REPRODUCTIVE HEALTH IN AFRICAN AND THE EASTERN MEDITERRANEAN REGIONS OF WHO

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Pillars of Reproductive Health

1. Gender equity
2. Maternal health and safe motherhood
3. Abortion
4. Family planning
5. Reproductive tract infections including HIV/AIDS
6. Infertility
7. Adolescent reproductive health and sexuality
8. Sexual behaviour
9. Harmful traditional practices and violence against women
10. Nutrition of mothers and children
11. Reproductive tract malignancies
12. Reproductive health of older women and men

Reproductive "ill-health"

Incomplete knowledge of magnitude

- Poor reproductive health indicators, particularly in sub-Saharan Africa:

  - Extremely high maternal mortality
  - Low contraceptive prevalence
  - High total fertility rate
  - High infertility rate in some parts
  - High prevalence of "curable" STD's
  - HIV/AIDS pandemic

Chance of a Woman Dying from Complications of Pregnancy, Childbirth or Unsafe Abortion during her Lifetime

Italy	1	in	17,361
Norway	1	in	15,432
Australia	1	in	8,772
United States	1	in	5,669
Poland	1	in	3,608
Cuba	1	in	1,286
China	1	in	439
Zimbabwe	1	in	217
Mexico	1	in	131
India	1	in	59
Kenya	1	in	31
Mali	1	in	7

(from Population Action International, 1995)

Maternal Mortality

- One African woman dies every 3 minutes from pregnancy-related causes

Nafis Sadik (ICPD, 1994)

Maternal Health

- WHO safe motherhood initiative
- Maternal mortality rate of up to 1,000 per 100,000 births in Nigeria
- Maternal mortality rates are generally higher in rural areas

Maternal Mortality

"High maternal mortality is a manifestation of gross underdevelopment. Hence its permanent reduction requires societal transformations. Everywhere the fundamental requirements are a determined leadership able to put organization, discipline and mass education of good quality into place"

Harrison, 1997

Continuing Rise in Maternal Mortality in Africa

Due to:

- Mass poverty with gross inequalities
- Unbooked emergencies
- Illiteracy

Maternal Morbidity

Vesico-Vaginal Fistula

- Preventable
- Caused by neglected obstructed labour
- Affected woman becomes a social outcast, abandoned and shunned by society
- Trauma and suffering from repeated attempts at surgical repair

Vesico-Vaginal Fistula

- Occurs in a state of socio-economic deprivation
- Women from rural areas with inadequate or non-existent health services
- Childhood malnutrition prevents full skeletal development leading to cephalo-pelvic disproportion

Regional Estimates of Incidence of, and Mortality from, Unsafe Abortions[1,2]

Region	No. of unsafe abortions (1,000s)	Unsafe abortions per 1,000 women 15-49 years	No. of deaths from unsafe abortion	Mortality from unsafe abortion per 100,000 live births	% of maternal deaths
Africa	**3,740**	**26**	**23,000**	**83**	**13**
Asia	9,240	12	40,000	47	12
Europe	260	2	100	2	10
Latin America	4,620	41	6,000	48	24
Oceania	20	17	< 100	29	5
USSR (former)	2,080	30	500	10	23

[1] Figures may not add to totals due to rounding

[2] For Northern America where the incidence of unsafe abortion is negligible, no estimate has been made

(Source: WHO, 1994)

Abortion

- Unsafe abortion is one of the most important causes of maternal mortality in sub-Saharan Africa
- In Nigeria, abortion accounts for about 40% of maternal deaths

Abortion

- Abortion laws are still restrictive in most parts of Africa
- Only in Zambia is abortion legalized

Hospital-based Descriptive Study of Mortality and Morbidity of Induced Abortion

Study conducted by HRP's Epidemiological Task Force in nine countries, including Benin, Ethiopia, Senegal and Uganda

- Aim of the study was to describe:
  - Morbidity and mortality caused by unsafe abortion
  - Cost to the health care system

