</td>
</tr>
<tr>
<td><strong>Does it contain hormones?</strong></td>
<td>No</td>
<td>Yes: low dose of progestin (no estrogen)</td>
</tr>
<tr>
<td><strong>Side effects</strong></td>
<td>Heavy periods</td>
<td>Spotting</td>
</tr>
<tr>
<td></td>
<td>Cramps with your period</td>
<td>Less common: bloating, nausea, headaches, breast pain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No period after a few months – this is not risky, and many women like it</td>
</tr>
</tbody>
</table>
IUDs

What have you heard?

Can we put an IUD in our 16 year old, Rosa?
Blanca

36-year-old G6P4
Has fibroids and anemia,
smokes one ppd
## Smoking and Contraceptive Use

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>COC</th>
<th>CIC</th>
<th>POP</th>
<th>NET-EN</th>
<th>DMPA</th>
<th>IMP</th>
<th>Cu-IUD</th>
<th>LNG-IUD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SMOKING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Age&lt;35</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b) Age&gt;35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) &lt;15 cigarettes/day</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(ii) ≥15 cigarettes/day</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Progestin IUD (MIRENA)
Progestin Implant

- Highly effective and rapidly reversible
- Discreet
- Not user-dependent
- Contain no estrogen
- Can be used during lactation
- Active hormone: etonogestrel (68 mg)
Features of Progestin Implants

Causes spotting

Requires certified clinician visits for insertion and removal
Barriers to Best Practices?

- Provider training
- Support staff training (examples:)
  - Prior approval process for IUDs
  - Nursing training for instrument assembly
- Support from leadership
  - Commitment to quality in women’s health
  - Uniform practices across sites
Women’s Committee IFH

- Physicians
- Nurse Practitioners
- Billing
- IT
- Nursing
- Practice managers
- Social work
Counseling to Enhance Adherence

• **LISTEN** to her ideas about the best method.

• **EXPLORE** lifestyle issues that may impact adherence.

• **ENCOURAGE** her to call you with problems/concerns.
Impact of Choice

% of Women Continuing Contraceptive Use at 1 Year

Choice Granted: 72.2%
Choice Denied: 8.9%

Pariani. Stud Fam Plann, 1991
Office barriers to adherence
Using the EHR

Welcome, Ruth Lesnewski!

You Might Want To...

- Read your new message from Generic Mychart.
  Subject: APPT REMINDER.

- Review the preventive care services we recommend you schedule soon.

- View your new TUBERCULOSIS TESTING (PPD) results from 5/19/2010.

- Ask a medical question.
- Schedule an appointment.
- View your health summary.
Take-home message: Be pro-active with contraception!

DE-LINK pap smears from birth control prescriptions.

ROUTINELY prescribe 1-year supply with 3 packs at a time.

Use Quickstart.

Ask about contraceptive needs at all types of visits.

Emphasize high-efficacy methods, but honor women’s choice whenever possible.
Review: Reducing Gaps in Use

- Encourage use of LARC
- QuickStart – especially for DepoProvera
- Allow for extended use where there is evidence:
  - Depo Provera and OCPs can be used indefinitely
  - Mirena for up to 7 years
  - Paragard for up to 12 years
  - If no contraindications, ok to use all methods up until menopause
- Easy access to refills: refill without an office appointment if BP normal
Questions? Quiz?

![Diagram with questions: Who, What, How, Where, Why, When]
References and Resources

- Hatcher et al, *Contraceptive Technology* 2007
- Managing Contraception – book online @ www.managingcontraception.org
- Medical Eligibility Criteria for Contraceptive Use 2010 by WHO www.who.int/reproductive-health
- Association of Reproductive Health Professionals www.arhp.org
- Alan Guttmacher Institute www.agi-usa.org
- Planned Parenthood www.plannedparenthood.org
- The Cochrane Collaboration www.cochrane.org
- www.Not-2-Late.com
- Reproductive Health Access Project www.reproductiveaccess.org