Session Objectives

- Define postpartum contraception
- Explain the benefits of birth-spacing
- For both breastfeeding and non-breastfeeding women, discuss:
  - Postpartum return of fertility
  - Timing and initiation of method types
  - Use of key contraception methods
- Overview of WHO Medical Eligibility Criteria for Contraceptive Use

Definitions

- **Postpartum contraception** is the initiation and use of family planning methods during the first year after delivery
  - Post-placental – within 10 minutes after placenta delivery
  - Immediate postpartum – within 48 hours after delivery (e.g., voluntary sterilization)
  - Early postpartum – 48 hours up to 6 weeks
  - Extended postpartum – 48 hours up to one year after birth

Unmet Need: Fertility Preferences of Postpartum Women

- According to many DHS surveys:
  - 92-97% of women do not want another child within 2 years after giving birth
  - But 35% of women had their children spaced at 2 years apart or less
  - 40% of women who intend to use a FP method in the first year postpartum are not using one

*Ross JA and Winfrey WL, 2001

Birth Spacing

- Time interval from one child’s birth date until the next child’s birth date
- Healthy timing and spacing of pregnancy
  - Both infants and mothers are more likely to survive if couples space their births 3 to 5 years apart
  - This means that couples should wait 2 years after the birth of their last baby before trying to conceive

Birth Spacing Saves Infant Lives

[Diagram showing birth spacing across different countries and intervals between births]
Birth Spacing Saves Mothers’ Lives

- Healthy timing and spacing of pregnancies has positive effects on maternal health and newborn outcomes
- Women who have their babies at 27 to 32 month intervals are
  - More likely to avoid anemia
  - More likely to avoid 3rd trimester bleeding
  - More likely to survive childbirth

Contraception after Childbirth: Basic Care and Services

- Basic care should include:
  - Discussion of contraceptive needs
    - Considering client’s reproductive goals
  - Information and counseling about methods, their effectiveness rates, and side effects
  - Short- and long-term method choices

Contraception after Childbirth: Basic Care and Services (cont’d)

- Assurance of contraceptive re-supply with access to follow-up care
- Integration with other maternal-infant child care
  - ANC and postpartum visits
  - Newborn care
  - Immunizations
- HIV/STI prevention
  - To help clients assess their risk and make necessary changes in behavior and choose appropriate FP method

Counseling

- Encourage breastfeeding for all postpartum women
- Do not discontinue breastfeeding to begin use of a contraceptive method
- There are many contraceptive choices for breastfeeding women
  - These methods do not have negative effects on breast milk or breastfeeding

Counseling (cont’d)

Main goals of FP counseling:
- To help women (and couples) decide if they want to use a contraceptive method.
- With the client’s permission, include partner
- Birth spacing/limiting
  - If she does not want contraception, to help her choose an appropriate method, taking into consideration whether or not she is breastfeeding.
  - To prepare her to use the method effectively.
  - To help the woman develop a transition plan from LAM to another method
  - To discuss return to fertility


Return to Fertility

- During pregnancy, the cyclic function of the ovaries is suspended due to presence of placental hormones
- During early postpartum:
  - Inhibiting effects of estrogen and progesterone are removed
  - Levels of Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH) gradually rise
  - Ovarian function begins again
Return to Fertility: Effect of Lactation

- **Non-lactating women:**
  - Will menstruate within 12 weeks
  - On average first ovulation 45 days after delivery
  - Risk of pregnancy

- **Breastfeeding women:**
  - Period of infertility longer for exclusive or nearly exclusive breastfeeding
    - On demand feeding blocks ovulation
  - Return to fertility not predictable
  - Likelihood of menses and ovulation is low during first 6 months
  - Ovulation may occur prior to menses

Breastfeeding Women

- Protected for at least 6 months if using LAM
  - Fully or nearly fully breastfeeding
  - Less than 6 months postpartum
  - Menses has not returned
- Protected up to 6 weeks if not using LAM
  - At 6 weeks can use combined methods
  - At 6 weeks can use progestin only methods safely or TL
- All non-hormonal methods are safe for mother and baby
- Can use IUD

When to Introduce Methods in Breastfeeding Women

<table>
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<tr>
<th>Method</th>
<th>LAM</th>
<th>COC</th>
<th>POC</th>
<th>IUD</th>
<th>BTL</th>
<th>Condoms</th>
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<td>NO</td>
<td>OK</td>
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<tr>
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<td>NO</td>
<td>OK</td>
<td>OK**</td>
<td>OK</td>
<td>OK</td>
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<td>OK</td>
<td>OK</td>
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<td>OK</td>
</tr>
</tbody>
</table>

