Contraception in Women with Medical Complexities

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Objectives

• Review US reproductive health epidemiology
• Discuss contraceptive resources and decision-making
  – Safety
  – Effectiveness
  – Availability (including accessibility and affordability)
  – Acceptability
• Case example
Healthy = Planned
Pregnancies by Intention Status

Nearly half of U.S. pregnancies are unintended.

- Intended: 55%
- Mistimed: 27%
- Unwanted: 18%

www.guttmacher.org
Modern Contraception Works

The two-thirds of U.S. women at risk of unintended pregnancy who practice contraception consistently and correctly account for only 5% of unintended pregnancies.

Women at Risk (43 Million in 2008)
- 14% Nonuse or long gaps in use
- 18% Inconsistent use
- 68% Consistent use

By consistency of method use all year

Unintended Pregnancies (3.1 Million)
- 5% Consistent use
- 54% Nonuse
- 41% Inconsistent use

By consistency of method use during month of conception
Chronic Diseases

- Prevalence of chronic medical conditions among reproductive age women is increasing

- Increased risk of unintended pregnancy in women with chronic diseases
Chronic Conditions

- Breast cancer
- Complicated valvular heart disease
- Cystic fibrosis
- Complicated diabetes
- Endometrial or ovarian cancer
- Epilepsy
- HTN
- Bariatric surgery
- HIV/AIDS
- Ischemic heart disease
- GTD
- Malignant liver tumors
- Peripartum cardiomyopathy
- Schistosomiasis

- Cirrhosis
- Sickle Cell
- Solid organ Tx
- Stroke
- Lupus
- Thrombogenic mutations
- TB
- Depression
- Obesity
- Rheumatoid arthritis
- IBD
- Asthma
- Thyroid Dx
Contraceptive Selection

One Key Question®

**ASK: Would you like to become pregnant in the next year?**

- **Yes**
  - Recommend 400mcg of folic acid daily.
  - Screen for health concerns that could impact pregnancy and treat as indicated.
  - Encourage early prenatal care.
  - “Act Pregnant Before You Get Pregnant”

- **OK either Way/Unsure**
  - **ASK: Are you currently using a type of contraceptive method that you are satisfied with?**
    - **Yes**
      - Recommend Emergency Contraception as a backup method
    - **No**
      - Provide complete contraceptive counseling
    - **Not at risk for pregnancy**
      - Contraception not indicated
Safety
Evidence-based guidance on the contraceptive safety for U.S. women with specific characteristics and medical conditions

Modified by the CDC from the WHO MEC
Six new medical diagnoses added- IBD, bariatric surgery, solid organ transplant, etc.
Why the MEC??

Can a teen use an IUD?

Can a woman on seizure meds use the patch?

Can a breastfeeding woman use the shot?

Can a diabetic use the pill?
US MEC Categories

US Medical Eligibility Criteria (US MEC)

- **Category 1**: No restriction for the use of the contraceptive method
- **Category 2**: Advantages generally outweigh the theoretical or proven risks
- **Category 3**: Theoretical or proven risks usually outweigh the advantages
- **Category 4**: Unacceptable health risk if the contraceptive method is used
# U.S. MEC

| Condition                                | Sub-Condition                             | Cu-IUD I | Cu-IUD C | LNG-IUD I | LNG-IUD C | Implant I | Implant C | DMPA I | DMPA C | POP I | POP C | CHC I | CHC C |
|------------------------------------------|-------------------------------------------|----------|----------|-----------|-----------|-----------|-----------|        |        |      |      |      |      |
| Diabetes                                 | a) History of gestational disease         | 1        | 1        | 1         | 1         | 1         | 1         | 1       |        |      |      |      |      |
|                                          | b) Nonvascular disease                    |          |          |           |           |           |           |         |        |      |      |      |      |
|                                          | i) Non-insulin dependent                  | 1        | 2        | 2         | 2         | 2         | 2         | 2       | 3/4*   |      |      |      |      |
|                                          | ii) Insulin dependent                     | 1        | 2        | 2         | 2         | 2         | 2         | 2       |        |      |      |      |      |
|                                          | c) Nephropathy/retinopathy/neuropathy‡    | 1        | 2        | 2         | 3         | 2         | 3         | 4*      |        |      |      |      |      |
|                                          | d) Other vascular disease or diabetes of >20 years’ duration‡ | 1        | 2        | 2         | 3         | 2         | 3         | 4*      |        |      |      |      |      |
| Dysmenorrhea                             | Severe                                    | 2        | 1        | 1         | 1         | 1         | 1         | 1       |        |      |      |      |      |
| Endometrial cancer‡                      |                                           | 4        | 2        | 4         | 2         | 1         | 1         | 1       |        |      |      |      |      |

