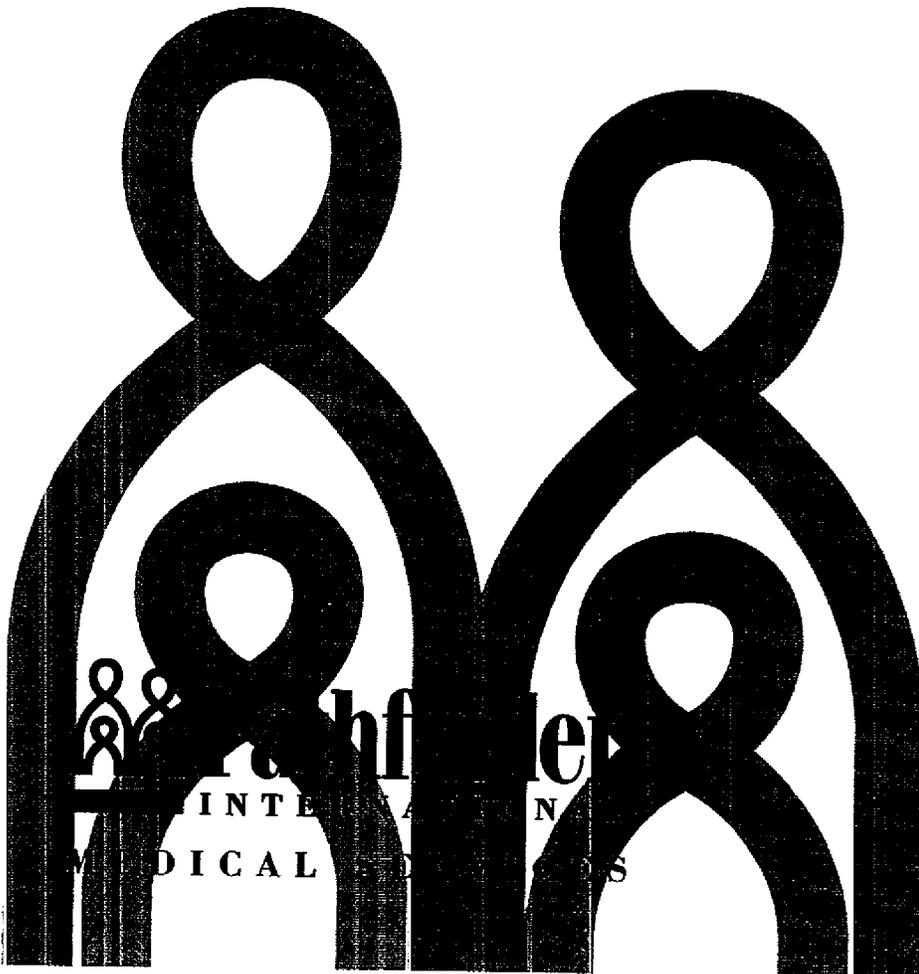


- PN-ACT-645 -

A comprehensive training course

Introduction/ Overview



1

Comprehensive
Reproductive Health and Family Planning
Training Curriculum

**MODULE 1:
INTRODUCTION TO
FAMILY PLANNING AND
THE HEALTH OF
WOMEN AND CHILDREN
AND AN OVERVIEW OF
FAMILY PLANNING
METHODS**

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April 1997

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The entire comprehensive training curriculum was used to train service providers in 1995 under this cooperative project which included Pathfinder International, IPAS, AVSC International, and the Vietnamese Ministry of Health. Individual modules were used to train service providers in Nigeria (DMPA), Azerbaijan (VSC), Kenya (Infection Prevention), and Iran (VSC). Feedback from these trainings has been incorporated into the training curriculum to improve its content, training methodologies, and ease of use.

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NOTES TO THE TRAINER

PURPOSE

This training manual is designed for use as part of the comprehensive family planning and reproductive health training of service providers. It is designed to be used to train physicians, nurses and midwives.

This manual is designed to actively involve the participants in the learning process. Sessions include simulation skills practice, discussions, and clinical practice, using objective knowledge, attitude, and skills checklists.

This particular module, *Module 1: Family Planning and the Health of Women and Children and Overview of Family Planning Methods* contains references to the demographic data of the country in which the training is occurring (or the home country of the participants, if that is different). Where there are blank spaces in the text, the data should be filled in by the trainer from the demographic data resource found in the Appendix. Wherever this occurs, the *Training Methods* section will make reference to the Handout for the trainer's convenience.

DESIGN

The training manual consists of 15 modules:

1. Introduction/Overview
2. Infection Prevention
3. Counseling
4. Combined Oral Contraceptives and Progestin-only Pills
5. Emergency Contraceptive Pills
6. DMPA Injectable Contraceptives
7. Intrauterine Devices
8. Lactational Amenorrhea and Breastfeeding Support
9. Condoms and Spermicides
10. Voluntary Surgical Contraception
11. MVA for Treatment of Incomplete Abortion
12. Reproductive Tract Infections
13. Postpartum/Postabortion Contraception
14. Training of Trainers
15. Quality of Care

Included in each module is a set of knowledge assessment questions, skills checklists, trainer resources, participant materials, training evaluation tools, and a bibliography.

SUGGESTIONS FOR USE

- The modules are designed to provide flexibility in planning, conducting, and evaluating the training course.
- The curriculum is designed to allow trainers to formulate their own training schedule, based on results from training needs assessments.
- The modules can be used independently of each other.
- The modules can also be lengthened or shortened depending on the level of training and expertise of the participants.
- In order to foster changes in behavior, learning experiences have to be in the areas of knowledge, attitudes, and skills. In each module, the overall objective, general, and specific objectives are presented in terms of achievable changes in these three areas.
- Training references and resource materials for trainers and participants are identified.
- Each module is divided into a *Trainer's Module* and *Appendix* section.
- The *Trainer's Module* presents the information in two columns:
 1. *Content*, which contains the necessary technical information; and
 2. *Training/Learning Methods*, which contains the training methodology (lecture, role play, discussion, etc.) by which the information should be conveyed.
- The training design section includes the content to be covered and the training methodologies.
- The *Appendix* section contains:
 - Participant handouts
 - Transparencies
 - Pre & Post-test (Participant Copy and Master Copy with Key)
 - Participant evaluation form
- The *Participant Handouts* are referred to in the *Training/Learning Methods* sections of the curriculum and include a number of different materials and exercises, ranging from recapitulations of the technical information from the *Content* of the module to role play descriptions, skills checklists, and case studies.
- The *Participant Handouts* should be photocopied for the trainees and distributed to them in a folder or binder to ensure that they are kept together as a technical resource after the training course has ended.
- Transparencies have been prepared where called for in the text. These should be copied onto clear overheads for display during the training sessions.
- The *Participant Evaluation* form should also be copied to receive the trainees' feedback in order to improve future training courses.
- The methodologies section is a resource for trainers for the effective use of demonstration/return demonstration in training.

To ensure appropriate application of learning from the classroom setting to clinical practice, Clinical Practicum sessions are an important part of this training. For consistency in the philosophy of client's rights, the following should be shared with participants, in preparation for their clinical practicum experiences:

CLIENT'S RIGHTS DURING CLINICAL TRAINING

The rights of the client to privacy and confidentiality should be considered at all times during a clinical training course. When a client is undergoing a physical examination it should be carried out in an environment in which her/his right to bodily privacy is respected. When receiving counselling, undergoing a physical examination, or receiving surgical contraceptive services, the client should be informed about the role of each individual inside the room (e.g., service provider, individuals undergoing training, supervisors, instructors, researchers, etc.).

The client's permission must be obtained before having a clinician-in-training/participant observe, assist with or perform any services. The client should understand that s/he has the right to refuse care from a clinician-in-training/participant. Furthermore, a client's care should not be rescheduled or denied if s/he does not permit a clinician-in-training/participant to be present or provide services. In such cases, the clinical trainer or other staff member should perform the procedure. Finally, the clinical trainer should be present during any client contact in a training situation.

Clinical trainers must be discreet in how coaching and feedback are given during training with clients. Corrective feedback in a client situation should be limited to errors that could harm or cause discomfort to the client. Excessive negative feedback can create anxiety for both the client and clinician-in-training.

It can be difficult to maintain strict client confidentiality in a training situation when specific cases are used in learning exercises such as case studies and clinical conferences. Such discussions always should take place in a private area, out of hearing of other staff and clients, and be conducted without reference to the client by name (AVSC, "Tips for Trainers-8," September 1994; **NSV Trainer's Manual**).

DEMONSTRATION TECHNIQUE

The Five-Step Method of Demonstration and Return Demonstration is a training technique useful in the transfer of skills. The technique is used to make sure that participants become proficient in certain skills. It can be used to develop skills in IUD insertion, pill dispensing, performing a general physical examination, performing a breast or pelvic examination, etc. In short, it can be used for any skill which requires a demonstration. The following are the "five steps:"

1. **Overall Picture:** Provide participants with an overall picture of the skill you are helping them develop and a skills checklist. The overall picture should

include why the skill is necessary, who needs to develop the skill, how the skill is to be performed, etc. Explain to the participants that these necessary skills are to be performed according to the steps in the skills checklist, on models in the classroom and practiced until participants become proficient in each skill and before they perform them in a clinical situation.

2. **Trainer Demonstration:** The trainer should demonstrate the skill while giving verbal instructions. If an anatomical model is used, a participant or co-trainer should sit at the head of the model and play the role of the client. The trainer should explain the procedure and talk to the role playing participant as s/he would to a real client.

3. **Trainer/Participant Talk-Through:** The trainer performs the procedure again while the participant verbally repeats the step-by-step procedure.

Note: The trainer does **not** demonstrate the wrong procedure at any time. The remaining participants observe the learning participant and ask questions.

4. **Participant Talk-Through:** The participant performs the procedure while verbalizing the step-by-step procedure. The trainer observes and listens, making corrections when necessary. Other participants in the group observe, listen, and ask questions.

5. **Guided Practice:** In this final step, participants are asked to form pairs. Each participant practices the demonstration with their partner. One partner performs the demonstration and talks through the procedure while the other partner observes and critiques using the skills checklist. The partners should exchange roles until both feel competent. When both partners feel competent, they should perform the procedure and talk-through for the trainer, who will assess their performance using the skills checklist.

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UNIT 1: FAMILY PLANNING AND THE HEALTH OF WOMEN AND CHILDREN

INTRODUCTION:

Family planning contributes to the health of mothers and children worldwide by reducing maternal and infant mortality. When a wide range of family planning services are offered in the context of integrated family planning and maternal and child health care, the health of women and children in that community can be greatly improved.

MODULE TRAINING OBJECTIVE:

To explain to participants the rationale by which child spacing activities can improve the health of both mothers and children.

SPECIFIC LEARNING OBJECTIVES:

1. Explain key messages related to child spacing and maternal and child health.
2. Describe the major principles of family planning.
3. Describe the health benefits of family planning.
4. Explain the relationship between maternal and child mortality and the high-risk factors of maternal age, birth order, and birth interval.
5. Compare pregnancy and childbirth mortality risks with contraceptive use mortality risks.

TRAINING/LEARNING METHODOLOGY:

- Trainer Presentation
- Class Discussion
- Required Reading

MAJOR REFERENCES AND TRAINING MATERIALS:

- Hatcher, R.A., et al. Essentials of Contraceptive Technology. Summer, 1992.
- Hatcher, R.A., et al. Contraceptive Technology. 16th ed., 1994.
- Indian Medical Association/Development Associates, Family Planning Course, Module 1: Family Planning and MCH and an Overview of FP Methods, 1994.
- INTRAH, Removing Medical Barriers to Family Planning Services, 1994.
- Population Reference Bureau, "Contraceptive Safety." IMPACT: May 1988.
- Population Reference Bureau, "Family Planning Saves Lives." IMPACT: September 1991.
- Shelton, J.D., Angle, M.A. and Jacobstein, R.A. "Medical Barriers to Family Planning." The Lancet 1992; 340: 1334-5.
- World Bank, Social Indicators of Development: 1994.

RESOURCE REQUIREMENTS:

- Whiteboard or newsprint
- Marking Pens

EVALUATION METHODS:

- Pre- and post-test
- Participant reaction form

TIME REQUIRED: approximately 2.5 hours (Unit 1 only)

MATERIALS FOR TRAINERS TO PREPARE IN ADVANCE:

1. Transparencies on:
 - Overall and Specific Objectives (*Transparency 1.1*)
 - Causes of Maternal Death in Developing Countries (*Transparency 1.2*)
 - Maternal Deaths by Birth Order, Matlab, Bangladesh, 1968 - 1970 (*Transparency 1.3*)
 - Comparison of Death Rates from Pregnancy or Childbirth and Various Contraceptive Methods (*Transparency 1.4*)
 - Comparison of Mortality Rates for Infants Born After Short or Long Intervals (*Transparency 1.5*)
 - Estimated Percent Reduction in Infant Mortality Rate if All Babies were Born After at least Two Year Interval (*Transparency 1.6*)
2. Materials such as a flipboard or whiteboard and marking pens for presentations
3. Copies of the Pre-Test and Participant Handouts for each participant.

Unit 1: Introduction

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Review of Unit 1</p> <p>The purpose of this Unit is to provide a basic framework of understanding how and why family planning benefits the health of both mothers and children.</p> <p>During this Unit, we will explore some of the key concepts which underlie the rationale behind family planning programs.</p>	<p>Warm-up and Welcome of Participants: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Welcome the participants (Px). • Introduce her/himself. • Request Px to introduce themselves briefly to group. <p>Administer Pre-Test: (20 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Inform Px of the purpose and evaluation of the module pre-test. • Explain that the post-test will be an opportunity to demonstrate knowledge gained in the course. • Administer the test. • Upon review of responses, note units and objectives requiring specific attention. <p>Trainer Presentation: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Display <i>Transparency 1.1</i>. • Discuss the objectives of Unit 1. • Emphasize necessity for Px to participate fully in training discussions and exercises. • Discuss Px expectations of the training.

Specific Objective #1: Explain key messages related to child spacing and maternal and child health.