Hospital-based Descriptive Study of Mortality and Morbidity of Induced Abortion

Benin and Senegal

- 20% of induced abortions were in women under the age of 20
- The cost of abortion care in both countries were considerably higher in the group of induced abortion compared to those with spontaneous abortion

Hospital-based Descriptive Study of Mortality and Morbidity of Induced Abortion

The study illustrated:

- The severe consequences of unsafe abortion for women's health
- Burden placed on scarce hospital resources

Clandestine Abortion in Mozambique

Study supported by HRP LID -Grant to Maputo

Study showed that women undergoing illegal abortion

- have a lack of sex education
- have had first sexual intercourse and first pregnancy at a relatively lower age than general population
- Maternal mortality of 3% (i.e.3,000/100,000 births)
- 25% of them had severe short-term sequelae

Determinants and Consequences of Induced Abortion

Mauritius study

- Disproved the notion that abortion is related to low contraceptive use
- Main reason for induced abortion was inconsistent use of condoms, the pill and ineffective use of withdrawal and periodic abstinence methods

Determinants and Consequences of Induced Abortion

Tanzanian Study

- Low contraceptive prevalence in Tanzania
- Main reason for induced abortion was inconsistent use of the pill
- The cost of treating an abortion case was 1,500 Tanzanian shillings compared to Ministry of Health's budget 210 Tanzanian shillings per person per year

Family Planning

- Low contraceptive prevalence in Africa and most of Eastern Mediterranean region

- Few exceptions such as:

- Mauritius	75%
- Seychelles	51%
- Zimbabwe	45%

Family Planning

- Increasing unmet needs
- National survey data indicate an unmet family planning need of more than 30% in sub-Saharan Africa, excluding unmet needs of adolescents and unmarried individuals

Family Planning

HRP study show a wide gap between contraceptive awareness and use

- In Kenya, whereas 97% of women knew of a contraceptive method, only 30% were using contraceptives
- Estimates show that fertility rate sub-Saharan Africa can immediately drop from 6.1% to 4.6% if current existing demand is met

Family Planning

Study by Commonwealth Health Regional Community Secretariat for East, Central and Southern Africa in 5 countries - Kenya, Uganda, Zambia, Swaziland and Mauritius (1991)

- Contraceptive prevalence ranged between 19% for Uganda and 75% for Mauritius

- The mean contraceptive prevalence was 30%.

- Contraceptive prevalence was twice as high in urban compared to rural areas

Determinants of contraceptive use
(Commonwealth Health Secretariat study)

- Religious affiliation
- Level of education
- Approval of family planning by partner
- Knowledge of some women using modern contraceptive
- Knowledge of services provided at family planning clinics
- Knowledge of a family planning method

Family planning methods used
(Commonwealth Health Secretariat study)

