

# Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals



Achieving the Millennium Development Goals

The UN Millennium Project is an independent advisory body commissioned by the UN Secretary-General to propose the best strategies for meeting the Millennium Development Goals (MDGs). The MDGs are the world's quantified targets for dramatically reducing extreme poverty in its many dimensions by 2015 – income poverty, hunger, disease, exclusion, lack of infrastructure and shelter – while promoting gender equality, education, health, and environmental sustainability.

The UN Millennium Project is directed by Professor Jeffrey D. Sachs, Special Advisor to the Secretary-General on the Millennium Development Goals. The bulk of its analytical work has been performed by 10 task forces, each composed of scholars, policymakers, civil society leaders, and private-sector representatives. The UN Millennium Project reports directly to the UN Secretary-General and the United Nations Development Programme Administrator, in his capacity as Chair of the UN Development Group.

# **Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals**

By Stan Bernstein  
with Charlotte Juul Hansen

2006

**MillenniumProject**

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## Foreword

The world has an unprecedented opportunity to improve the lives of billions of people by adopting practical approaches to meeting the Millennium Development Goals (MDGs). At the request of the UN Secretary-General Kofi Annan, the UN Millennium Project has identified practical strategies to eradicate poverty by scaling up investments in infrastructure and human capital while promoting gender equality and environmental sustainability. These strategies are described in the UN Millennium Project's report *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*, which was co-authored by the coordinators of the UN Millennium Project Task Forces.

The Task Forces' reports and *Investing in Development*, underscore the importance of sexual and reproductive health (SRH) for the attainment of the MDGs. *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals* takes these arguments further and presents the evidence of the relationship between SRH and each Goal. It underscores the urgent need to increase investments in improving the access to SRH information and services, particularly for the poor. Otherwise, the MDGs cannot be met.

*Public Choices, Private Decisions* identifies and also describes the policies and practical investments that can improve access to SRH services and information. Based on country experiences from around the world, the report shows how SRH analyses and interventions can be integrated into MDG-based national development strategies, as recommended by the UN Millennium Project.

This report has been prepared by staff of the UN Millennium Project secretariat, who drew on background papers commissioned for this purpose. I am grateful for their important work and recommend this report to all who

are interested in improving sexual and reproductive health outcomes that will make it possible to achieve the Millennium Development Goals.

Jeffrey D. Sachs  
New York  
February 2006

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## Preface

The Millennium Declaration articulated a comprehensive call for development efforts to address poverty in all its dimensions by 2015. The vision of the Millennium Summit is a deeply humanitarian one. The international community, including the experts associated with the UN Millennium Project, recognizes the Millennium Development Goals (MDGs) generated in the follow-up processes to the Millennium Summit as markers and priorities for the whole set of recommendations that emerged from the international conferences of the 1990s and early 21st century.

The recent 2005 World Summit, which affirmed the centrality of the MDGs to international policy priorities and development discourse, also emphasized the broader development dialogue that is needed to ensure poverty elimination. It identified key issues, including reproductive health, that deserve greater attention in strategies to accelerate development. Sexual and reproductive health (SRH) is linked particularly to the attainment of the health MDGs, but it is also essential to gender equality and progress against poverty. In the Outcome Document of the 2005 World Summit (UN 2005b), the leaders of the world explicitly referenced these relationships in its Section II: Development.

This report details the centrality of SRH to progress on human development. It necessarily builds on and reinforces the analyses and recommendations made by the Task Forces of the UN Millennium Project. As we shall see, the concept of reproductive health is multidimensional and components of it are woven throughout the MDG framework: addressing demographically driven poverty traps under Goal 1; promotion of gender equality and empowerment of women under Goals 2 and 3; safe motherhood and child survival under Goals 4 and 5; prevention (as part of a continuum of services) of HIV/AIDS under Goal 6; population–environmental linkages under Goal 7; and

international cooperation for equitable access to basic medical interventions under Goal 8. The major conclusions on SRH reached by the Task Forces are included in an appendix to this report.

The main messages of the UN Millennium Project's report, *Investing in Development: A Practical Plan to Achieve the MDGs* (2005a), are as important for SRH and rights as for other development areas. In all areas, the Project calls on countries to rephrase the question from "How close can we get to the Goals given current financial and other constraints?" to "Which investments and policy changes are needed to meet the Goals?" Domestic resource mobilization must be expanded to finance and ensure full and successful implementation of the MDGs, including SRH. At the same time, additional funding and aid effectiveness are needed to scale up investments in SRH and to ensure sustainable improvements. And the national MDG-based development strategies that are to be developed in all countries should include access to SRH as a strategic factor to reduce poverty.

In addition, global scientific initiatives are also crucial to strengthen the research agenda for SRH to further develop the evidence-based arguments for the linkages between improvements in SRH, poverty reduction and economic development.

Many elements of this report, therefore, point to discussions already found in other reports prepared by the international experts associated with the Project. The purpose of this report is to elaborate some of the relationships, strategies for action and contexts that have advanced or impeded progress on SRH, and to come up with recommendations on what needs to be done to improve SRH as part of a strategy for human development.

Section 1 of the report defines the concept of SRH and rights and brings out the linkages between the Programme of Action from the 1994 International Conference on Population and Development (ICPD) and the MDGs. Section 2 provides an overview of the state of SRH over time and across regions, highlighting areas and groups – both within and between countries – that have had particularly adverse SRH outcomes. It also dissects why attention to access to SRH services is 'falling short'. Section 3 shows how universal access to sexual and reproductive health and rights affects each of the MDGs. It reviews the available evidence linking SRH – directly or indirectly – to each of the Goals and highlights the magnitude of such impact as well as the pathways by which SRH acts to influence their achievement. Finally, Section 4 discusses the policies, interventions and investments needed to ensure that all people have access to sexual and reproductive health and rights, and how such access should be explicitly included in national strategies to achieve the MDGs.

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## Acronyms

AGI	Alan Guttmacher Institute
AIC	AIDS information centre
CCA	Common Country Assessment
CCM	Country commodity manager
CDC	Center for Disease Control
CEDAW	Committee on the Elimination of Discrimination against Women
COPE	Client-oriented provider-efficient
DALY	Disability-adjusted life year
DFID	Department for International Development, UK
DHS	Demographic and Health Survey
FGC	Female genital cutting
FHI	Family Health International
GNI	Gross national income
HIMS	Health Management Information System
HIPC	Heavily indebted poor country
IASC	Inter-Agency Standing Committee
ICPD	International Conference on Population and Development
IEC	Information, education, communication
IMF	International Monetary Fund
INFO	Information and Knowledge for Optimal Health
IPPF	International Planned Parenthood Federation
IPT	Intermittent preventative treatment
IPV	Intimate partner violence
IV	Intravenous
M&E	Monitoring and evaluation
MAQ	Maximizing Access and Quality of Care

MDG	Millennium Development Goal
MICS	Multiple indicator cluster surveys
MMR	Maternal mortality ratio
MTEF	Medium-term expenditure framework
NGO	Non-governmental organization
NIDI	Netherlands Interdisciplinary Demographic Institute
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
PAC	Post-abortion care
PRSP	Poverty reduction strategy paper
RTI	Reproductive tract infection
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
SWAps	Sector-wide approaches
TB	Tuberculosis
TFR	Total fertility rate
TT	Tetanus toxoid
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UN DESA	United Nations Department of Economic and Social Affairs
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	Voluntary counselling and testing
WHO	World Health Organization
YLD	Years lived with disability
YLL	Years of life lost

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## Executive summary

### Introduction

Sexual and reproductive health (SRH) was given an international consensus definition at the International Conference on Population and Development (ICPD) in 1994. At its core is the promotion of healthy, voluntary and safe sexual and reproductive choices for individuals and couples, including decisions on family size and timing of marriage, that are fundamental to human well-being. Sexuality and reproduction are vital aspects of personal identity and key to creating fulfilling personal and social relationships within diverse cultural contexts.

SRH does not only involve the reproductive years but emphasizes the need for a life-cycle approach to health. It touches on sensitive, yet important, issues for individuals, couples and communities, such as sexuality, gender discrimination and male/female power relations. Attainment of SRH depends vitally on the protection of reproductive rights, a set of long-standing accepted norms found in various internationally agreed human rights instruments.

The ICPD adopted the goal of ensuring universal access to reproductive health by 2015 as part of its framework for a broad set of development objectives. The Millennium Declaration and the subsequent Millennium Development Goals (MDGs) set priorities closely related to these objectives. Progress towards the MDGs depends on attaining the ICPD reproductive health goals. The leaders of the world ratified that understanding in the 2005 World Summit Outcome Document (UN 2005b).

### The current situation

A lack of access to SRH is a major public health concern, especially in developing countries. For example, death and disability due to SRH accounted for 18 percent of the total disease burden globally and 32 percent of the disease burden among women of reproductive age (15–44) in 2001, though there is considerable

**Up to 50 percent of women in some countries still marry or enter a union by age 18**

regional variation. Due in large part to the HIV/AIDS crisis, the reproductive health disease burden accounts for about one third of Africa's total disease burden, which is almost double that of most other regions. And death and disability is only a portion of the impact of SRH on the quality of life and the prospects for development. The record of progress in SRH in recent decades is mixed.

### *Fertility*

Although significant declines in fertility have occurred in most regions of the world, these have recently slowed in several countries. In many sub-Saharan African countries the fertility transition remains in its early stages. National level fertility declines also disguise significant variations within countries. Poor and rural populations often have the least access to family planning information and services, and thus the highest fertility rates.

### *Adolescent reproductive health*

Adolescents, currently about 20 percent of the world's population, have special reproductive health concerns and face risks related to early sexual experience, marriage and fertility. A rise in the age of marriage globally has contributed to declines in adolescent fertility. However, up to 50 percent of women in some countries still marry or enter a union by age 18, with this figure rising to 70 percent by age 20. The proportion of young women married or in union by age 20 is closely linked to adolescent fertility and exposure to reproductive health risks.

### *Family planning*

Contraceptive use accounts for a substantial portion of the variation in observed fertility rates (others include age of marriage, abortion rates, postpartum amenorrhea and abstinence, and occurrence of marital separations). Although there have been dramatic increases in the use of family planning services, unmet need for family planning remains very high in low-prevalence regions. While contraceptive use among adolescents has been on the rise, data from 94 national surveys taken over the past decade demonstrate that the unmet need of adolescents is over two times higher than that of the general population in these countries. In this age group, unmet need for family planning is predominantly a desire to delay pregnancy. Addressing these preferences could reduce exposure to reproductive risks and empower young women in education, employment and social participation.

Men are involved in reproductive health efforts as advocates for needed services, as supporters of their partner's needs and as recipients of services for their health and well-being. The majority of men aged 20–24 report having had sexual intercourse before their 20th birthday, with a substantial proportion having had sex before their 15th birthday. A large proportion of married men aged 25–39, particularly in sub-Saharan Africa, say that they have not discussed family planning with their partners. Yet, men in many settings are more likely

**Unsafe abortions contribute to 13 per cent of maternal deaths, about 68,000 per year**

to approve of contraceptive use than their partners realize, and thus lack of communication leads to lost opportunities to cooperate on attaining preferences. In most countries a majority of men have only one sexual partner in any given year but a significant minority of married men has extramarital partners. Condom use is higher among unmarried men than married men as within marriage this is associated with unfaithfulness and mistrust of the spouse.

### ***Maternal health***

Some 529,000 women die each year in delivery and pregnancy – the overwhelming majority in developing countries. While women in industrialized countries face a 1 in 2,800 chance of dying in pregnancy or delivery, the risk in developing regions is 1 in 61. In sub-Saharan Africa it is as high as 1 in 16. This lifetime risk of death reflects both pregnancy rates and the quality of delivery care associated with each pregnancy. Maternal deaths occur from both direct and indirect complications. Direct complications account for 80 percent of maternal deaths and include hemorrhage, sepsis, hypertensive disorders from pregnancy, abortion complications and obstructed labor. Indirect complications vary from region to region and include malaria and AIDS. Moreover, it has been estimated that for every woman who dies, approximately 30 more suffer injuries, infection and disabilities in pregnancy or childbirth. These disabilities include obstetric fistula.