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Key Messages</p> <ol style="list-style-type: none"> 1. Voluntary FP is one of the most important health measures a couple and a nation can practice to reduce maternal and infant mortality and morbidity. 2. The prevention of unwanted pregnancies and spacing of births by at least two years has a profound effect on reducing maternal and child mortality. 3. The risk of death from pregnancy and childbirth is far greater than the risk of death from contraceptive use. 4. Important barriers to FP in any country include those imposed by the medical profession of that country. Medical barriers are medical policies, standards and practices which are not scientifically justifiable and which may restrict clients' access to family planning services. 	<p>Trainer Presentation: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Briefly discuss the key messages. • Stress them as the major concepts underlying entire course rationale. • List key words from messages on the flipboard as introduced. Discuss each one and ask Px what they think is meant by each statement. Do they agree/disagree? Why? <p>(See Px Handout 1.1.)</p>

Specific Objective #2: Describe major principles of family planning

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Principles of FP Services</p> <ol style="list-style-type: none"> 1. The cornerstone of a sound FP program is one that incorporates the following four principles: <ul style="list-style-type: none"> • voluntarism • informed choice • the widest range of FP methods possible • integration within a general MCH service program. 2. A client has the right to make an unpressured, voluntary decision of a contraceptive method, assuming it is medically safe. Some would argue even further that if a precaution exists and the client is fully informed of the risks, the client's choice must still be honored by the clinician. 3. Confidentiality, preservation of dignity and respect, provision of FP services regardless of age or religious, social, marital, or economic status are all essential policy elements of a FP program. 4. Alertness on the part of health professionals for clients at risk for STDs has traditionally been part of FP services; HIV and hepatitis B must now be added as areas of special attention. In this regard, distribution of latex condoms should now be a mainstay of all FP programs. 	<p>Class Discussion: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Start discussion by asking Px what they consider to be important principles of FP programming. • Guide discussion around content, probing individual Px about what s/he thinks about the principles described. • Explore with those Px who provide FP services their experience in implementing these principles. What are the challenges in implementing them in a busy clinic setting? <p>(See Px Handout 1.1.)</p>

Specific Objective #2: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>5. The responsible involvement of men/husbands/mothers/mothers-in-law, and community leaders in FP programs adds an additional dimension of quality care to FP programs and should be encouraged, but at the same time it is not to be considered a condition for providing FP services to a client who requests them. The provider must extend the principle of confidentiality to the point of not involving the husband, mother-in-law, etc., if that is what the client wishes.</p> <p>6. It is the responsibility of health care workers to assume leadership in educating clients, community, and special interest groups about significant health and other non-contraceptive benefits of FP. With their considerable influence, physicians can become powerful advocates of family planning by:</p> <ul style="list-style-type: none"> • providing comprehensive, integrated FP/MCH services; • supporting private-sector FP initiatives such as social marketing programs; • introducing MCH/FP programs in factories, plantations, and other work sites; and • working to remove legal, regulatory and procedural barriers to the availability of all contraceptive methods. 	<p>Discussion: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Discuss the involvement of other parties in FP services. Ask the following questions: <ul style="list-style-type: none"> a) Is this realistic? b) What are the problems in trying to involve husbands or partners? Mothers-in-law? c) Where does such involvement compromise the client's confidentiality? • Discuss the role of health care workers in client education. Ask the following questions: <ul style="list-style-type: none"> a) Is this done by Px now? b) How many are/have been involved in community and voluntary FP group activities? c) Do Px think their involvement can make a difference?

Specific Objective #3: Describe the health benefits of family planning

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Health/Non-Contraceptive Benefits</p> <p><i>Significant Reduction in Maternal Mortality and Morbidity</i></p> <ul style="list-style-type: none"> • Globally, an estimated 500,000 women die each year from pregnancy and childbirth related causes, including septic abortions. • 90% of maternal mortality deaths occur in Africa and South Asia. • An unpublished WHO study estimates that complications from pregnancy and childbirth are the first or second cause of all deaths occurring in women ages 15-44 in developing countries. • Major direct causes are hemorrhage, complications from unsafe induced abortion, toxemia, obstructed labor, and puerperal infection. • Multiple and closely spaced pregnancies lead to and worsen such conditions as anemia, maternal malnutrition, and low birth-weight babies. • Using an effective FP method reduces maternal deaths by preventing high-risk pregnancies among women who are too young, too old, or too ill to bear children safely. • Maternal deaths can be prevented if unwanted pregnancies are avoided and pregnancies are spaced by at least two years. <p><i>Reduction in Infant and Child Mortality and Morbidity</i></p> <ul style="list-style-type: none"> • Globally, an estimated 14.5 million infants and children under age five die every year, mainly from respiratory and diarrheal diseases complicated by malnutrition. 	<p>Trainer Presentation: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Display <i>Transparencies 1.2, 1.3, 1.4, 1.5, and 1.6.</i> • Ask the Px <ul style="list-style-type: none"> a) How can FP help reduce maternal mortality? b) How can FP help reduce infant mortality? • Using the transparencies, highlight the significant difference prevention of unwanted pregnancies and child spacing can make to the reduction of maternal and child mortality. <p>(See <i>Px Handout 1.2.</i>)</p>

Specific Objective #3: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<ul style="list-style-type: none"> • Multiple worldwide studies show that spacing of births by at least two years could prevent at least 20% of these infant deaths and significantly reduce the devastating morbidity effects suffered by these children. <p><i>Other Health Benefits of FP</i></p> <ul style="list-style-type: none"> • FP saves lives. • Studies show that combined oral contraceptives (COCs) provide significant non-contraceptive health benefits. They are known to reduce the incidence of the following diseases and disorders: <ul style="list-style-type: none"> • Ectopic pregnancy • Ovarian cancer • Endometrial cancer • Ovarian cysts • Benign breast disease • Excessive menstrual bleeding and associated anemia • Menstrual cramping, pain and discomfort • Breastfeeding protects infants against diarrheal and other infectious diseases, as well as protecting mother from postpartum hemorrhage. • All FP methods help women with AIDS to avoid pregnancy and thus avoid bearing HIV-infected children. 	<p>Discussion: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to name some non-contraceptive benefits of such FP methods as the COC and breastfeeding. • List Px responses on the flipboard and add to their list as necessary. • Ask if Px can identify non-contraceptive benefits of other methods.

Specific Objective #4: Explain the relationship between maternal and child mortality and high-risk factors of maternal age, birth order, and birth interval

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Maternal High-Risk Factors</p> <p>In many developing countries, the high-risk factors referred to as "Too Young, Too Old, Too Many, Too Close" are major culprits of maternal and infant mortality.</p> <p><i>Age ("Too Young, Too Old")</i></p> <ul style="list-style-type: none"> • In the developing world, pregnancy and childbirth are the leading causes of death in women under the age of 18 years. • Mothers younger than 18 and older than 35 are at greater risk of prenatal complications and pregnancy-related death. • Studies suggest that if pregnancy could be averted in women under age 20 and over age 35, maternal mortality could be reduced by 8-40%. • In _____, the Maternal Mortality Ratio (MMR) is estimated to be around ____/100,000 live births; the Infant Mortality Rate (IMR) is estimated to be about ____/1,000 live births. • Infant mortality is particularly high in babies born to mothers under age 20 and over age 40. • If childbirth could be postponed until the "too young" mother was old enough, and averted in mothers "too old" and "too ill," the impact on both maternal and infant mortality would be significant. • Factors that would greatly reduce MMR and IMR in the "safe" age group (20-35) include: <ul style="list-style-type: none"> • Better access to pre- and postnatal care • Better access to contraceptive methods to permit child spacing • Improved nutrition • Better-trained village midwives 	<p>Trainer Presentation: (20 min.)</p> <p>Prior to the session, the trainer should insert the demographic information for the appropriate country from <i>Px Handout 1.4</i> into the "Content" column and into <i>Px Handout 1.3</i>. <i>Px Handout 1.4</i> may also be distributed to the Px for their information.</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • List four high-risk factors on flipboard. • As each is discussed, ask Px to explain what is meant by "too young", etc. • Ask Px to think about the devastating effect the death of a mother has on a family. <p>(See <i>Px Handout 1.3</i>.)</p>

Specific Objective #4: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<ul style="list-style-type: none"> • Improved childbirth and delivery conditions • Better access to specialists for management of complications from labor and birth • Better facilities for managing complications <p><i>Birth Number ("Too Many")</i></p> <ul style="list-style-type: none"> • Studies show that the more children a woman bears, the greater her risk of dying as a result of pregnancy and/or childbirth. • Women who have had five or more deliveries are more likely to experience problems during pregnancy and labor and to require Caesarean section (which is often not readily available or not performed early enough). • This group has a significantly higher risk of miscarriage and perinatal mortality than women undergoing their second or third delivery. <p><i>Birth Interval ("Too Close")</i></p> <ul style="list-style-type: none"> • Studies have consistently shown a strong, direct relationship between birth intervals and infant/child mortality. • Babies born less than two years after the previous baby are twice as likely to die as babies spaced by at least a two year interval. • The child who has been displaced by the new baby is also at increased risk--on average, about one and a half times as likely to die if the new baby is born within two years of his or her birth because of early weaning and its accompanying risks of diarrheal disease and malnutrition. • <i>Transparency 1.5</i> shows the estimated percent in IMR reduction if all births were spaced by at least two years. 	<p>Brainstorm: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to identify factors that would help to reduce MMR/IMR. • List on flipboard and add to list from content, as necessary.

Specific Objective #5: Compare pregnancy and childbirth mortality risks with contraceptive-use mortality risks

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>There is widespread misinformation about the safety of some FP methods, particularly with regard to COCs. What are the facts? What are the actual risks associated with the use of these methods? Are the health benefits discussed earlier canceled by the risks of using contraceptives?</p> <p>Multiple worldwide studies have shown that the most effective contraceptives are also the safest, once the risks associated with unwanted pregnancy and childbirth are included. Although both legal abortion and modern contraceptive methods involve some health risks, these risks are significantly lower when compared with risks from pregnancy and childbirth. For example, the health risk associated with the COC for non-smoking women is 1.6 per 100,000 users. Contrast that with the death rate of _____ per 100,000 live births from pregnancy/childbirth in _____ women. Looking at risks associated with other activities helps to put the risks of contraceptive use into perspective.</p> <p>The greatest risk of death in using contraceptives comes not from the contraceptive itself, but from occasional method failure or incorrect method use, which then may result in a dangerous pregnancy. For example, condoms in and of themselves are in no way harmful. However, if a condom breaks during use or is improperly used, the woman may get an STD/HIV infection or become pregnant and is then at increased risk of dying as a result of her pregnancy.</p>	<p>Discussion: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Insert the relevant demographic information from <i>Px Handout 1.4</i> into the "Content" column and <i>Px Handout 1.5</i>. • Present the information in the "Content" column. • Ask the Px about anything that they may have heard about the dangers of contraception. • Discuss the misconceptions of danger related to contraceptive use, providing information to dispel them. • Discuss the relative risks of childbirth in the appropriate country using demographic information from <i>Px Handout 1.4</i>. <p>(See <i>Px Handout 1.5</i>.)</p>

Summary

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>Summary Key Concepts</p> <ul style="list-style-type: none">• FP saves lives by enabling women to avert unwanted pregnancies and space wanted pregnancies.• The risk of dying from childbirth is far greater than the risk of dying from contraceptive use.	<p>Trainer Summary: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none">• Summarize key concepts.• Solicit and respond to any Px questions.• Proceed to <i>Unit 2: An Overview of FP Methods</i>.

UNIT 2: AN OVERVIEW OF FAMILY PLANNING METHODS

INTRODUCTION:

Offering a wide range of family planning methods is crucial to any family planning program trying to offer quality services to its clients. Each method has its own mechanism of action, effectiveness, advantages and disadvantages. By gaining familiarity with these methods, service providers can offer a wide range of services and referrals to their clients.

MODULE TRAINING OBJECTIVE:

To explain the major features of the child spacing methods currently available in country and to enable providers to promote them to potential family planning clients.

SPECIFIC LEARNING OBJECTIVES:

1. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of hormonal contraceptives including combined oral contraceptives (COCs); progestin-only pills (POPs); emergency contraceptive pills (ECPs); the progestin-only injectable DMPA; and Norplant^{®1} implants.
2. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of IUDs.
3. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of voluntary surgical contraception (VSC) (female sterilization and vasectomy).
4. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of condoms.
5. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of the Lactational Amenorrhea Method (LAM).
6. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of fertility awareness methods.
7. Identify and discuss medical and other barriers to FP services in the country, and the role of health care providers in overcoming these.

TRAINING/LEARNING METHODOLOGY:

- Required Reading
- Trainer Presentations
- Class Discussions

¹ Norplant[®] is the registered trademark of the Population Council for subdermal levonorgestrel implants.

MAJOR REFERENCES AND TRAINING MATERIALS:

- Blumenthal, P. and McIntosh, N. Pocket Guide for Family Planning Service Providers. Baltimore: JHPIEGO, 1995.
- Family Health International, "Fertility Awareness," Network 1996. Vol. 17, No. 1.
- Hatcher, R.A., et al. Essentials of Contraceptive Technology. Summer, 1992.
- Hatcher, R.A., et al. Contraceptive Technology. 16th ed., 1994.
- Indian Medical Association/Development Associates, Family Planning Course, Module 1: Family Planning and MCH and an Overview of FP Methods, 1994.
- INTRAH, Removing Medical Barriers to Family Planning Services, 1994.
- INTRAH, Guidelines for Clinical Procedures in Family Planning, 2nd edition. Chapel Hill: University of North Carolina, 1992.
- Labbok, M., et al. Guidelines: Breastfeeding, Family Planning, and the Lactational Amenorrhea Methods (LAM). Washington, DC: Georgetown University, Institute for Reproductive Health, 1994.
- Population Reference Bureau, "Contraceptive Safety." IMPACT: May 1988.
- Shelton, J.D., Angle, M.A. and Jacobstein, R.A. "Medical Barriers to Family Planning." The Lancet 1992; 340: 1334-5.
- Technical Guidance Working Group, Recommendations for Updating Selected Practices in Contraceptive Use, Volume 1, November 1994.
- WHO, Improving Access to Quality Care in Family Planning, Medical Criteria for Contraceptive Use, 1996.

- *If available*, Demographic Health Survey or other source of contraceptive use information on appropriate country

RESOURCE REQUIREMENTS:

- Samples of various contraceptives (IUD/COC/Condoms).
- Whiteboard or newsprint
- Marking pens

EVALUATION METHODS:

- Pre- and post-test
- Participant Reaction Form

TIME REQUIRED: 6 hours (Unit 2 only)

MATERIALS FOR TRAINERS TO PREPARE IN ADVANCE:

1. Transparencies on:
 - Unit 2 Specific Objectives (*Transparency 2.1*)
 - Efficacy of Contraceptive Methods (*Transparency 2.2*)
2. Materials such as a flipboard or whiteboard and marking pens for presentations
3. Samples of various contraceptive methods, including an IUD, condoms, oral contraceptives, etc.
4. Copies of the Post-Test and Participant Handouts for each participant.

