Contraceptive Methods for Women with Chronic Medical Conditions

First Time Motherhood/New Parent Initiative

EDGECOMBE - HALIFAX – HERTFORD – GATES - NASH – NORTHAMPTON
Approach to Best Method

- First: Do no harm
- Second: Try to do good
- Third: If you don’t know, ask
- Fourth: Document
How Do You Choose the Best Method?

- Thorough medical history and plans for future pregnancy
- Assess *medical eligibility* for contraception
- Consider evidence surrounding method/condition interaction
- Efficacy
- Safety/availability of method

Thorough Medical History

- Very important to perform a thorough medical history when deciding contraception for a woman with a chronic medical condition.
- Is this medical condition going to affect a pregnancy?
- Will pregnancy affect this medical condition?
From the Medical History:

Which method medically “fits”

AND

Which method individually “fits” the woman
Assessing Medical Eligibility

Resources

- World Health Organization (WHO) *Medical eligibility criteria for contraceptive use 4th ed.* (2009) and can be found at [www.who.int/reproductivehealth](http://www.who.int/reproductivehealth)

- The Medical Eligibility Criteria Wheel can be found at [http://www.who.int/reproductive-health/publications/mec/](http://www.who.int/reproductive-health/publications/mec/)

- Managing Contraception Pocket Guide can be ordered from [www.managingcontraception.com](http://www.managingcontraception.com)

- Contraceptive Technology 19th ed. Hatcher, R et al. 2007
## WHO Medical Eligibility Criteria – Safety of Use

<table>
<thead>
<tr>
<th>Category</th>
<th>With Clinical Judgment</th>
<th>With Limited Clinical Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Use method in any circumstances</td>
<td>Yes (use the method)</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Generally use the method</td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Use of method not usually recommended unless other more appropriate methods are not available</td>
<td>No (do not use the method)</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Method not to be used</td>
<td></td>
</tr>
</tbody>
</table>
Consider Evidence Surrounding Method/Condition Interaction

- What are the non-contraceptive benefits?
- Are there any medication interactions?
- What about other medical conditions that may be present in the woman?
- Many WHO MEC Category 3 methods are based on theoretical concerns

Efficacy

Comparing Effectiveness of Family Planning Methods

More effective
Less than 1 pregnancy per 100 women in 1 year

- Implants
- IUD
- Female sterilization
- Vasectomy

How to make your method more effective

- Implants, IUD, female sterilization: After procedure, little or nothing to do or remember
- Vasectomy: Use another method for first 3 months
- Injectables: Get repeat injections on time
- Lactational amenorrhea method, LAM (for 6 months): Breastfeed often, day and night
- Pills: Take a pill each day
- Patch, ring: Keep in place, change on time
- Condoms, diaphragm: Use correctly every time you have sex
- Fertility awareness methods: Abstain or use condoms on fertile days. Newest methods (Standard Days Method and TwoDay Method) may be easier to use.

Less effective
About 30 pregnancies per 100 women in 1 year

- Male condoms
- Diaphragm
- Female condoms
- Fertility awareness methods
- Withdrawal
- Spermicides

Sources:
Contraceptive “Fit” for the Woman

- Future pregnancy plan; When? How many? Ever again?
- Sexually transmitted infection protection?
- Privacy concerns, partner support
- Cost
- Ability to use consistently and correctly
- Can she do what is necessary?
  - Remember to take pills, change patch, etc.
  - Get to pharmacy, clinic (i.e., for Depo injection)
  - Capable of using method (i.e., insertion of NuvaRing)

Availability of Method

- Long-acting reversible methods (i.e., IUDs, Implanon, etc) are highly effective and have less user error, but initial method cost is higher

- Implanon provider must be trained by manufacturer directly before he/she can be allowed to order/insert Implanon

- Use of Women’s Health Service Fund dollars to purchase more long acting methods (health departments)

- Family Planning Waiver covers all long acting reversible contraceptive methods
Considerations

- Age
- Smoking
- Asthma
- Hypertension
- Diabetes Mellitus
- Obesity
- Sickle Cell Disease
- Cancer
- History of sexually transmitted infection/HIV

Age alone has no contraindications based on the WHO Medical Eligibility Criteria in any of the methods.

All methods are a category 1 or 2.

Smoking

For women under age 35 and smoking
- All methods are category 1 or 2

For those over age 35 and smoke <15 cigarettes per day
- Oral contraceptives, patch and ring are **not** recommended (category 3)

For those over age 35 and smoke >15 cigarettes per day
- Oral contraceptives, patch and ring **DO NOT USE** (category 4)
- Other methods are all category 1

Asthma

- There are no contraindications for any of the birth control methods and asthma
- Have found that extended cycle and continuous use of combined oral contraceptives (COC’s) can significantly reduce asthma attacks

Hypertension

- This medical condition will affect a future pregnancy: increases pre-eclampsia, placental abruption, intrauterine growth restriction, pre-term delivery

- Use of COC’s may increase BP in normotensive women (average 8 mm Hg systolic/6mm Hg diastolic)

- The risk of MI and CVA in young women is very low
  - Weigh decision to use combined methods with the adverse outcome of pregnancy
  - Even if the relative risk is increased, the absolute risk remains very low
Hypertension