Unsafe abortions contribute to 13 percent of maternal deaths, about 68,000 per year. Abortion-related complications contribute to a relatively large share of maternal deaths in Latin America and the Caribbean (where legal restrictions on abortion are common) and to a lesser degree in Asia and Africa. The case fatality rate for abortions, however, is highest in Africa.

Increases in the proportion of births assisted by a skilled birth attendant have been dramatic in Southern Asia, Eastern Asia and the Pacific and (from higher initial levels) in Latin America and the Caribbean. Sub-Saharan Africa lags behind other world regions with only 41 percent of births assisted by a skilled attendant. This contributes to the high maternal mortality on the continent.

### ***HIV/AIDS and STIs***

The HIV/AIDS pandemic constitutes a major threat to development in affected countries. The virus is spreading through different populations at varying rates, and prevalence rates among adults range from a fraction of a percent to well over 30 percent. In sub-Saharan Africa and parts of the Caribbean, the epidemic is clearly established in the general population and is largely spread through heterosexual contact. Whatever the main means of transmission, however, it is almost always the poor and the marginalized that are at greatest risk of exposure. More than half the men and women in most countries worldwide lack comprehensive and correct knowledge on how to prevent HIV transmission.

**Gender-based violence is a significant public health problem that affects millions of women worldwide**

The prevalence of curable and incurable STIs, including HIV/AIDS, is higher in sub-Saharan Africa and in Latin America and the Caribbean than in other regions. In some parts of the developing world, men may be prepared to use condoms but are unable to obtain them, especially young men and those with limited resources or living in rural areas.

***Gender-based violence***

Gender-based violence is a significant public health problem that affects millions of women worldwide. Abused women have been found to be more than twice as likely as non-abused to have poor health, including reproductive health, and both physical and mental problems. These women also have an increased risk of contracting an STI, including HIV/AIDS.

**Why hasn't SRH been given higher priority?**

The importance of SRH to the attainment of international development goals has not been adequately translated into action frameworks and monitoring mechanisms at international, regional and national levels. Advances have been hindered by the complexity of the concept. Different components of SRH fall within the province of different sectoral ministries, challenging coordinated national responses. Many national planners learned development economics before the recent analytical advances on the effect of age structures on poverty reduction. SRH issues have also been distributed among various MDGs (maternal health, child mortality, gender equality, HIV/AIDS) and family planning has been excluded from the Goals, reducing priority attention.

The diverse justifications for the importance of attaining SRH relate to public health, human rights, moral priorities, instrumental concerns related to basic development goals (including linkages and relationships) and institutional analyses. However, different groups and constituencies focus on different elements of this complex of concerns, complicating resolution and political mobilization. Operational planning often takes place in settings that do not welcome or encourage the resolution of these contending vocabularies and priorities. Matters related to sex and reproduction are sensitive – enmeshed in issues of culture and ideology of social institutions and personal identities. In many countries, various cultural groups have different understandings and positions on SRH (and on associated service provision). Public discussion and attention may be limited so political divisions can be avoided or because there is stigma attached. SRH has only become a fit topic for international discussion and consensus within the last 10–15 years.

The targeted time frame for the MDGs also diverts attention from the SRH agenda. The targets and indicators in key areas such as gender equality are defined consistent with what can be measured and with change in short time periods, not in the longer time horizons needed for cultural change and demographic shifts. Further, issues related to women have been accorded low

**A disease-oriented approach to health priority setting has not recognized the importance of preventing unintended pregnancies**

priority. Gender disparities in education have not been achieved on time. Maternal mortality has not been given appropriate priority and investment.

Priority-setting approaches in the area of health have slighted SRH concerns. A disease-oriented approach to health priority setting has not recognized the importance of preventing unintended pregnancies. The consequences of these extend beyond the direct individual disability concerns to social participation, familial health and complex empowerment issues. Returns to investments in SRH are, therefore, difficult to assess and often omitted from policy dialogues.

The historical record of progress in SRH, particularly in the expansion of contraceptive use and the overall reduction in fertility, has diverted concern from continued investment needs. The assumption of continuing progress along historical paths has reduced the expenditures needed to attain it. Changing demographic concerns (e.g., the reductions in fertility and increased pace of population ageing) in major donor countries have also undercut some support for developing country initiatives. With donor development assistance policies moving towards direct budget support without earmarks for specific programs, areas like women's health can be neglected. Vertical pipelines for specific initiatives (e.g., HIV/AIDS) can give priority to some interventions but harm health system capacity building.

Within developing countries, health sector reform, often including decentralized priority setting, increases the information and advocacy burden for inclusion of SRH concerns. Central functions (like operating logistic systems and service quality control) require high-level commitment and a supportive policy and regulatory framework.

The international discussion on SRH emphasizes an outcome-oriented public health approach but people react to multiple dimensions. Strong passions and intensive debates continue on a range of issues: abortion, adolescent SRH and even family planning. These issues elicit renewed discussion at every relevant intergovernmental conference. Donor policies can advance or stifle discussion and reproductive health program development.

An example of the difficulties in addressing SRH concerns comes from the response to HIV/AIDS. Despite the dominant role of sexual transmission in its spread, it is classified with communicable diseases (tuberculosis and malaria) in the MDG framework. A historical separation of STIs (including HIV/AIDS) and other reproductive health issues (including family planning) has only recently started to be addressed in policy, programs and funding priorities.

**The impact of universal access to SRH on attainment of the MDGs**

Apart from being important in and of itself, ensuring universal access to sexual and reproductive health and rights is instrumentally important for achieving many of the MDGs. The achievement of the MDGs is influenced by population dynamics such as population growth, fertility and mortality levels, age

## Population trends affect the course of and prospects for poverty reduction

structure and rural–urban distribution. Each developing country has its own unique combination of demographic factors that affect the prospects for progress toward the MDGs.

Creating economic development is connected to increasing productivity and investments in areas such as education, nutrition and health. Population momentum joined with declining fertility rates provides a unique chance to spur economic development as the work force increases and the dependency burden of society decreases. However, this requires policies that create jobs for the growing work force. The young age dependency burden in the least developed countries and regions creates expanding demands for resources to and investment in education, nutrition and health just to keep pace with population growth. The projected declines in birth rates, should adequate resources help realize them, will allow greater investment in quality improvements.

Until the HIV/AIDS epidemic, mortality levels were expected to continue to decline in all regions. However, this tendency has been reversed in countries where HIV/AIDS is most prevalent, especially in sub-Saharan Africa. Life expectancy at birth is lower in the developing regions than in the more developed regions but it is projected to increase in both less and least developing countries. This is dependent on successful implementation of HIV/AIDS prevention and treatment programs and on other health interventions. Migration, both internal and international, also conditions the prospect for progress towards the MDGs.

### ***Goal 1: Eradicating extreme poverty and hunger***

Population trends affect the course of and prospects for poverty reduction. Diverse and changing population dynamics have had dramatic impacts in several world regions. Sub-Saharan Africa remains in a poverty trap where demographic factors – high fertility, high infant and child mortality, and excess adult mortality (including that due to HIV/AIDS) – play significant roles. Eastern Asia, on the other hand, has seen dramatic declines in the number of persons living in income poverty. Recent analyses suggest that 25–40 percent of economic growth is attributable to the effects of decreased mortality (health affects productivity) and declining fertility (allowing a deepening of human capital investment). At the societal level there is a remarkable one-time opportunity when the proportion of the population of labor-force age (15–60) is large relative to the more ‘dependent’ younger and older populations. This demographic bonus, though, is not guaranteed. It is an opportunity and a challenge that depends on the right priorities, policies and strategies.

When institutions exist that permit the accelerated flow of information throughout a society it is possible to have wide dissemination of information about the benefits of smaller families, accurate feedback of the returns to investments in children and quicker recognition of the increased chances of children surviving, which reduces old age support motivations for persistent

**There is a strong incentive for larger families to keep children, especially girls, at home and out of school**

high fertility. However, the largest difference between rich and poor families is not in their desired or ideal family sizes but in their ability to implement their preferences. Access to services for the poor can be adversely affected by clinic placement, hours of service and user fees. The demographic bonus therefore operates not just on a macroeconomic level but also at the micro levels of the community and family. High levels of fertility contribute directly to poverty, reducing women's opportunities, diluting expenditure on children's education and health, precluding savings and increasing vulnerability and insecurity.

SRH programs can help improve the nutritional status of women and their children and advance progress on the hunger and maternal and child health targets. Supplemental feeding programs for pregnant women, improving women's knowledge of the nutritional requirements of themselves and their children and increasing women's power to negotiate access to needed nutrition must be part of a multi-intervention strategy. Closely spaced pregnancies and the associated high fertility levels place women at an increased risk of anemia and other conditions of absolute and relative malnutrition.

Progress in alleviating hunger also requires targeted inputs to improve agricultural productivity. Community level cooperative action can ensure implementation of soil improvement, improved water management and other components of an integrated approach to agricultural productivity. However, rapid population growth fueled by high fertility desires and/or poor implementation of preferred family sizes can lead to the sub-division of land holdings, which can reduce the benefits of productivity-enhancing interventions.

### ***Goal 2: Achieve universal primary education***

SRH impacts various levels of education in similar and overlapping ways. For example, girls may be pulled out of school to care for siblings at any time during their education. This is more likely as family size increases. Pregnancy-related dropouts, too, may occur at any level of education, including the primary level.

Many empirical studies have found that a child's school attendance is negatively associated with the number of siblings with whom the child lives. There is a strong incentive for larger families to keep children, especially girls, at home and out of school. There is also evidence from these studies that the gender gap in education may be explained by parental preference for sending boys to school when a family has limited resources. Gender disparities in education, then, should decrease with falling family sizes. Yet, the estimated effects are often relatively small in size compared to other factors: Parental schooling accounts for a substantial proportion of the increase in rates.

As States increasingly subsidize education, the impact of parental resources on younger children's school enrolment becomes less important. However, educational *attainment* has been found to be linked to family size, as older children are increasingly likely to be pulled out of school due to costs

**Involving men in SRH is crucial to promoting gender equality and to increasing men's reproductive health**

of schooling and their increasing ability to contribute to household responsibilities. Greater investments in children's welfare, including schooling, often occur in households where mothers have greater control over spending.

Adolescents and youth in developing countries are having sexual encounters at an early age. The increased gap between onset of menses and marriage also increases exposure to pregnancy risk. A growth in the percentage of girls attending school after puberty inevitably leads to a rise in the risk of pregnancy among students. There is a high cost associated with becoming known to be pregnant while still in school. A pregnant schoolgirl often has to choose between dropping out or undergoing an abortion that is typically illegal, and therefore likely to be unsafe. Boys who are involved in girls' pregnancies do not face these same risks. Reductions in pregnancy-related drop-outs would make a large enough difference to warrant policy attention, with payoffs that are likely to be greatest, in countries that have begun to address gender discrimination and in those at intermediate levels of socio-economic development. Early marriage is also associated with teen pregnancy. Married young girls, compared to their unmarried counterparts, have limited social networks, are less mobile, have less income-generating opportunities, face heightened exposure to health risks and have higher levels of overall fertility.

***Goal 3: Promote gender equality and empower women***

Ensuring universal access to sexual and reproductive health and rights is essential for achieving gender equality. Involving men in SRH is crucial to promoting gender equality and to increasing men's reproductive health.

Guaranteeing SRH and rights is important to ensure that girls and women lead longer and healthier lives, and has strong and direct impacts on their well-being. SRH services work to promote voluntary, safe and healthy sexual and reproductive choices. To do this, they must go beyond simply making available family planning information and services and include such activities as combating gender-based violence, sexual coercion and female genital cutting (FGC).

Gender-based violence, in particular, has a profound impact on the well-being of women. It takes many forms: coerced sex in marriage and dating relationships, rape by strangers, systematic rape during armed conflict, sexual harassment, sexual abuse of children, forced prostitution and sex trafficking, child marriage and violent acts against the sexual integrity of a woman (such as FGC or virginity inspections). Sexual violence is associated with significant emotional trauma and long-term mental health problems.

Sex trafficking is a growing problem. Some 800,000 people are trafficked across borders each year, and 80 percent of them are women and girls who are bought and sold worldwide mostly for commercial sex. This figure does not include the substantial number of women and girls who are trafficked within their own country.

