Objectives

- At the end of this talk you will be able to:
  - Remember to think about contraception in your clinical practice
  - Know where to find evidence about contraception for women with possible contraindications
  - Encourage women to use longer-term contraceptive methods
Outline

- Unintended pregnancy
- Contraceptive evidence
- Contraceptive methods updates
  - Extended cycle combined hormonal methods
  - Patch and thrombosis
  - DMPA and BMD
  - IUC update
Jane is a 27 year-old woman taking combined oral contraceptive pills who presents to your clinic for an annual examination. She reports having missed two periods. Her urine pregnancy test is positive.
6.3 Million U.S. Pregnancies

52% Intended

25% Unintended Despite method use

23% Unintended No method used

How effective is the combined oral contraceptive for prevention of pregnancy?
Contraceptive Efficacy

- **Efficacy**
  - Perfect use v. actual or typical use
  - 23% of repro-aged women at risk for pregnancy
    significant gap in contraceptive use each year \(^1\)
  - Combined oral contraceptive pill
    - 99.7% perfect use, 92% actual use
    - 10 million women using the pill: 1% ↓ efficacy = 100,000 unintended pregnancies in 1 year

Realities of Pill Use

Potter L et al., *Fam Plann Perspect*, 1996.
Contraceptive Method Choice in the United States, 2002

*Other includes diaphragm, ring, gel/foam, rods, and EC

Alan Guttmacher Institute, Facts In Brief, 2005.
Why did Jane get pregnant?
Why did Jane get pregnant?

Jane tells you that she ran out of birth control pills last month, and that she tried to call the office to get an appointment, but the receptionist told her she was overdue for a pap smear. Today was the first day she could get an appointment.
Barriers to Effective Contraception

Provider Barriers

- Requiring examination before initiating methods
  - BP check for hormonal methods
  - Otherwise NO physical examination required
- Adequate counseling
  - Quick start: No evidence for increased continuation
- Awareness about need for birth control
  - 48% of women using D or X medications – contraception counseling
- Education about contraindications
  - Contraceptive evidence

1. Weshoff, Ob Gyn, 2007; Bednarek, AJOG, 2008
Contraceptive Evidence: WHO Guidelines

- Medical Eligibility Criteria for Contraceptive Use
  - [www.who.int](http://www.who.int) full text on-line
  - [www.reproductiveaccess.org](http://www.reproductiveaccess.org)
  - Resource for evaluating risk from contraception in specific medical situations (weighed against the risk from pregnancy)
Contraceptive Evidence: WHO Guidelines

1. No restriction
   - Use the method
2. Advantages of method outweigh the risks
   - Generally use the method
3. Risks outweigh the advantages
   - Use only if no other method available
4. Unacceptable health risk if method used
   - Do not use the method

Medical Eligibility Criteria for Contraceptive Use (www.who.int/reproductive-health)
Case: Migraines

Jane tells you that she may want to continue the birth control pill, but you discover that she has migraines. You look at the WHO guidelines and find that it is a category 2 if she does not have aura and a category 4 if she does have aura.
Stroke

- The absolute risk of stroke in young women is low at <1 per 10,000 women-years

- Risk factors:
  - Migraine with and without aura
  - Combined hormonal contraception
  - Synergistic effect of the two

Migraine, OCPs, and Stroke*

■ Migraine and stroke:
  ▪ Migraine without aura: RR 1.6\(^1\) – RR 3.0\(^2\)
  ▪ Migraine with aura: RR 2.9\(^1\) – RR 6.2\(^2\)

■ COC and stroke:
  ▪ RR 2.1\(^3\) -3.5\(^2\)

Migraine, OCPs, and Stroke

Synergistic effect of Migraine and COC

OR 8.7 (95% CI 5.0-15.0) \(^1\)

OR 13.9 (95% CI 5.5-35.1) \(^2\)

Absolute Risks of Stroke *

- 6 per 100,000 ♀ / year – healthy
- 12 per 100,000 ♀ / year – migraine
- 18 per 100,000 ♀ / year – migraine with aura
- 12 per 100,000 ♀ / year – healthy and COC
- 19 per 100,000 ♀ / year – migraine and COC
- 30 per 100,000 ♀ / year – migraine with aura and COC
- 34 per 100,000 ♀ / year – stroke in pregnancy

