Postpartum Contraception: Family Planning Methods and Birth Spacing After Childbirth

JHPIEGO in partnership with Save the Children, Constella Futures, The Academy for Educational Development, The American College of Nurse-Midwives and Interchurch Medical Assistance

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

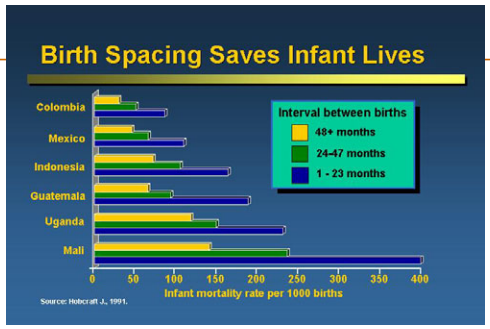
Unmet Need: Fertility Preferences of Postpartum Women

- **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



Source: FHI 2000

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

USAID access

7

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**

USAID access

8

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

USAID access

9

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

USAID access

10

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

Source: Pathfinder 1998.

USAID access

11

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

USAID access

12

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

Return to Fertility: Effect of Lactation (cont'd)

- **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

	LAM	COC	POC	IUD	BTL	Con-doms
At delivery	OK	NO	NO	OK	OK	NO
3 weeks	OK	NO	NO	NO	NO	OK
6 weeks	OK	NO	OK	OK**	OK	OK
6 months	OK	OK	OK	OK	OK	OK
>6 months	NA	OK	OK	OK	OK	OK

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**

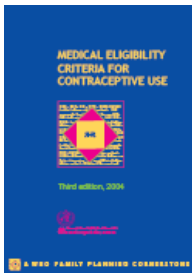
When to Start Contraception

- **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

http://www.who.int/reproductive-health/publications/mec/mec.pdf



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

Classification	With clinical judgment	With limited clinical judgment
1	Use method in any circumstances	Yes Use the method
2	Generally use: advantages outweigh risks	Yes Use the method
3	Generally do not use: risks outweigh advantages	No Do not use the method
4	Method not to be used	No Do not use the method

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.**

USAID access

25

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

USAID access

26

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

USAID access

27

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**

USAID access

28

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**

USAID access

29

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

USAID access

30

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

USAID access

31

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

USAID access

32

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

USAID access

33

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

USAID access

34

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

USAID access

35

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

USAID access

36

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

HIV/AIDS	2nd Ed. Category	3rd Ed 2004 Category	
		I	C
High Risk of HIV	3	2	2
HIV-infected	3	2	2
AIDS	3	3	2
Clinically well on ARV therapy		2	2

Cu-IUD Side Effects

- Heavier menses in the fist 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

USAID FROM THE AMERICAN PEOPLE access Family Planning Initiative

55

Hormonal Methods

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

USAID FROM THE AMERICAN PEOPLE access Family Planning Initiative

56

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

USAID FROM THE AMERICAN PEOPLE access Family Planning Initiative

57

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%)

USAID FROM THE AMERICAN PEOPLE access Family Planning Initiative

58

Projestogen-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

USAID FROM THE AMERICAN PEOPLE access Family Planning Initiative

59

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

USAID FROM THE AMERICAN PEOPLE access Family Planning Initiative

60

Combined Estrogen-Progestin Methods

- **BREASTFEEDING**
  - DO NOT use combined estrogen-progestin methods within the first 6 weeks postpartum
  - NOT recommended during the first 6 months postpartum
- **NON-BREASTFEEDING**
  - NOT recommended to use combined estrogen-progestin methods during the first 3 weeks postpartum
  - Safe to start after 3 weeks post-delivery

USAID access

61

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

USAID access

62

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)**

USAID access

63

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 5days after unprotected sex**
- **Distinct from RU-486 (The Abortion Pill)**
- **Millions of unintended pregnancies and abortions could be averted with EC**

USAID access

64

Types of ECPs

- **Progestin-only OCs**: Levonorgestrel-only, in preferred regimen one dose of 1.5 mg
  (or can be in 2 doses of 0.75mg, 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)

USAID access

65

ECP Effectiveness and Time

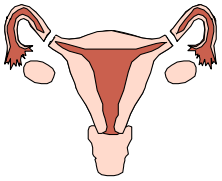
- **ECPs are effective up to 120 hours (5 days), thought to be slightly more effective during first 24 hours.**
- **This offers providers and women more flexibility of use particularly when ECPs are not given in advance of need.**

USAID access

66

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 use 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.fhi.org/en/RH/Pubs/servdelivery/index.htm
- http://www.who.int/reproductive-health/publications/mec/mec.pdf
- http://www.reproline.jhu.edu/
- http://www.engenderhealth.org/wh/fp/index.html
- 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

WHO, Rivers of life