REPRODUCTIVE HEALTH AND ITS COMPONENTS

Module 11a
Learning Objectives

Upon completion of this module, the student will be able to

- Trace the recent expansion of reproductive health policies
- Describe different components of reproductive health
The Reproductive Life Cycle

Newborn

Infancy - Childhood

Youth - Adolescence

Adult - Middle Age - Elderly

Death

Sexual Activity

Post-partum

Pregnancy

Childbirth
Reproductive Health Care

*The Old Paradigm (Before 1994)*

- **Family Planning**
  - Unmet need for contraception
- **Maternity Care**
  - Antenatal care
  - Safe childbirth
  - Post-partum care
- **Child Health Care**
  - Breast feeding promotion
  - Nutrition, growth monitoring
  - Immunizations
  - Sickness care (ORT, ARI, malaria, etc)
Human Rights and Reproductive Health

International Conference on Population and Development (ICPD), Cairo, 1994

♦ Reproductive and Sexual Health throughout the life cycle.
♦ Reproductive self determination including:
  - right to voluntary choice in marriage;
  - right to determine number, timing and spacing of ones children.

continued
Human Rights and Reproductive Health

ICPD, 1994

- *Equality and equity* for men and women in all spheres of life.
- *Sexual and reproductive security* including freedom from sexual violence and coercion.
Reproductive Health Care
Additions with the New Paradigm

1. Gender discrimination
   - Sex selective abortions
   - Son preference for food allocation, health care, education, etc.

2. Violence against women
   - Child pornography
   - Commercial sex
   - Female genital mutilation
   - Spouse abuse
   - Rape, incest

continued
Reproductive Health Care
Additions with the New Paradigm

3. Adolescent sexuality
4. Reproductive rights regarding marriage and childbearing
5. Gender equity and equality
6. Unintended pregnancy
   Emergency contraception
   Safe abortions

continued
Reproductive Health Care
Additions with the New Paradigm

7. Chronic complications of pregnancy and childbirth
8. Sexually transmitted diseases
   Acute infections
   Chronic complications, e.g.,
   - infertility
   - cervical cancer
9. HIV/AIDS
Burden of Disease in Developing Countries
Women 15-44 years

Other noncommunicable diseases 34%
Other communicable diseases 17%
Injuries 12%
Maternal 18%
STDs 9%
HIV 7%
Anemia 3%

Percentage Burden of Disease Contributed by Reproductive Health Problems by Region for Women 15-44 years

Defining Reproductive Health

‘Reproductive health’ implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

(World Health Organization, 1998)
Programmatic Goals for Reproductive Health *(WHO)*

- Experience healthy sexual development and maturation
- Achieve desired number of children safely
- Avoid illness, disease and disability related to sexuality and reproduction
- Be free from violence, and other harmful practices
Summary Slide

- Components of reproductive health new paradigm
- Reproductive health from human rights perspective
- Defining reproductive health
- Programmatic goals for reproductive health
Learning Objectives

Upon completion of this module, the student will be able to

- Explain the role of family planning in a reproductive health context
Family Planning Programs

Definition

* Family planning programs are organized efforts in the public and private sectors, to provide contraceptive supplies, services, and information to couples and individuals who want to space, or limit their children.
Family Planning: An Essential Component of Reproductive Health

- Helps couples to achieve their desired birth spacing and family size
- Offers protection against reproductive tract infections (condoms)
- Reduces maternal mortality and morbidity by avoiding unsafe abortions and high risk pregnancies
Trends in Contraceptive Use in Developing Countries

![Bar chart showing trends in contraceptive use in different regions between 1960 and 1990.](chart)

- SS Afr.: 0.05 (1960), 0.08 (1990)
- ME/NA: 0.02 (1960), 0.36 (1990)
- S. Asia: 0.15 (1960), 0.4 (1990)
- L. Amer.: 0.11 (1960), 0.6 (1990)
- E. Asia: 0.17 (1960), 0.7 (1990)

The chart illustrates the increase in contraceptive use in various regions from 1960 to 1990.
Trends in Fertility in Developing Countries

<table>
<thead>
<tr>
<th>Region</th>
<th>1960</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS Africa</td>
<td>6.7</td>
<td>6.5</td>
</tr>
<tr>
<td>ME/NA</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>So. Asia</td>
<td>6</td>
<td>4.2</td>
</tr>
<tr>
<td>L. America</td>
<td>5.9</td>
<td>3.2</td>
</tr>
<tr>
<td>E. Asia</td>
<td>5.8</td>
<td>2.6</td>
</tr>
</tbody>
</table>
Family Planning: Measuring the Need