US Medical Eligibility Criteria for Contraceptive Use. CDC 2016
U.S. SPR

Morbidity and Mortality Weekly Report (MMWR)

U.S. Selected Practice Recommendations for Contraceptive Use, 2016

Recommendations and Reports / July 29, 2016 / 65(4);1–66

- Improve same day provision
- Avoid unnecessary screening or testing
- Limit barriers
- Provide evidence-based recommendations
### Starting contraception

<table>
<thead>
<tr>
<th>Contraceptive method</th>
<th>(If the provider is reasonably certain that the woman is not pregnant)</th>
<th>Additional contraception (i.e., back up) needed</th>
<th>Examinations or tests needed before initiation¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper-containing IUD</td>
<td>Anytime</td>
<td>Not needed</td>
<td>Bimanual examination and cervical inspection²</td>
</tr>
<tr>
<td>Levonorgestrel-releasing IUD</td>
<td>Anytime</td>
<td>If &gt;7 days after menses started, use back-up method or abstain for 7 days.</td>
<td>Bimanual examination and cervical inspection²</td>
</tr>
<tr>
<td>Implant</td>
<td>Anytime</td>
<td>If &gt;5 days after menses started, use back-up method or abstain for 7 days.</td>
<td>None</td>
</tr>
<tr>
<td>Injectable</td>
<td>Anytime</td>
<td>If &gt;7 days after menses started, use back-up method or abstain for 7 days.</td>
<td>None</td>
</tr>
<tr>
<td>Combined hormonal contraceptive</td>
<td>Anytime</td>
<td>If &gt;5 days after menses started, use back-up method or abstain for 7 days.</td>
<td>Blood pressure measurement</td>
</tr>
</tbody>
</table>

¹ CDC Selective Practice Recommendations. Available at: http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/PDF/248124_Box1_App_B_D_Final_TAG508.pdf

² One additional examination may be needed if the IUD is a progestin-releasing system.
Effectiveness
HOW WELL DOES BIRTH CONTROL WORK?

Really, really well
- The Implant (Nexplanon)
- IUD (Skyla)
- IUD (Mirena)
- IUD (ParaGard)
- Sterilization, for men and women

Works, hassle-free, for up to...
- 3 years
- 3 years
- 5 years
- 12 years
- Forever

Less than 1 in 100 women

O.K.
- The Pill
- The Patch
- The Ring
- The Shot (Depo-Provera)

For it to work best, use it...
- Every Single Day
- Every week
- Every month
- Every 3 months

6-9 in 100 women, depending on method

Not as well
- Pulling Out
- Fertility Awareness
- Diaphragm
- Condoms, for men or women

For each of these methods to work, you or your partner have to use it every single time you have sex.

12-24 in 100 women, depending on method

FYI, without birth control, over 90 in 100 young women get pregnant in a year.
Availability
Acceptability
Case #1

26yo G1P0 @ 28 weeks
SLE
+antiphospholipid antibodies
Chronic anticoagulation for h/o PE
Plans to breastfeed
Decision-making