**Children born to very young mothers are at an increased risk of suffering complications**

It is estimated that between 100 and 140 million women and girls, most of them in Africa, the Arab States and Asia, have undergone FGC. This rite of passage may cause hemorrhaging, infection and even death, and exposes young girls to serious and lasting physical and emotional trauma. Long-term chronic health risks include constant urinary tract infections, reproductive tract infections and more severe menstrual pain. Finally, the ability to experience pleasure from sexual encounters is largely destroyed.

Early marriage takes many different forms and has many different causes, including age-old traditions, protecting girls from unintended and out-of-wedlock pregnancies or building ties between families or communities. However, marriage of girls by coercion or before they are old enough to give full and free consent is not only harmful to their health and well-being; but it also violates their human rights, as elaborated in the Universal Declaration of Human Rights and other human rights instruments.

Allowing a woman to satisfy her desire for spacing or limiting children enables her to better balance household responsibilities (including childrearing) with activities outside the home, including economic, political and educational activities. One of the most dramatic transformations in development over the past 30 years has been women's increasing role in the labor force, greatly catalyzed by their ability to control their fertility and thus to shape their careers over their lifecycle.

***Goal 4: Reduce child mortality***

Maternal behavior and fertility are important determinants of child health and survival. Children born to very young mothers are at an increased risk of suffering complications. Similarly, children born too closely together are also at an increased risk of ill health. Where modern contraceptive prevalence is below 10 percent, the average infant mortality is 100 deaths per 1,000 live births. Where prevalence is 10–29 percent, infant mortality is 79 per 1,000; and where it is over 30 percent, it is 52 per 1,000.

Children born to teen mothers are twice as likely to die during their first year of life as those born to women in their 20s and 30s. Young teen mothers are at higher risk of experiencing serious complications because their bodies often have not yet fully matured. They are also much more likely to have poorer nutritional habits and are less likely to seek adequate antenatal and post-partum care, leading to higher rates of low birth weight, malnutrition and poor health outcomes in their children.

Birth spacing is an important lifesaving measure for both mothers and children. Compared with babies born less than two years after a previous birth, children spaced three or four years apart are more likely to survive to age five. In less developed countries, if no births occurred within 36 months of a preceding birth the infant mortality rate would drop by 24 percent and the under-five-mortality rate would drop by 35 percent. In total numbers this would

**That women die of preventable causes during childbirth is a tragedy. This tragedy is compounded when the pregnancy was not even intended**

annually amount to 3 million children under age five, or roughly 30 percent of total child mortality. Furthermore, a minimum of three years birth spacing is also important for enhancing the child's cognitive and social development.

Women who have closely spaced births are more likely to discontinue breastfeeding too early, thereby increasing the risk of infant mortality. Breastfeeding protects babies and infants from infectious and chronic diseases – including both diarrheal and acute respiratory diseases – and helps them to recover more quickly from illness. Intensive demand feeding also provides protection against pregnancy immediately after a birth by delaying the return of menses. The promotion of exclusive breastfeeding is an important global priority for increasing the health of infants. An HIV-positive mother may reduce the risk of postnatal HIV-transmission when she exclusively breastfeeds her child as compared to giving mixed feeding.

### ***Goal 5: Improve maternal health***

Each year more than half a million women die of preventable complications of pregnancy and childbirth. Making access to SRH more widespread could decrease childbirth- and pregnancy-related mortality and morbidity. That women die of preventable causes during childbirth is a tragedy. This tragedy is compounded when the pregnancy was not even intended. Moreover, as the Task Force on Child Health and Maternal Health asserts, improving maternal health requires policies and interventions that go beyond simply reducing maternal mortality.

About 201 million women have an unmet need for modern contraception – making it more likely that they will experience high-risk or unintended pregnancies and thus complications in pregnancy, during childbirth or from an unsafe abortion. Among married women of childbearing age, demand for birth spacing represented 33–75 percent of demand for family planning services. Younger women especially want to delay their next pregnancy and have longer birth intervals. Some are also interested in delaying their first birth despite the common assumption that women want to have their first child right after marriage. The failure to help women fulfil their spacing desires derives from socio-cultural constraints on women's status and on other restrictions on access to health services.

Comprehensive basic and emergency obstetric care is essential to maternal mortality reduction. Although there has been progress over the past decade, only about 70 percent of births in developing countries are preceded by even a single antenatal care visit. Anemia during pregnancy and childbearing increases the risks of maternal mortality and morbidity and also adversely affects infant health by increasing odds for prematurity and low birth weight. Reductions in delays to providing emergency care (in the decision to seek it, in arriving at a facility and in receiving care on arrival) can dramatically improve survival outcomes. Post-partum care, often less available than antenatal care, contributes

**Only one in five people at risk of contracting HIV have access to even basic prevention services**

to the health and survival of the newborn and provides an opportunity for family planning counseling.

High rates of unintended pregnancies are associated with higher incidences of abortion, and specifically unsafe abortions, which further place women at risk of death and disability. Young women are particularly impacted, as two out of every three unsafe abortions are experienced by 15–30-year-olds and 14 percent by women under the age of 20. Legal abortion, however, does not guarantee safety in places where providers are not trained or barriers prohibit broad access to services. Evidence points to a strong correlation between abortion laws and policies, safer abortion and reduced maternal mortality.

Lack of use of or access to contraceptives is a major cause of unwanted pregnancy: More than half of all women in the developing world are at risk because they are using a traditional method with high failure rates, they are using a reversible method that requires regular supplies, or they are using no method at all. Correct and consistent use of contraception and access to emergency contraception can significantly reduce recourse to abortion and improve maternal health overall.

#### ***Goal 6: Combat HIV/AIDS, malaria and other diseases***

Addressing SRH needs and combating AIDS, malaria and other diseases require essential medicines to be available throughout a country. Globally, 80 percent of HIV cases are transmitted sexually. Only one in five people at risk of contracting HIV have access to even basic prevention services, which could prevent 29 million of the 45 million new infections projected to occur in this decade. Testing, counseling, treatment and care reach an even smaller proportion of those affected.

Correct and consistent use of condoms – which has been found to reduce HIV incidence by 80 percent – is a key component of any national prevention strategy used to reduce sexual exposure to HIV. Other components include delaying sexual initiation, abstinence and reducing the number of sexual partners. However, there is still a wide gap in condom availability in many developing countries, and large-scale investments will need to be made in education and awareness programs that promote and de-stigmatize condom use among both men and women.

Underlying power dynamics between women and men in many developing countries also prevent women from accessing condoms and then insisting on their use. Unprotected sex with a non-monogamous husband greatly increases a woman's likelihood of being exposed to HIV. An important step in addressing such power dynamics is to ensure that there is universal access to sexual and reproductive health and rights, and that family planning services actively target men in their programs. SRH services include counseling (for both women and men) to reduce exposure to risky sexual behavior that may increase a person's chances of contracting HIV (or transmitting it to others).

**Expanded SRH services can provide an integrated package of services including counseling on HIV transmission and prevention, psychological and social support, and antiretroviral treatment for HIV-positive mothers**

In 2003, an estimated 630,000 infants worldwide became infected with HIV during their mother's pregnancy, labor or delivery, or as a result of breastfeeding. Many of these infections could have been avoided by ensuring mothers' access to a regimen to prevent mother-to-child transmission. Expanded SRH services can provide an integrated package of services including counseling on HIV transmission and prevention, psychological and social support, and antiretroviral treatment for HIV-positive mothers. Voluntary contraceptive services to help HIV-positive women prevent unwanted pregnancies should be a central component of cost-effective national prevention strategies.

Prevention and treatment of STIs, while important in their own right, are also essential components of strategies to reduce HIV transmission. Women are more likely to suffer complications from STIs as they are more often asymptomatic and are less likely to seek treatment even when experiencing symptoms. Women with STIs are also more likely to experience stigmatization, infertility, and even abuse and abandonment.

Pregnancy reduces women's immunity to malaria, which can then lead to adverse health outcomes, and even death, for the mother as well as increased risks of stillbirth or low birth weight and its related complications for the infant. HIV-positive women experience higher frequency and density of parasitemia, and women who are co-infected have more anemia and more adverse birth outcomes than women infected with either malaria or HIV alone. Ensuring universal access to SRH services would help ensure that pregnant women at risk of malaria receive effective treatment.

***Goal 7: Ensure environmental sustainability***

The past century of population growth has put increasing pressure on natural resources as the scale of human needs and activities has expanded. Population growth, among other factors, has led to cropland expansion, intensified farming, housing sprawl and overuse of water and forests.

Population growth is an indirect driver of environmental degradation. It is part of a complex dynamic that includes poverty, inequality, levels of consumption and policy and market failures. Populations living in countries with scarce natural resources and the fewest resources to invest in health, education and family planning are growing more rapidly than the world population as a whole, putting even greater pressure on these often biologically fragile zones.

Environmental sustainability must be a result of biological conservation programs, technological advancement and a broad human development effort. Development priorities need to include investments in education and health, including SRH, to break vicious cycles of population growth and environmental vulnerability.

The world's urban population is estimated to grow from 2.1 billion in 2000 to 5 billion in 2030. Slowing the growth of new slums and improving the lives of slum dwellers require urgent action. The urban poor require SRH

**Maternal mortality is generally higher in rural areas than in urban areas**

services within an accessible and functioning health system. While the fertility rate of rural women is generally higher than that of urban women, poor urban women have significantly higher fertility rates than non-poor urban women. The unmet need for contraception among the urban poor is also higher than among the urban non-poor, though lower than that of people in rural areas. Maternal mortality is generally higher in rural areas than in urban areas.

Both rural and poor urban populations lack access to modern health institutions. However, while rural populations are most affected by proximity of service, urban populations face other factors, including transport costs and user fees. Many improvements are needed for slum dwellers and the urban poor to increase their SRH outcomes. HIV/AIDS is a major health concern in cities and some risks are heightened there. Adolescents may also face greater challenges to leading healthy sexual lives.

***Goal 8: Global partnerships***

The International Conference on Population and Development (ICPD) was the first international conference to estimate the resources needed to achieve the agreed action plan. The resource estimates included four components: family planning; reproductive health; STIs and HIV/AIDS; and basic research, data and population and development analysis. Each component should be integrated into basic national programs for population and reproductive health.

It is important to recognize that the Programme of Action estimates did not include all the issues brought up at the conference, and that additional resources are still needed for other objectives and goals (later incorporated in the MDGs) like the improvement of women's status and empowerment and the strengthening of primary healthcare systems

However, the resources mobilized from donors are not even living up to the funding targets that were agreed at the ICPD. Although funding for population activities is increasing, this is largely due to a higher resource flow towards HIV/AIDS activities. Unfortunately, this has happened at the expense of other areas within population assistance. Family planning has received less and less attention since the ICPD, and its funding as a share of total population assistance dropped from 56 percent in 1995 to 13 percent in 2003.

Donor countries vary in how much of official development assistance (ODA) they contribute to population activities. In 2003, only five countries gave more than the 4 percent of ODA to population activities (as agreed at ICPD). Population activities in developing countries also receive external assistance from supporters other than donor countries. Development banks, especially the World Bank, foundations and non-governmental organizations (NGOs) contribute important resources. Out-of-pocket expenses contribute a large amount of the total domestic financial resources. Even though domestic expenditures are increasing, many developing countries (and particularly the poorest countries) require adequate ODA. Within the time frame for the

**Political will for action and the close monitoring of progress can accelerate advances**

MDGs they cannot reach a level of sustainable domestic funding anywhere near two thirds of the costs for population activities.

Providing access to reproductive health drugs and supplies is crucial to the achievement of the MDGs and to the improvement of health in developing countries. Reproductive health commodity security is about ensuring a secure supply and choice of commodities such as contraceptives (including condoms), maternal health supplies and those needed for HIV/AIDS and other STI treatment and prevention. These commodities need to be provided to rural and urban populations, rich and poor, young and old, and both women and men. It is crucial that national capacity is developed in order to secure sustainable forecasting, logistics, financing, procurement, warehousing, stock monitoring, distribution of commodities, and training and management of human resources.