- The “need” for family planning services in a population is not measured directly.
- What is actually measured is “unmet need for contraception.”
- This is only measured indirectly among women not using contraception by a series of questions in a survey.
Unmet Need for Contraception

Women are defined as having an \textit{unmet need} if they are:

- Fecund
- Married or living in union, AND
- Not using any contraception
- Do not want any more children, OR
- Want to postpone for at least two years

\textit{continued}
Unmet Need for Contraception

- Unmet need also includes women who are currently pregnant or with post-partum amenorrhea:
  - With unwanted or mistimed pregnancies/births, AND
  - Were not using contraception at time of last conception
Defining Unmet need - Kenya, 1993

Not using contraception 67%

Pregnant or amenorrheic 30%

Pregnancy intended 12.7%

Pregnancy mistimed 12.7%

Pregnancy unwanted 4.6%

Not pregnant or amenorrheic 37%

Fecund 24.6%

Infecund 12.6%

Want later 9.4%

Want no more 8.7%

Want soon 6.4%

Need for spacing 12.7%

Need for limiting 4.6%

Need for spacing 9.4%

Need for limiting 8.7%

Total unmet need 35.5%
Unmet Need and Contraceptive Use by Women’s Age, Kenya, 1993

Unmet need for spacing
Unmet need for limiting
Contraceptive use

% MWRA


0 10 20 30 40 50 60 70 80 90
Unmet Need for Contraception by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Spacing</th>
<th>Limiting</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSA</td>
<td>18.8</td>
<td>8</td>
</tr>
<tr>
<td>Northern Africa &amp; West Asia</td>
<td>10.1</td>
<td>9.7</td>
</tr>
<tr>
<td>Asia</td>
<td>8.3</td>
<td>9.3</td>
</tr>
<tr>
<td>Latin America &amp; Carribean</td>
<td>8.7</td>
<td>11.3</td>
</tr>
</tbody>
</table>
Reasons for Unmet Need

- Lack of access
  - To preferred method
  - To preferred provider

(Physical distance is not the only factor here as there are other “costs” limiting access such as monetary, psychological, and time)

continued
Reasons for Unmet Need

- Poor quality of services provided. This includes problems with:
  - Choice of methods
  - Provider competence
  - Information given to the clients
  - Provider-client relationships
  - Provision of related health care services
  - Follow-up care
Reasons for Unmet Need

- Health concerns
  - Actual side effects
  - Perceived side effects
- Lack of information and misinformation about:
  - Available methods
  - Mode of action/ how used
  - Side effects
  - Source/cost of methods

continued
Reasons for Unmet Need

- Family/community opposition
  - Pronatalism
  - Concerns about unfaithfulness
  - Fear of side effects
  - Objections to male providers
  - Religious objections
- Little perceived risk of pregnancy
- Ambivalence about fertility preferences
Meeting Unmet Need

- Improve access to good quality services
  - Offer choice of methods
  - Eliminate medical barriers
  - Expand service delivery points
    - Home delivery
    - Social marketing
  - Provide confidentiality and privacy

continued
Meeting Unmet Need

- Improve communication about
  - Legitimacy of family planning
  - Source of FP information and supplies
  - Misinformation and rumors regarding effects or side-effects
  - Risks of contraception
  - Risks of pregnancy

continued
Meeting Unmet Need

- Reach men/ husbands as well as women
- Link FP services to other services
  - Prenatal care
  - Post-partum care/breastfeeding
  - Immunization
  - Post-abortion care
  - Child health services
This concludes this session. The key concepts introduced in this session include:

- Significance of FP for achieving overall reproductive health
- Measuring the need for family planning (unmet need)
- Reasons for unmet need
- Programmatic strategies for meeting the unmet need
Safe Motherhood And Reproductive Health

Module 11c
Learning Objectives

Upon completion of this module, the student will be able to

- Describe the magnitude of maternal mortality and the social barriers to safe motherhood
Maternal Mortality and Morbidity: Why a Concern?