Non-Breastfeeding Women

- Contraception should be started at the time of or before first intercourse
- Combined hormonal methods should not be used until after 3 weeks postpartum

When to Start Contraception

- Timing depends on
  - Breastfeeding status
  - Method of choice
  - Reproductive goals
Medical Eligibility Criteria for Contraceptive Use (MEC)

- Covers 17 contraceptive methods, 120 medical conditions
- Addresses who can use contraceptive method based on medical methods
- Gives guidance to providers for clients with medical problems or other special conditions


Purpose of the Medical Eligibility Criteria (MEC)

- To guide family planning practices based on the best available evidence
- To address and change misconceptions about who can and cannot safely use contraceptive methods
- To reduce medical policy and practice barriers (i.e., not supported by evidence)
- To improve quality, access, and use of family planning services

What Is Answered by MEC?

Identifies which contraceptive or FP method can be safely used in the presence of a given individual characteristic or medical condition

WHO Medical Eligibility Criteria Classification Categories

<table>
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<tr>
<th>Classification</th>
<th>With clinical judgment</th>
<th>With limited clinical judgment</th>
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<tr>
<td>1</td>
<td>Use method in any circumstances</td>
<td>Yes Use the method</td>
</tr>
<tr>
<td>2</td>
<td>Generally do not use: advantages outweigh risks</td>
<td>Use the method</td>
</tr>
<tr>
<td>3</td>
<td>Generally do not use: risks outweigh advantages</td>
<td>Do not use the method</td>
</tr>
<tr>
<td>4</td>
<td>Method not to be used</td>
<td>Do not use the method</td>
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</tbody>
</table>

Postpartum Contraception for HIV-Positive Women

Important information for HIV+ women:
- Correct and consistent use of male and female condoms can reduce risk of STI/HIV transmission
- Using another contraception in addition to a condom (dual method use) reduces the chance of pregnancy, this avoiding mother to child transmission

Summary – Contraception and HIV Acquisition

- Male condoms proven effective; female condoms effectiveness may be similar to male condoms
- Spermicides (N-9) not effective against HIV
  - N-9 in WHO MEC is category 4 for HIV-positive people
- IUDs and hormonals do not increase HIV acquisition from findings of observational studies
Integration of HIV with FP

- HIV prevention should be an integral part of FP services to help clients assess their risk and make necessary changes in behavior.
- FP providers should encourage clients to seek VCT to prevent HIV transmission to partners, to improve quality of life if HIV-positive, and to prevent HIV transmission to future children.

Postpartum FP and HIV

- HIV-positive women who are not breastfeeding need a family planning method immediately
- HIV-positive women who are breastfeeding may practice LAM, but will need to choose another method at 6 months when they stop breastfeeding
- Counsel all women (even when status is unknown) about the importance of postpartum FP:
  - Significance of safer sex and dual protection
  - Available contraceptive choices
  - Healthy timing and spacing if future pregnancy desired
  - Surgical contraception if no future pregnancy desired

Non-Hormonal Methods

- Non-hormonal methods
  - LAM
  - Barrier methods
  - Periodic abstinence (fertility awareness, SDM)
  - Male and female sterilization
  - IUDs (Copper)

All non-hormonal contraceptive methods can be used safely by breastfeeding women

What is Lactational Amenorrhea Method (LAM)?

- Exclusively or nearly exclusively breastfeeding
  - On demand around the clock feeding (every 2-3 hours)
  - No supplemental infant feeding
- Menses has not returned
- Less than 6 months postpartum
- If any of these three factors change, FP is needed to prevent pregnancy
- Begin planning for FP method to transition at 6 months

Lactational Amenorrhea Method (cont'd)

For women who exclusively breastfeed:
- Fertility is delayed during the first 6 months postpartum
- More than 98% protection from pregnancy
- Effective, safe contraception suitable for most women
  - Non-hormonal
  - Non-invasive
- Can be used as a transitional method until couple decides on or meets criteria for another method
- Can be used by HIV+ mothers in addition to condoms. LAM is consistent with WHO guidelines for HIV+ women

Transition from LAM...