Unit 2: Introduction

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Introductory Remarks</p> <p>Worldwide, more and more couples of reproductive age are using modern contraceptive methods. In 1987, about 372 million of the world's couples (43%) used a modern method. For 1991, that figure had grown to 381 million couples, or 51%. The most popular method worldwide is VSC, followed by the pill and IUD. In recent times, as a result of the HIV/AIDS pandemic, the use of condoms has increased dramatically.</p> <p>In _____, the use of modern contraceptive methods by eligible couples is estimated to be ____%. About ____% of couples use any method; ____% of the couples are using a modern method.</p>	<p>Trainer Presentation/Introduction (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Insert the relevant demographic information from <i>Px Handout 1.4</i> into the "Content" column and <i>Px Handout 2.1</i>. • If available, this information may be supplemented by further information on contraceptive method mix from a <u>DHS</u> or other source of data. • Display <i>Transparency 2.1</i> on Unit 2 objectives and discuss with Px. • Review how Px will be evaluated. • Explain to Px that the purpose of this unit is to provide an overview only, and that in-depth information and skill development for service delivery of various methods will be covered in other training modules (if the course is continuing). <p>(See <i>Px Handout 2.1</i>.)</p>

Specific Objective #1: Describe the mechanism of action and effectiveness, advantages, disadvantages, and appropriate users of hormonal contraceptives

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>Combined Oral Contraceptives (COCs)</p> <p>Available now for over 30 years, COCs are one of the most extensively studied medications in history. They constitute a highly effective and popular FP method and are safe for use by most women.</p> <p><i>Mechanism of Action</i> COCs contain the hormones estrogen and progestin. Taken orally on a daily basis, the combined action of the two hormones prevents pregnancy chiefly by hampering the production of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), thus suppressing ovulation; by creating a thick cervical mucus which hampers the transport of sperm; and by creating a thin, atopic endometrium which deters implantation.</p> <p><i>Effectiveness</i> COCs are effective--their typical pregnancy rate is 8% in one year. As with any method which is client-dependent, effectiveness rates will vary. The perfect-use pregnancy rate is 1%.</p> <p><i>Advantages</i></p> <ul style="list-style-type: none"> • Reduce dysmenorrhea • Regulate the menstrual cycle • Reduce menstrual flow (which may be useful to anemic women) • Decrease pre-menstrual symptoms 	<p>Trainer Presentation/ Discussion: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on COCs mechanism of action and effectiveness. • Hand out samples of COC packages, if available. • Answer any questions about COCs. • Inform Px that this material will be covered in detail during Module 4 (if course is continuing). <p>(See Px Handout 2.2.)</p>

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Advantages (cont.)</i></p> <ul style="list-style-type: none"> • Decrease the risk of severe forms of pelvic inflammatory disease (PID) • Decrease the risk of ectopic pregnancy • Decrease the risk of ovarian and endometrial cancer • Decrease the incidence of functional ovarian cysts • Decrease the rate of benign breast disease • Decrease the incidence of acne • Client controls own fertility • Well researched • Does not interrupt sex • Will not affect lactation after use has been established • Can be stopped anytime • Easily made available • Highly effective, reversible, easy to use • Safe for most women <p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Client-dependent; must be taken every day • Requires regular/dependable supply • COCs may have minor side effects in some clients, such as nausea, headache or breakthrough bleeding • May cause rare but serious circulatory system complications, especially in women over 35 who smoke and/or have other health problems • Does not protect from STDs/HIV <p><i>Appropriate Users of COC's</i> COCs may be an appropriate choice for:</p> <ul style="list-style-type: none"> • Women and couples who want effective, reversible method • Nulliparous women 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to identify advantages, disadvantages and appropriate users of COCs. • List on flipboard. • Supplement list, as necessary. • Briefly discuss each.

Specific Objective #1: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p><i>Appropriate Users (cont.)</i></p> <ul style="list-style-type: none"> • Women suffering from anemia due to heavy menstrual bleeding • Women with irregular menstrual cycles • Women with history of ectopic pregnancy • Women with family history of ovarian cancer or history of benign, functional ovarian cysts <p>Emergency Contraceptive Pills (ECPs)</p> <p>ECPs are either high- or low-dose combined oral contraceptives or progestin-only pills taken following a specific regimen (the Yuzpe regimen) within 72 hours after unprotected sex in order to avoid an unwanted pregnancy. Women who are at risk of unwanted pregnancy take an initial dose of 100 mcg of ethinyl estradiol (EE) and 0.15 mg of levonorgestrel (LNG)/desogestrel (or 0.3 mg norgestrel) as soon after unprotected intercourse as possible (within 72 hours). The same dose is repeated 12 hours later. There are many low-dose combined oral contraceptives (COCs) which can be used. With these low-dose COCs, 4 tablets are taken within 72 hours and 4 tablets 12 hours after the first dose.</p> <p><i>Mechanism of Action</i></p> <p>The precise mode of action of ECPs is uncertain and may be related to the time it is used in a woman's cycle. ECPs are thought to prevent ovulation, fertilization, and/or implantation. ECPs are not effective once the process of implantation of a fertilized ovum has begun. ECPs will not cause an abortion and have no known adverse effects on (the growth and development of) an established pregnancy.</p>	<p>Trainer Presentation/ Discussion: (20 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on ECPs mechanism of action and effectiveness. • Stress the need for thorough counseling regarding use of ECPs. • Answer any questions about ECPs. • Inform Px that this material will be covered in detail during Module 5 (if course is continuing). <p>(See Px Handout 2.3.)</p>

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Effectiveness</i> After a single act of unprotected sexual intercourse, the Yuzpe regimen (which contains estrogen and a progestin) fails in about two percent of women who use it correctly. (The chances of pregnancy are approximately four times greater when no emergency contraceptive is used.) The progestin-only regimen is equally effective. Overall, ECPs are less effective than regular contraceptive methods. Because the ECP pregnancy rate is based on a one-time use, it cannot be directly compared to failure rates of regular contraceptives, which represent the risk of failure during a full year of use. If ECPs were to be used frequently, the failure rate during a full year of use would be higher than those of regular hormonal contraceptives. Therefore, ECPs are inappropriate for regular use.</p> <p><i>Advantages</i></p> <ul style="list-style-type: none"> • Well-documented safety • Drug exposure and side effects are of short duration • Readily available (COCs containing EE and LNG) • Convenient and easy to use • Multiple contraceptive mechanisms: prevents ovulation and implantation • Reduce the risk of unwanted pregnancy • Reduce the need for abortions • Appropriate for young adults who may have unplanned sex and who may be less likely than adults to be prepared for a first sexual encounter • Can provide a bridge to the practice of regular contraception 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to identify advantages, disadvantages and appropriate users of ECPs. • List on flipboard. • Supplement list, as necessary. • Briefly discuss each. <p>(see <i>Px Handout 2.3.</i>)</p>

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Do not protect against the transmission of STDs and HIV • Do not provide ongoing protection against pregnancy • Should be used within three days of unprotected intercourse for highest efficacy • May produce nausea and sometimes vomiting • May change the time of the woman's next menstrual period • Are more expensive and less effective than regular contraception • Could result in increased pregnancy risk if used too frequently <p><i>Appropriate Users of ECPs</i> ECPs are suitable for a woman who experiences:</p> <ul style="list-style-type: none"> • Unprotected intercourse • Contraceptive accidents (e.g., condom breakage or slippage, dislodged diaphragm, etc.) • Contraceptive use errors (e.g., missed pills, incorrect use of barrier methods, miscalculated safe days with natural family planning method, etc.) • Sexual assault or other non-consensual intercourse <p>Progestin-Only Pills (POPs)</p> <p>Progestin-only pills, like other progestin-only contraceptives (i.e., Norplant implants and DMPA), contain no estrogen. They are administered orally, but other delivery mechanisms include injections (DMPA), implants (Norplant), IUDs (Progestasert), or vaginal rings. The DMPA injectable has been in use for some 20 years and POPs for about 12. One of the newer progestin methods available is the Norplant implant.</p>	<p>Trainer Presentation: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on POPs mechanism of action and effectiveness. • Stress the need for thorough counseling regarding use of POPs. • Inform Px that this material will be covered in detail during Module 4 (if course is continuing). (See Px Handout 2.4.)

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Mechanism of Action</i> The progestin in POPs prevents pregnancy by suppressing ovulation in many cycles (not all), and by thickening the cervical mucus and creating a thin endometrium, which hampers sperm transport.</p> <p><i>Effectiveness</i> POPs are effective, even though they contain about one-third the progestin in COCs. POPs have a typical pregnancy rate varying from 5-12% (estimated based on lack of specific data). POPs are generally provided to breastfeeding women, thereby reducing the expected pregnancy rate, probably to (or below) the typical use rate for COCs in non-breastfeeding women. However, the effectiveness of POPs is client-dependent; the pill must be taken at the same time every day. It is important for the client to understand that even one pill missed can render the method ineffective for that cycle. POPs become effective within seven days if begun on the first day of the menstrual cycle. If the POP is started on day two to day five of the cycle, the POPs will not become fully effective until after ovulation for that cycle, and the client should use a back-up method (condom/spermicide/other non-hormonal method) for two weeks. Clients must be counseled particularly well on these points.</p> <p><i>Advantages</i></p> <ul style="list-style-type: none"> • Highly effective when used correctly • Do not affect breastfeeding • Do not increase risk of blood clotting • Decreases menstrual pain and amount of bleeding 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask different Px to identify advantages, disadvantages and appropriate users of POPs. • List on flipboard. • Direct some of your questions at those Px who have not been talking much. • Supplement Px list as necessary. • Briefly discuss each.

Specific Objective #1: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Must be taken at same time every day • May produce minor side effects, including amenorrhea, headaches, weight gain/loss, mood changes, nausea, breast tenderness • Does not prevent ectopic pregnancy • Does not protect against future ovarian cysts • Does not protect against STDs, including HIV/AIDS <p><i>Appropriate Users of POPs</i></p> <p>POPs may be an appropriate choice for:</p> <ul style="list-style-type: none"> • Breastfeeding women who need/want contraception • Women who experience estrogen-related side effects when using COCs • Women with high blood pressure • Women over 35 who smoke and do not want to use an IUD or VSC • Women with sickle cell anemia <p>DMPA (Depo-Provera™)</p> <p>DMPA (depo-medroxyprogesterone acetate) contains the hormone progesterone. It is a long-acting method which slowly releases the hormone, and is given by intramuscular injection, required every 12 weeks.</p> <p><i>Mechanism of Action</i></p> <p>DMPA suppresses ovulation in all cycles, and thickens cervical mucus while creating a thin endometrium, which hampers sperm transport.</p> <p><i>Effectiveness</i></p> <p>DMPA is highly-effective, with a pregnancy rate less than 1%. Studies show that approximately only one woman out of 400 who uses DMPA for a year will become pregnant.</p>	<p>Trainer Presentation/Discussion: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on DMPA's mechanism of action and effectiveness. • Answer any questions about DMPA. • Inform Px that this material will be covered in detail during Module 6 (if course is continuing). <p>(See Px Handout 2.5.)</p>

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • Highly effective, long-acting, private, convenient • Reversible (with some delay in fertility return) • Appropriate for women over 35 with estrogen precautions and/or those who don't want more children but want a reversible method. • May be used by breastfeeding women (more than 6 weeks postpartum) • Unrelated to coitus and easy to use • Has long shelf-life and does not need refrigeration • Reduces frequency of fibroids • Lessens incidence of ovarian cysts • Reduces benign breast lumps • Protects against ectopic pregnancy (since ovulation does not occur) • Reduces symptoms of endometriosis (DMPA is sometimes used to treat) • Protects against endometrial and probably ovarian cancer • Provides immediate postpartum or postabortion contraception • May be used by women taking Rifampin <p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Menstrual changes in all users • Increased appetite, causing weight gain in some cases • Delay in return to fertility after discontinuing (pregnancy is delayed two to four months longer than with other contraceptives) • Since it is long-acting, DMPA cannot be easily discontinued or removed from the body in case of complications or if pregnancy is desired • Offers no protection against STDs/HIV 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask different Px to identify advantages, disadvantages and appropriate users of DMPA. • List on flipboard. • Direct some of your questions at those Px who have not been talking much. • Supplement Px list as necessary. • Briefly discuss each.

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Appropriate Users of DMPA</i> DMPA may be an appropriate choice for:</p> <ul style="list-style-type: none"> • Women who want long-term spacing or to postpone pregnancy for at least two years • Women who have developed estrogen-related side effects or who are at risk of developing cardiovascular problems • Breastfeeding mothers (more than 6 weeks postpartum) • Women who desire private, convenient, no-bother method unrelated to coitus and daily activities • Women who have problems of compliance with oral contraceptive regimens <p>Norplant® Implants</p> <p>Developed by the Population Council, the Norplant implant system consists of six thin, flexible silastic capsules which are inserted just under the skin of the inner upper arm by a trained provider. The capsules contain the progestin levonorgestrel, which is released through the capsule walls in a continuous low dose over five years.</p> <p><i>Mechanism of Action</i> Like DMPA, Norplant implants work by consistently suppressing ovulation and by producing a thick, scanty cervical mucus which hampers sperm transport.</p> <p><i>Effectiveness</i> Norplant implants are highly effective, with a pregnancy rate less than 1% over the course of a year (a figure comparable to VSC). Norplant implants provide effective protection for five years, after which time its effectiveness diminishes and it should be removed.</p>	<p>Trainer Presentation/Discussion: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on Norplant implants' mechanism of action and effectiveness. • Answer any questions on hormonal contraceptive methods. <p>(See <i>Px Handout 2.6</i>.)</p>

Specific Objective #1: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • Extremely effective • Long-lasting • Reversible with prompt fertility return • Can be used by breastfeeding women (more than 6 weeks postpartum) • Easy to use, unrelated to coitus, comfortable • Has few side effects <p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Requires minor surgical procedure to insert/remove • Requires availability of trained/skilled service provider • Alteration in menstrual pattern common though not serious • Offers no protection against STDs/HIV • Women over 35 who smoke <p><i>Appropriate Users of Norplant Implants</i> Norplant may be an appropriate choice for:</p> <ul style="list-style-type: none"> • Women who want long-term birth spacing, and those who desire no more children but do not want or are not appropriate candidates for VSC • Women who are nulliparous and want long-term, reversible protection • Breastfeeding mothers (6 weeks or more postpartum) • Women with precautions for estrogen in COCs 	<p>Question & Answer Session (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask the Px to identify advantages, disadvantages and appropriate users of Norplant implants. • List on flipboard. • Supplement list as necessary. • Briefly discuss each.

Specific Objective #2: Describe the mechanism of action, effectiveness, advantages, disadvantages, and appropriate users of the IUD

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>IUDs</p> <p>A popular and very effective method, modern IUDs have been available since the 1960s, with the development of the Lippes Loop. There are two categories of IUDs: unmedicated (inert) and medicated. The Lippes Loop is an example of an unmedicated IUD. Medicated IUDs are those that are either copper-bearing, such as the second-generation Copper T 380A (TCu 380A), the Multiload 375 (MLCu 375), or hormone-releasing, such as the Progestasert. The copper on plastic IUDs increases their effectiveness and extends their effective lifespan. There are about several types of IUDs used worldwide.</p> <p><i>Mechanism of Action</i></p> <p>Recent studies of the IUD indicate that the copper-bearing IUDs principal mechanism of action (MOA) is to interfere with fertilization. When the IUD is in place, the transport of sperm and eggs through the fallopian tubes is altered, preventing fertilization. IUDs have several other MOAs, including the destruction of sperm and egg secondary to vaseptic inflammatory reaction in the uterus. IUDs, which contain progesterone, also cause the thickening of cervical mucus, which hampers sperm transport.</p> <p><i>Effectiveness</i></p> <p>The IUD is highly effective, with different pregnancy rates for the various types. Older, inert IUDs have a pregnancy rate above 2% per year. The newer Tcu 380A and MLCu 375 have pregnancy rates of less than 1% per year. IUDs also have a continuation rate higher than most other reversible methods.</p>	<p>Trainer</p> <p>Presentation/Discussion: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on IUDs' mechanism of action and effectiveness. • Clarify any incorrect information regarding how IUDs work to prevent pregnancy. • Distribute samples of TCu 380A and other IUDs available in country for Px to examine. • Inform Px that this material will be covered during Module 7 (if course is continuing). <p>(See Px Handout 2.7.)</p>

Specific Objective #2: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • Highly effective • Safe for most women not at risk of STD/HIV • May be safely used by lactating and immediate (within 48 to 72 hours of delivery) postpartum women (with provider trained in PP insertion technique) • Good choice for older women with COC precautions • Long duration of use (five years for MLCu 375, up to ten years for TCu 380A) • Unrelated to coitus, private • Does not interact with other medications <p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Does not protect against STDs/HIV • May place client at risk of PID if she is at risk of STDs for any reason • May expose client to infection during insertion • Requires specially-trained provider • Side effects include heavier/longer menstrual periods • Increased cramping/spotting fairly common in first three months • Serious complications (although rare) require immediate attention and reliable, high-quality back-up services <p><i>Appropriate Users of IUDs</i> An IUD may be an appropriate choice for the client who:</p> <ul style="list-style-type: none"> • Has healthy reproductive tract • Has one or more children • Is in mutually monogamous sexual relationship and not at risk for STDs/HIV 	<p>Question & Answer Session: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to identify advantages, disadvantages and appropriate users of IUDs. • List on flipboard. • Supplement Px list as necessary. • Briefly discuss each.