- Almost 600,000 women die yearly of pregnancy complications; 99% of these are in the developing world.
- For each woman who dies, an estimated 100 women suffer pregnancy related consequences.
- A leading cause of healthy years of life lost for women in reproductive age group in developing countries.
## Estimated Pregnancy Outcomes, 1998

<table>
<thead>
<tr>
<th></th>
<th>Intended</th>
<th>Unintended</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Births</strong></td>
<td>108</td>
<td>30</td>
<td>138</td>
</tr>
<tr>
<td><strong>Abortions</strong></td>
<td>-</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td><strong>Foetal losses</strong></td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>108</td>
<td>75</td>
<td>183</td>
</tr>
</tbody>
</table>
# Estimated Maternal Mortality, 1998

<table>
<thead>
<tr>
<th></th>
<th>Total events</th>
<th>Maternal deaths</th>
<th>Ratio per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Births</td>
<td>138,000,000</td>
<td>515,000</td>
<td>373</td>
</tr>
<tr>
<td>Abortions</td>
<td>45,000,000</td>
<td>70,000</td>
<td>156</td>
</tr>
<tr>
<td>Total</td>
<td>183,000,000</td>
<td>585,000</td>
<td>320</td>
</tr>
</tbody>
</table>
Maternal mortality ratios, 1990*

*Maternal deaths per 100,000 live births

- <29
- 30-99
- 100-199
- 200-499
- 500-999
- >1000
- not available
Medical Causes of Maternal Mortality

- Obstructed Labor: 7%
- Unsafe Abortion: 13%
- Other Direct Causes: 8%
- Indirect Causes: 20%
- Hemorrhage: 24%
- Infection: 15%
- Eclampsia: 13%
- Obstructed Labor: 7%
Social Causes of Maternal Mortality
The “Three Delays”

♦ Delay in decision to seek care
  – Inability to recognize serious complications
  – Acceptance of maternal death
  – Low status of women
  – Socio-cultural barriers to seeking care

♦ Delay in reaching care
  – Geographic barriers and lack of organization

♦ Delay in receiving care
  – Inadequate supplies and equipment
  – Poorly trained and/or poorly motivated personnel
Programmatic Strategies to Make Motherhood Safe

- Providing family planning
  - Helps to avoid births to mothers with high risks
    - Mothers too young or too old, or
    - Births spaced too closely together
  - Prevents unwanted pregnancies and unsafe abortions

continued
Programmatic Strategies to Make Motherhood Safe

- Family education about obstetric complications and the need for prompt medical care (First Delay)
- Ensuring effective community organization for transport in case of remote locations (Second Delay)

continued
Programmatic Strategies to Make Motherhood Safe

- Ensuring that skilled assistance during childbirth is available 24 hours a day *(Third Delay)*
Measurable Indicators of Safe Motherhood Programs

- Percent of mothers receiving prenatal care coverage
- Percentage of births attended by skilled health personnel
- Maternal mortality ratio
- Perinatal mortality rate
- Low birth weight incidence
Delivery Care and Maternal Mortality

Current Approach to Reduction of Maternal Mortality
The Higher the Proportion of Deliveries Attended by Skilled Attendant in a Country, the Lower the Country's Maternal Mortality Ratio

![Graph showing the relationship between maternal deaths and skilled attendance at delivery. The graph indicates a strong negative correlation, with a fitted line showing a logarithmic relationship. The R-squared value is 0.74.]
This concludes this part. The key concepts introduced in this part of this lecture include:

- The magnitude of maternal mortality and morbidity across different world regions
- Different causes of maternal mortality
- Programmatic strategies to make motherhood safe
Sexually Transmitted Diseases and Reproductive Health

Module 11d
Learning Objectives

- List some major sexually transmitted diseases, their complications and describe the scope of the problem
- Describe the impact of the HIV/AIDS epidemic in sub-Saharan Africa
Reproductive Tract Infections (RTIs)

Sexually transmitted (STDs)
- **Viral**
  - HIV, HPV
  - Hepatitis B
  - etc.
  - Incurable STDs
  - Cancers

- **Bacterial**
  - Gonorrhea
  - Chlamydia
  - Syphilis, etc.
  - Curable STDs
  - Reproductive disabilities

Non-sexually transmitted
- Bacterial vaginosis
- Infections associated with OB complications

Protozoal
- Trichomoniasis
Reproductive Tract Infections: Why Are They a Public Health Concern?