History of hypertension (HTN) where BP CANNOT be evaluated

- Copper IUD (Paragard) is a Category 1
- Mirena IUD, Implanon, Depo injection, Progestin-only pills are a Category 2
- All others are a Category 3

Adequately controlled HTN where BP CAN be evaluated

- Progestin-only pills, Implanon, Paragard and Mirena IUDs are all Category 1
- Depo injection is a Category 2
- COC’s, Patch and Ring are a Category 3

Contraceptive Fit for HTN

For women without other risks who can be followed closely:

- Use method in the top two tiers of Efficacy Chart that fits her lifestyle
  (*Implanon, Mirena, Paragard, Depo injection, progestin-only pills*)

For women with complications:

- Use a progestin only
  (*Implanon, Depo injection, progestin-only pills*)
  or non-hormonal method
  (*Paragard*)

Diabetes Mellitus (DM)

- Risks to future pregnancies.....YES

- Risk of fetal anomaly, loss, macrosomia, intrauterine growth restriction, increased risk of HTN, possible progression of retinopathy and nephropathy during pregnancy, and pregnancy increases insulin resistance

- Risk increases if woman is insulin dependent with damage to arteries, kidneys, eyes or nervous system, or of more than 20 years duration
Contraceptive Choices for DM

Gestational Diabetes history
- All methods of birth control are a Category 1

Non-vascular diabetes (insulin dependent or not)
- Paragard IUD is a Category 1. All other methods are a Category 2

Vascular disease or >20 years duration
- Paragard IUD is Category 1, Mirena IUD is a Category 2
- Implanon, Depo, progestin-only pills are a Category 2
  All others are Category 3 and 4

Obesity

- Increased risk for HTN, gestational diabetes, post-term pregnancy, macrosomia, post-partum complications and is an independent risk factor for venous thromboembolism (VTE)

- May have a slightly higher rate of failure with patch and possibly COC’s in women over 90 kg. (198 lbs)

- Women who have had bariatric surgery may have trouble with malabsorption
No Medical Eligibility Criteria contraindications with any methods (Pills, patch, ring and Depo are a Category 2)

- Mirena IUD has **not** been associated with weight gain, **not** affected by weight, and offers endometrial protection

- Implanon appears **not** to be associated with weight gain

- Depo injection **is** associated with a 5.4 lb. weight gain in first year, 16.5 lbs after 5 years.

Sickle Cell Disease

- Increased risk for maternal morbidity, mortality, and perinatal mortality

- Pregnancy can also increase the risk of sickle cell crisis, infections, and pulmonary complications

- All methods of birth control are Category 1 or 2
  - Extended cycle or continuous use COC’s and Depo have been shown to decrease the frequency and severity of crises

- Depo injection probably best method if acceptable to client

Breast cancer in the past 5 years prohibits the use of hormonal contraception (COC’s, patch, ring, Depo, Mirena IUD)

Recommended methods are Paragard, other non-hormonal methods or sterilization

Family history of breast cancer is NOT a contraindication to hormonal contraception
Other Cancers

- Endometrial, ovarian, and cervical cancer should not have IUD placements

- Liver tumors (benign or malignant) use of Paragard is the only Category 1 method. All others are Category 2, 3 or 4
Sexually Transmitted Infections

- Important to counsel women on the fact that birth control methods (excluding male/female condoms) only prevent pregnancy and not sexually transmitted infections (STIs).

- All methods are a Category 1 for individuals with STIs excluding current vaginitis, cervicitis, chlamydia or gonorrhea for IUD insertion.

- Unless acute infection is visually present, Paragard or Mirena may be inserted, but must test for CT/GC or vaginitis (yeast, BV, Trich) on day of insertion. If STD is identified with testing, treatment with appropriate medication is warranted.

Sexually Transmitted Infections

STIs have serious health consequences:

- Tubal occlusion leading to infertility and ectopic pregnancy
- Genital cancers
- Enhanced transmission of human immunodeficiency virus (HIV)
- Pregnancy loss and neonatal morbidity caused by infection transmission during pregnancy and childbirth

Correcting Misunderstandings on STIs and IUDs

- Rarely do IUDs lead to PID
- Do not increase the risk of contracting STIs, including HIV
- Risk of STI acquisition and IUD use have been exaggerated due to flaws in early IUD research
- Both epidemiological and bacteriological evidence indicate that the insertion process, and not the device or its string, increases the risk of STI infection
- Research shows no support for removing IUD as an adjunct to antibiotic therapy for those with STI

HIV

- Effects of pregnancy
  - In asymptomatic women, no increase in maternal morbidity or mortality
  - Increased risk of preterm birth, fetal growth restriction, and stillbirth
  - Vertical transmission

- All methods are Category 1 or 2 for those with HIV infection

- For women who have AIDS, use of Paragard and Mirena are a Category 3 for insertion but Category 2 if well controlled on ARV therapy

- Dual protection (condom use with birth control method) recommended

Women and their medical conditions with associated risks do not always fit into one category

Need to weigh risks/benefits of method vs. no method and effect of pregnancy on condition

However, there are methods available for women with chronic medical conditions
For More Information

Cheryl Kovar PhD, RN, CNS
Women’s Health Branch
NC DHHS, Division of Public Health
cheryl.kovar@dhhs.nc.gov
919-707-5719