Specific Objective #2: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p><i>Indications (cont.)</i></p> <ul style="list-style-type: none"> • Desires no more children and does not want VSC • Wants long-term, reversible method and has children • Is breastfeeding • Wants effective method but has precautions for hormonal methods • Is immediately postpartum (within 48 to 72 hours of delivery) and wants effective method that will not interfere with breastfeeding 	

Specific Objective #3: Describe the mechanism of action, effectiveness, advantages, disadvantages, and appropriate users of voluntary surgical contraception (female sterilization and vasectomy)

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Voluntary Surgical Contraception</p> <p>Commonly acknowledged to be quick, easy, safe, and effective, female sterilization is the most widely used contraceptive method worldwide. An estimated 182 million couples have chosen voluntary surgical contraception (VSC) as the means to prevent further pregnancies; 140 million of these were female sterilizations. Services to provide female sterilization have greatly expanded in many countries, making it possible for more women to avail themselves of this procedure. In contrast, the male sterilization procedure, vasectomy, is one of the least known and least used contraceptive methods worldwide.</p> <p><i>Mechanism of Action</i> Female sterilization and vasectomy are both relatively simple and safe surgical procedures. Female sterilization involves blocking the fallopian tubes by ligation, clips or bands in order to prevent sperm and ovum from uniting. Vasectomy involves blocking the vas deferens to prevent sperm from entering semen. The vasa are reached through two small incisions in the scrotum.</p> <p><i>Effectiveness</i> Neither procedure affects sexual performance, and both are highly effective. Female sterilization pregnancy rates are less than 1% in the first year, and pregnancy is even less frequent in subsequent years. Vasectomy pregnancy rates are also less than 1%.</p>	<p>Trainer Presentation/Discussion: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on VSC mechanism of action and effectiveness. • Stress the need for thorough counseling and informed consent. • Inform Px that this material will be covered in detail during Module 10 (if course is continuing). <p>(See Px Handout 2.8.)</p>

Specific Objective #3: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>An important point to make when counseling for vasectomy is that it takes 20 ejaculations for the man to be free of sperm following a vasectomy; he should use a condom during every act of intercourse until he has had 20 ejaculations. Both female sterilization and vasectomy are permanent and must be assumed to be irreversible by the client.</p> <p><i>Advantages (for both men and women)</i></p> <ul style="list-style-type: none"> • Safe, convenient, highly effective • Permanent • Inexpensive in long run • Minimal risk of complications • No long-term health effects • Requires only a single procedure • Surgery is relatively quick (a few minutes for men, usually less than 30 minutes for women) <p><i>Disadvantages (for both men and women)</i></p> <ul style="list-style-type: none"> • Requires surgical procedure • Requires trained service providers • Permanent; difficult to reverse • Does not protect against STDs/HIV <p><i>Appropriate Users of VSC</i> VSC may be an appropriate choice for:</p> <ul style="list-style-type: none"> • Women or men who are completely certain that they do not want more children • Women whose life would be endangered by a pregnancy 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to identify advantages, disadvantages, and appropriate users of VSC. • List on flipboard. • Supplement Px list as necessary. • Briefly discuss each.

Specific Objective #4: Describe mechanism of action, effectiveness, advantages, disadvantages, and appropriate users of condoms

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Condoms</p> <p>Condoms are contraceptive devices (barrier methods) that cover the penis and prevent sperm from uniting with the ovum. In the age of HIV/AIDS, condoms have assumed new importance. The condom is the only method (if used correctly) that is known to protect against HIV transmission. Condoms also offer protection from STDs and reduce STD transmission rates.</p> <p><i>Mechanism of Action</i></p> <p>Barrier methods physically block or chemically inactivate sperm to prevent it from uniting with the ovum. The condom prevents sperm from entering the vagina.</p> <p><i>Effectiveness</i></p> <p>Condoms range from fairly effective to highly effective, depending on a number of variables (age of user, frequency of intercourse, use with spermicide, correct and consistent use, etc.). Used consistently and correctly, condoms have a pregnancy rate of approximately 3%. Typical use pregnancy rates are about 12%.</p> <p><i>Advantages</i></p> <ul style="list-style-type: none"> • Can be very effective in protecting from STDs/HIV • Can be effective in preventing pregnancy, depending on correctness of use • Easy to use, readily available in many locations, relatively inexpensive • Only reversible male contraceptive • Very useful as back-up method 	<p>Trainer Presentation/Discussion: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on condom's mechanism of action and effectiveness. • Hand out samples. • Inform Px that this material will be covered in detail during Module 9 (if course is continuing). <p>(see Px Handout 2.9.)</p>

Specific Objective #4: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Interrupts coitus • High probability of incorrect or inconsistent use • Can deteriorate if incorrectly stored <p><i>Appropriate Users of Condoms</i></p> <p>Condoms may be an appropriate choice for:</p> <ul style="list-style-type: none"> • Individuals or couples at risk of STDs/HIV • Women with a condition considered to be precaution to more effective methods • Breastfeeding women who need a contraceptive • Women needing back-up method 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to identify advantages, disadvantages, and appropriate users of condoms. • List on flipboard. • Supplement Px list as necessary. • Briefly discuss each. <p>(See Px Handout 2.9.)</p>

Specific Objective #5: Describe mechanism of action, effectiveness, advantages, disadvantages, and appropriate users of Lactational Amenorrhea Method (LAM)

<p style="text-align: center;">CONTENT Knowledge/Attitude/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Lactational Amenorrhea Method (LAM)</p> <p>LAM is a family planning method for breastfeeding mothers which provides natural protection against pregnancy for up to 6 months after birth and encourages the timely introduction of complementary family planning methods during continued breastfeeding.</p> <p><i>Mechanism of Action</i> LAM is based on the physiological infertility of breastfeeding women. The infant's suckling at the breast sends neural signals to the mother's hypothalamus. This influences the level and rhythm of gonadotropin-releasing hormone (GnRH) secretion. GnRH influences pituitary release of FSH and LH, the hormones responsible for follicle development and ovulation. Hence, breastfeeding results in decreased and disorganized follicular development. Without ovulation, fertilization can not take place.</p> <p><i>Effectiveness</i> If using the LAM technique perfectly, a woman has less than a 2% chance of pregnancy in 6 months. She must meet the following criteria:</p> <ul style="list-style-type: none"> • She is less than six months postpartum, • She is amenorrheic, and • She is fully or almost fully breastfeeding. <p>Recent clinical trials have confirmed this theoretical effectiveness rate. However, another contraceptive method should be started before any of the three criteria expire. Alternatively, give her a method before 6 weeks postpartum to begin immediately if she should menstruate or reduce breastfeeding intensity.</p>	<p>Trainer Presentation/Discussion: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Present information on LAM's mechanism of action and effectiveness. • Answer Px questions. • Inform Px that this material will be covered in detail during Module 8 (if course is continuing). <p>(See Px Handout 2.10.)</p>

Specific Objective #5: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p><i>Advantages</i></p> <ul style="list-style-type: none"> • Can be started immediately after delivery • Requires no prescription • Carries no side effects or precautions • Economical • Very convenient • Requires no chemical substances or mechanical devices • Helps protect infant from diarrhea and other infectious diseases <p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Can only be used during the early postpartum period • May be difficult for woman to maintain pattern of fully or almost fully breastfeeding • Provides no protection against STD/HIV <p><i>Appropriate Users of LAM</i> LAM may be an appropriate choice for women who:</p> <ul style="list-style-type: none"> • Can maintain patterns of fully or almost fully breastfeeding 	<p>Question & Answer Session: (15 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask the PX to identify the advantages, disadvantages, and appropriate users of LAM. • List on a flipchart. • Supplement PX list as necessary. • Briefly discuss each. (These lists relate to the advantages and disadvantages of LAM as a contraceptive method, not the advantages and disadvantages of breastfeeding.)

Specific Objective #6: Describe the mechanism of action, effectiveness, advantages, disadvantages, and appropriate users of fertility awareness methods

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Fertility Awareness Methods</p> <p>Fertility awareness methods are methods that rely on various techniques to identify a woman's fertile days (the days on which she can become pregnant). These methods monitor the various changes and signs that occur in a woman's body during each menstrual cycle, which may indicate when she is fertile and when she is not (the "safe" days). By avoiding intercourse on "unsafe" days, a woman may avoid pregnancy. These methods can work for many women with varying degrees of reliability. However, each requires a considerable degree of instruction and a high level of motivation and commitment on the part of the couple in order to be used successfully.</p> <p><i>Mechanism of Action</i></p> <p>The Rhythm (or Calendar) Method is one of the oldest and most widely practiced fertility awareness methods worldwide. This method allows the woman to calculate the fertile days of her cycle. To use the Rhythm Method, the woman keeps a strict record of the length of her last six cycles (counting the first day of bleeding as the first day of a new cycle) and then uses a simple formula to identify her fertile days. She counts the number of days in the shortest cycle, and subtracts 18, using the answer to estimate the first day of fertility in a cycle. To estimate the last day of fertility, the woman determines the number of days in her longest cycle, subtracts 11, and uses the answer.</p> <p>The Basal Body Temperature (BBT) Method requires the woman to take her own temperature every morning on awaking and record it on a chart</p>	<p>Trainer Presentation/Discussion: (30 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Briefly review fertility awareness methods and mechanism of action and effectiveness for each. <p>(See <i>Px Handout 2.11.</i>)</p>

Specific Objective #6: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>over several months. By doing this she can determine her time of ovulation. A drop in the BBT sometimes precedes ovulation by 12 to 24 hours and rises immediately after ovulation, staying elevated slightly (0.2 to 0.5 degrees C) until her next menstrual period.</p> <p>To use the Cervical Mucus Method (CMM) (Billings Method), the woman monitors and records on a daily basis the changes in her cervical mucus discharge. Typically, there is little mucus discharge for a few days following menstruation. Then the mucus becomes sticky/pasty or crumbly/slightly yellow or white. As ovulation nears, the mucus becomes slippery, white, clear and wetter. Following ovulation, the mucus becomes sticky/pasty again.</p> <p>The Symptothermal Method (STM) combines several techniques to predict ovulation. The woman monitors her cervical mucus (as in the Billings Method) and her temperature changes (as in the BBT method), including other signs of ovulation, like breast tenderness, back pain, abdominal pain, and light intermenstrual bleeding. She must abstain from the first sign of wet cervical mucus until her body temperature has remained elevated for three days after the peak day (the last day of clear, slippery mucus) or until the fourth day after the thin mucus is no longer observed, whichever is later.</p> <p><i>Effectiveness</i> Fertility awareness methods have a typical pregnancy rate of about 20% in the first year. Depending on variables such as consistency of use, regularity of menstrual cycles, and</p>	<p>Discussion: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Initiate discussion by asking Px if they would recommend these methods to a client. • Ask Px under what circumstances they might be appropriate.

Specific Objective #6: Continued

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p><i>Effectiveness (cont.)</i> user-related factors, consistent and correct use can reduce the pregnancy rate to 2%. When used in combination with a barrier method, effectiveness is increased.</p> <p><i>Advantages</i></p> <ul style="list-style-type: none"> • No or low cost • No systemic products/no physical side effects • Immediately reversible • Acceptable to many religious faiths • Responsibility for family planning is shared by both partners <p><i>Disadvantages</i></p> <ul style="list-style-type: none"> • Requires considerable client instruction • Requires high level of client responsibility: women must keep daily records • Couples must cooperate in order to avoid sexual relations during fertile days (about 10-15 days each month), unless a barrier method is used at that time • Women with irregular menstrual periods may be unable to use rhythm or BBT methods • Does not protect against STDs/HIV <p><i>Appropriate Users of Fertility Awareness Methods</i> Fertility awareness methods may be appropriate for client who:</p> <ul style="list-style-type: none"> • Will not or cannot use other methods for personal or religious reasons • Has conditions that are a precaution for hormonal or other methods • Finds that using a more effective method is not crucial 	<p>Question & Answer Session: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Ask Px to list advantages and disadvantages of NFP. • List Px responses. • Discuss each briefly. <p>Summary of Methods: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Display <i>Transparency 2.2</i>. • Discuss the difference between typical use and consistent and correct use failure rates. • Review the effectiveness of the contraceptive methods. • Solicit and respond to Px questions.

Specific Objective #7: Identify/discuss medical and other barriers to FP services and role of health-care providers in overcoming these

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
<p>Medical Barriers</p> <ul style="list-style-type: none"> • Restrictions on who can provide certain clinical methods like the COC/IUD • Some methods only available with doctor's prescription • Clinical guidelines/regulations listing elaborate physical/laboratory exams before agreeing to provide certain methods • Limiting the number of COC cycles dispensed at first and follow-up visits • Requiring that much irrelevant information be included in the client history • Imposing age and parity restrictions on potential clients of injectable contraceptives • Restricting access to non-clinical methods such as condoms and spermicides by offering them only at clinics • Limiting postpartum clients to a choice of condoms or spermicides • Requiring frequent follow-up visits for IUDs <p>Social/Cultural Barriers</p> <ul style="list-style-type: none"> • Cultural privileging of early marriage/early childbearing • Son preference • Mothers-in-law or other family members • Spousal consent required for some methods <p>Program Barriers</p> <ul style="list-style-type: none"> • Chronic/periodic shortages (e.g. COC/IUD) • Inadequately trained FP staff • Providing only small amounts at a time of some methods (COCs, for example) 	<p>Group Discussion: (Up to 20 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Introduce topic of possible major barriers (i.e., medical, social, cultural, and program barriers). • Encourage group discussion by asking one or two of the more articulate Px what s/he thinks may be possible barriers to effective and quality FP services in the country. • Try to guide and stimulate discussion by asking questions: <ul style="list-style-type: none"> a) Can you give me an example? b) Can you elaborate a bit more? • Keep Px on track; draw out those not participating. • List barriers on flipboard, as they are identified, and suggestions on how physicians may help overcome these. • When time is up, ask one of the Px to summarize discussion. <p>(See Px Handout 2.12.)</p>

Specific Objective #7: Continued

CONTENT Knowledge/Attitudes/Skills	Training/Learning Methods (Time Required)
<p>Program barriers (cont.)</p> <ul style="list-style-type: none">• Minimum age/minimum number of children required before VSC would be approved• Delay in approvals of certain methods (for example, Norplant Implants) <p>Political Barriers</p> <p>Legislative/Legal Barriers</p>	

Summary

<p style="text-align: center;">CONTENT Knowledge/Attitudes/Skills</p>	<p style="text-align: center;">Training/Learning Methods (Time Required)</p>
	<p>Trainer Summary: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Summarize the major points covered in Unit 2. • Ask for and respond to questions. • Pose the learning objectives in question form to assess learning of the content. <p>Post-test: (20 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Administer the module post-test. <p>Evaluation: (10 min.)</p> <p>The trainer should:</p> <ul style="list-style-type: none"> • Administer the Participant Reaction Form.