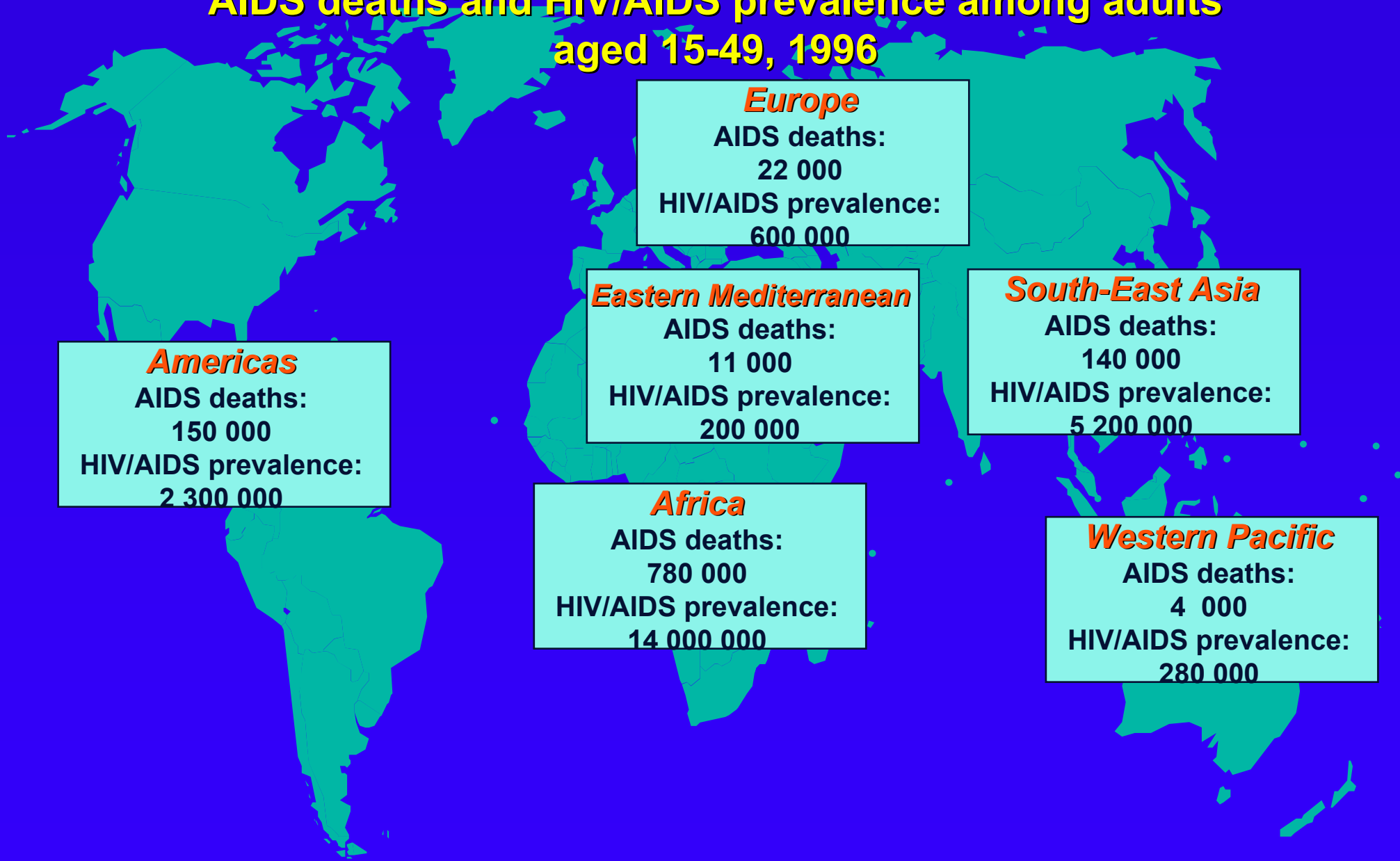
Natural family planning (NFP) method	38%
Oral contraceptive	28%
Injectables	15%
Tubal ligation	8%
Intrauterine devices	5%

Reproductive Tract Infections

- Incidence of STD's in sub-Saharan Africa is one of the highest in the world
- HIV/AIDS in sub-Saharan Africa has reached pandemic proportions
- WHO estimates number of cases as around 6 million

HRP UNDP / UNFPA / WHO / WORLD BANK

AIDS deaths and HIV/AIDS prevalence among adults aged 15-49, 1996



Europe
AIDS deaths:
22 000
HIV/AIDS prevalence:
600 000

Eastern Mediterranean
AIDS deaths:
11 000
HIV/AIDS prevalence:
200 000

South-East Asia
AIDS deaths:
140 000
HIV/AIDS prevalence:
5 200 000

Americas
AIDS deaths:
150 000
HIV/AIDS prevalence:
2 300 000

Africa
AIDS deaths:
780 000
HIV/AIDS prevalence:
14 000 000

Western Pacific
AIDS deaths:
4 000
HIV/AIDS prevalence:
280 000

HIV / AIDS

- Education provides the only means of prevention and control of HIV spread in the absence of a cure or vaccine
- Information alone is insufficient to change the risk behaviour of target groups