- Before 6 months:
  - Assist the woman in planning for transition to another FP method post LAM
- At 6 months women will need to begin another FP method:
  - Weaning from exclusive breastfeeding often starts
  - Less suckling/less prolactin—ovulation no longer inhibited
  - Menses and ovulation more likely
Advantages of LAM

- Breastfeeding practices required by LAM have other health benefits for mother and baby
  - Bonding, protects baby from diseases, healthiest food for baby, etc.
- Universally available
- Can be used immediately after childbirth
- No supplies or procedures needed
- Bridge to other contraceptives
- No hormonal side effects

Disadvantages of LAM

- No protection against STIs
- Effectiveness after 6 months uncertain
- Exclusive breastfeeding may not be convenient for some women
- Small chance of MTCT during breastfeeding if mother is HIV-positive

Barrier Methods: Condoms

- When used consistently and correctly, male condoms are highly effective against pregnancy and STIs/HIV
- A latex sheath or covering made to fit over erect penis
- 97% effective in preventing pregnancy when used correctly every time

Advantages of Condoms

- Prevent STIs, including HIV/AIDS as well as pregnancy when used correctly and with each act of intercourse
- Can be used soon after childbirth
- No hormonal side effects
- Can be stopped anytime
- No need for health provider or clinic visit
- Usually easy to obtain and sold in many places
- Anyone can use if not allergic to latex

Disadvantages of Condoms

- A man’s cooperation is needed
- May decrease sensation
- Poor reputation—associated with immoral sex, extra-marital sex or prostitution
- May be embarrassing/uncomfortable to purchase or ask partner to use
- Can be weakened if stored too long, in too much heat or humidity or if used with oil-based lubricants—may break during use
- Some men or women may be allergic to latex

Fertility Awareness Methods

- Based on awareness of or ability to determine fertile time of menstrual cycle
- Includes:
  - Basal body temperature/cervical secretions
  - Calendar calculations
  - Standard Days Method
  - Cycle beads
  - Periodic abstinence during fertile period
Fertility Awareness Methods/SDM

- **Advantages:**
  - Inexpensive
  - Not necessary to acquire supplies at clinic/dispensary

- **Disadvantages:**
  - Most methods unreliable in postpartum women
  - Postpartum women, especially when breastfeeding, need to have 4 menstrual cycles, the most recent cycle is 26 to 32 days long
  - Partner’s cooperation needed in periodic abstinence

Male Sterilization: Vasectomy

- A safe, convenient, highly effective and simple form of contraception for men that is provided under local anesthesia in an out-patient setting
- Vasectomy is safer, simpler, less expensive and equally effective as FS (tubal ligation)
- Vasectomy is popular in the US and UK
  - www.maqweb.org
  - Technical briefs

Male Sterilization: Vasectomy (cont’d)

- Not effective until after 3 months
- Can be timed to coincide with the postpartum period when fertility is reduced
  - Ideal with LAM
  - If not using LAM, couple will need to use another contraceptive method during the first 12 weeks
- Follow local protocols for counseling couples in advance and obtaining informed consent

Male Sterilization: Vasectomy (cont’d)

- Highly effective in preventing pregnancy (99.6 to 99.8% effective)
- Comparable to FS, Implants, IUDs in preventing pregnancy
- Not effective immediately—WHO recommends use of backup contraception for 3 months after the procedure

Vasectomy: Safety

- Very safe, with few medical restrictions
- Major morbidity and mortality rare
- Adverse long-term effects not been found
- Minor complications (e.g., infection, bleeding, post-operative and/or chronic pain 5-10%)
- No-scalpel (NSV) technique has lower incidence of bleeding and pain than incisional technique
- Morbidity and mortality rare

Vasectomy: Crucial Programmatic Facts

- Men in every region, cultural, religious and SE setting show interest in vasectomy, despite common assumptions about negative male attitudes or societal prohibitions (MAQ)
- However, men often lack full access to information and services, especially male-centered programming, which has been shown to result in greater uptake of vasectomy
Postpartum Female Sterilization

- Ideally done within 48 hours after delivery
- May be performed immediately following delivery or during C/section
- If not performed within 1 week of delivery, delay for 4-6 weeks
- Follow local protocols for counseling clients and obtaining informed consent in advance
  - Discuss during ANC

Female Sterilization: Effectiveness

- Highly effective, 99.5% comparable to vasectomy, implants, IUDs
- Risk of failure (pregnancy), while low:
  - continues for years after the procedure
  - does not diminish with time
  - is higher in younger women
- No medical condition absolutely restricts a person’s eligibility for FS

IUD

- IUDs are among the most reliable and cost-effective long-acting method of contraception available to women today. IUD offers a level of protection comparable to female sterilization with the added advantage of easy and rapid reversibility.
- IUD prevents pregnancy by preventing fertilization; the mechanism of action of copper IUDs is spermicidal. Copper causes a sterile body inflammatory reaction resulting in biochemical and cellular changes that are toxic to sperm in the uterine cavity rendering the sperm incapable of fertilization.