- Attributable risk: 7-12 per 100,000 women per year
WHO: Headaches and CHC

<table>
<thead>
<tr>
<th>Non-migrainous (mild or severe)</th>
<th>Initiate</th>
<th>Continue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migraine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) without focal neurologic symptoms</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Age &lt; 35</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Age &gt; 35</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(ii) with focal neurologic symptoms</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>(at any age)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prodrome = photo/phonophobia, N/V – These are not focal

Focal symptoms = vision changes, numbness, parasthesias

http://www.who.int/reproductive-health/publications/RHR_00_2_medical_eligibility_criteria_3rd/
Case: Counseling

- Jane does not have aura with her migraines and can use combined oral contraception, but it turns out that she wants to learn about other methods. She has no previous experience and little knowledge about other methods. How do you approach counseling her?
Contraceptive Methods: Counseling

- Natural Family Planning
- Barrier Methods
- Hormonal Methods
Contraceptive Methods: Counseling

- Natural Family Planning
- Barrier Methods
- Hormonal Methods

Do not present these methods equally: move from categories to efficacy!
## Natural Family Planning *

<table>
<thead>
<tr>
<th>Contraceptive Method</th>
<th>Perfect Use</th>
<th>Typical Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Method</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>Periodic Abstinence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Days Method®️*</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>Ovulation Method</td>
<td>3%</td>
<td>22%</td>
</tr>
<tr>
<td>Symptothermal</td>
<td>2%</td>
<td>13-20%</td>
</tr>
<tr>
<td>Two-Day Method®️</td>
<td>3%</td>
<td>14%</td>
</tr>
</tbody>
</table>

* Including Cycle Beads
**Barrier Methods**

<table>
<thead>
<tr>
<th>Contraceptive Method</th>
<th>Failure Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perfect Use</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>4 %</td>
</tr>
<tr>
<td>Condoms</td>
<td>2 %</td>
</tr>
<tr>
<td>Cervical Cap (parous)</td>
<td>26 %</td>
</tr>
<tr>
<td>Cervical Cap (nulliparous)</td>
<td>9 %</td>
</tr>
<tr>
<td>Sponge (parous)</td>
<td>20 %</td>
</tr>
<tr>
<td>Sponge (nulliparous)</td>
<td>9 %</td>
</tr>
<tr>
<td>Female Condoms</td>
<td>5 %</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>6 %</td>
</tr>
</tbody>
</table>
# Hormonal Methods

<table>
<thead>
<tr>
<th>Contraceptive Method</th>
<th>Failure Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perfect Use</td>
</tr>
<tr>
<td>Combined Hormonal Pills</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>Progestin Only Pills</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>Transdermal Patch</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>Vaginal Ring</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>1-month Injection</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>3-Month</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>Implants</td>
<td>&lt;1 %</td>
</tr>
<tr>
<td>Copper IUD/LNG IUS</td>
<td>&lt;1 %</td>
</tr>
</tbody>
</table>
Counseling: Frequency of Intervention

- **Episodic**: barrier methods, NFP
- **Daily**: pill, NFP
- **Weekly**: patch
- **Monthly**: vaginal ring
- **Every 3 Months**: injection
- **Every 3 years**: implant
- **Every 5 years**: IUC
- **Every 10 years**: IUC
- **Permanent**: sterilization

Increasing efficacy
Comparing Typical Effectiveness of Contraceptive Methods

Most effective

- Implants
- Female Sterilisation
- Vasectomy
- IUD

How to make your method more effective

- One-time procedures; nothing to do or remember
- Need repeat injections every 1, 2 or 3 months
- Must take a pill or wear a patch or ring every day
- Must follow LAM instructions
- Must use every time you have sex; requires partner’s cooperation
- Must use every time you have sex
- Must use every time you have sex
- Require partner’s cooperation; for FABs must abstain or use condoms on fertile days
- Must use every time you have sex

Least effective

- About 30 pregnancies per 100 women in one year
- Generally 1 or fewer pregnancies per 100 women in one year