Multicentre Study on HIV Vertical Transmission (1)

WHO study in Uganda and Zimbabwe

- Study aimed at consequences of HIV infection in pregnancy with special reference to determinants of mother-to-fetus / infant HIV-1 transmission

Multicentre Study on HIV Vertical Transmission (2)

WHO study in Uganda and Zimbabwe

- Each Centre (Harare and Kampala) enrolled 400 HIV-positive and 400 HIV-negative women on a voluntary basis
- Both groups were in the first and second trimester of pregnancy at enrollment
- The women were followed-up through pregnancy, childbirth and for 2 years thereafter together with their infants

Prevention of HIV-1 vertical transmission in Ugandan mothers and infants"

WHO study in Uganda

- Aimed at reducing the risk of vertical transmission through administration of HIV-1 hyper immune globulin to mothers and newborns

HIV / AIDS

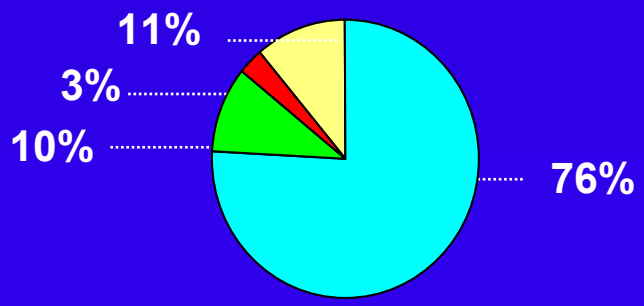
- The prevalence of HIV-1 is high among women of child-bearing age (15-49 years) in Africa
- HIV prevalence is still moderate in some West African countries
- This provides a window of opportunity for prevention efforts before HIV-disease begins to escalate.

HIV / AIDS

- Of 16,000 people tested in Sierra Leone:
- 492 (3%) tested positive for HIV
- 154 (1%) had AIDS

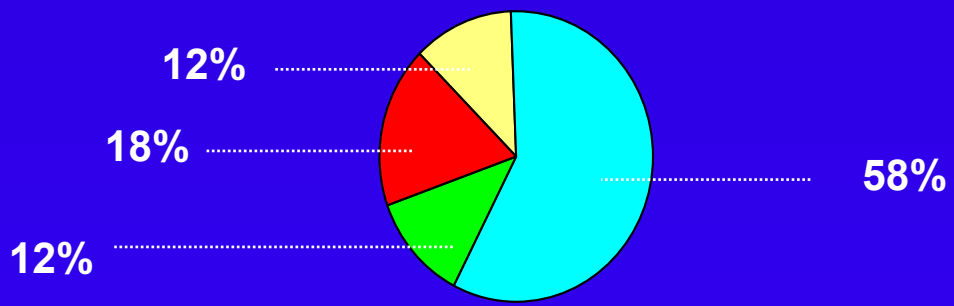
Percentage Distribution of Pregnancies by Outcome