APPENDIX

Participant Handout 1.1: Key Messages and Principles of FP Services

Key Messages

1. Voluntary FP is one of the most important **health** measures a couple and a nation can practice to reduce maternal and infant mortality and morbidity.
2. The prevention of unwanted pregnancies and spacing of births by at least two years has a profound effect on reducing maternal and child mortality.
3. The risk of death from pregnancy and childbirth is far greater than the risk of death from contraceptive use.
4. Important barriers to FP in any country include those imposed by the medical profession of that country. Medical barriers are medical policies, standards and practices which are not scientifically justifiable and which may restrict clients' access to family planning services.

Principles of FP Services

1. The cornerstone of a sound FP program is one that incorporates the following four principles:
 - **voluntarism**
 - **informed choice**
 - **the widest range of FP methods possible**
 - **integration within a general MCH service program.**
2. A client has **the right** to make an unpressured, voluntary decision of a contraceptive method, assuming it is medically safe. Some would argue even further that if a precaution exists and the client is fully informed of the risks, the client's choice must still be honored by the clinician.
3. **Confidentiality**, preservation of dignity and respect, provision of FP services regardless of age or religious, social, marital, or economic status are all essential policy elements of a FP program.
4. **Alertness** on the part of health professionals for clients at risk for **STDs** has traditionally been part of FP services; **HIV** and **hepatitis B** must now be added as areas of special attention. In this regard, distribution of **latex condoms** should now be a mainstay of all FP programs.
5. The **responsible involvement of men/husbands/mothers/mothers-in-law, and community leaders** in FP programs adds an additional dimension of quality care to FP programs and should be encouraged, but at the same time it is not to be considered a condition for providing FP services to a client who requests them. The provider must extend the principle of confidentiality to the point of not involving the husband, mother-in-law, etc., if that is what the client wishes.

Participant Handout 1.1: Key Messages and Principles of FP Services cont.

6. It is the responsibility of **health care workers** to assume leadership in educating clients, community, and special interest groups about significant health and other non-contraceptive benefits of FP. With their considerable influence, physicians can become powerful advocates of family planning by:
 - providing comprehensive, integrated FP/MCH services;
 - supporting private-sector FP initiatives such as social marketing programs;
 - introducing MCH/FP programs in factories, plantations, and other work sites; and
 - working to remove legal, regulatory and procedural barriers to the availability of all contraceptive methods.

Participant Handout 1.2: Health Benefits of FP

Significant reduction in maternal mortality and morbidity

- Globally, an estimated 500,000 women die each year from pregnancy and childbirth related causes, including septic abortions.
- 90% of maternal mortality deaths occur in Africa and South Asia.
- An unpublished WHO study estimates that complications from pregnancy and childbirth are the first or second cause of all deaths occurring in women ages 15-44 in developing countries.
- **Major direct causes are hemorrhage, complications from unsafe induced abortion, toxemia, obstructed labor, and puerperal infection.**
- Multiple and closely spaced pregnancies lead to and worsen such conditions as anemia, maternal malnutrition, and low birth-weight babies.
- Using an effective FP method reduces maternal deaths by preventing high-risk pregnancies among women who are too young, too old, or too ill to bear children safely.
- **Maternal deaths can be prevented if unwanted pregnancies are avoided and pregnancies are spaced by at least two years.**

Reduction in Infant and Child Mortality and Morbidity

- Globally, an estimated 14.5 million infants and children under age five die every year, mainly from respiratory and diarrheal diseases complicated by malnutrition.
- Multiple worldwide studies show that **spacing of births by at least two years could prevent at least 20%** of these infant deaths and significantly reduce the devastating morbidity effects suffered by these children.

Other Health Benefits of FP

- **FP saves lives.**
- Studies show that combined oral contraceptives (**COCs**) provide significant non-contraceptive health benefits. They are known to reduce the incidence of the following diseases and disorders:
 - Ectopic pregnancy
 - Ovarian cancer
 - Endometrial cancer
 - Ovarian cysts
 - Benign breast disease
 - Excessive menstrual bleeding and associated anemia
 - Menstrual cramping, pain and discomfort
- **Breastfeeding** protects infants against diarrheal and other infectious diseases, as well as protecting mother from postpartum hemorrhage.
- **All FP methods** help women with AIDS to avoid pregnancy and thus avoid bearing HIV-infected children.

Participant Handout 1.3: Maternal High-Risk Factors

In many developing countries, the high-risk factors referred to as "**Too Young, Too Old, Too Many, Too Close**" are major culprits of maternal and infant mortality.

Age ("Too Young, Too Old")

- In the developing world, pregnancy and childbirth are the leading causes of death in women under the age of 18 years.
- Mothers younger than 18 and older than 35 are at greater risk of prenatal complications and pregnancy-related death.
- Studies suggest that if pregnancy could be prevented in women under age 20 and over age 35, maternal mortality could be reduced by 8-40%.
- In _____, the Maternal Mortality Ratio (MMR) is estimated to be around _____/100,000 live births; the Infant Mortality Rate (IMR) is estimated to be about _____/1,000 live births.
- Infant mortality is particularly high in babies born to mothers under age 20 and over age 40.
- If childbirth could be postponed until the "too young" mother was old enough, and averted in mothers "too old" and "too ill," the impact on both maternal and infant mortality would be significant.
- Factors that would greatly reduce MMR and IMR in the "safe" age group (20-35) include:
 - Better access to pre- and postnatal care
 - Better access to contraceptive methods to permit child spacing
 - Improved nutrition
 - Better-trained village midwives
 - Improved childbirth and delivery conditions
 - Better access to specialists for management of complications from labor and birth
 - Better facilities for managing complications

Birth Number ("Too Many")

- Studies show that the more children a woman bears, the greater her risk of dying as a result of pregnancy and/or childbirth.
- Women who have had five or more deliveries are more likely to experience problems during pregnancy and labor and to require Caesarean section (which is often not readily available or not performed early enough).
- This group has a significantly higher risk of miscarriage and perinatal mortality than women undergoing their second or third delivery.

Participant Handout 1.3: Maternal High-Risk Factors cont.

Birth Interval ("Too Close")

- Studies have consistently shown a strong, direct relationship between birth intervals and infant/child mortality.
- Babies born less than two years after the previous baby are **twice as likely to die** as babies spaced by at least a two year interval.
- The child who has been displaced by the new baby is also at increased risk—on average, about one and a half times as likely to die if the new baby is born within two years of his or her birth because of early weaning and its accompanying risks of diarrheal disease and malnutrition.
- *Transparency 1.5* shows the estimated percent in IMR reduction if all births were spaced by at least two years.

Participant Handout 1.4: Demographic Data

Country	Total Fertility Rate	Contraceptive Prevalence Rate		Maternal Mortality Rate	Infant Mortality Rate
		Total	Modern		
<i>North Africa</i>					
Egypt	3.9	47	45	270	62
<i>West Africa</i>					
Burkina Faso	6.9	8	4	810	94
Cote d'Ivoire	7.4	3	1	—	88
Ghana	5.5	19	9	1000	66
Nigeria	6.5	6	4	800	87
Senegal	6.0	7	5	600	68
<i>East Africa</i>					
Eritrea	—	—	—	—	105
Ethiopia	6.6	4	3	560	120
Kenya	5.4	33	27	170	62
Madagascar	6.1	17	5	570	93
Mozambique	6.6	—	—	300	148
Tanzania	6.3	10	7	340	92
Uganda	7.4	5	3	550	115
Zimbabwe	4.4	48	42	—	53
<i>Middle Africa</i>					
Zaire	6.7	8	3	800	108
<i>South Africa</i>					
Botswana	4.6	33	32	250	41
South Africa	4.4	50	49	84	46
<i>West Asia</i>					
Azerbaijan	2.5	—	7	—	25
Jordan	5.6	40	27	48	34
Turkey	2.3	63	35	150	47
Yemen	7.7	10	6	—	83
<i>South Central Asia</i>					
Bangladesh	4.3	45	36	600	88
India	3.4	41	36	460	79
Iran	6.6	65	45	120	57

Country	Total Fertility Rate	Contraceptive Prevalence Rate		Maternal Mortality Rate	Infant Mortality Rate
		Total	Modern		
Kazakhstan	2.3	--	22	--	27
Kyrgyzstan	3.3	--	25	--	29
Nepal	5.1	23	22	830	98
Pakistan	6.1	12	9	500	91
Sri Lanka	2.6	66	44	80	18.4
Tajikistan	4.3	--	15	--	47
Turkmenistan	4.0	--	12	--	46
Uzbekistan	3.8	--	19	--	28
<i>Southeast Asia</i>					
Cambodia	5.8	--	--	500	111
Indonesia	3.0	50	47	450	66
Laos	6.3	--	--	300	102
Philippines	4.1	40	25	100	34
Thailand	2.2	66	64	50	35
Vietnam	3.7	49	37	120	42
<i>East Asia</i>					
China	2.0	83	81	95	44
<i>North America</i>					
United States	2.1	74	69	8	7.5
<i>Central America</i>					
Mexico	3.2	53	45	110	34
<i>South America</i>					
Bolivia	4.8	45	18	600	71
Brazil	3.0	66	56	200	58
Ecuador	3.8	53	41	170	40
Peru	3.5	59	33	300	60
<i>Northern Europe</i>					
United Kingdom	1.8	72	71	100	6.2

Definitions

Total Fertility Rate (TFR): Average number of children a woman would have assuming current age-specific birth rates.

Contraceptive Prevalence Rate (CPR): Percent of currently married or "in-union" women of reproductive age (ages 15 to 49) who are using any form of contraception. "Modern" methods include clinic and supply methods such as the pill, IUD, condom, and sterilization. The rates presented in this chart are from demographic information for the years from 1988 - 1994.

Maternal Mortality Ratio (MMR): Number of deaths of women from pregnancy-related causes per 100,000 live births in one year. The rates presented in this chart are from demographic information for the years 1990 - 1992.

Infant Mortality Rate (IMR): Infant deaths per 1000 live births.

Source: Population Reference Bureau, 1875 Connecticut Ave., Suite 520, Washington, DC 20009-5728
tel: (202) 483-1100

Participant Handout 1.5: Relative Risks of Contraception

There is widespread misinformation about the safety of some FP methods, particularly with regard to COCs. What are the facts? What are the actual risks associated with the use of these methods? Are the health benefits discussed earlier canceled by the risks of using contraceptives?

Multiple worldwide studies have shown that the most effective contraceptives are also the safest, once the risks associated with unwanted pregnancy and childbirth are included. Although both legal abortion and modern contraceptive methods involve some health risks, these health risks are significantly lower when compared with risks from pregnancy and childbirth. For example, the health risk associated with the COC for non-smoking women is 1.6 per 100,000 users. Contrast that with the death rate of 640 per 100,000 live births from pregnancy/childbirth in African women, 420/100,000 in Asian women, 270/100,000 in Latin American women and 220/100,000 in Caribbean women. Looking at risks associated with other activities helps to put the risks of contraceptive use into perspective.

The greatest risk of death in using contraceptives comes not from the contraceptive itself, but from occasional method failure or incorrect method use, which then may result in a dangerous pregnancy. For example, condoms in and of themselves are in no way harmful. However, if a condom breaks during use or is improperly used, the woman may get an STD/HIV infection or become pregnant and is then at increased risk of dying as a result of her pregnancy.

Participant Handout 2.1: Introduction

Worldwide, more and more couples of reproductive age are using modern contraceptive methods. In 1987, about 372 million of the world's couples (43%) used a modern method. For 1991, that figure had grown to 381 million couples, or 51%. The most popular method worldwide is VSC, followed by the pill and IUD. In recent times, as a result of the HIV/AIDS pandemic, the use of condoms has increased dramatically.

In _____, the use of modern contraceptive methods by eligible couples is estimated to be ____%. About ____% of couples use any method; ____% of the couples are using a modern method.

Participant Handout 2.2: Combined Oral Contraceptives (COCs)

Available now for over 30 years, COCs are one of the most extensively studied medications in history. They constitute a highly effective and popular family planning method and are safe for use by most women.

Mechanism of Action

COCs contain the hormones estrogen and progestin. Taken orally on a daily basis, the combined action of the two hormones prevents pregnancy chiefly by hampering the production of follicle-stimulating hormone (FSH) and luteinizing hormone (LH), thus suppressing ovulation; by creating a thick cervical mucus which hampers the transport of sperm; and by creating a thin, atrophic endometrium which deters implantation.

Effectiveness

COCs are effective. Their **typical pregnancy rate** is 8% in one year. As with any method which is client-dependent, effectiveness rates will vary. The perfect-use pregnancy rate is 1%.

Advantages

- Reduce dysmenorrhea
- Regulate the menstrual cycle
- Reduce menstrual flow (which may be useful to anemic women)
- Decrease pre-menstrual symptoms
- Decrease the risk of severe forms of pelvic inflammatory disease (PID)
- Decrease the risk of ectopic pregnancy
- Decrease the risk of ovarian and endometrial cancer
- Decrease the incidence of functional ovarian cysts
- Decrease the rate of benign breast disease
- Decrease the incidence of acne
- Client controls own fertility
- Well researched
- Does not interrupt sex
- Will not affect lactation after use has been established
- Can be stopped anytime
- Easily made available
- Highly effective, reversible, easy to use
- Safe for most women

Participant Handout 2.2: Combined Oral Contraceptives (COCs) cont.

Disadvantages

- Client-dependent; must be taken every day
- Requires regular/dependable supply
- COCs may have minor side effects in some clients, such as nausea, headache or breakthrough bleeding
- Women who smoke and are over 20 cigarettes a day and are over 35 years of age are at high risk for developing cardiovascular disease.
- Does not protect from STDs/HIV

Appropriate Users of COCs

COCs may be an appropriate choice for:

- Women and couples who want effective, reversible method
- Nulliparous women
- Women suffering from anemia due to heavy menstrual bleeding
- Women with irregular menstrual cycles
- Women with history of ectopic pregnancy
- Women with family history of ovarian cancer or history of benign, functional ovarian cysts

Participant Handout 2.3: Emergency Contraceptive Pills (ECPs)

ECPs are either high- or low-dose combined oral contraceptives or progestin-only pills taken in a specific regimen (the Yuzpe regimen) within 72 hours after unprotected sex in order to avoid an unwanted pregnancy.

Mechanism of Action

The precise mode of action of ECPs is uncertain and may be related to the time it is used in a woman's cycle. ECPs are thought to prevent ovulation, fertilization, and/or implantation. ECPs are not effective once the process of implantation of a fertilized ovum has begun. **ECPs will not cause an abortion** and have no known adverse effects on (the growth and development of) an established pregnancy.

Effectiveness of ECPs

After a single act of unprotected sexual intercourse, the Yuzpe regimen (which contains estrogen and a progestin) fails in about two percent of women who use it correctly. (The chances of pregnancy are approximately four times greater when no emergency contraceptive is used.) The progestin-only regimen is equally effective.