**What needs to be done**

The incorporation of SRH into national strategies to attain the MDGs and into international and regional programs has been recommended by the world's leaders in the 2005 World Summit Outcome Document (UN 2005b) and in health sector recommendations at the World Health Assembly.

Political will for action and the close monitoring of progress can accelerate advances. Political will should be shown by both high-level commitments that legitimate priorities and the mobilization of community support.

***Task 1: Integrating SRH analyses and investments into national poverty reduction strategies***

National development planning must be based on MDGs needs assessments that include population and SRH concerns. Such analyses need to diagnose the current situation and the projected dynamics of key population groups receiving priority interventions in order to orient investments to reach coverage targets and reflect their expected returns.

To date, these issues have not been adequately incorporated in planning exercises, and existing national population or SRH strategies have not been appropriately referenced. Yet, investments in voluntary family planning programs, for example, would reduce the total resource requirements for progress on the health-related MDGs and provide additional benefits.

The selection of indicators to monitor progress on SRH at national, regional and global levels can help focus action priorities.

***Task 2: Integrating SRH services into strengthened health systems***

Family planning programs started as vertically organized systems with distinct donor funding guarantees. This provided some advantages and disadvantages. The ICPD placed all SRH services – including family planning – within the regular health system. Countries subsequently changed their programs to

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increase the integration of these services into the primary healthcare system. A systematic framework for approaching integration is needed to guide program design and monitor operations.

Attention to a person-centered continuum of care over a lifecycle and to service interventions is proposed as a guiding framework. Effective information and referral systems, and well-equipped and functioning component service delivery units, are essential to ensuring this standard of care.

Past experience with service integration points to the need for more management expertise. Monitoring and evaluation and accountability burdens increase with service completeness and complexity. Appropriate attention must be given to SRH, the retention and strengthening of specialized capabilities and the improvement of logistics and procurement systems. SRH interventions can be allocated to different actors both within and outside the clinical health system.

Effective integration requires giving priority to meeting client needs, client-focused information, realistic and specific planning and monitoring, and flexible management of motivated and competent staff in strong health systems. SRH issues pose special challenges since needs over the life cycle and among different populations vary greatly, and services at different levels of the health system need to be provided and linked.

The effective integration of SRH delivery with HIV/AIDS prevention, treatment and care systems is a requirement for accelerated progress on the full range of SRH concerns.

***Task 3: Systematically collecting data***

Effective management of integrated health service delivery, including SRH components, requires investments in service and results-oriented databases. Such system development has been challenging in many settings. Beyond health management information needs, there has been a lack of basic information that stakeholders can use to ensure accountability related to a variety of population and SRH concerns. These include reproductive health and education within the socio-cultural context for sexual and reproductive behavior; population dynamics and youth needs; urbanization and migration; deteriorating rural and agricultural conditions; poverty pockets; gender roles and relationships and belief systems; and gender-disaggregated data to provide a more accurate picture of women's economic contributions to society, including their management roles and their unpaid labor in the family and in the informal sector.

Strategic interventions to improve data for decision-making and accountability include the definition of a basic package of health information needs, negotiation of effective accountability mechanisms between donors and national authorities, formalized linkages between government agencies and national stakeholders (NGOs and national research institutions) and

**The quality of SRH care leads to greater acceptance of contraceptives and other SRH services and lower rates of discontinuation**

investments in improving the technical capacity of those involved. Such developments should attend to the specific needs at national, regional and district levels.

***Task 4: Acting on the Reproductive Health Quick Impact Initiative***

The UN Millennium Project has identified key interventions to accelerate progress towards achieving the MDGs as a whole that can produce results within relatively short time frames. The Reproductive Health Quick Impact Initiative has two components: (1) improving access to reproductive health information and services, including family planning, and (2) closing the funding gap for commodities, supplies and logistics.

Knowledge about family planning is now fairly widespread, but important misconceptions and information gaps remain about this and other SRH issues. These are particularly pronounced among young people and include lack of knowledge about the transmission of HIV/AIDS.

Reasons for non-use of services are various and context-specific. Solutions must be tailored to national circumstances as there are no 'one size fits all' methodologies. In addition to addressing unmet need for family planning, the quality of care needs to be improved. This includes attention to providing a range of choice of methods, meeting information needs, availability of technically competent staff and equipped facilities, adequacy and sensitivity of client-provider relations, continuity-encouraging follow up, and provision of an integrated constellation of services. The quality of SRH care leads to greater acceptance of contraceptives and other SRH services and lower rates of discontinuation. The increased use of community-based health workers providing a range of service modules will require extensive training and backstopping to ensure quality.

Contraceptive demand is projected to increase dramatically within the MDG time frame as a result of population growth, the current backlog of unaddressed needs and decreasing family size preferences. The Asia-Pacific region will require the largest share of resources for contraceptives, drugs and medical supplies. But the largest increase – 161 percent – is projected to be in Africa.

The Reproductive Health Supplies Coalition has been working to improve information exchange on availability and needs, strengthen supply systems, foster country ownership and national political and financial commitment for reproductive health supplies, improve coordination between international suppliers and country supply managers and expand the markets for private-sector provision to appropriate population segments. This effort needs to improve national capacity and to address emergency responses to stock-outs and other supply crises. Allocation of national funds remains an important signal that countries can send that might encourage further donor responses. A coordinated effort to increase resources from national and international sources is required, with significant allocations to strengthening national institutions.

## Young women and men are underserved in development planning

Such efforts should include improved feedback from local actors (governmental and non-governmental) on evolving demand and on supply quality and dependability.

The effective incorporation of SRH commodities into national Essential Drugs and Medicine delivery systems must be realized. Multiple and ill-coordinated logistic management systems reduce efficiency and effectiveness. Existing management tools can provide technical support to such national delivery efforts.

Improving access to and usage of family planning services should include programmatic attention to key life events at which demand and receptivity is high. These include services to be offered post-abortion, post-partum, post-infection (by an STI, including HIV/AIDS), post-child death and post-puberty/initiation).

### *Task 5: Meeting the needs of special populations*

Since the needs of different population groups vary – both in the risks they face and the programs required to reach them – special attention to targeted service development has increased. Sub-groups include such populations as unmarried youth, the poor, rural populations, and post-partum and post-abortion women.

#### *Adolescents*

Young women and men are underserved in development planning. Sectoral institutional frameworks tend not to be organized around age categories and do not offer an integrated approach to the needs of the young. Surveys of the health information and service needs, including SRH, of youth show their reluctance to use clinics or to address sex and reproduction. Comprehensive and holistic approaches must be developed that are sensitive and youth-friendly. Normative frameworks on client rights are particularly important for reassuring youth.

The diversity of situation of adolescent populations must be taken into consideration, with special population groups among adolescents requiring priority attention in program planning. This includes those living in situations of risk and young mothers. Detailed data is needed on the situation of young people, married and unmarried, particularly in the area of SRH.

#### *Humanitarian situations*

A humanitarian crisis – whether it is due to conflict or natural disaster – poses an extreme challenge to the achievement of the MDGs. Structures and systems break down, making people much more vulnerable and increasing the need for protection and service provision. Of the 34 poorest countries that are farthest away from achieving the MDGs, 22 countries are in or just emerging from conflict.

**To implement the various recommended actions, effective multisectoral programming efforts are critical**

The SRH situation during conflict and natural disasters increases the likelihood of unwanted pregnancy, maternal and infant death, and the transmission of STIs including HIV/AIDS. The sudden loss of medical support, as well as the trauma and malnutrition that often follow an emergency, means that pregnant women face a greater risk of maternal morbidity and mortality. The spread of STIs including HIV/AIDS increases because an emergency breaks up stable relationships; disrupts social norms on sexual behavior; and coerces women as well as young girls and boys to exchange sex for food, shelter and income. Gender-based violence also increases. Operational guidelines on reproductive health in emergency situations have been developed and must be implemented.

#### *Men*

Men play a crucial role in reproductive health both as clients, partners and agents of change. Donors can support operational research to advance these contributions and countries can give it priority. Gender-equitable programs to involve men should address power relations, and positive and supportive definitions of masculinity should be reinforced to improve the situation of both women and men. Reproductive health strategies should make male involvement a key program strategy. Outreach to men is a vital component for meaningful scaling up of SRH programs. Program staff will need reorientation to address male involvement.

#### ***Requirements for effective action***

##### *Political commitment*

High-level political commitment can signal the importance of SRH progress to the population as a whole and to implementing bureaucracies. Dramatic change is possible on accelerated time scales when national governments mobilize to meet voluntary choices.

##### *Effective coordination*

To implement the various recommended actions, effective multisectoral programming efforts are critical. Coordinating mechanisms and institutions can mobilize stakeholders for the design, implementation and monitoring of programs involving diverse actors.

##### *Community participation and cultural sensitivity*

Consistent with this vision is recognition of the vital role of community inputs to development planning. Services can be better adapted to local conditions when staff are equipped with methods and guidelines to evaluate their own performance and supplement their evaluations with inputs from service beneficiaries.

In order to make reproductive health programs successful, it is crucial to take into account the local context, including structure and culture. Partnering

**The expansion of family planning, maternal health and HIV/AIDS prevention efforts depends on the mobilization of political will, institutional capacity and technical and financial resources**

with local groups such as faith-based organizations and individuals from within the community is therefore a crucial step in a successful program that seeks to promote human rights and healthier lives.

*Resources for programs*

Additional information on detailed intervention costs that have become available in the decade since the ICPD have led to new estimates of resource needs for SRH. These estimates include: (a) detailed disaggregated direct service delivery cost estimates for family planning and other basic maternal and reproductive health services (including safe delivery, emergency obstetric care, neonatal survival/infant mortality interventions and a broad range of HIV/AIDS prevention efforts); (b) overhead costs (e.g., maintenance, power, basic facility supplies, support staff); and (c) system improvement costs related to management, improved monitoring and evaluation and capacity for research and evaluation needs.

Preliminary estimates of additional capital and human resource requirements for attaining the targeted service coverage are also available. Better estimates of these needs will come from ‘bottom-up’ MDG needs assessments carried out by individual countries. UN Millennium Project analyses demonstrate that most low-income countries need to substantially increase capital investments to strengthen health systems and scale up service coverage to meet the MDGs. It is clear that resource requirements for the basic SRH package will be significantly higher than estimated over a decade ago. By 2015 the required annual costs will be about US\$14 billion more than originally anticipated, reaching US\$36 billion. The magnitude and share of required HIV/AIDS prevention investments are substantial.

Additional analyses apply this new methodology to a scenario projecting family planning needs, population dynamics and maternal, newborn and child health services based on the satisfaction of current unmet need for family planning. These analyses reflect the larger savings in other reproductive health services gained by higher investments to eliminate unmet need for family planning preferences. Savings from family planning investments increase over time as smaller birth cohorts reduce other service needs and can finance system improvements.

Both the 1993 and the current resource projections omit supportive investments in other sectors (including investments for women’s empowerment). The current SRH estimates are also based only on direct service costs and added health system costs and do not include the required information, education and behaviour-change communication and community-based interventions. Further work is needed to elaborate these needs.

The expansion of family planning, maternal health and HIV/AIDS prevention efforts depends on the mobilization of political will, institutional capacity and technical and financial resources. However, a significant number

of countries identify shortfalls in international assistance as having a negative effect on their programs. Greatly increased support, both financial and technical, to national programs will be required to reach the ICPD goal of universal access to reproductive health and attain the MDGs.

## Introduction

At the Millennium Summit in September 2000, 189 world leaders adopted the Millennium Declaration and committed their nations to a global partnership to reduce poverty, improve health and promote peace, human rights, gender equality and environmental sustainability. This Declaration built on the outcomes of international conferences held throughout the 1990s, recognizing the importance of achieving the development goals and targets adopted at previous gatherings. Indeed, it recommitted governments to many of their long-standing promises.

Importantly, the Millennium Declaration also explicitly recognized the interconnectedness of development priorities set at these various gatherings – from the International Conference on Population and Development (ICPD) to the Fourth World Conference on Women and to the World Education Forum, among others. World leaders agreed that the many dimensions of extreme poverty must be tackled together, and that the aspirations and goals of one conference can only be realized alongside those articulated at the others. To this end, the Millennium Development Goals (MDGs) following from the Millennium Declaration, further held governments to account by setting time-bound and measurable targets for eradicating extreme poverty in its many forms – income poverty, hunger, disease, lack of adequate shelter and exclusion – while promoting gender equality, education and environmental sustainability (box 1.1).