- Globally 333 million people infected each year with curable STDs
- Nearly 1 million new cases occur each day
- Responsible for greatest number of healthy years lost, after maternal causes, among women of reproductive age group in developing countries (excluding HIV/AIDS)
New Cases of Selected STDs Worldwide, 1995

- Syphilis: 12
- Gonorrhea: 62
- Chlamydia: 89
- Trichomoniasis: 170

**Estimated New Cases of Curable STD* Among Adults, 1995**

<table>
<thead>
<tr>
<th>Region</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>14 million</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>36 million</td>
</tr>
<tr>
<td>Western Europe</td>
<td>16 million</td>
</tr>
<tr>
<td>North Africa and Middle East</td>
<td>10 million</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>65 million</td>
</tr>
<tr>
<td>Eastern Europe and Central Asia</td>
<td>18 million</td>
</tr>
<tr>
<td>East Asia and Pacific</td>
<td>23 million</td>
</tr>
<tr>
<td>South and South-East Asia</td>
<td>150 million</td>
</tr>
<tr>
<td>Australasia</td>
<td>1 million</td>
</tr>
<tr>
<td><strong>Global Total</strong></td>
<td><strong>333 million</strong></td>
</tr>
</tbody>
</table>

*gonorrhoea, chlamydial infection, syphilis, and trichomoniasis*
STDs Are the Second Largest Health Burden Among Women in Developing Countries

- Maternal Causes: 18
- STD: 8.9
- Tuberculosis: 7
- HIV: 6.6
- Depressive Disorders: 5.8
- Self-Inflicted Injuries: 3.2
- Respiratory Infections: 2.5
- Anemia: 2.5
- Osteoarthritis: 2.2
- Motor Vehicle Injuries: 2.1
Major Consequences of STDs
Reproductive Health Problems

- Women
  - Pelvic inflammation
  - Infertility
  - Ectopic pregnancy
  - Spontaneous abortion

- Men
  - Epididymitis
  - Prostatitis
  - Infertility

continued
Major Consequences of STDs

Pregnancy Complications

- Women
  - Preterm delivery
  - Premature rupture of membranes
  - Puerperal sepsis
  - Postpartum infection

- Infants
  - Stillbirth
  - Low birth weight
  - Conjunctivitis
  - Pneumonia
  - Neonatal sepsis
  - Congenital abnormalities

continued
Major Consequences of STDs

Cancers

- Women
  - Cervical cancer
  - Vulva cancer
  - Vaginal cancer
  - Anal cancer
  - Liver cancer

- Men
  - Penile cancer
  - Anal cancer
  - Liver cancer
Reproductive Tract Infections: Implications for Women

- Women: physiologically more receptive to STDs
- Infection is more often asymptomatic in women
- More frequent and serious sequelae: both physiological and social
- Transmission during pregnancy with consequences for infant morbidity and mortality
Programmatic Challenges to Controlling RTI s/ STDs

- Lack of awareness of problem of RTI s and their consequences
- Lack of diagnostic or screening tests
- Large number of asymptomatic patients
- Limited and inaccessible health services with overburdened and untrained health workers

continued
Programmatic Challenges to Controlling RTIs/STDs

- Competition with other important health problems over limited resources
- Unequal gender relations
- Socio-cultural barriers and attached social stigma
Global Status of HIV/AIDS 1998

- 33.4 million are living with HIV
- Estimated 5.8 million newly infected in 1998
  - 2.1 million of these are women
  - 590,000 are children
- About 16,000 new infections occur daily
  - 90% in developing countries
- Majority of new HIV infected adults are < 25 years old
- 10.7 million adults and 3.2 million children have died since the epidemic began

Number of People with HIV/AIDS by Region - 1998

- Western Europe: 500,000
- Sub-Saharan Africa: 22.5 million
- Eastern Europe & Central Asia: 270,000
- North Africa & Middle East: 210,000
- South and South East Asia: 6.7 million
- North America: 890,000
- Caribbean: 330,000
- Latin America: 1.4 million
- Australia and New Zealand: 12,000
- East Asia & Pacific: 560,000

Total: 33.4 million

Spread of HIV in Sub-Saharan Africa, 1982-1997

Spread of HIV in Sub-Saharan Africa, 1982-1997

- **Outside region**: 0.0 - 0.5%
- **Data unavailable**: 0.5 - 2.0%
- **2.0 - 8.0%**
- **8.0 - 16.0%**
- **16.0 - 32.0%**

66
The Global View

A Global View of HIV Infection
Estimated Percentage of Adults, Aged 15-19, Infected with HIV
Impact of HIV/ AIDS on Health

- **Direct effect**: through AIDS deaths
  - Reversal of past gains in child survival
  - Decline in life expectancy

- **Indirect effects**
  - Strains on the health system
  - Facilitation of spread of other diseases, e.g., tuberculosis

Impact of AIDS on Population Growth Rates

- High mortality will result in population loss with a consequent decline in population growth rates.
- Population growth rate will remain positive though at a slower rate.
- Demographic impact is likely to intensify in future.