Overall, ECPs are less effective than regular contraceptive methods. Because the ECP pregnancy rate is based on a one-time use, it cannot be directly compared to failure rates of regular contraceptives, which represent the risk of failure during a full year of use. If ECPs were to be used frequently, the failure rate during a full year of use would be higher than those of regular hormonal contraceptives. Therefore, ECPs are inappropriate for regular use.

Advantages

- Well-documented safety
- Drug exposure and side effects are of short duration
- Readily available (COCs containing EE and LNG)
- Convenient and easy to use
- Multiple contraceptive mechanisms: Prevents ovulation and implantation
- Reduce the risk of unwanted pregnancy
- Reduce the need for abortions
- Appropriate for young adults who may have unplanned sex and who may be less likely than adults to be prepared for a first sexual encounter
- Can provide a bridge to the practice of regular contraception

Participant Handout 2.3: Emergency Contraceptive Pills (ECPs) cont.

Disadvantages

- Do not protect against the transmission of STDs and HIV
- Do not provide ongoing protection against pregnancy
- Should be used within three days of unprotected intercourse for highest efficacy
- May produce nausea and sometimes vomiting
- May change the time of the woman's next menstrual period
- Are more expensive and less effective than regular contraception
- Could result in increased pregnancy risk if used too frequently

Appropriate Users of ECPs

ECPs are suitable for a woman who experiences:

- Unprotected intercourse
- Contraceptive accidents (e.g., condom breakage or slippage, dislodged diaphragm, etc.)
- Contraceptive use errors (e.g., missed pills, incorrect use of barrier methods, miscalculated safe days with natural family planning method, etc.)
- Sexual assault or other non-consensual intercourse

Participant Handout 2.4: Progestin-Only Pills

Progestin-only pills, like other progestin-only contraceptives (i.e., Norplant implants and DMPA), contain no estrogen. They are administered orally, but other delivery mechanisms include injections (DMPA), implants (Norplant), IUDs (Progestasert), or vaginal rings. The DMPA injectable has been in use for some 20 years and POPs for about 12. One of the newer progestin methods available is the Norplant implant.

Mechanism of Action

The progestin in POPs prevents pregnancy by suppressing ovulation in many cycles (not all), and by thickening the cervical mucus and creating a thin endometrium which hampers sperm transport.

Effectiveness

POPs are effective, even though they contain about one-third the progestin in COCs. POPs have a **typical pregnancy rate** varying from 8-12% (estimated based on lack of specific data). Pregnancies will be fewer in breastfeeding women. However, the effectiveness of POPs is client-dependent; **the pill must be taken at the same time every day**. It is important for the client to understand that **even one pill missed can render the method ineffective** for that cycle. POPs become effective within seven days if begun on the first day of the menstrual cycle. If the POP is started on day two to day five of the cycle, the POPs will not become fully effective until after ovulation for that cycle, and the client should use a back-up method (condom, spermicide, or other non-hormonal method) for two weeks. Clients must be counseled particularly well on these points.

Advantages

- Highly effective when used correctly
- Do not affect breastfeeding
- Do not increase risk of blood clotting
- Decreases menstrual pain and amount of bleeding

Disadvantages

- **Must be taken at same time every day**
- May produce minor side effects, including amenorrhea, headaches, weight gain/loss, mood changes, nausea, breast tenderness
- Does not prevent ectopic pregnancy
- Does not protect against future ovarian cysts
- Does not protect against STDs/HIV

Participant Handout 2.4: Progestin-Only Pills cont.

Appropriate Users of POPs

POPs may be an appropriate choice for:

- Breastfeeding women who need/want contraception
- Women who experience estrogen-related side effects when using COCs
- Women with high blood pressure
- Women over 35 who smoke and do not want to use an IUD or VSC
- Women with sickle cell anemia

Participant Handout 2.5: DMPA

DMPA (depo-medroxyprogesterone acetate) contains the hormone progesterone. It is a long-acting method which slowly releases the hormone, and is given by intramuscular injection, required every 12 weeks.

Mechanism of Action

DMPA suppresses ovulation in all cycles, and thickens cervical mucus and a thin endometrium, which hampers sperm transport.

Effectiveness

DMPA is highly effective, with a pregnancy rate of less than 1%. Studies show that approximately only one woman out of 400 who use DMPA for a year will become pregnant.

Advantages

- Highly effective, long-acting, private, convenient
- Reversible (with some delay in fertility return)
- Appropriate for women over 35 with estrogen precautions and/or those who don't want more children but want a reversible method
- May be used by breastfeeding women (more than six weeks postpartum)
- Unrelated to coitus and easy to use
- Has long shelf-life and does not need refrigeration
- Reduces frequency of fibroids
- Lessens incidence of ovarian cysts
- Reduces benign breast lumps
- Protects against ectopic pregnancy (since ovulation does not occur)
- Reduces symptoms of endometriosis (DMPA is sometimes used to treat)
- Protects against endometrial and probably ovarian cancer
- Provides immediate postpartum or postabortion contraception
- May be used by women taking Rifampin

Disadvantages

- Menstrual changes in all users
- Increased appetite, causing weight gain in some cases
- Delay in return to fertility after discontinuing (pregnancy is delayed two to four months longer than with other contraceptives)
- Since it is long-acting, DMPA cannot be easily discontinued or removed from the body in case of complications or if pregnancy is desired.
- Offers no protection against STDs/HIV

Participant Handout 2.5: DMPA cont.

Appropriate Users of DMPA

DMPA may be an appropriate choice for:

- Women who want long-term spacing or to postpone pregnancy for at least two years
- Women who have developed estrogen-related side effects or who are at risk of developing cardiovascular problems
- Breastfeeding mothers (more than six weeks postpartum)
- Women who desire private, convenient, no-bother method unrelated to coitus and daily activities
- Women who have problems of compliance with oral contraceptive regimens

Participant Handout 2.6: Norplant Implants

Developed by the Population Council, the Norplant implant system consists of six thin, flexible silastic capsules which are inserted just under the skin of the inner upper arm by a trained provider. The capsules contain the progestin levonogestrel, which is released through the capsule walls in a continuous low dose over five years.

Mechanism of Action

Like DMPA, Norplant implants work by consistently suppressing ovulation and by producing a thick, scanty cervical mucus which hampers sperm transport.

Effectiveness

Norplant implants are highly effective, with a pregnancy rate of less than 1% over the course of a year (a figure comparable to VSC). Norplant implants provide effective protection for five years, after which time its effectiveness diminishes and it should be removed.

Advantages

- Extremely effective
- Long-lasting
- Reversible with prompt fertility return
- Can be used by breastfeeding women (more than six weeks postpartum)
- Easy to use, unrelated to coitus, comfortable
- Has few side effects

Disadvantages

- Requires minor surgical procedure to insert/remove
- Requires availability of trained/skilled service provider
- Alteration in menstrual pattern common though not serious
- Offers no protection against STDs/HIV

Appropriate Users of Norplant Implants

Norplant may be an appropriate choice for:

- Women who want long-term birth spacing, and those who desire no more children but either do not want or are not appropriate candidates for VSC
- Women who are nulliparous and want long-term, reversible protection
- Breastfeeding mothers (six weeks or more postpartum)
- Women with precautions for estrogen in COC
- Women over 35 who smoke

Participant Handout 2.7: Intrauterine Devices

A popular and very effective method, modern IUDs have been available since the 1960s, with the development of the Lippes Loop. There are two categories of IUDs: unmedicated (inert) and medicated. The Lippes Loop is an example of an unmedicated IUD. Medicated IUDs are those that are either copper-bearing, such as the second-generation Copper T 380A (TCu 380A) or the Multiload 375 (MLCu 375), or hormone-releasing, such as the Progestasert. The copper on plastic IUDs increases their effectiveness and extends their effective lifespan. There are about several types of IUDs used worldwide.

Mechanism of Action

Recent studies of the IUD indicate that the copper-bearing IUDs' principal mechanism of action (MOA) is to interfere with fertilization. When the IUD is in place, the transport of sperm and eggs through the fallopian tubes is altered, preventing fertilization. IUDs have several other MOAs, including the destruction of sperm and egg secondary to vaseptic inflammatory reaction in the uterus. IUDs, which contain progesterone, also cause the thickening of cervical mucus, which hampers sperm transport.

Effectiveness

The IUD is highly effective, with different pregnancy rates for the various types. Older, inert IUDs have a pregnancy rate above 2% per year. The newer TCu 380A and MLCu 375 have pregnancy rates of less than 1% per year. IUDs also have a good continuation rate, higher than most other reversible methods.

Advantages

- Highly effective
- Safe for most women not at risk of STD/HIV
- May be safely used by lactating and immediate postpartum (within 48-72 hours after delivery) women (with provider trained in PP insertion technique)
- Good choice for older women with COC precautions
- Long duration of use (five years for MLCu 375, up to ten years for TCu 380A)
- Unrelated to coitus, private
- Does not interact with other medications

Disadvantages

- Does not protect against STDs/HIV
- May place client at risk of PID if she is at risk of STDs for any reason
- May expose client to infection during insertion
- Requires specially-trained provider
- Side effects include heavier/longer menstrual periods
- Increased cramping/spotting fairly common in first three months
- Serious complications (although rare) require immediate attention and reliable, high-quality back-up services

Participant Handout 2.7: Intrauterine Devices cont.

Appropriate Users of IUDs

An IUD may be an appropriate choice for the client who:

- Has healthy reproductive tract
- Has one or more children
- Is in mutually monogamous sexual relationship and not at risk for STDs/HIV
- Desires no more children and does not want VSC
- Wants long-term, reversible method and has children
- Is breastfeeding
- Wants effective method but has precautions for hormonal methods
- Is immediately postpartum (48-72 hours) and wants effective method that will not interfere with breastfeeding

Participant Handout 2.8: Voluntary Surgical Contraception

Commonly acknowledged to be quick, easy, safe, and effective, female sterilization is the most widely used contraceptive method worldwide. An estimated 182 million couples have chosen voluntary surgical contraception (VSC) as the means to prevent further pregnancies; 140 million of these were female sterilizations. Services to provide female sterilization have greatly expanded in many countries, making it possible for more women to avail themselves of this procedure. In contrast, the male sterilization procedure, vasectomy, is one of the least known and least used contraceptive methods worldwide.

Mechanism of Action

Female sterilization and vasectomy are both relatively simple and safe surgical procedures. Female sterilization involves blocking the fallopian tubes by ligation, clips or bands in order to prevent sperm and ovum from uniting. Vasectomy involves blocking the vas deferens to prevent sperm from entering semen. The vasa are reached through two small incisions in the scrotum.

Effectiveness

Neither procedure affects sexual performance, and both are highly effective. Female sterilization pregnancy rates are less than 1% in the first year and pregnancy is even less frequent in subsequent years. Vasectomy pregnancy rates are also less than 1%

An important point to make when counseling for vasectomy is that it takes 20 ejaculations for the man to be free of sperm following a vasectomy; he should use a condom during every act of intercourse until he has had 20 ejaculations. Both female sterilization and vasectomy are permanent and must be assumed to be irreversible by the client.

Advantages (for both men and women)

- Safe, convenient, highly effective
- Permanent
- Inexpensive in long run
- Minimal risk of complications
- No long-term health effects
- Requires only a single procedure
- Surgery is relatively quick (a few minutes for men, usually less than 30 minutes for women)

Participant Handout 2.8: Voluntary Surgical Contraception cont.

Disadvantages (for both men and women)

- Requires surgical procedure
- Requires trained service providers
- Permanent; difficult to reverse
- Does not protect against STDs/HIV

Appropriate Users of VSC

VSC may be an appropriate choice for:

- Women or men who are completely certain that they do not want more children
- Women whose life would be endangered by a pregnancy

Participant Handout 2.9: Condoms

Condoms are contraceptive devices (barrier methods) that cover the penis and prevent sperm from uniting with the ovum. In the age of STDs/HIV, condoms have assumed new importance. The condom is the only method (if used correctly) that is known to protect against STDs/HIV transmission.

Mechanism of Action

Barrier methods physically block or chemically inactivate sperm to prevent it from uniting with the ovum. The condom prevents sperm from entering the vagina.

Effectiveness

Condoms range from fairly effective to highly effective, depending on a number of variables (age of user, frequency of intercourse, use with spermicide, correct and consistent use, etc.). Typical user pregnancy rates are about 12%. Used consistently and correctly, condoms have a pregnancy rate of approximately 3%.

Advantages

- Can be very effective in protecting from STDs/HIV
- Can be effective in preventing pregnancy, depending on correctness of use
- Easy to use, readily available in many locations, relatively inexpensive
- Only reversible male contraceptive
- Very useful as back-up method

Disadvantages

- Interrupts coitus
- High probability of incorrect or inconsistent use
- Can deteriorate if incorrectly stored

Appropriate Users of Condoms

Condoms may be an appropriate choice for:

- Individuals or couples at risk of STDs/HIV
- Women with a condition considered to be precaution to more effective methods
- Breastfeeding women who need a contraceptive
- Women needing back-up method

Participant Handout 2.10: Lactational Amenorrhea Method (LAM)

LAM is a family planning method for breastfeeding mothers which provides natural protection against pregnancy for up to six months after birth and encourages the timely introduction of complementary family planning methods during continued breastfeeding.

Mechanism of Action

LAM is based on the physiological infertility of breastfeeding women. The infant's suckling at the breast sends neural signals to the mother's hypothalamus. This influences the level and rhythm of gonadotropin-releasing hormone (GnRH) secretion. GnRH influences pituitary release of FSH and LH, the hormones responsible for follicle development and ovulation. Hence, breastfeeding results in decreased and disorganized follicular development. Without ovulation, fertilization can not take place.

Effectiveness

If using the LAM technique perfectly, a woman has less than a 2% chance of pregnancy in six months. She must meet the following criteria:

- She is less than six months postpartum,
- She is amenorrheic, and
- She is fully or almost fully breastfeeding.

Recent clinical trials have confirmed "consistent and correct use" effectiveness rate.

Advantages

- Can be started immediately after delivery
- Requires no prescription
- Carries no side effects or precautions
- Economical
- Very convenient
- Requires no chemical substances or mechanical devices
- Helps protect infant from diarrhea and other infectious diseases

Disadvantages

- Can only be used during the early postpartum period
- May be difficult for woman to maintain pattern of fully or almost fully breastfeeding
- Provides no protection against STDs/HIV

Appropriate Users of LAM

LAM may be an appropriate choice for women who:

- Can maintain patterns of fully or almost fully breastfeeding

Participant Handout 2.11: Fertility Awareness Methods

Fertility awareness methods are methods that rely on various techniques to identify a woman's fertile days (the days on which she can become pregnant). These methods monitor the various changes and signs that occur in a woman's body during each menstrual cycle, which may indicate when she is fertile and when she is not (the "safe" days). By avoiding intercourse on "unsafe" days, a woman may avoid pregnancy. These methods can work for many women with varying degrees of reliability. However, each requires a considerable degree of instruction and a high level of motivation and commitment on the part of the couple in order to be used successfully.

Mechanism of Action

The **Rhythm (or Calendar) Method** is one of the oldest and most widely practiced fertility awareness methods worldwide. This method allows the woman to calculate the fertile days of her cycle. To use the Rhythm Method, the woman keeps a strict record of the length of her last six cycles (counting the first day of bleeding as the first day of a new cycle) and then uses a simple formula to identify her fertile days. She counts the number of days in the shortest cycle, and subtracts 18, using the answer to estimate the first day of fertility in a cycle. To estimate the last day of fertility, the woman determines the number of days in her longest cycle, subtracts 11, and uses the answer.