The World Summit held in September 2005 confirmed the importance of reproductive health in the attainment of the MDGs as countries committed themselves in the Outcome Document to: “Achieving universal access to reproductive health by 2015, as set out at the International Conference on Population and Development, integrating this goal in strategies to attain the internationally agreed development goals, including those contained in the Millennium Declaration, aimed at reducing maternal mortality, improving

**Box 1.1**  
**Millennium**  
**Development**  
**Goals**

**Goal 1 Eradicate extreme poverty and hunger**

- **Target 1** Halve, between 1990 and 2015, the proportion of people whose income is less than US\$1 a day
- **Target 2** Halve, between 1990 and 2015, the proportion of people who suffer from hunger

**Goal 2 Achieve universal primary education**

- **Target 3** Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

**Goal 3 Promote gender equality and empower women**

- **Target 4** Eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education no later than 2015

**Goal 4 Reduce child mortality**

- **Target 5** Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

**Goal 5 Improve maternal health**

- **Target 6** Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio (MMR)

**Goal 6 Combat HIV/AIDS, malaria and other diseases**

- **Target 7** Have halted by 2015 and begun to reverse the spread of HIV/AIDS
- **Target 8** Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

**Goal 7 Ensure environmental sustainability**

- **Target 9** Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources
- **Target 10** Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation
- **Target 11** Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers

**Goal 8 Develop a global partnership for development**

- **Target 12** Develop further an open, rule-based, predictable, non-discriminatory trading and financial system (includes a commitment to good governance, development and poverty reduction – both nationally and internationally)
- **Target 13** Address the special needs of the Least Developed Countries (includes tariff- and quota-free access for Least Developed Countries' exports, enhanced programme of debt relief for HIPC and cancellation of official bilateral debt, and more generous ODA for countries committed to poverty reduction)
- **Target 14** Address the special needs of landlocked countries and small island developing states (through the Programme of Action for the Sustainable Development of Small Island Developing States and the twenty-second General Assembly provisions)
- **Target 15** Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

- **Target 16** In cooperation with developing countries, develop and implement strategies for decent and productive work for youth
- **Target 17** In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
- **Target 18** In cooperation with the private sector, make available the benefits of new technologies, especially information and communication technologies

maternal health, reducing child mortality, promoting gender equality, combating HIV/AIDS and eradicating poverty” (UN 2005b, paragraph 57g).

### **ICPD and the MDGs – moving forward together**

Many elements of the Millennium Declaration and the MDGs were anticipated by the broad vision of development elaborated at the ICPD, held in Cairo in 1994. Similar to the Millennium Summit, the ICPD marked the largest international conference of its time, with 179 world leaders adopting its Programme of Action. This set the population and development agenda for the next two decades. The ICPD Programme of Action and the MDGs strongly reinforce each other in a number of important ways.

Firstly, the ICPD Programme of Action addressed a myriad of pressing development problems – from eradicating extreme poverty to ensuring environmental sustainability to supporting families – and went far beyond what had previously been seen as ‘traditional’ population issues. In fact, early critics of the ICPD Programme of Action worried that the declaration addressed too many varied issues and contained too many targets. But, much like the MDGs, the ICPD Programme of Action explicitly recognized these issues to be fundamentally related, and unachievable without action being taken on all of them. For example, without adequate roads, women in labor are not able to access maternal health clinics. And even if they reach a clinic, without adequate electricity they cannot receive the necessary care. The breadth of the development vision thus expanded on the approach in earlier population conferences:

“The 1994 Conference was explicitly given a broader mandate on development issues than previous population conferences, reflecting the growing awareness that population, poverty, patterns of production and consumption and the environment are so closely related that none of them can be considered in isolation.” (UN 1994, para. 1.5)

Secondly, the ICPD Programme of Action set quantifiable targets and indicators to measure countries’ progress toward meeting their agreed goals. This was an important step at that time in holding governments accountable for their pledges, and is a shared element of the MDGs. Furthermore, four of the five quantified goals from the ICPD Programme of Action are echoed in the MDGs (see below).

Thirdly, the ICPD Programme of Action viewed population concerns from within a human rights framework – creating a key shift in the population debate.

**The concept of SRH and rights adopted at the ICPD marked a turning point in the approach to fertility and family planning programs**

It succeeded in replacing a macroeconomic perspective on population policy with a focus on a woman's need to receive appropriate SRH care (within a functioning health system) and to control the number and timing of her pregnancies. The advancement of the human rights perspective on reproductive health, along with a more focused discussion of gender roles in development, was a major step forward. Similarly, the MDGs should be seen as human rights goals – the right to food, shelter, healthcare and education – as enumerated in the Universal Declaration of Human Rights and the UN Millennium Declaration.

Fourthly, the ICPD Programme of Action explicitly recognized that a true global partnership between rich and poor countries was needed in order to achieve its aspirations. It was the first international conference to accept (however provisionally) estimates of resource requirements for a core program package and to define the relative contributions to these efforts by donor and developing countries. It also explicitly recognized the need for strengthened partnerships on an international, regional and national level. In this same vein, the Millennium Declaration and the MDGs explicitly call for strengthened global partnerships, particularly in such key areas as aid, trade, debt relief, access to essential medicines and foreign direct investment. And the UN Millennium Project also stresses in its recommendations the need for a global partnership between rich and poor countries to achieve the Goals.

It is in these ways that the MDGs build on the important outcomes of the ICPD, and they should be viewed as a strong recommitment to the vision, aspirations and goals of that landmark event. Four of the five quantifiable targets put forth in the ICPD Programme of Action are included (in close form) in the MDGs – reducing maternal mortality, reducing child mortality and ensuring universal access to primary education and access to secondary education (table 1.1). ICPD+5 also included a goal for preventing HIV/AIDS, which is reflected in the MDGs. The fifth ICPD goal – access to SRH services including family planning – is now widely recognized as essential to the achievement of the MDGs.

**What is sexual and reproductive health?**

One of the major innovations of the ICPD was the elaboration of a definition of a rights-based approach to SRH. The concept of SRH and rights adopted at the ICPD marked a turning point in the approach to fertility and family planning programs. The Programme of Action defined SRH broadly, as encompassing issues related to physical, mental and social well-being in matters related to the reproductive system (box 1.2). At its core is the promotion of healthy, voluntary and safe sexual and reproductive choices for individuals and couples, including such decisions as those on family size and timing of marriage. Indeed, such promotion is fundamental to human well-being. Throughout human history, sexuality and reproduction have been vital aspects of personal identity and key to creating fulfilling personal and social relationships.

**Table 1.1**  
**ICPD quantifiable**  
**targets**

ICPD Goals	Targets
Universal access to primary education	"...countries should....strive to ensure complete access to primary school or equivalent level of education by girls and boys as quickly as possible, and in any case before 2015" (paragraph 11.6)
Access to secondary and higher education	"Beyond the achievement of the goal of universal primary education in all countries before the year 2015, all countries are urged to ensure the widest and earliest possible access by girls and women to secondary and higher levels of education, as well as to vocational education and technical training" (paragraph 4.18)
Reduction of infant and child mortality	"By 2015, all countries should aim to achieve an infant mortality rate below 35 per 1,000 live births and an under-five mortality rate below 45 per 1,000. Countries that achieve these levels earlier should strive to lower them further" (paragraph 8.16)
Reduction of maternal mortality	"Countries should strive to effect significant reductions in maternal mortality and morbidity by the year 2015 (...) to levels where they no longer constitute a public health problem. Disparities in maternal mortality within countries and between geographical regions, socio-economic and ethnic groups should be narrowed" (paragraph 8.21)
Universal access to reproductive and sexual health services including family planning	"All countries should strive to make accessible through the primary health-care system, reproductive health to all individuals of appropriate ages as soon as possible and no later than the year 2015" (paragraph 7.6)

**Box 1.2**  
**ICPD definition**  
**of reproductive**  
**health**

"Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore 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....Reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted diseases." (UN 1994, para. 7.2)

SRH also involves issues extending beyond the reproductive years, such as preventing cervical cancer, and emphasizes the need for a life-cycle approach to health.<sup>1</sup> Importantly, reproductive health programs involve men as well as women – because men are exposed to sexual risks, men impact the reproductive health of their partners, and men must be involved in programs to eliminate sexual violence and coercion. And SRH touches on sensitive, yet important, issues for individuals, couples and communities, such as sexuality, gender discrimination and male/female power relations. For example, SRH programs work to eliminate sex-selective abortions or to eliminate harmful traditional practices, such as female genital cutting (FGC) or forced early marriage. As the World Health Organization (WHO) Reproductive Health Strategy (2004) affirmed:

"Reproductive health extends before and after the years of reproduction, and is closely associated with socio-cultural factors, gender roles and the respect and

**“Parents have a basic human right to determine freely and responsibly the number and spacing of their children”**

protection of human rights, especially – but not only – in regard to sexuality and personal relationships.”

Given the broad definition of SRH, a wide range of interventions and program activities are needed for its promotion. Interventions are needed, for example, to ensure access to SRH information and services, to promote gender equality and women’s empowerment and to eliminate gender-based violence and sexual coercion (see Appendix 2 for a list of interventions). Programs, therefore, must involve many different actors – from government officials to community and cultural leaders to civil society and the private sector down to families and individuals (both men and women). Finally, SRH programs are committed to strengthening healthcare delivery in developing countries, and are working to ensure that SRH activities are fully integrated into these systems.

Recently, in an attempt to further refine this broad definition as it relates to the health system, WHO (2004a) identified five key interventions that, although not comprehensive, are key to successful SRH programs:

1. Ensuring contraceptive choice and safety
2. Improving maternal and newborn health
3. Reducing sexually transmitted and other reproductive tract infections and HIV/AIDS
4. Eliminating unsafe abortion
5. Promoting healthy sexuality.

### **Reproductive rights**

SRH goes well beyond simply delivering services and information about disease prevention and risk reduction (although these activities are essential aspects of SRH programming). At its core is the promotion of healthy, voluntary and safe sexual and reproductive choices for individuals and couples, including such decisions as those on family size and timing of marriage.

The International Conference on Human Rights in Tehran in 1968 was the first international forum to explicitly state that “Parents have a basic human right to determine freely and responsibly the number and spacing of their children”. And this was reaffirmed at the 1975 First World Conference on Women, which argued that the right to family planning was essential for gender equality. The 1984 International Conference on Population again endorsed this right, and further concluded that men shared responsibility for family planning and child rearing.

These references to reproductive rights are not new, but instead bring together long-standing accepted norms from various internationally agreed human rights frameworks that are relevant to SRH. The Universal Declaration of Human Rights (1948) put forth a common standard of achievement for all peoples and all nations that included certain fundamental political, social, economic and cultural rights and freedoms. Based on this, the International Covenant on Civil and Political Rights (1976) and the International Covenant on Economic, Social

**Reproductive  
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embrace  
certain human  
rights that  
are already  
recognized in  
national laws,  
international  
human rights  
documents  
and other  
consensus  
documents**

and Cultural Rights (1976) both stressed the right of women to be free of all forms of discrimination, the right to the highest attainable standard of physical and mental health as well as family rights (the right to marry and found a family and the right to have a private and family life).

Other human rights treaties and conventions set clearer definitions and standards for the protection of women against discrimination and for ensuring their access to SRH services. The Convention on the Elimination of All Forms of Discrimination against Women (1979), for example, set out measures for achieving gender equality, including overcoming the disadvantage inherent in gender roles. The Convention on the Rights of the Child (1989) also reaffirmed the right to family planning services. It called on States to ensure appropriate antenatal and post-natal care for mothers, to protect children from sexual violence and coercion and to abolish traditional practices that harm the health of a child. And given that nearly all States have ratified this Convention, it has become a particularly strong tool for holding governments accountable for ensuring universal access to SRH services, including family planning.