<table>
<thead>
<tr>
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<th>Sub-Condition</th>
<th>Cu-IUD</th>
<th>LNG-IUD</th>
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<th>DMPA</th>
<th>POP</th>
<th>CHC</th>
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</thead>
<tbody>
<tr>
<td>Systemic lupus erythematosis</td>
<td>a) Positive (or unknown) antiphospholipid antibodies</td>
<td>1*</td>
<td>1*</td>
<td>3*</td>
<td>3*</td>
<td>3*</td>
<td>3*</td>
</tr>
<tr>
<td>Deep venous thrombosis (DVT)/Pulmonary embolism (PE)</td>
<td>c) DVT/PE and established anticoagulant therapy for at least 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Higher risk for recurrent DVT/PE</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>a) &lt;21 days postpartum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) 21 to &lt;30 days postpartum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Other risk factors for VTE</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Clarification:** Persons with SLE are at increased risk for ischemic heart disease, stroke, and VTE. Categories assigned to such conditions in U.S. MEC should be the same for women with SLE who have these conditions. For all subconditions of SLE, classifications are based on the assumption that no other risk factors for cardiovascular disease are present; these classifications must be modified in the presence of such risk factors. Many women with SLE can be considered good candidates for most contraceptive methods, including hormonal contraceptives (73, 77–94).

**Evidence:** Antiphospholipid antibodies are associated with a higher risk for both arterial and venous thrombosis (95, 96).
**Clarification:** Breastfeeding provides important health benefits for mother and infant. The U.S. Department of Health and Human Services recommends increasing the proportion of infants initially breastfed, exclusively breastfed through 6 months of life, and continuing breastfeeding through at least 1 year of life as key public health goals (49).

**Evidence:** Two small, randomized controlled trials found no adverse impact on breastfeeding with initiation of etonogestrel implants within 48 hours postpartum. Other studies found that initiation of POPs, injectables, and implants at ≤6 weeks postpartum compared with nonhormonal use had no detrimental effect on breastfeeding outcomes or infant health, growth, and development in the first year postpartum. In general, these studies are of poor quality, lack standard definitions of breastfeeding or outcome measures, and have not included premature or ill infants (50,51).

**Comment:** Certain women might be at risk for breastfeeding difficulties, such as women with previous breastfeeding difficulties, certain medical conditions, and certain perinatal complications and those who deliver preterm. For these women, as for all women, discussions about contraception for breastfeeding women should include information about risks, benefits, and alternatives.
## Decision-making

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<td></td>
<td></td>
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<td>3*</td>
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</tr>
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<td>a) &lt;21 days postpartum</td>
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<td></td>
<td></td>
<td>2*</td>
<td>2*</td>
<td>2*</td>
</tr>
<tr>
<td></td>
<td>b) 21 to &lt;30 days postpartum</td>
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<td></td>
<td></td>
<td>2*</td>
<td>2*</td>
<td>2*</td>
</tr>
<tr>
<td></td>
<td>i) With other risk factors for VTE</td>
<td>2*</td>
<td>2*</td>
<td>2*</td>
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</tr>
<tr>
<td>Postpartum (In breastfeeding or non-breastfeeding women, including cesarean delivery)</td>
<td>a) &lt;10 minutes after delivery of the placenta</td>
<td></td>
<td></td>
<td></td>
<td>1*</td>
<td>2*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Breastfeeding</td>
<td></td>
<td></td>
<td></td>
<td>1*</td>
<td>1*</td>
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<tr>
<td></td>
<td>ii) Nonbreastfeeding</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>b) 10 minutes after delivery of the placenta to &lt;4 weeks</td>
<td>2*</td>
<td>2*</td>
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<td></td>
<td>c) ≥4 weeks</td>
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<td>1*</td>
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<tr>
<td></td>
<td>d) Postpartum sepsis</td>
<td></td>
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<td></td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Decision-making

- Safety
- Effectiveness
- Availability (including accessibility and affordability)
  - Insurance
  - Provider training
- Acceptability
  - Side effects- may be positive or negative
  - Non-contraceptive benefits
  - Birth spacing/ pregnancy planning
  - Partner
Summary

- Reproductive planning is critical for women with chronic diseases
- CDC MEC and SPR assist in safety
- Contraceptive decision-making is complex—especially in chronic diseases
  - Safety
  - Effectiveness
  - Availability (including accessibility and affordability)
  - Acceptability
Questions?