The **Basal Body Temperature (BBT) Method** requires the woman to take her own temperature every morning on awaking and record it on a chart over several months. By doing this she can determine her time of ovulation. A drop in the BBT sometimes precedes ovulation by 12 to 24 hours and rises immediately after ovulation, staying elevated slightly (0.2° to 0.5°C) until her next menstrual period.

To use the **Cervical Mucus Method (CMM) (Billings Method)**, the woman monitors and records on a daily basis the changes in her cervical mucus discharge. Typically, there is little mucus discharge for a few days following menstruation. Then the mucus becomes sticky/pasty or crumbly/slightly yellow or white. As ovulation nears, the mucus becomes slippery, white, clear and wetter. Following ovulation, the mucus becomes sticky/pasty again.

The **Symptothermal Method (STM)** combines several techniques to predict ovulation. The woman monitors her cervical mucus (as in the Billings Method) and her temperature changes (as in the BBT method), including other signs of ovulation, like breast tenderness, back pain, abdominal pain, and light intermenstrual bleeding. She must abstain from the first sign of wet cervical mucus until her body temperature has remained elevated for three days after the peak day (the last day of clear, slippery mucus) or until the fourth day after the thin mucus is no longer observed, whichever is later.

Participant Handout 2.11: Fertility Awareness Methods cont.

Effectiveness

Fertility awareness methods have a typical pregnancy rate of about 20% in the first year. Depending on variables such as consistency of use, regularity of menstrual cycles, and user-related factors, consistent and correct use effectiveness can reach 98%. When used in combination with a barrier method, effectiveness is increased.

Advantages

- No or low cost
- No systemic products/no physical side effects
- Immediately reversible
- Acceptable to many religious faiths
- Responsibility for family planning is shared by both partners

Disadvantages

- Requires considerable client instruction
- Requires high level of client responsibility: women must keep daily records
- Couples must cooperate in order to avoid sexual relations during fertile days (about 10-15 days each month), unless a barrier method is used at that time
- Women with irregular menstrual periods may be unable to use rhythm or BBT methods
- Does not protect against STDs/HIV

Appropriate Users of Fertility Awareness Methods

Fertility awareness methods may be appropriate for client who:

- Will not or cannot use other methods for personal or religious reasons
- Has conditions that are a precaution for hormonal or other methods
- Finds that using a more effective method is not crucial

Participant Handout 2.12: Medical and Other Barriers

Medical Barriers

- Restrictions on who can provide certain clinical methods like the COC/IUD
- Some methods only available with doctor's prescription
- Clinical guidelines/regulations listing elaborate physical/laboratory exams before agreeing to provide certain methods
- Limiting the number of COC cycles dispensed at first and follow-up visits
- Requiring that much irrelevant information be included in the client history
- Imposing age and parity restrictions on potential clients of injectable contraceptives
- Restricting access to non-clinical methods such as condoms and spermicides by offering them only at clinics
- Limiting postpartum clients to a choice of condoms or spermicides
- Requiring frequent follow-up visits for IUDs

Social/Cultural Barriers

- Cultural privileging of early marriage/early childbearing
- Son preference
- Mothers-in-law or other family members
- Spousal consent required for some methods

Program Barriers

- Chronic/periodic shortages (e.g. COC/IUD)
- Inadequately trained FP staff
- Providing only small amounts at a time of some methods (COCs, for example)
- Minimum age/minimum number of children required before VSC would be approved
- Delay in approvals of certain methods (for example Norplant implants)

Political Barriers

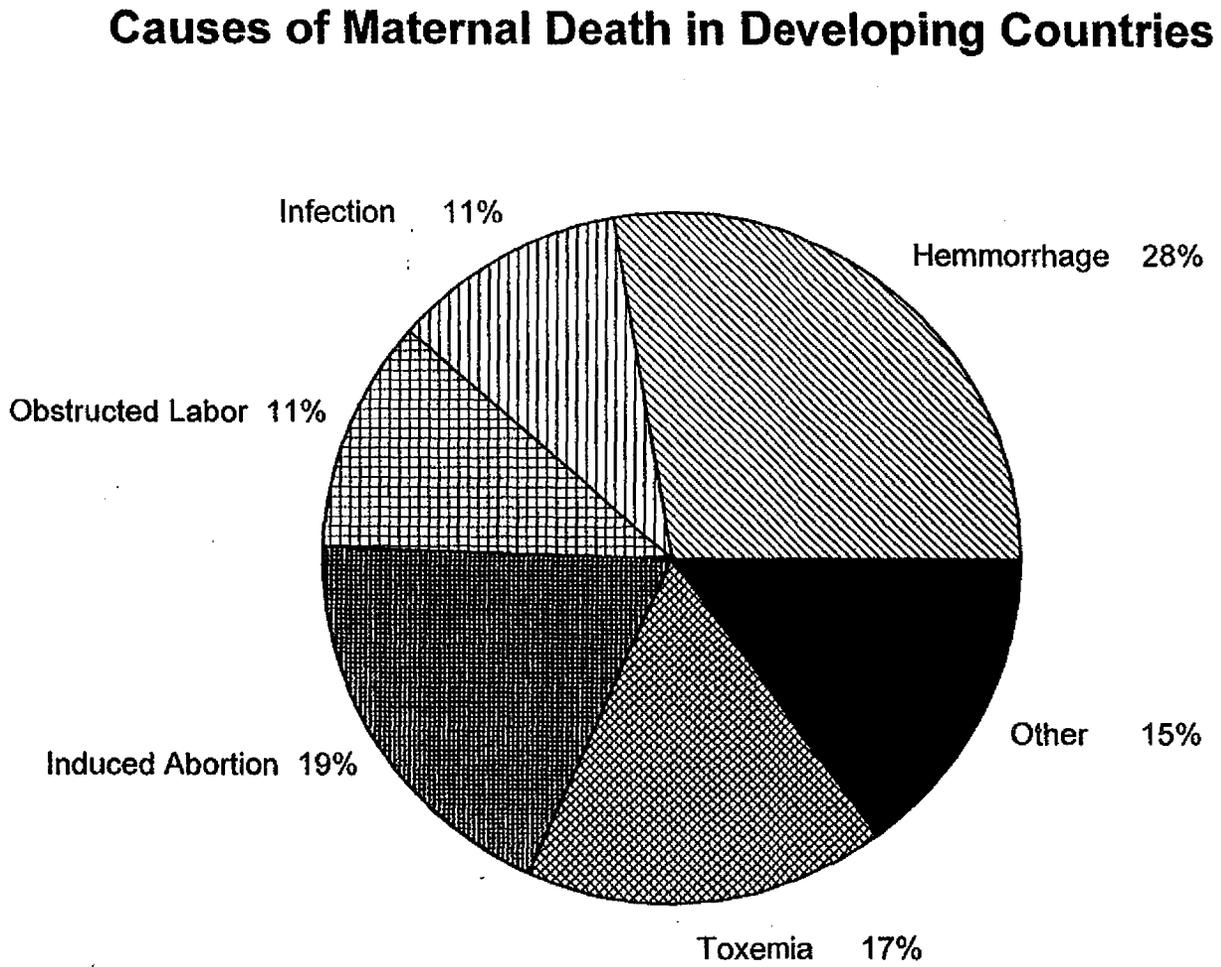
Legislative/Legal Barriers

Transparency 1.1: Unit 1 Objectives

SPECIFIC LEARNING OBJECTIVES:

1. Explain key messages related to child spacing and maternal and child health.
2. Describe the major principles of family planning.
3. Describe the health benefits of family planning.
4. Explain the relationship between maternal and child mortality and the high-risk factors of maternal age, birth order, and birth interval.
5. Compare pregnancy and childbirth mortality risks with contraceptive use mortality risks.

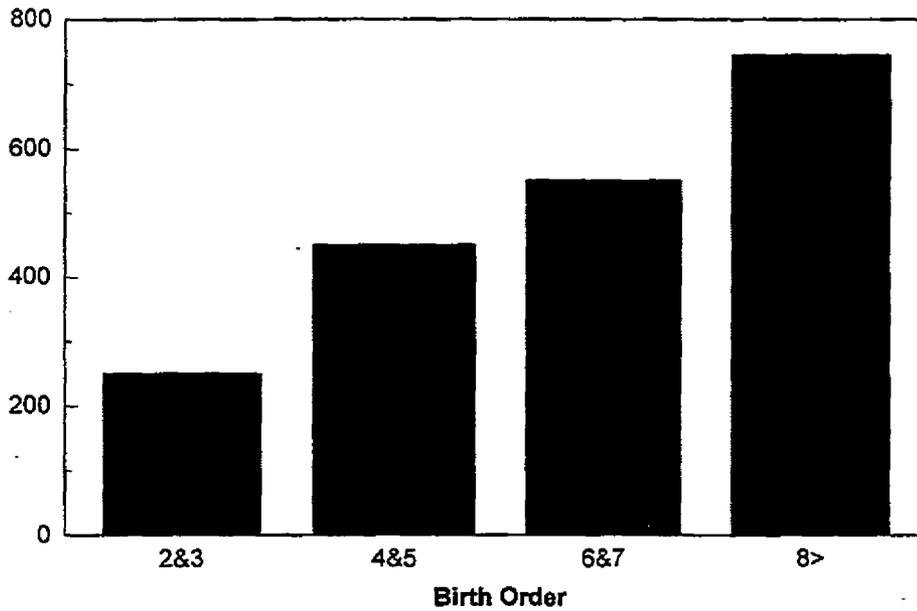
Transparency 1.2: Causes of Maternal Death in Developing Countries



Source: Family Planning Saves Lives, 2nd ed.
Washington, DC: Population Reference Bureau, 1991, p.9.

Transparency 1.3: Maternal Deaths by Birth Order Matlab, Bangladesh, 1968 - 1970

Deaths per 100,000 Live Births



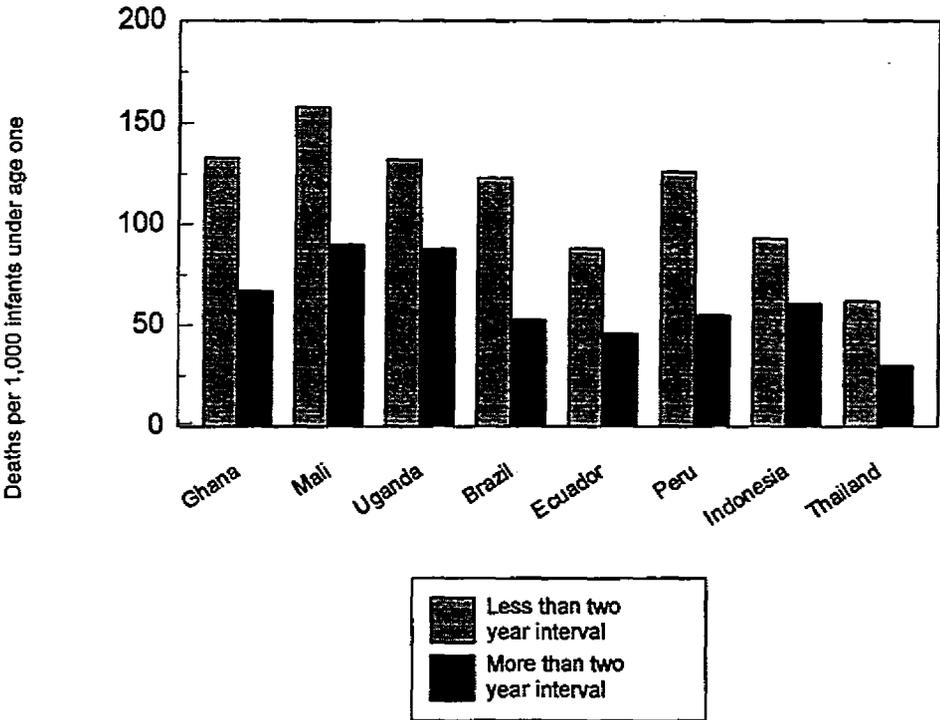
Source: INTRAH, Guidelines for Clinical Procedures in Family Planning, 2nd ed. Chapel Hill, NC: Population Reference Bureau, 1993, p.8

Transparency 1.4: A Comparison of Death Rates from Pregnancy or Childbirth and from Various Contraceptive Methods

Women's Death Rate from Pregnancy and Childbirth (in one year)	
<i>Region</i>	<i>Deaths per 100,000 births</i>
World	390
Africa	640
Asia	420
Caribbean	220
Latin America	270
Developed Countries	30
<p>Note: A woman's lifetime risk of dying from maternal causes is affected by her health status, available medical care, and the number of times she becomes pregnant.</p>	
Women's Death Rate from Using Contraceptives (in one year)	
<i>Method</i>	<i>Deaths per 100,000 Users</i>
Oral Contraceptives (nonsmoker)	1.6
Oral Contraceptives (smoker)	6.3
IUD	1.0
Barrier Methods	0.0
Natural Methods	0.0
Female Sterilization	5.0
<p>Note: The contraceptive risks are based on United States data. At this time, there are no reliable sources of contraceptive risk information for developing countries. These risk estimates do NOT include the risk of death from pregnancy due to method failure. Deaths from female sterilization surgery are virtually zero after the first year.</p>	

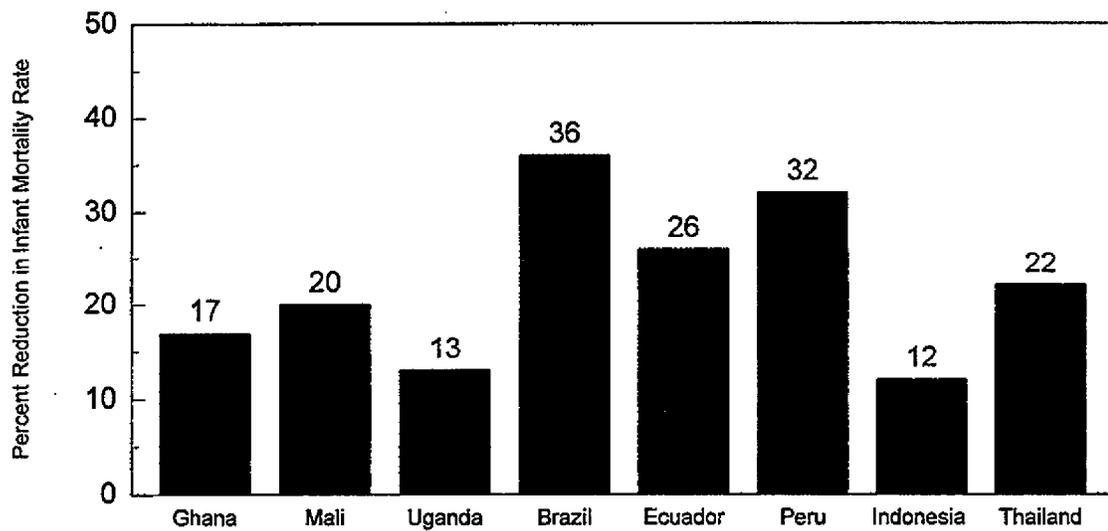
Source: Family Planning Saves Lives, 2nd. ed. Population Reference Bureau, 1991, p. 12.