Sub-Saharan Africa, 1994



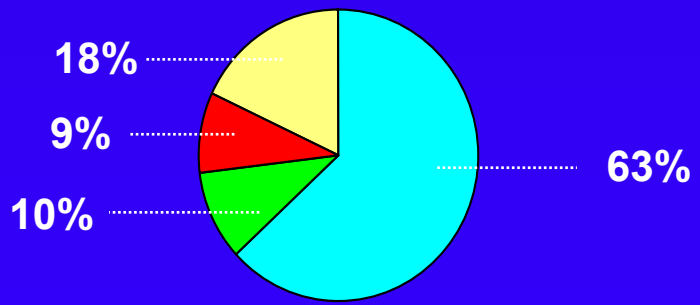
28.9 million pregnancies

North Africa & Middle East, 1994



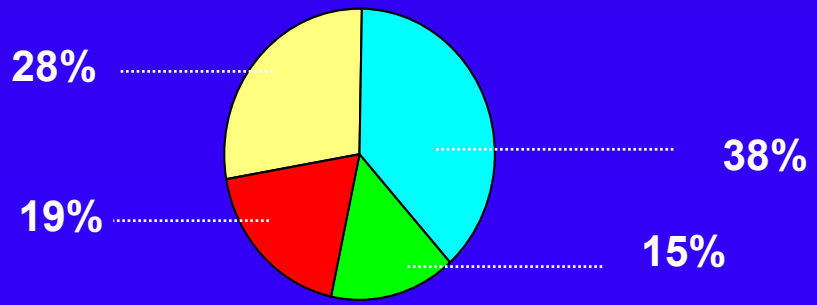
11.6 million pregnancies

South & Southeast Asia, 1994



65.4 million pregnancies

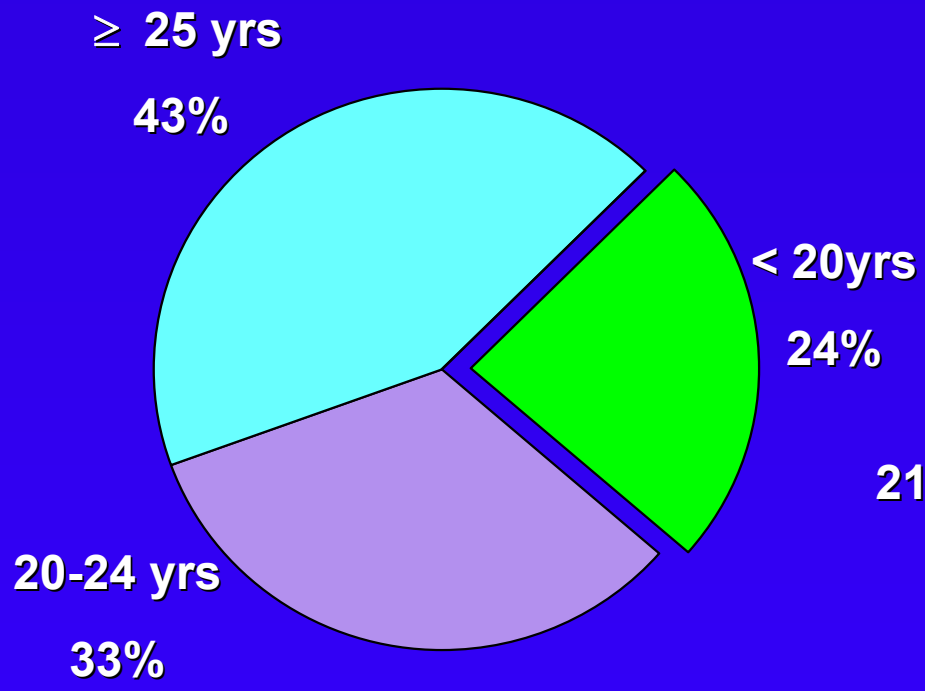
Latin America, 1994



16.4 million pregnancies

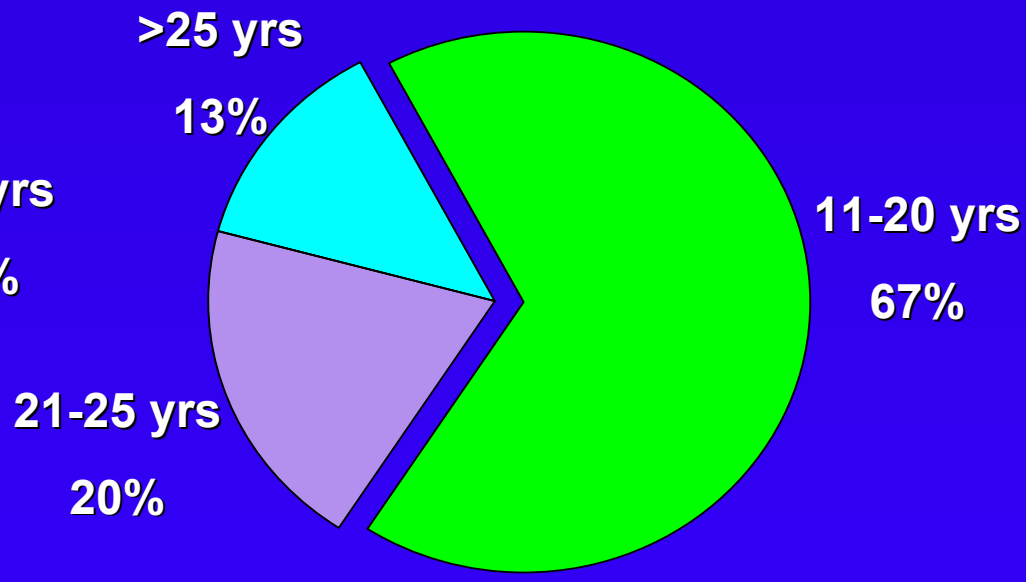
Wanted birth | Mistimed birth | Unwanted birth | Abortion