While these conferences, treaties and conventions include reproductive health as a human right, however, it was the ICPD that fully elaborated the concept of reproductive rights:

“Reproductive rights embrace certain human rights that are already recognized in national laws, international human rights documents and other consensus documents. These rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health. It also includes their right to make decisions concerning reproduction free of discrimination, coercion and violence, as expressed in human rights documents...” (UN 1994, para. 7.3)

The concept of reproductive rights is important for (at least) three key reasons:

1. Human rights instruments set clear definitions for the basic minimum entitlements that all people the world over should enjoy, no matter who they are or where they were born. All too often, ‘cultural heritage’ and ‘age-old tradition’ arguments have been used to maintain practices that, for example, denigrate women and their contributions to families, communities and nations, or that pose great risks to a woman’s health (i.e., FGC). Reproductive rights make clear that certain practices are not to be condoned simply because they are deemed cultural or traditional and that in fact such practices violate internationally agreed norms.
2. Stemming from these rights are obligations on States to ensure that access to SRH information and services is afforded to all persons; to eliminate gender-based violence, sexual coercion and forced early marriage; to ensure high-quality healthcare to reduce maternal and child mortality; and so on. A 2003 United Nations Population Fund (UNFPA) survey

**Box 1.3**  
**Reproductive**  
**rights as**  
**human rights**

Reproductive rights, as derived from international human rights instruments, specifically include:

- *Right to the highest attainable standard of health* includes a right to have access to healthcare of the highest possible quality, which includes access to sexual and reproductive health (SRH) services and information.
- *Right to life and survival* mostly focuses on ensuring safeguards against arbitrary execution by the state. But some experts have also applied this right to women who die of pregnancy-related causes and have demanded governments provide services to reduce maternal mortality.
- *Right to liberty and security of person* implies a right to enjoy and control one's sexual and reproductive life in accord with the rights of others. For example, sexual coercion and abuse as well as FGC violate the security of a person. So too do compulsory sterilization and forced abortion.
- *Right to family planning* specifies that individuals have a right to freely and responsibly decide the number and spacing of their children and have access to the information and services to do so. This is a key component of reproductive rights.
- *Right to marry and found a family* specifies that individuals should be able to freely consent to marriage as well as to the number and spacing of their children. Some experts have also applied this right as an obligation for States to provide prevention and treatment services for STIs, as these are a leading cause of infertility.
- *Right to a private life and family life* includes the ability to make autonomous and confidential decisions about sexuality and the number and spacing of one's children – free from coercion, discrimination and violence.
- *Right to the benefits of scientific progress* implies that everyone should have access to available technology in reproductive healthcare, including quality contraceptive options.
- *Rights to receive information and to freedom of thought* are also applicable to SRH issues in that everyone (including adolescents and unmarried women) must have access to family planning information and services.
- *Right to education* is important in and of itself. But this right also empowers women with knowledge and skills to be able to participate in the life of their communities, and to challenge traditional gender roles.
- *Right to non-discrimination on the basis of sex* is essential for achieving gender equality and, in particular, for women to make choices about their reproductive health without their spouse's consent. Gender-based discrimination occurs in many regions the world over and is exemplified by the differential treatment of boys and girls as well as by sex-selective abortions.
- *Right to non-discrimination on the basis of age* implies that young people should have the same rights to confidentiality as adults with regard to their reproductive healthcare.

found that since the adoption of this language, 131 countries had changed national policies or laws to explicitly recognize reproductive rights. South Africa and Venezuela, for example, include reproductive rights in their constitutions as fundamental human rights (UNFPA 2004b).

**Ensuring  
universal  
access to SRH  
and rights  
is thus an  
important part  
of strategies  
for achieving  
the MDGs**

3. Countries that have ratified these human rights instruments are required to report regularly on actions undertaken to ensure that their citizens enjoy such rights. The established monitoring bodies may also offer recommendations to specific States or groups on actions they should take to implement their agreed human rights responsibilities, and specifically with respect to reproductive rights. For example, national progress related to SRH and rights has been part of the purview of the Committee on the Elimination of Discrimination against Women (CEDAW), and has been included in national reports and shadow reports to the Committee and in its Concluding Comments (see the databases accessible at [http://www.whrnet.org/docs/issue-cedaw\\_committee.html](http://www.whrnet.org/docs/issue-cedaw_committee.html) and <http://www.acpd.ca/compilation/Intro.htm>).

The Special Rapporteur on the Right to Health has reported on the status of rights in the area of SRH, within the context of existing norms and concepts such as freedoms, entitlements, immediate obligations, international assistance and cooperation, articulating rights issues emerging from the ICPD, the Fourth World Conference on Women and their review processes (Commission on Human Rights 2004). In official Resolutions following from the reports of the Commission on Human Rights, the General Assembly “*calls upon* States to place a gender perspective at the centre of all policies and programmes affecting women’s health” and “*further calls upon* States to protect and promote sexual and reproductive health as integral elements of the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” (ibid.).

Reproductive rights are recognized as valuable ends in themselves and essential to the enjoyment of other fundamental rights. Ensuring universal access to SRH and rights is thus an important part of strategies for achieving the MDGs. The achievement of some Goals – including improving maternal health, reducing child mortality, promoting gender equality and combating HIV/AIDS – depend *directly* on making access to these services widespread. Other Goals are also closely connected with SRH issues, since the ability to make informed decisions concerning reproductive health, marriage and childbearing without any form of discrimination or coercion is closely correlated with a country’s prospects of reducing poverty, improving health and education, raising productivity and living standards, and achieving environmental sustainability (UNFPA 2005c). These various connections are considered in detail in Section 3. First, however, Section 2 looks at the current situation as regards SRH.



## The current situation

This section starts by looking at the global burden of diseases and risks related to sexual and reproductive health (SRH). It reviews the extent to which most regions, countries, sub-national areas and populations are ‘falling short’ in the key areas of SRH (given available data) and compares, to the extent possible, today’s snapshot with that of times past. There have been some spectacular improvements in some areas of SRH – witness the declines in fertility levels over the past few decades. But there have also been serious setbacks, most notably the AIDS crisis in sub-Saharan Africa. This discussion highlights the existing disparities in diseases and risks relevant to SRH – both within and between countries – and the groups or regions with particularly adverse outcomes.

Despite the centrality of SRH to the attainment of international development goals, including those in the International Conference on Population and Development (ICPD) Programme of Action and the Millennium Development Goals (MDGs), it has not been adequately translated into action frameworks and monitoring mechanisms at international, regional and national levels. The final part of the section looks at why SRH has been marginalized in the development dialogue.

### **The global burden of SRH-related diseases and risks**

The broad concept of SRH, as defined in Section 1, poses great measurement challenges when trying to highlight the burden of SRH-related diseases and risks globally. Firstly, given the broad scope of the definition and various interpretations of SRH, it is not always clear how best to measure its contribution to the overall burden of disease. For example, Murray and Lopez (1998) measured these using six different SRH definitions and came out with six divergent estimates – varying as much as from 5 to 20 percent of the total global disease burden.

**Good health  
is much  
more than  
the absence  
of disease**

Secondly, SRH issues cut across traditional measurement lines. SRH includes diseases (e.g., AIDS) and ‘non-diseases’ or normal physiological processes (e.g., pregnancy), as well as including both communicable diseases (e.g., STI) and non-communicable ones (e.g., breast cancer). These disease groups are usually measured and classified separately, making estimating the total SRH burden more difficult.

Thirdly, it is important to measure factors that either increase or decrease a person’s risk of exposure to poor SRH outcomes. And such risk factors often relate to lifestyle, culture and behavior. But data on these factors are usually hard to obtain as they touch on intimate topics that are difficult for individuals or communities to discuss. And often those at the greatest risk of suffering adverse SRH outcomes are the same people who are hardest for such surveys to reach (such as sex workers or adolescents).

Fourthly, the measurement of the disease burden does not take into account impacts on families, communities and society, but only reductions in individual functioning. Intergenerational impacts of poor realization of reproductive health are excluded, including those beyond the area of physical impairment.

Finally, and fundamentally, good health is much more than the absence of disease. And this becomes abundantly clear with SRH – arguably more so than in other areas of health. Throughout history great emphasis has been placed on sexuality, pregnancy and childbearing. Indeed, much of our personal identity as well as our social and personal relationships hinge on this part of our lives – which is closely related to our overall health and well-being. Today’s measurement tools are not able to capture such positive aspects of health and well-being (see further discussion in Section 3 under Goal 3).

***Estimates of the overall SRH burden***

Despite the difficulty of assessing the overall SRH burden, estimates of the extent to which adverse outcomes lead to death and disability have been made. These show that lack of access to SRH is (and has long been) a major public health concern, especially in developing countries.

A recent costing study of SRH interventions (Vlassoff et al. 2004) reviewed the burden of disease estimates for components of SRH (table 2.1 and 2.2). According to these estimates, death and disability due to SRH accounted for 18.4 percent of the overall global disease burden and 32 percent of the disease burden among women of reproductive age (15–44). Maternal conditions (including hemorrhage or sepsis due to childbirth, obstructed labor, pregnancy-related hypertensive disorders and unsafe abortion) accounted for 2.1 percent of all disability-adjusted life years (DALYs)<sup>2</sup> lost (and 13 percent among women of reproductive age) in 2001. And this disease burden has stayed relatively constant over the past decade, decreasing from 2.2 percent in 1990 to 2.1 percent in 2001. Perinatal conditions (including low birth weight, birth asphyxia and birth trauma) accounted for 6.7 percent of all DALYs lost in 2001. HIV/AIDS

**Table 2.1**  
Burden of disease estimates related to reproductive health, 1990 and 2001

Note: Numbers in table may not sum because of rounds.

Source: Vlassoff et al. 2004

	Years of life lost (YLL) (months)		Years lived with disability (YLD) (months)		Disability-adjusted life years (DALY) (months)		Percent of all DALYs	
	1990	2001	1990	2001	1990	2001	1990	2001
STIs	6.5	5.4	12.0	7.0	18.5	12.4	1.3	0.9
HIV	8.8	80.0	2.3	8.4	11.2	88.0	0.8	6.0
Maternal conditions	13.3	15.0	16.5	15.9	29.8	30.8	2.2	2.1
Total	28.6	100.4	30.8	31.3	59.5	131.3	4.3	9.0

accounted for 6 percent (and 14 percent among women of reproductive age), up from 0.8 percent in 1990. And STIs, excluding HIV/AIDS, accounted for 0.9 percent of all DALYs lost in 2001, down from 1.3 percent in 1990.

Across regions there are great disparities in the total burden of disease due to SRH problems (table 2.2). Nowhere are the disparities clearer than in terms of HIV/AIDS, as 18.8 percent of the total disease burden is due to HIV/AIDS in Africa, compared to 6 percent worldwide and 0.6 percent in Europe. In fact, the disease burden in Africa, due in large part to the HIV/AIDS crisis, is about one third of the total disease burden, and is almost double that of most other regions. Most other SRH problems also account for a larger portion of DALYs lost in Africa than in other regions. In Europe, conversely, the SRH burden is relatively low compared to the region's overall burden of disease, accounting for only 6.9 percent. Other regions show SRH burdens accounting for 10–20 percent of the total disease burden. Clearly, from these estimates, SRH poses a serious burden in many regions, but especially in Africa, and accounts for a good proportion of the total disease burden in much of the world.

**Table 2.2**  
Share of DALYs lost due to reproductive health-related causes, by region, 2001 (percent)

Note: Numbers in table may not sum because of rounds.

Source: Vlassoff et al. 2004

	World	Africa	Americas	Europe	Eastern Mediterranean	South-east Asia	Western Pacific
STIs (excluding HIV/AIDS)	0.8	1.4	0.4	0.2	1.0	1.0	0.2
HIV/AIDS	6.0	18.8	1.9	0.6	1.3	3.2	0.8
Maternal conditions	2.1	3.2	1.3	0.5	3.0	2.4	1.1
Perinatal conditions	6.7	6.1	4.9	1.9	9.1	9.4	5.7
Other SRH conditions	2.7	1.7	3.5	3.7	2.5	2.8	3.0
Total (percent)	18.4	31.3	12.0	6.9	16.9	18.9	10.8
Total DALYs (thousands)	270	112	17	10	23	79	28

**Poor and rural populations often having the least access to family planning information and services, and thus the highest fertility rates**

### **Measuring progress in key areas of SRH**

#### *Fertility levels*

Much of the world has seen spectacular declines in fertility levels over the past few decades. In more developed regions, the total fertility rate<sup>3</sup> was relatively stable at 1.55 children per woman in 1995–2000 and 1.56 in 2000–2005. Both periods have fertility rates below replacement level.<sup>4</sup> In less developed regions, total fertility also declined over the same period – from 3.1 to 2.9 children per woman. However, if China is excluded, this decline was only from 3.64 to 3.35. Northern Africa, in particular, experienced rapid declines in fertility levels, especially in Algeria, Jordan and Libya. And by the late 1990s, total fertility levels fell below five children per woman in most countries of Asia, Latin America and the Caribbean and Oceania. Indeed, by 2000, approximately 44 percent of the world's population lived in countries with below replacement fertility.