Source: WHO 2006

Contraceptive Methods: Counseling

Key points:
- Present methods with focus on efficacy, ease of use, and side effects
- Address pregnancy plans
- Once method chosen review side effects, protocols for incorrect use
- Provide continuity of care and system for addressing questions
- Thought to be important
  - Most RCTs of counseling interventions have failed to demonstrate improved compliance

Improving Contraceptive Use in the US, Guttmacher Institute, 2008
Contraceptive Methods Update
Contraceptive Methods Update

- Extended cycle combined hormonal methods
  - Pills and ring
- Patch and thrombosis
- Injectable and bone mineral density
- Implanon efficacy updates
- Evidence-based intrauterine contraception
Daily: Natural Family Planning *

- Help women identify fertile days
  - Fertility window 6 -8 days
  - Failure rate 12-22%
- TwoDay method®
  - Simple, accurate method – quicker to learn
  - Two questions
    - Did I note secretions today?
    - Did I note secretions yesterday?
    - If yes to either, consider fertile
Natural Family Planning: Two-Day Method®

- Study of 450 women – 3,928 cycles

- Failure rates:
  - 14% typical use
  - 3% perfect use (no intercourse)
  - 6% semi-perfect (barriers or withdrawal)
  - Half of pregnancies in first 3 months

- Mean fertile window 12 days

- High acceptability

Daily: Combined Oral Contraceptives

- Traditional prescription flawed
- Extended cycle may increase efficacy
  - Up to 47% of women have follicle ready to ovulate by day 7 of placebo week!
  - So if the start of the new pack is delayed, they are at high risk!

Daily: Extended Use Pills

- Shortened hormone-free week
  - 23 days or 24 days hormones
  - Failure rate up to 1.3%
  - Decreases ovarian activity at end of placebo
  - Shorter withdrawal bleeds
  - Similar breakthrough bleeding
  - Few products approved by FDA
    - Yaz® and Loestrin ® 24 FE

**Daily: Extended Use Pills**

- **Decreased frequency of hormone-free wks**
  - FDA-approved: 12 weeks hormone/1 week off
    - Failure 0.6% - Lower than conventional?
    - 84 days LNG 150 µg/EE 30 µg; 7 days placebo (Seasonale®)
    - Seasonique™ adds 10 mcg EE during placebo
      - No improvement in bleeding

Tricycle Breakthrough bleeding/spotting

Daily: Extended Use Pills

- **Continuous Use – studied up to one year**
  - 2 RCTs and 2 cohort trials – no efficacy data
  - Increased spotting in first six months, comparable in second six months
    - Median 1.5 days spotting in last trimester
  - Up to 72% amenorrhea at one year
  - High acceptability

- **FDA-approved: Lybrel™**
  - 90 mcg levonorgestrel + 20 mcg EE in each pill,
  - Daily continuous use with no placebos for a year

Extended cycle: Is Something Building Up Inside? *

- Endometrial biopsy data – no hyperplasia
  - Tricycle regimen, short hormone-free, cont.
  - 1 year continuous: 11% weakly proliferative
- Ultrasound data - thin endometrial stripe in study of continuous x 6 months
- Traditional use decreases risk of endometrial cancer

Conclusion: Extended Use Pills

- I strongly recommend moving away from traditionally prescribed oral contraceptives
  - Shorten placebo week
  - Extended hormonal weeks
Pill Instructions *

- **Initiation:**
  - If Sunday or Quick Start – backup for 7 days
  - System for remembering

- **Continuation:**
  - If miss one: do nothing
    - If miss two: take forgotten pills every 12 hours
    - Continue and backup contraception x 7 days
    - If beginning of pack and unprotected sex: ECP
    - If extended cycle: no need for ECP
  - If miss more than two:
    - If unprotected sex: take ECP, restart OC next day
    - Backup for 7 days
Weekly: Transdermal Contraceptive System “Patch”

- Ortho Evra®
  - 20mcg EE & 150mcg norelgestromin
- One patch each week for 3 weeks, then week off
- Constant serum levels
- Failure rate 0.9%
- Women are more compliant than with pill (88% v. 78%)

TCS/ “Patch”