Age distribution of women undergoing legal abortion in Canada, 1984 and of women seeking treatment for complications following abortion, Nigeria



Canada 1984

Legally performed abortions



Nigeria 1983

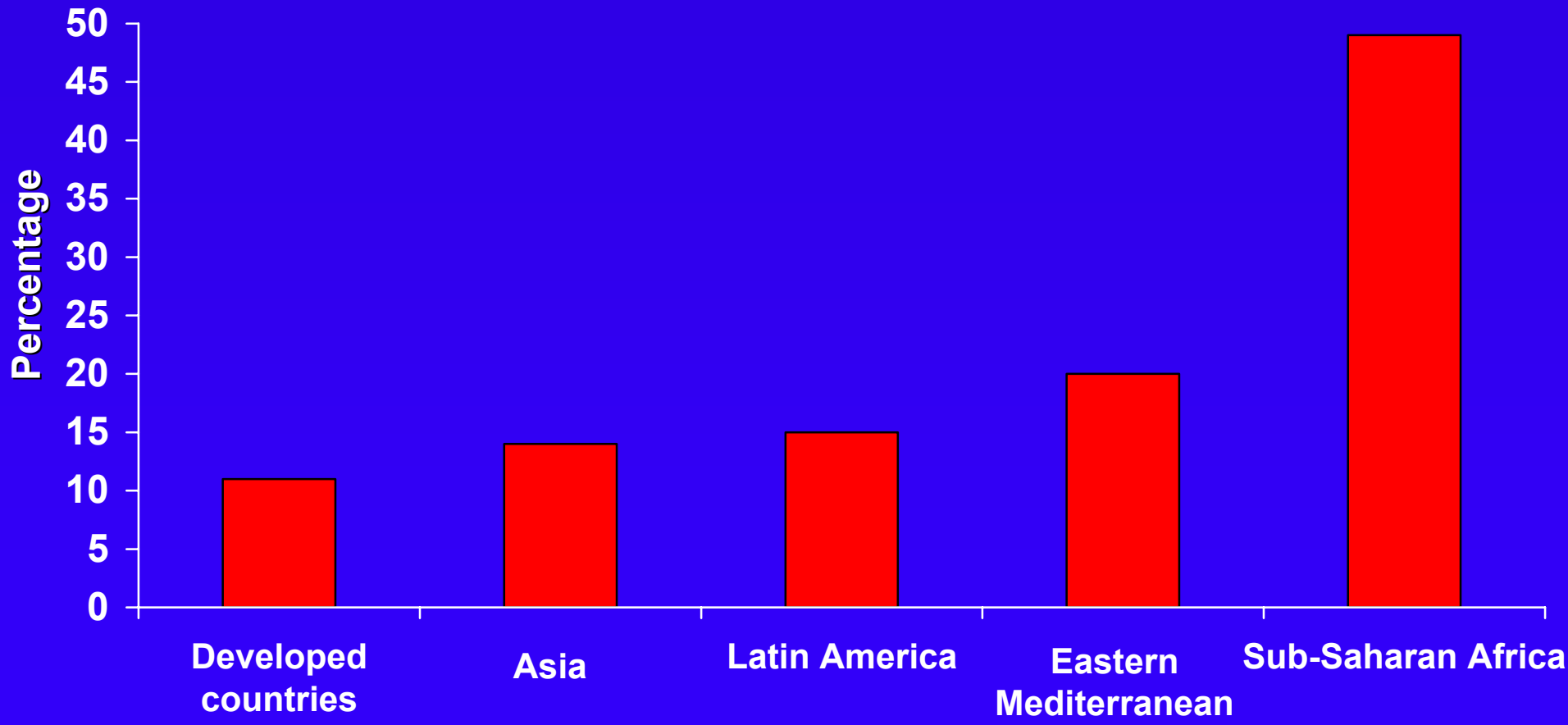
Women seeking hospital treatment for abortion complications