In the least developed countries, however, fertility levels are still estimated at 5.02 for 2000–2005 (UN Population Division 2002a and 2005b). In addition, many countries have seen the decline slow down in recent years. India, in particular, saw progress in reducing fertility rates – which dropped from about 5.5 to 4 children per woman during the 1970s and 1980s– slow during the 1990s. Bangladesh saw slowing progress during the 1990s as well, with fertility levels holding steady at about three children per woman during that decade. El Salvador, Haiti, Malaysia, Myanmar, Paraguay and Peru experienced similar slowdowns, with rapid fertility declines during the 1970s and 1980s followed by slower (or no) declines during the 1990s.

Even worse, some countries (mostly in Africa) did not experience fertility declines at all over the past few decades, and continue to have rates above five children per woman (table 2.3). In addition, pockets of high fertility within countries continue to exist – with poor and rural populations often having the least access to family planning information and services, and thus the highest fertility rates. In countries with fertility rates above six children per woman, such as in Mali or Nigeria, there is often little difference between income groups within countries. In these countries the total fertility rate does not fall below four children per woman even among the wealthy. In countries with overall lower or intermediate fertility rates, such as some Latin American countries, fertility levels range from 3.5 to 5.1 children per woman. In six Latin American countries, the wealthiest quintile has fertility rates around two children per woman (below replacement levels), while the poorest have rates around five (UNFPA 2002b). High fertility levels are also often found among young married women, especially adolescents (see below).

Reasons why fertility rates have not declined in Africa can vary from country to country but there are some overall explanations. Firstly, the region has a very high desired family size compared to other regions. Secondly, only small numbers of married women have access to and use modern contraceptives. Thirdly, the reduced international support for family planning challenges the needed

investments in these programs. And finally, Africa has many fragile governments and health systems, which imposes further challenges to reaching the poor with public services, including effective contraceptive information and services (Cleland and Sinding 2005).

Table 2.3 suggests that countries with total fertility rates that have remained above five children per woman over the past few decades share similar characteristics. Under-five mortality rates were high in these countries in 1995–2000 – ranging between 135 and 287 child deaths per 1,000 live births. Compare this rate to that of less developed regions with an average rate of 95 child deaths per 1,000 live births, or even least developed countries with an under-five mortality rate of 167 per 1,000 live births. Almost all of these countries had less than half of their populations living in urban areas.

**Table 2.3**  
Countries where  
total fertility rate  
remains above five  
children per woman  
and has not decreased  
since 1960, selected  
characteristics,  
late 1990s

Source: UN Population Division  
2004

	Total fertility rate	Under-five mortality	Percentage urban	Gross national income per capita at purchasing power parity (international dollars)
	Late 1990s	1995–2000	1999	2000
Angola	7.2	218	34	1,230
Burkina Faso	6.8	170	19	1,020
Burundi	6.8	211	9	580
Chad	6.6	212	24	860
Congo	6.3	135	63	590
Democratic Republic of Congo	6.7	151	30	680
Equatorial Guinea	5.9	177	48	4,770
Guinea	5.5	207	33	1,930
Liberia	6.8	172	45	–
Malawi	6.3	238	25	600
Mali	7.0	261	30	790
Niger	7.5	228	21	760
Sierra Leone	6.5	287	37	460
Somalia	7.3	204	28	–
Uganda	7.1	186	14	1,230
Least developed countries	5.5	167	26	–
Less developed regions	3.1	95	40	–

### *Adolescents, early marriage and fertility*

Many of the MDGs refer to adolescents, of whom one in four is estimated to live in extreme poverty (UNFPA 2005d). There are over one billion adolescents between the ages of 10 and 19, accounting for about 20 percent of the world's total population. More than 85 percent of these young people

live in the developing world (Bruce and Chong 2006). The total number of adolescents in the world will not change over the coming decades. About 14 million adolescents each year gave birth to a child during the period 1995–2000. Of these teen mothers, 12.8 million lived in developing countries. Africa experienced the highest proportion of adolescent childbearing in the world, with a fertility rate in 1995–2000 of 122 births per 1,000 women aged 15–19. This was expected to decrease in 2000–2005 to 114 births per 1,000 women (table 2.4).

**Table 2.4**  
**Age-specific fertility rates for women aged 15–19 by major region, 1995–2005 (per 1,000)**

Source: UN Population Division 2005c

Region	1995–2000	2000–2005
Africa	122	114
Asia	53	46
Europe	24	21
Latin America and the Caribbean	86	80
Northern America	50	48
Oceania	40	32
World	64	59
More developed regions	20	27
Less developed regions	71	64
Least developed countries	136	125

Higher fertility rates among adolescents have been linked to early marriage. In most countries, especially developing countries, childbearing takes place in the context of marriage – making age at marriage a primary indicator for exposure to risk of pregnancy. Overall, among 20–24-year-olds, 90 percent of young women have their first births after marriage – with variation ranging from 70 percent in Eastern and Southern Africa to 97 percent in Southern Asia to nearly 100 percent in the Arab States (Lloyd 2006). And in developing countries, between half and three quarters of all first births to married women occur within the first two years of marriage (Singh and Samara 1996). Recent findings further suggest that this interval between marriage and first birth (known as the ‘first birth interval’) is decreasing in all regions except in the Asian countries of the former Soviet Union. Among women currently aged 40–44, their first birth interval ranged from 13–26 months. Among the youngest cohort (15–19-year-olds), the range narrowed to 14–21 months (National Research Council and Institute of Medicine 2005). Given these first birth intervals, childbearing between the ages of 15 and 19 on average reflects young women marrying between the ages of 13 and 18. Even though the majority of these births occur in the last two years

**Despite a rise in the average age at marriage worldwide, however, a substantial proportion of women in developing countries still marry at a young age**

of the age cohort in most settings, the major portion of the adolescent fertility rate would still reflect an age of marriage as early as age 16.

Globally, there has been a rise in the average age of marriage, and this has contributed to declines in adolescent fertility. This is particularly the case in Northern Africa, Western Asia and South-central and Southeastern Asia. An analysis conducted by the UN Population Division (Mensch and Singh 2003) suggests that in almost two thirds of the 11 countries that experienced the fastest declines in fertility, less than 10 percent of the women aged 15–19 had ever been married. In Algeria, for example, the mean age at marriage increased by five years between 1980 and 1992 (to after age 25), which was closely associated with a significant decline in fertility levels by more than two children per decade between 1979 and 1995.

Despite a rise in the average age at marriage worldwide, however, a substantial proportion of women in developing countries still marry at a young age (Singh and Samara 1996). Indeed, great variation exists in age at marriage and early childbearing both between and within countries. In some countries, up to 50 percent of women marry or enter a union by age 18, with this figure rising to 70 percent by age 20.

It is difficult to estimate the number of early marriages because many marriages are unregistered and unofficial, and even fewer are officially acknowledged for children under the age of 14. An exception is in Bangladesh, where the Demographic and Health Survey (DHS) found that, in 1996–1997, 5 percent of 10–14-year-olds were already married. In the Indian state of Rajasthan, a small survey of 5,000 women conducted in 1993 found that 56 percent were married before the age of 15, and 17 percent of these marriages occurred before age 10. In Nepal 7 percent of girls are married before age 10 and 40 percent by age 15. High rates of early marriage also appear to occur in Afghanistan, Burkina Faso, Cameroon, Mali, Niger and Uganda. A recent UNICEF survey found that 44 percent of women aged 20–24 in Niger got married when they were under the age of 15. Early marriage is less common in Northern Africa, the Arab States and Latin America and the Caribbean (UNICEF 2001a).

India, Indonesia, Pakistan and Yemen have the highest proportion of women married or in union by age 20, and also have three of the four highest rates of adolescent fertility in their regions (South-central, Southeastern and Western Asia). Similarly in sub-Saharan Africa, six countries (Burkina Faso, Cameroon, Malawi, Mali, Niger and Uganda) with the highest proportion of women married by age 20 also have four of the highest adolescent fertility rates. Finally, in Latin America and the Caribbean, the four countries (El Salvador, Guatemala, Nicaragua and Trinidad and Tobago) that have the highest proportions of women married by age 20 also include the three countries with the highest adolescent fertility rates (U.S. Bureau of the Census 1996).

**Table 2.5**  
**Average age at marriage and percentage of men and women aged 15–19 and 20–24 who are ever married**

Source: UN Population Division  
 2004

Region	Average age at marriage (years)		Difference in average age at marriage (years)	Percentage ever married in age group 15–19		Percentage ever married in age group 20–24	
	Males	Females	Males - Females	Males	Females	Males	Females
World	27.6	24.1	3.3	2.3	13.3	21.2	46.1
Africa	26.8	21.9	5.0	3.3	24.8	24.8	63.1
Asia and Oceania	26.6	23.4	3.2	2.7	13.0	24.9	51.0
Europe and Northern America	28.8	26.1	2.8	0.6	3.6	13.9	30.7
Latin America and the Caribbean	28.5	25.5	2.8	2.7	10.9	19.6	36.2

### *Family planning*

These spectacular declines in overall fertility levels have been met with and driven by equally dramatic increases, on average, in the use of family planning services over the past few decades. More than 60 percent of couples in less developed countries use family planning services today, compared with 10 percent in 1960. Moreover, the success of family planning efforts has impacted the number of children a couple reportedly desires. In Kenya, for example, women reported wanting just 3.9 children today on average, compared with 7.2 in the 1970s.

Despite such advances, about 201 million women who want to space or limit their childbearing are still not using effective modern methods of contraception: 137 million women are using no method at all and 64 million are using less effective traditional methods (UN Millennium Project 2005b). Such high levels of unmet need for effective contraception has led to about 70 to 80 million unintended pregnancies each year in developing countries. Almost one fifth of married women in developing countries have such unmet need for family planning services. And in Africa, only about a quarter of couples are using family planning services.

There are also large disparities both across and within countries in the use of family planning services. For example, while most Africans hardly use family planning services, almost half of married women in some countries – especially in Northern and Southern Africa – are using contraception. This rate is three to five times higher than in many other countries of that region. Western Africa, for example, has very low family planning usage, except in Ghana. In Asia (excluding China) the use of family planning services is similar to levels found in Northern and Southern Africa. With China, this proportion rises even higher to 66 percent. Prevalence of contraceptive use is very low in other countries of that region including Afghanistan, Bhutan, Iraq and Lao PDR – with each of these countries experiencing rates below 20 percent. Countries in Latin America and the Caribbean have relatively high

contraceptive prevalence rates, at about of 69 percent, and there exists little variation between them.