- Easily placed and removed
- High acceptability and compliance
- Few side effects – comparable to pills except
  - 20% skin irritation – 2% stopped method
  - More breast discomfort in first 2 cycles (19%) than pills (6%)
  - More spotting (20%) than pills in first 2 cycles
  - 3% detached – Recent RCT 46% experience at least one detachment in one cycle
TCS/ “Patch”

Body Weight

- 5 of 15 treatment failures in women with baseline body weight $\geq 90$ kg (198 lb)
  - This subgroup $<3\%$ of total study population
  - Higher failure rate in heavier women
  - Warn women about increased risk but not absolute contraindication

TCS and thrombosis

- Increased risk thrombosis?
  - Numerator and denominator are unclear
  - New user bias
  - Serum levels slightly higher than 35 mcg pill
    - Slight increase in AUC in 2\textsuperscript{nd} and 3\textsuperscript{rd} wk
    - Should not be used in continuous fashion

EE Exposure with CHC

AUC (area under curve) pg/mL

Patch  $37.7 \pm 5.6$
OC*  $22.7 \pm 2.8$
Ring  $11.2 \pm 2.7$

* 30 mcg EE/150 mcg LNG

van den Heuvel,
Contraception 2005 72:168
TCS and thrombosis *

2 studies - retrospective case-control from insurance claims

- No association:
  - Jick et al, 2006 Nested case-control design based on information from PharMetrics; 59K patch, 147K OC users
    - did not show increased risk of VTE: OR .9 (CI 0.5–1.6) and OR 1.1 (CI 0.6–2.1) with 2006 data, when compared to OCs containing 35mcg EE and norgestimate

- Association:
  - Cole et al, 2007. reviewed United Health Care claims data and chart reviews for 99K patch 257K OC users
    - did show odds ratio 2.4 (CI 1.1-5.5) for VTE among patch users compared to OCs with 35 mcg EE and norgestimate

Jick SS et al., Contraception, 2006; Contraception, 2007; Cole JA et al., Obstet Gynecol, 2007.
TCS and thrombosis

- Conclusion: There may be increased risk but not clear. Consider it equivalent to a higher dose pill.
Patch Instructions *

- **Initiation:**
  - Prescribe replacement patches (up to 3)
  - If day other than first day menses – backup 7 days

- If the PATCH FREE interval is >9 days (late restart), apply a new patch and use backup contraception for 7 days

- No band-aids, tattoos, or decals on top of patch as this might alter absorption of hormones

- Smooth edges down when you first put it on

- Avoid the same site 2 consecutive weeks
Patch Instructions *

- Location of patch should not be altered mid-week.
- Women should check the patch daily to make sure all the edges remain closely adherent to skin.
- Single replacement patches are available through pharmacists.
- Unlike pills, the time of day the patch is changed doesn’t matter.
- Disposal: Fold over self. Place in solid waste. Do not flush down toilet.
Monthly: Contraceptive Vaginal Ring

- Nuvaring®
  - 15 mcg EE & 120 mcg desogestrel
- One ring each month
- Ring in vagina for 3 weeks
- Ring removed for one week
- Constant, low hormone levels
- Failure rate 1.2%

Miller, Obstetrics and Gynecology, 2005.
CVR/ “Ring”

- Easily placed and removed
- Most women and men don’t notice during sex
- High acceptability and compliance
- Few side effects – comparable to pills except
  - Less spotting 5% (significantly less in first month)
  - 1% stop method because of discharge
  - 2.5% stop method because of discomfort
  - Recent RCT 20% ring expelled at least once during 3-week period

Dieben, Ob Gyn, 2002.
Monthly: Extended Cycle Ring

- Study of conventional, 8 wks, 12 wks, cont.
  - All regimens well-tolerated
  - Extended: Fewer bleeding days and more spotting days

- Potential for use on a monthly basis
  - Serum levels for 35 days
Ring Instructions *

- **Initiation:**
  - First five days of menses – if not backup x 7 days
  - The ring can be left in for up to 35 days
  - May remove up to 3 hours (not recommended)
  - If ring is out for more than 3 hours use back-up for 7 days
  - Always have two rings on hand in case one is lost
  - Rings may be stored at room temperature for up to 4 months