(Source: WHO, 1993)

The Impact of Reproductive Tract Infection on Women's Health

1. Infertility
2. Ectopic (tubal) pregnancy
3. Cervical cancer
4. Adverse outcomes of pregnancy
5. HIV transmission

Incidence of Bilateral Tubal Occlusion amongst Infertile Couples



(Source: Cates et al., 1985)

Infertility

- Extent of infertility varies considerably among countries and between countries
- WHO estimates 60-80 million couples affected world-wide
- High prevalence in some countries in sub-Saharan Africa

Infertility

- A major cause of distress to families
- In some cultures, ability to have children is an important sign of an individual's worth
- Failure to have children can lead to social disgrace and divorce

Diagnosis and Management of Infertility

WHO/HRP study

- 10,000 infertile couples
- 33 centres in 25 countries
- 8 centres in 7 countries of Africa and EMR

Africa	EMR
- Cameroon	- Egypt (2 centres)
- Kenya	- Pakistan
- Nigeria	- Tunisia
- Zambia	

Infertility

HRP study showed the important role of infection in the aetiology of infertility

- Worldwide, one third of cases of infertility resulted from pelvic infection
- In Africa, tubal factors, from infection, accounted for two thirds of female infertility

Infertility

HRP studies showed:

- Serological evidence of chlamydia in 76% of infertile women with tubal disease as compared to 29% in those with no tubal disease and 10-16% in non-pregnant fertile women

Infertility

Serological evidence of chlamydia in HRP study:

- Infertile women
  - with tubal disease 76%
  - with no tubal disease 29%
- Fertile women
  - Non-pregnant 10-16%

Infertility

Gambia and Gabon

- Studies of infertile women with tubal damage show serological evidence of past chlamydia infection:

  - 68% in Gambia
  - 83% in Gabon

Infertility

- Spectacular progress in the last two decades in the management of infertility through assisted reproduction
- However, due to high cost, such procedures are virtually inaccessible to the majority of developing country infertile couples
- It is important to concentrate efforts on measures that prevent tubal blockage

Infertility

- Since infection constitutes the main cause of preventable infertility, current WHO work in this area are focused on the prevention of these infections, particularly gonococci and chlamydia

Adolescent Reproductive Health

Definition

- Variable definitions
- Generally the period of adolescence should encompass the onset of puberty up to the time of full integration as an adult
- The period of adolescence encompasses both biological and social changes which are not necessarily synchronous in time

Adolescent Reproductive Health

- WHO has suggested the period between the ages of 10 and 19 years as the period of adolescence

Adolescent Reproductive Health

- Sexual behaviour of adolescents is of special concern

- Adolescents in Africa and Eastern Mediterranean regions are in a more disadvantaged position as compared to other regions, where information and contraceptive services are much better organized

Adolescent Reproductive Health

Nigerian study:

- 45% of adolescents between 15 and 19 years of age had already had sex
- The incidence of casual sex was quite high
- Condoms were used by only 40% of them, even though they were readily available
- 57% of them considered that condoms reduced sexual pleasure