Transparency 1.5: A Comparison of Mortality Rates for Infants Born After Short or Long Intervals



Source: Family Planning Saves Lives, 2nd. ed.
Washington, DC: Population Reference Bureau, 1991, p. 5.

Transparency 1.6: Estimated Percent Reduction in Infant Mortality Rate if All Babies were Born After at least Two-Year Interval



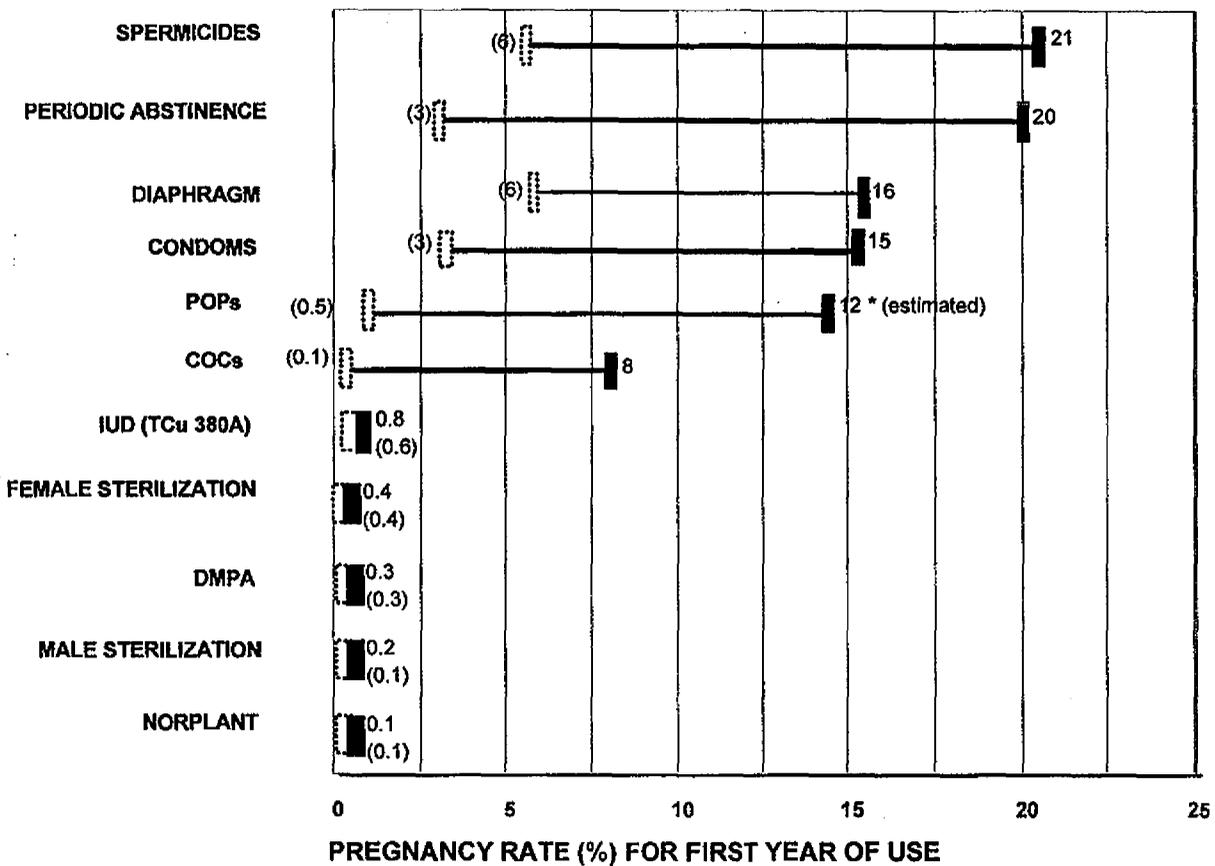
Source: Family Planning Saves Lives, 2nd Ed.
Washington, DC: Population Reference Bureau, 1991, p. 8.

Transparency 2.1: Unit 2 Objectives

SPECIFIC LEARNING OBJECTIVES:

1. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of hormonal contraceptives including combined oral contraceptives (COCs); progestin-only pills (POPs); emergency contraceptive pills (ECPs); the progestin-only injectable DMPA; and Norplant implants.
2. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of IUDs.
3. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of voluntary surgical contraception (female sterilization and vasectomy).
4. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of condoms.
5. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of the lactational amenorrhea method (LAM).
6. Describe the mechanism of action, effectiveness, advantages, disadvantages, and indications for use of fertility awareness methods.
7. Identify and discuss medical and other barriers to FP services in the country, and the role of health care providers in overcoming these.

Transparency 2.2: Contraceptive Efficacy by Method, Typical Use and Consistent and Correct Use Rates



* During breastfeeding POPs will have a lower pregnancy rate.

Contraceptive Pregnancy Rates for Typical and Perfect Use, by Method

Sources: Jones, E. and Forrest, J. D. "Contraceptive Failure Rates Based on the 1988 NSFG. Family Planning Perspectives 1992; 24(1): 12-19.
 Hatcher, R. Contraceptive Technology, 16th Revised Edition, pp. 112-3.

FAMILY PLANNING AND THE HEALTH OF WOMEN AND CHILDREN AND AN OVERVIEW OF FAMILY PLANNING METHODS PRE-/POST-TEST

Participant Name _____

Instructions: Circle the letter or letters corresponding with the correct answer or answers (some questions have more than one correct answer).

1. Which of the following would **not** be part of a comprehensive FP program?
 - a. informed choice
 - b. voluntarism
 - c. a narrow range of FP methods
 - d. FP services integrated with MCH services
 - e. confidentiality

2. The main cause of all deaths occurring in women age 15-44 years in developing countries is:
 - a. malnutrition
 - b. accidents
 - c. malaria
 - d. complications from pregnancy and childbirth
 - e. cardiovascular heart disease

3. The major direct causes of maternal death associated with pregnancy and childbirth in developing countries are:
 - a. toxemia
 - b. hemorrhage
 - c. obstructed labor
 - d. infection
 - e. complications from unsafe induced abortion
 - f. all of the above

4. It has been estimated that maternal deaths in developing countries could be diminished if:
 - a. all women were literate
 - b. unwanted pregnancies could be avoided
 - c. pregnancies could be spaced by at least 1 year
 - d. pregnancies could be spaced by at least 2 years
 - e. economic conditions for women were improved
 - f. all of the above

5. Risk factors which make a pregnancy particularly dangerous for a mother and baby include:
 - a. mother age 20-35
 - b. mother age 18 and younger
 - c. mother age 35 and older
 - d. mother has more than 4 children
 - e. mother's last pregnancy less than 2 years before
 - f. unwanted/unplanned pregnancy

6. Babies born at the end of a birth interval of less than 2 years
 - a. are at reduced risk of dying in infancy
 - b. are at twice the risk of dying in infancy
 - c. are at the same risk as a child born at end of a birth interval of more than 2 years
 - d. have no change in mortality risk
 - e. none of the above

7. A child displaced by a new baby born at the end of a short birth interval is at increased risk of dying because of:
 - a. premature weaning from the breast
 - b. competition with newborn for mother's attention, etc.
 - c. competition with newborn for scarce resources to buy food, medicine and medical care
 - d. diarrheal and respiratory diseases
 - e. all of the above

8. Factors that would reduce contraceptive-method failure are:
 - a. thorough screening
 - b. use of methods that are not client-dependent
 - c. thorough counseling for correct method use
 - d. knowledgeable and skilled service providers
 - e. all of the above

9. The effective life of the TCU 380A is:
 - a. 6 months
 - b. 1 year
 - c. 2 years
 - d. 3 years
 - e. 10 years

10. The progestin-only pill (POP) must be taken
 - a. every day
 - b. every day at the same time
 - c. every other day
 - d. once every 12 weeks

14. Match the contraceptive method (Column A) with its description (Column B):

COLUMN A

COLUMN B

- | | |
|----------------------|---|
| 1. ___ The COC | a. Injection containing a synthetic progestin similar to the natural hormone progesterone |
| 2. ___ The IUD | b. Thin latex sheath which is placed on man's penis |
| 3. ___ DMPA | c. A fertility awareness method that combines several techniques to predict ovulation |
| 4. ___ Condoms | d. Women who fully or almost fully breastfeed, are amenorrheic, and are less than 6 months postpartum are effectively protected from pregnancy by this method |
| 5. ___ VSC | e. A contraceptive pill containing estrogen and progestin |
| 6. ___ Symptothermal | f. A contraceptive pill containing progestin only |
| 7. ___ LAM | g. A plastic or plastic-and-copper device placed in woman's uterus |
| 8. ___ Spermicides | h. A foam/tablet/jelly placed in woman's vagina to kill sperm |
| 9. ___ POP | i. A permanent surgical method of contraception |

15. Fill in either True (T) or False (F) in the blank space provided.

- a. _____ Mortality risks associated with the use of modern contraceptive methods are greater than those associated with pregnancy and childbirth.
- b. _____ International studies show that the IMR decreases as birth interval increases.
- c. _____ Women under age 18 and over age 35 are at increased risk of prenatal complication.
- d. _____ Women who have 5 or more pregnancies are at increased risk of prenatal complications and pregnancy-related death.
- e. _____ The IUD protects a woman from STDs.
- f. _____ Condoms can protect both men and women from STDs/HIV.

FAMILY PLANNING AND THE HEALTH OF WOMEN AND CHILDREN AND AN OVERVIEW OF FAMILY PLANNING METHODS PRE-/POST-TEST

Participant Name _____

Instructions: Circle the letter or letters corresponding with the correct answer or answers (some questions have more than one correct answer).

1. Which of the following would **not** be part of a comprehensive FP program?
 - a. informed choice
 - b. voluntarism
 - c. a narrow range of FP methods**
 - d. FP services integrated with MCH services
 - e. confidentiality

2. The main cause of all deaths occurring in women age 15-44 years in developing countries is:
 - a. malnutrition
 - b. accidents
 - c. malaria
 - d. complications from pregnancy and childbirth**
 - e. cardiovascular heart disease

3. The major direct causes of maternal death associated with pregnancy and childbirth in developing countries are:
 - a. toxemia
 - b. hemorrhage
 - c. obstructed labor
 - d. infection
 - e. complications from unsafe induced abortion
 - f. all of the above**

4. It has been estimated that maternal deaths in developing countries could be diminished if:
 - a. all women were literate
 - b. unwanted pregnancies could be avoided**
 - c. pregnancies could be spaced by at least 1 year
 - d. pregnancies could be spaced by at least 2 years**
 - e. economic conditions for women were improved
 - f. all of the above

5. Risk factors which make a pregnancy particularly dangerous for a mother and baby include:
 - a. mother age 20-35
 - b. mother age 18 and younger**
 - c. mother age 35 and older**
 - d. mother has more than 4 children**
 - e. mother's last pregnancy less than 2 years before**
 - f. unwanted/unplanned pregnancy**

6. Babies born at the end of a birth interval of less than 2 years
 - a. are at reduced risk of dying in infancy
 - b. are at twice the risk of dying in infancy**
 - c. are at the same risk as a child born at end of a birth interval of more than 2 years
 - d. have no change in mortality risk
 - e. none of the above

7. A child displaced by a new baby born at the end of a short birth interval is at increased risk of dying because of:
 - a. premature weaning from the breast
 - b. competition with newborn for mother's attention, etc.
 - c. competition with newborn for scarce resources to buy food, medicine and medical care
 - d. diarrheal and respiratory diseases
 - e. all of the above**

8. Factors that would reduce contraceptive-method failure are:
 - a. thorough screening**
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 - a. 6 months
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 - c. 2 years
 - d. 3 years
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 - a. every day
 - b. every day at the same time**
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14. Match the contraceptive method (Column A) with its description (Column B):

COLUMN A

COLUMN B

- | | |
|---------------------------|---|
| 1. <u>e</u> The COC | a. Injection containing a synthetic progestin similar to the natural hormone progesterone |
| 2. <u>g</u> The IUD | b. Thin latex sheath which is placed on man's penis |
| 3. <u>a</u> DMPA | c. A fertility awareness method that combines several techniques to predict ovulation |
| 4. <u>b</u> Condoms | d. Women who fully or almost fully breastfeed, are amenorrheic, and are less than 6 months postpartum are effectively protected from pregnancy by this method |
| 5. <u>i</u> VSC | e. A contraceptive pill containing estrogen and progestin |
| 6. <u>c</u> Symptothermal | f. A contraceptive pill containing progestin only |
| 7. <u>d</u> LAM | g. A plastic or plastic-and-copper device placed in woman's uterus |
| 8. <u>h</u> Spermicides | h. A foam/tablet/jelly placed in woman's vagina to kill sperm |
| 9. <u>f</u> POP | i. A permanent surgical method of contraception |

15. Fill in either True (T) or False (F) in the blank space provided.

- a. F Mortality risks associated with the use of modern contraceptive methods are greater than those associated with pregnancy and childbirth.
- b. T International studies show that the IMR decreases as birth interval increases.
- c. T Women under age 18 and over age 35 are at increased risk of prenatal complication.
- d. T Women who have 5 or more pregnancies are at increased risk of prenatal complications and pregnancy-related death.
- e. F The IUD protects a woman from STDs.
- f. T Condoms can protect both men and women from STDs/HIV.

*Module 1/Pre- and Post-test
Answer Key*

Comprehensive FP/RH Curriculum Participant Evaluation

Module 1: Family Planning and the Health of Women and Children and an Overview of FP Methods

Rate each of the following statements as to whether or not you agree with them, using the following key:

- | | |
|---|----------------------------|
| 5 | Strongly agree |
| 4 | Somewhat agree |
| 3 | Neither agree nor disagree |
| 2 | Somewhat disagree |
| 1 | Strongly disagree |

Course Materials

I feel that:

- | | |
|---|-----------|
| • The objectives of the module were clearly defined. | 5 4 3 2 1 |
| • The material was presented clearly and in an organized fashion. | 5 4 3 2 1 |
| • The pre-/post-test accurately assessed my in-course learning. | 5 4 3 2 1 |
| • The competency-based performance checklists were useful. | 5 4 3 2 1 |

Technical Information

- | | |
|---|-----------|
| I learned new information in this course. | 5 4 3 2 1 |
| I will now be able to: | |
| • explain the rationale for family planning to improve the health of women and children. | 5 4 3 2 1 |
| • describe the mechanism of action, effectiveness, advantages and disadvantages of the major family planning methods. | 5 4 3 2 1 |
| • describe medical and other barriers to quality FP services. | 5 4 3 2 1 |

Training Methodology

- | | |
|--|-----------|
| The trainers' presentations were clear and organized. | 5 4 3 2 1 |
| Class discussion contributed to my learning. | 5 4 3 2 1 |
| I learned practical skills in the role plays and case studies. | 5 4 3 2 1 |
| The required reading was informative. | 5 4 3 2 1 |
| The trainers encouraged my questions and input. | 5 4 3 2 1 |

Training Location & Schedule

The training site and schedule were convenient.

5 4 3 2 1

The necessary materials were available.

5 4 3 2 1

Suggestions

What was the most useful part of this training? _____

What was the least useful part of this training? _____

What suggestions do you have to improve the module? Please feel free to reference any of the topics above. _____