IUDs (Cu-T)

- IUDs can be inserted:
  - Immediately after delivery of the placenta
  - During C/Section
  - Within 48 hours of childbirth
- If not inserted within 48 hours, insertions should be delayed for 4-6 weeks
- Expulsion rates can be higher than with interval insertions
  - Some studies show that insertion within 10 minutes of placenta delivery is better than other times before hospital discharge
  - High fundal placement has lower expulsion rates

Important Programmatic Characteristics of IUDs

- Effectiveness is comparable to FS
  - 12-13 yrs with CU-T (approved)
  - Cheaper to provide than other methods
  - Quickly and completely reversible
- Very safe for most women (including: immediately postpartum, postabortion, or interval; breastfeeding; young; and nulliparas)

IUDs: Programmatic Considerations

- More service cadres can provide (because it is non-surgical)
- Choice: Long-acting methods that can be used long-term, non-permanent. Providing a woman with a PPIUD prior to discharge is less than half as expensive as providing in outpatient settings
- Good option for HIV+ women
- Most cost-effective method of all reversible methods if used for 2 or more years
Dispelling Myths About IUDs

IUDs...
- do not cause abortion
- do not cause infertility
- are unlikely to cause discomfort for male partner
- do not travel to distant parts of the body
- are not too large for small women
- May offer protection against endometrial and cervical cancer

Common Concerns about IUDs: New Information

- Pelvic Inflammatory Disease (PID)
- Infertility
- HIV/AIDS

Medical Evidence: Low PID Rates and Infertility among IUD Users

- First 20-days: highest risk due to insertion
- Beyond 20 days: PID risk is same as if no IUD
  - 99.8% of women with IUDs have no problems with PID
- IUD use NOT associated with infertility
  - The real culprit is Chlamydia Trachomatis (and GC), not the IUD!

IUD Use and HIV: Three Main Questions

1. Does IUD increase risk of HIV acquisition by the woman using it?
   - NO
2. Does use of IUD by HIV-infected women increase their other health risks?
   - NO
3. Does the HIV-infected IUD user increase risk to sero-negative male partner?
   - NO

WHO Medical Eligibility Criteria: HIV/AIDS and Copper IUDs

<table>
<thead>
<tr>
<th>HIV/AIDS</th>
<th>2nd Ed. Category</th>
<th>3rd Ed 2004 Category</th>
<th>I</th>
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<tr>
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<tr>
<td>AIDS</td>
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<td>3</td>
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<tr>
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<td>2</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Cu-IUD Side Effects

- Heavier menses in the first few months
- Increased cramping and menstrual pattern changes in the first few months
- Low expulsion rate, when occurring usually within the first 3 months
Summary: IUD

- Comparable in safety, effectiveness to FS
- Can be inserted during the postpartum period
- Risk of PID very small, even in high STI settings
- Does not increase risk of infertility
- Safe for women with no children
- Safe (and a good choice) for HIV-infected women or women with AIDS doing well on ARVs who do not desire pregnancy

Hormonal Methods

- Progestin-only Contraceptives
  - Implants
  - Injectables
  - Progestin-only pills (POPs)
- Combined Estrogen-Progestin Methods
  - Combined oral contraceptives (COCs)
  - Monthly injectables (Mesigyna, Cyclofem)

Progestin-Only Contraceptives; Breastfeeding Women

- No effect on breastfeeding, breast milk production or infant growth and development
- WHO recommends a delay of 6 weeks after childbirth before starting progestin-only methods as infants may be at risk of exposure to the progestin

Implants

- Norplant: (will no longer be produced after 2006)
  - 6 capsules, effective 7 years
  - 1-yr failure rate 0.05% (1 pregnancy / 2000 users)
  - 5-yr failure rate 1.6%
- Jadelle
  - 2 rods, effective 5 years
  - 1-yr failure rate 0.05%; 5-yr failure rate 1.1%
- Implanon
  - 1 rod, effective 3 years; with failure rate 0.07/100 ♀ years (<1%)