Adolescent Reproductive Health

On the whole, adolescents in Africa and Eastern Mediterranean have very little knowledge about sex and reproductive matters

- In a study in Southern Ghana, poor knowledge of reproductive health was demonstrated among 11 to 18 years old school girls
- Most of the youngsters received their knowledge from peers
- In a survey in Senegal, the most prominent reason for not using contraceptive is lack of knowledge, whilst in Mauritius, teenagers mistakenly believed that condoms were for married couples only

Adolescent Reproductive Health

- A large proportion of abortions take place in the adolescent group:
  - in Tanzania a third of the victims of unsafe abortion practices are teenagers, and half of these are 17 years old or younger

Adolescent Reproductive Health

An increasing percentage of adolescents in many countries engage in premarital sex which may result in pregnancy

- in Tanzania between 40% and 60% of secondary school children are sexually active and pregnancy is the leading cause of school drop-out

Female Genital Mutilation

Definition:

- Female Genital Mutilation (FGM) encompasses all procedures that involve partial or total removal of the female external genitalia and / or injury to the female genital organs for cultural or any other non-therapeutic reasons

Female Genital Mutilation

It is estimated that

- Over 130 million girls and women have undergone some form of genital mutilation
- At least 2 million girls per year are at risk of genital mutilation

Female Genital Mutilation

- Most girls and women who have undergone FGM live in 28 African and Eastern Mediterranean countries
- FGM is found increasingly among immigrant groups in Europe, USA, Canada, Australia and New Zealand
- The prevalence of FGM is a least 90% in several African countries

Female Genital Mutilation

- The physical and psychological effects of FGM are often very extensive, affecting health and, in particular, sexual, reproductive and mental health
- In addition, FGM causes pain and suffering and it is a violation of internationally accepted human rights

Female Genital Mutilation

Major gaps in knowledge about:

- Extent and nature of FGM
- Interventions necessary for its elimination
- Actual prevalence of complications
- Long-term sequelae in relation to reproductive morbidity, pregnancy outcome and maternal and childhood mortality
- Psychological and sexual damages caused by FGM

Female Genital Mutilation

It is important to obtain information for developing appropriate strategies for:

- Health Care Services and clinical support of girls and women suffering from FGM sequelae
- Advocacy for elimination of FGM

Female Genital Mutilation

Based on the impressive arguments presented by WHO, the Programme of action of the ICPD urged:

"Governments and communities to take urgent steps to stop the practice of female genital mutilation and protect women and girls from all such similar unnecessary and dangerous practices"

Female Genital Mutilation

WHO strategies for the elimination of FGM:

- Increase available knowledge
- Encourage countries to promote technically sound policies and approaches that would ensure that FGM is incorporated into broader concerns of women's health, reproductive health, safe motherhood and child health, as well as human rights and health issues

Priority Issues for WHO's Research in Sexual and Reproductive Health

- Planning and programming for reproductive health
- Fertility regulation
- Pregnancy
- Perinatal health
- Unsafe abortion
- Infertility

Criteria for Selecting Priority Research Topics

1. The public health significance of the problem
2. The utility of the research
3. The impact on reproductive rights
4. The impact on development

Impact of HRP Research

A number of HRP's research projects have had major policy impact at country level. For instance:

- Abortion study in Mauritius led to a parliamentary discussion on legalization of abortion
- In Tanzania, post-abortion counselling on contraceptive use was introduced
- In Kenya, supply of condoms to long-distance truck drivers was introduced

Conclusion

- Although our knowledge of reproductive “ill-health” in Africa is incomplete, reproductive health indicators for the region is very poor
- Maternal mortality and morbidity are very high and HIV/AIDS have reached pandemic proportions in some parts of Africa
- Adolescent reproductive health is of special concern in both Africa and the Eastern Mediterranean regions
- A major challenge is how to improve reproductive health in Africa and Eastern Mediterranean throughout the life cycle, including men’s reproductive health