- **Disposal:** Fold over self. Place in solid waste. Do not flush down toilet.
- Ring floats in toilet
Patch versus Ring

- RCT of 500 recent pill users
- Women more likely to complete 3 cycles with ring (95% v. 88%, p=.03)
- Patch – 49% detached at least once
  - More frequent nausea, mastalgia, mood swings, increased menstrual bleeding, discomfort
  - 74% did not plan to continue patch
- Ring – 20% expelled at least once
  - More frequent vaginal discharge
  - 71% planned to continue ring

Every 3 months: Progestin Injection

- **Depo Provera®**
  - Medroxyprogesterone acetate 150 mg
- **Given every 3 months IM**
- **Failure rate 3.0%**
- **High acceptability**
- **New depo-subQ provera™**
  - Low-dose (104 mg) version
  - Similar side effects, unknown bone effect
Progestin Injection

- Requires visit to provider
- One injection lasts at least 13 weeks
- Extremely private
- Side effects:
  - Delayed return to fertility (9-10 months)
  - Irregular bleeding, amenorrhea (50% at 1 yr)
  - Weight gain (5 lbs at 1 year, 16 lbs at 5 yrs)
Progestin Injection and BMD

- Black Box Warning: Decreased bone mineral density (3% in 2 yrs) appears to resolve after discontinuation
  - FDA recommends limiting to 2 years in young women
  - WHO does not agree – good evidence resolution, and no fx outcome data
- Okay to use for more than two years and up to five years in young women if that is their method of choice
Progestin Injection and BMD *

- Black Box: limit to 2 yrs in young women
  - WHO does not agree
- Decreased BMD resolves after discontinuation
  - Study of 170 adolescents \(^1\)
    - 1-2 % decrease in BMD per year
    - 12 months after discontinuation: normal
  - Study of 183 women, ages 18-39 \(^2\)
    - 1% decrease in BMD per year
    - 30 months after discontinuation: normal
- Weigh risks against risk of pregnancy

DMPA Instructions *

- **Initiation:**
  - Prefer start days 1-5
  - Quick start okay – backup x 7 days
- Do not massage area for few hours
- Anticipate side effects – bleeding, weight
- Counsel about Calcium and exercise
- If >13 wks since last injection – abstinence, EC, condoms
Every 3 years: Single-Rod Implant

- **Implanon™**
  - Etonorgestrel 60mcg/day
- FDA-approved
- One implant for 3 years
- Continuous low hormone levels
- Failure rate <0.1%
Single-Rod Progestin Implant

- **Efficacy:** No pregnancies in initial trials
  - Summary Pearl Index: 0.031
- **High acceptability**
- **Continuation** 75%-90% yr 1
  - Large study: 82% yr 1, 70% yr 2
  - Most common reasons discontinuation: side effects (14%) and bleeding (10%)

Single-Rod Progestin Implant

Side effects

- 22% no periods
- 40% with irregular bleeding – mostly spotting
  - 34% infrequent
  - 7% frequent
  - 18% prolonged
- 11% acne, 13% weight increase (subjective), headache 15%
- Objective measurement of weight: 31% no change or decrease, 11% >7.5 kg

Every 5-10 Years: IUD Available in the United States

Copper T 380A IUD - PARAGARD®

LNG IUS - MIRENA®
- Levonorgestrel 20 mcg
IUD Efficacy

- **Mirena®**
  - Effective for 5 (7) years
  - 0.1% failure in one year
  - 1.1% failure in seven years

- **Paragard®**
  - Effective for 10 (12) years
  - 0.8% failure in one year
  - 1.4% failure in seven years

- **Comparable to TL failure rate of 1.9% /10 yrs**

Worldwide Use of IUD

Estimated Use Among Married Women of Reproductive Age

% Using IUC

Asia | Europe | Latin America & Caribbean | Africa | Oceania | North America

IUD Acceptability & Side Effects

- High acceptability
  - 80-90% of women continue for one year
  - Approximately 25% continue for seven years

- Side effects
  - Discomfort at time of insertion
  - Abnormal vaginal bleeding

- Rare complications
  - Uterine perforation <.01%
  - Expulsion 5%
  - PID – 1/1000 at time of insertion
## IUD Vaginal Bleeding