Socio-economic and Political Effects

- Severe strain on the health system with high morbidity levels
- Reduced economic productivity with losses in the most economically productive age group
- Increase in number of orphans
Summary Slide

This concludes this part. The key concepts introduced in this part include:

- The prevalence of sexually transmitted infections including HIV/AIDS across different world regions
- The demographic, health, social and political consequences of sexually transmitted infections including HIV/AIDS
Adolescents, Female Circumcision, Gender and Reproductive Health

Module 11e
Identify some reasons for special attention to reproductive health problems in adolescents
Describe the health problems surrounding female genital cutting
Relate gender concerns to reproductive health issues
Adolescent Reproductive Health

The World Health Organization defines adolescents as individuals between 10 and 19 years of age.
Adolescent Reproductive Health: Why a Special Concern?

- Half of world’s population is below age 25
- Special reproductive health risks
- Less informed, less experienced and less comfortable in accessing RH services
- Socio-cultural barriers to access to health care
Adolescents: Special Health Risks

- Early and unintended pregnancy: 40% of women give birth before age 20 in developing world
- Unsafe abortions: up to 4.4 million abortions each year among adolescents
- Increased risk of STDs: 60% of all new infections occur among 15 to 24 year olds
- Harmful traditional health practices: 2 million girls undergo female genital cutting each year
Adolescent Reproductive Health: Programmatic Challenges

- Adolescent sexuality: A sensitive subject in all cultures
- A hard to reach group
- Health care provider’s bias against adolescents
Adolescent Reproductive Health: Program Options

- Family life education programs to provide essential information regarding sex and reproduction
- Special integrated programs to meet the reproductive health needs of adolescents
- Access to contraceptives - controversial
  - Prevent unwanted pregnancies, abortions, and transmission of HIV/AIDS
  - Make them more promiscuous
Harmful Traditional Reproductive Health Practices

- Early marriage
- Female Genital Cutting/mutilation (FGM)
- “Dry sex” practices
- Dietary and other restrictions during pregnancy
- Heavy work during pregnancy
- Withholding colostrum from newborn
Female Genital Cutting

- **What is it?:** Partial or total removal of external female genitalia
- **Health and psychological consequences:**
  - Increased vulnerability to infections and hemorrhage
  - Difficulties in child birth
  - Chronic discomfort
  - Impairment of sexual life

*continued*
Female Genital Cutting

- Magnitude of problem-
  - 130 million girls and women have been circumcised world-wide (UNFPA)
  - 2 million believed to be at risk each year
- Accepted among all social and economic strata in some settings
- Has deep cultural roots
- More predominant among muslims
- Indicator of women’s low status relative to men
Strategies to Combat Female Genital Cutting

A multifaceted approach required:
- Legal
- Professional
- Social and culturally sensitive initiatives
- Behavior change communication programs
Combating Female Genital Cutting: An Example in Uganda

- The Reproductive, Educative and Community Health Gift Campaign in Uganda
  - Begun in 1995
  - Replaced FGM with a symbolic ritual
  - Addressed FGM within a broader reproductive health focus
  - Use of culturally appropriate persuasive approaches
  - Reduced FGM in Kapchorwa district by 36% in 1996
Gender and Reproductive Health

• ‘Gender‘ is a set of social and cultural practices that influence the different roles men and women play in society, and the relative power they yield.

• Involves both men and women with differences in power

• Organized differently in different societies - a cultural construct
Measuring Gender Inequality

- No standard single measure
- Indicators that reflect women’s relative status
  - Education differentials
  - Marriage patterns
  - Contraceptive use and family size
  - Employment outside home
  - Participation in political systems
  - Gender violence
This concludes this part and this lecture. The basic concepts introduced in this part include:

- Reproductive health issues among adolescents
- Female genital circumcision - the magnitude, consequences
- Gender and its implications for reproductive health