Progestogen-Only Injectable

- Safe to use immediately PP if not breastfeeding
- Safe to use after 6th week postpartum if breastfeeding
- Injection of:
  - 150 mg DMPA IM every 3 mos.
  - 104 mg DMPA subQ every 3 months
  - NET EN 200mg every 2 months
- Women of any age and parity can use it (MEC Cat. 1, age 18-45)
- Start first 7 days after LMP, or can use any time reasonably sure woman not pregnant
- Safe to use immediately PAC

Combined Estrogen-Progestin Methods: Breastfeeding Women

- DO NOT use within the first 6 weeks postpartum
- NOT recommended during first 6 months postpartum due to diminished quantity of breast milk, decreased duration of lactation and possible adverse affects on infant growth

Source: WHO 2004
Combined Estrogen-Progesterin Methods

- **BREASTFEEDING**
  - DO NOT use combined estrogen-progesterin methods within the first 6 weeks postpartum
  - NOT recommended during the first 6 months postpartum

- **NON-BREASTFEEDING**
  - NOT recommended to use combined estrogen-progesterin methods during the first 3 weeks postpartum
  - Safe to start after 3 weeks post-delivery

Women Eligible for COCs Without Restriction

Examples:
- Adolescents
- Nulliparous women
- Postpartum (3 weeks, if not breastfeeding)
- Immediately postabortion
- Women with varicose veins
- Any weight (including obese)

Source: WHO, Medical Eligibility Criteria for Contraceptive Use, 3rd Ed. 2004

Women Who Should Not Use COCs

- Breastfeeding (<6 weeks postpartum)
- Smoke heavily AND are over age 35
- At increased risk of cardiac valvular disease
- Have certain pre-existing conditions (e.g., breast cancer, liver disease, high risk of CV disease)
- Pregnant (but no proven negative effects on fetus if taken accidentally)

Emergency Contraception

- Methods of preventing pregnancy after unprotected sexual intercourse
- Regular birth control pills used in a special higher dosage.
  - ECPs are a higher dosage of the same hormones found in daily birth control pills
  - within 120 hours (5 days) of unprotected sex (but as soon as possible after unprotected sex)
- IUDs can also be used 5 days after unprotected sex
- Distinct from RU-486 (The Abortion Pill)
- Millions of unintended pregnancies and abortions could be averted with EC

Types of ECPs

- **Progestin-only OCs**: Levonorgestrel-only, in preferred regimen one dose of 1.5 mg
  - (or can be in 2 doses of 0.75 mg, 12 hrs apart)
  - →88% reduction in risk (1/100 will get pregnant)

- **Combined OCs**: 2 doses of pills containing ethinyl estradiol (100 mcg) and levonorgestrel (0.5 mg) taken 12 hrs apart
  - →75% reduction in risk (2/100 will get pregnant)

ECP Effectiveness and Time

- ECPs are effective up to 120 hours (5 days), thought to be slightly more effective during first 24 hours.
- This offers providers and women more flexibility of use particularly when ECPs are not given in advance of need.
Possible Mechanisms of Action of ECPs

Depending on when used during cycle, may:
- inhibit or delay ovulation
- affect sperm and ovum function
- Prevention of implantation is an unlikely effect

EC pills do not interrupt an established pregnancy

Withdrawal (Coitus Interruptus)

- A traditional family planning method in which the man completely removes his penis from the vagina, and away from the external genitalia of the female partner, before he ejaculates.
- CI prevents sperm from entering the woman’s vagina, thereby preventing contact between spermatozoa and the ovum.

CI: Effectiveness

- When used perfectly, effectiveness can be as high as 95%
- With typical usage, effectiveness about 75 to 81%
- However, CI is better than no method at all!

CI or Withdrawal (cont’d)

This method may be appropriate for postpartum women and couples:
- Who are highly motivated and able to use this method effectively;
- With religious or other reasons for not using other methods of contraception;
- Who need contraception immediately and have entered into a sexual act without alternative methods available;
- Who need a temporary method while awaiting the start of another method; and
- Who have intercourse infrequently.

Advantages of CI

- If used correctly, does not affect breastfeeding and is always available for primary use or as a back-up method
- Involves no economic cost or use of chemicals
- No health risks associated directly with CI
  - Men and women who are at high risk of STI/HIV infection should use a condom with each act of intercourse.

Disadvantages of CI

- Does not provide protection against STIs
- Requires the man’s self control
- May reduce the pleasure of intercourse
- During withdrawal, some sperm may have already entered into the women’s vagina
Helpful Resources

- http://www.reproline.jhu.edu/
- http://www.maqweb.org/iudtoolkit/

To save lives, parents should wait until their baby is 2 years old before they try to get pregnant again.