<table>
<thead>
<tr>
<th>Study Group</th>
<th>Mean Blood Loss (mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>35</td>
</tr>
<tr>
<td>Paragard</td>
<td>50-80</td>
</tr>
<tr>
<td>Mirena</td>
<td>5</td>
</tr>
</tbody>
</table>

- After 12 mos: average 90% decrease blood
- Increased spotting common in first 3-6 months

IUD and PID

History: Dalkon Shield—inhherent design flaw ↑ risk

- Current methods do NOT cause PID
  - Transient increased risk at time of insertion with IUC
    - 1/1000 women in US trial with screening\(^1\)
    - Up to 8/1000 in worldwide trial with no screening
    - No increased risk after 20 days after insertion
    - Caused by bacteria in the cervix at time of insertion
  - Beyond time of insertion
    - Overall decreased risk of LNG IUS\(^2\)
    - No increased risk of Copper IUD
    - No relationship between IUD and tubal infertility\(^3\)

Who is a candidate for IUD?

- Women of any reproductive age seeking long-term, highly effective contraceptive
  - Comparable cost to other methods if used for > 2 yrs
  - Immediate return to fertility

- Low risk for having sexually transmitted infection
  - High risk for current STI – screen before insertion or place and treat presumptively
  - Many experts suggest screening at time of insertion or not at all for low-risk women

- Women who haven’t been pregnant
Paragard “Contraindications”
New Label *

- Pregnancy or suspicion of pregnancy
- Distorted uterine cavity
- Acute PID or *history of PID*
- Post-partum endometritis or *infected abortion* in past 3 months
- Uterine or cervical cancer or *unresolved abnormal Pap smear*
- Genital bleeding of unknown source

- Pregnancy or suspicion of pregnancy
- Distorted uterine cavity
- Acute PID or current behavior *suggesting a high risk for PID*
- Postpartum or postabortal endometritis in the past 3 months
- Known or suspected uterine or cervical malignancy
- Genital bleeding of unknown source
Paragard “Contraindications”

New Label *

- Untreated acute cervicitis or vaginitis
- Wilson’s disease
- Allergy to copper
- Patient or partner with multiple partners
- Increased susceptibility to infection (AIDS, leukemia, etc)
- Genital actinomycosis
- Current IUD in place

New FDA-approved label

- Mucopurulent cervicitis
- Wilson’s disease
- Allergy to copper
- Previously placed intrauterine contraceptive that has not been removed
IUD Instructions *

- Teach patient to check strings
- Counsel patient about anticipated side effects
- Choosing which IUD/IUS
  - Length of desired contraception
  - Hormonal versus copper (few side effects)
  - Bleeding: heavier and regular or lighter and irregular
Permanent: Sterilization

- Extremely effective
  - Vasectomy, L/S TL, PPTL
- Hysteroscopic tubal occlusion
  - Essure®
  - 4 cm long coil threaded into proximal tubes
  - Over next three months fibrosis causes occlusion
  - FDA requires HSG 3 months
  - 85% successful at first attempt
  - Efficacy 99.7%
Jane

- You counsel Jane about the other options available, emphasizing those with high efficacy that require less intervention. She ends up choosing a highly effective IUD which you place that same day.
Conclusion

- Too many unintended pregnancies
- Many effective methods available
  - Minimize barriers to contraception
  - Encourage more effective methods
  - Remain up-to-date about evidence
Resources

- Medical Eligibility Criteria for Contraceptive Use
  - [www.who.int](http://www.who.int), full text on line

- Books
WHO Guidelines

- [www.reproductiveaccess.org](http://www.reproductiveaccess.org)

- Go to “providers” then under “clinical resources” you will see WHO guidelines.

- Available in Word or PDF

- Link to the comprehensive WHO list
On-line Resources

- ARHP (www.arhp.org)
- Managing contraception (www.managingcontraception.org)
- www.contraceptiononline.org
Acknowledgments

- Thanks to all who have shared slides
  - Tina Raine
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  - Sarah Prager
  - Norma Jo Waxman
  - Many others