Another important measure of unmet need is the proportion of desires for family planning satisfied. This human rights-based measure of access to family planning addresses the degree to which individuals are able to translate their fertility preferences into action and is a combination of unmet needs for family planning and the contraceptive prevalence rate. Data from DHS from 1996 to 2004 show that Africa on average has the lowest proportion of demand satisfied for all contraceptive methods, with only a 40 percent satisfaction rate, while Central Asia has a satisfaction rate of almost 84 percent (figure 2.1). When data are disaggregated by wealth quintiles a clear picture emerges: The poorer groups in all regions have the smallest proportion of their fertility desires satisfied while, not surprisingly, the richest have a much higher satisfaction rate – a rate that never goes below 40 percent. The proportion of desires satisfied in the poorest quintile roughly matches the overall contraceptive prevalence

**Figure 2.1**  
**Proportion of family**  
**planning desires**  
**satisfied for all**  
**contraceptive methods,**  
**by wealth quintile,**  
**survey periods**  
**1990–1995 and**  
**1996–2004**

Notes:

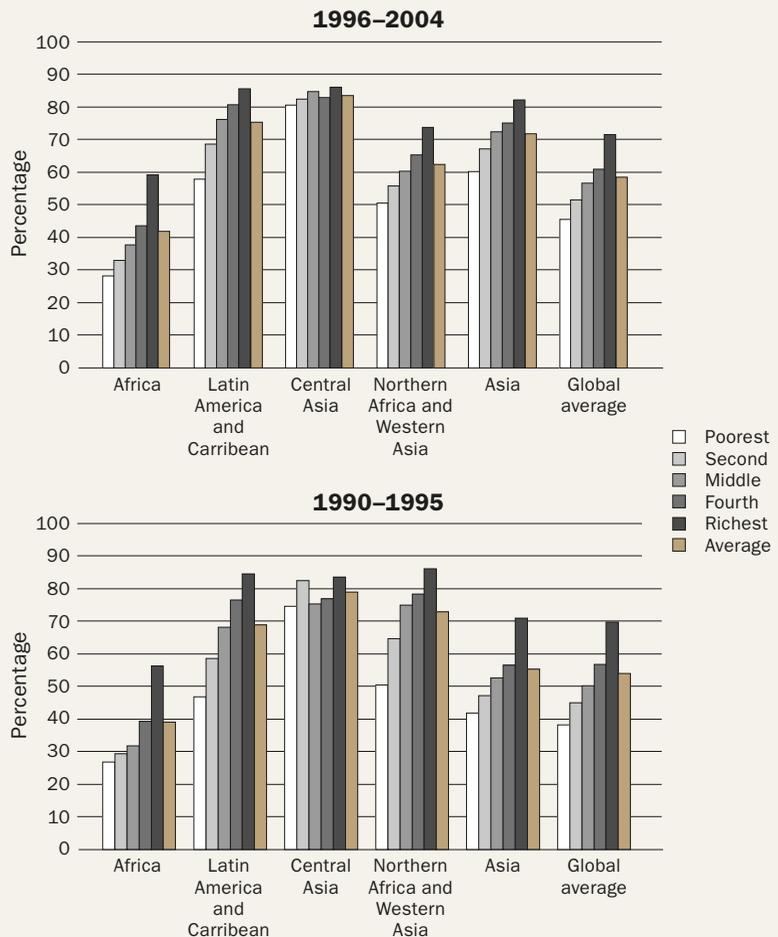
The two survey periods are not strictly comparable because they may contain different sets of countries

Some countries with two data points in one period had the point close to the boundary year reassigned up or down to capture change over time

Regional averages are not weighted by population, but by countries per region

Regional averages include only countries in that region with data; other countries have not been included. If more countries were added, it could significantly change the aggregates

Wealth quintile average is a simple average, and does not account for differences in wealth quintile groups between countries



Source: Data compiled from DHS STATcompiler 2005 accessed at [www.measuredhs.com](http://www.measuredhs.com)

**Men play a crucial part in SRH outcomes, and the more informed men become about living safer sexual and reproductive lives, the better the outcome for their partner and family**

rate, including countries with very low prevalence. Regional variations are very large: Even the richest in Africa have a lower proportion of their desires satisfied than the poorest in both Asia and Central Asia.

Over time in almost every region the proportion of people who have their desires for family planning satisfied is increasing. The only regions excepted from this development are Northern Africa and Western Asia. Interestingly, the increase in the proportion of desires satisfied appears across all wealth quintiles, indicating that every quintile to some extent is positively affected over time.

#### *Adolescents and contraception*

While contraceptive use among adolescents has been on the rise, this group still has a significantly higher unmet need for modern contraception than the general population in many countries around the world. The proportion of young women who are not using contraception in spite of being exposed to the risk of an unwanted pregnancy ranged between 17 and 47 percent of married women aged 15–19 in 26 developing countries in the mid-1990s. This range narrowed to between 16 and 40 percent of married women aged 20–24. Data from 94 national surveys taken over the past decade demonstrate that the unmet need of adolescents is 2.3 times higher than that of the general population in these countries. In sub-Saharan Africa, less than 20 percent of sexually active adolescents use contraception. This figure rises to between 20 and 40 percent in Asia and Northern Africa and is consistently over 30 percent in Latin America and the Caribbean, the region with the highest average in the developing world. In this age group, unmet need for family planning is predominantly a desire to delay pregnancy. Addressing these preferences could reduce exposure to reproductive risks and empower young women in education, employment and social participation.

#### *Men<sup>5</sup>*

Men play a crucial part in SRH outcomes, and the more informed men become about living safer sexual and reproductive lives, the better the outcome for their partner and family. Men are involved as advocates for needed services, as supporters of their partner's needs and as recipients of services for their own health and well-being. Family planning programs should therefore also address men and their SRH needs.

While male sexual and reproductive behavior varies widely across the developing world and among social and ethnic groups within a single country, some broadly similar patterns across regions do emerge. In almost all of 39 developing countries for which recent information is available, the majority of men aged 20–24 report having had sexual intercourse before their 20th birthday. A substantial proportion had had sex before their 15th birthday. Among unmarried men aged 15–24 who have ever had sex, two to six in ten

**Communication  
between  
husband and  
wife about  
family planning  
and desired  
number of  
children is  
closely linked  
to successful  
contraceptive  
use**

had two or more partners in the past year. Men in general are more likely to begin sex before marriage than women (INFO 2004). Despite these high levels of youthful sexual activity, fewer than half of sexually active men aged 15–24 in most sub-Saharan African countries use a contraceptive method or rely on their partner's method, compared to about two thirds in parts of Latin America and the Caribbean.

Among men in their late 20s and 30s, contraceptive prevalence is lower in sub-Saharan Africa than in other regions. Reasons for not intending to use contraception are reflected in these men's desire for more children, which is often higher than women's; their wives' reduced risk of pregnancy, e.g., due to infertility; or opposition to family planning itself for religious or other reasons, such as concern about side effects (INFO 2004). In developing countries where men aged 40–54 report moderate or high levels of contraceptive use, methods used by women (especially female sterilization) predominate. Vasectomy is not commonly performed in most developing countries, except China. A large fraction of married men aged 25–39, particularly in sub-Saharan Africa, report that they have not discussed family planning with their partners. Data show that communication between husband and wife about family planning and desired number of children is closely linked to successful contraceptive use. However, the same data also show that more men are likely to approve contraceptive use than women think, and that 90 percent of men in 36 of the 46 surveyed countries knew about either one or more traditional and modern contraceptive methods (INFO 2004). Failure to communicate, linked to traditional sex roles, impedes family planning acceptance.

Differing regional levels of risk of unintended pregnancy can be clearly seen in the fact that some 20–46 percent of men aged 25–54 in sub-Saharan Africa and 15–30 percent of those in Latin America and the Caribbean do not want a child soon, or do not want any more children, but are not protected against unplanned pregnancy.

Men's reported number of sexual partners varies considerably by country. In most countries, a majority of all men aged 25–39 had had only one sexual partner in the past year, in most cases their spouse. Yet 7–36 percent of married men had had one or more extramarital partners, and some 15–65 percent of unmarried men in this age group – who represent only a small proportion – had also had more than one partner within that time period. Similarly, some 4–23 percent of married men aged 40–54 had one or more extramarital partners in a recent 12-month period. The use of condoms is higher among unmarried than married men in many cases in Africa because condom use within marriage is associated with unfaithfulness and mistrust of spouse (INFO 2004).

Strikingly few men in their teens or early 20s have become fathers, but half of them have done so by their mid-to-late 20s. Men become parents later in life than women usually because men marry later than women (ibid).

**It has been estimated that for every woman who dies in pregnancy or childbirth approximately 30 more suffer injuries, infection and disabilities**

### *Maternal and child health*

As will be described in the following sections of this report (specifically, in the discussion of Goal 5 in Section 3) maternal health must go beyond simply measuring the number of maternal deaths averted. It must also include measurements of other aspects of maternal health, notably the promotion of healthy, voluntary and safe sexual, reproductive and childbearing choices. This includes having access to key aspects of SRH, such as family planning, including safe and effective contraceptive choices; prevention, treatment and care of STIs and HIV/AIDS; and access to care before, during and after childbirth. Since discussions of trends in these key aspects of SRH are included in Section 3, the following will focus on the burden of maternal mortality and morbidity worldwide.

### *Maternal mortality and morbidity*

In no other area of health is the disparity between developed and developing countries as great as it is within maternal health. Women in the developing world face a risk of death during pregnancy that is many times higher than women in industrialized countries. A woman has a 1 in 2,800 lifetime chance that she will die from pregnancy-related complications in industrialized countries, while the corresponding risk in developing countries is 1 in every 61. The lifetime risk is even greater in sub-Saharan Africa – 1 in every 16 – reflecting both higher pregnancy rates and the greater risk associated with each pregnancy (UNICEF, WHO and UNFPA 2004).

Maternal mortality is notoriously difficult to measure due to weak civil registration systems in developing countries as well as the size of the population needed for estimating maternal deaths from household surveys (given the rarity of the event and thus the need to measure it per 100,000 live births). Maternal mortality estimates also suffer from severe misclassification and underreporting. In recent years, WHO and the United Nations Children's Fund (UNICEF) (with assistance from UNFPA) have worked to revise these estimates for underreporting and misclassification, as well as to generate estimates for countries without data.

It is estimated that maternal mortality takes some 529,000 lives per year (table 2.6), the majority divided almost equally between Africa with 251,000 and Asia with 253,000. Worldwide, the maternal mortality ratio (MMR) is estimated to be about 400 deaths per 100,000 live births. Sub-Saharan Africa has the highest rate at 920 deaths per 100,000 live births followed by South-central Asia with 335 deaths per 100,000 live births.

Maternal deaths occur from both direct and indirect complications. Direct complications, which account for 80 percent of maternal deaths, include hemorrhage, sepsis, hypertensive disorders from pregnancy and abortion complications as well as obstructed labor. Indirect complications, such as malaria and AIDS, account for the remaining maternal deaths. The causes of indirect complications vary from region to region.

**Table 2.6**  
**Estimates of maternal**  
**mortality ratios,**  
**maternal deaths and**  
**lifetime risk for 2000**

Region	Maternal mortality ratio (maternal deaths per 100,000 live births)	Number of maternal deaths	Lifetime risk of maternal death 1 in:
<b>World total</b>	400	529,000	74
<b>Developed regions<sup>a</sup></b>	20	2,500	2,800
Europe	24	1,700	2,400
<b>Developing regions</b>	440	527,000	61
<b>Africa</b>	830	251,000	20
Northern Africa <sup>b</sup>	130	4,600	210
Sub-Saharan Africa	920	247,000	16
<b>Asia</b>	330	253,000	94
Eastern Asia	55	11,000	840
South-central Asia	520	207,000	46
South-eastern Asia	210	25,000	140
Western Asia	190	9,800	120
<b>Latin America and the Caribbean</b>	190	22,000	160
<b>Oceania</b>	240	530,000	83

Notes:

a. Includes, in addition to Europe, Australia, Canada, Japan, New Zealand and United States of America, which are excluded from regional totals

b. Excludes Sudan, which is included in sub-Saharan Africa

Source: UNICEF, WHO and UNFPA 2004

The toll of disabilities and illness from maternal complications is significantly higher than the death rate, most dramatically for young women. It has been estimated that for every woman who dies in pregnancy or childbirth approximately 30 more suffer injuries, infection and disabilities. This means that at least 15 million women a year incur this type of damage. The cumulative total of those affected by maternal morbidity has been estimated at 300 million, or more than a quarter of adult women in the developing world (UNICEF 2003).

#### *Unsafe abortions*

It is estimated that approximately 27 million legal abortions and another 19 million illegal and unsafe abortions were performed worldwide in 2000. Unsafe abortions lead to about 68,000 maternal deaths each year and hundreds of thousands of disabilities, which disproportionately affect women in developing countries (WHO 2004b) (table 2.7). Thus, one in eight maternal deaths, on average, is due to an abortion-related complication. This is also the average in Africa, while in Asia it increases to one in six and increases again to one in five in Latin America and the Caribbean. The risk of death from an unsafe abortion is highest in Africa, where the case fatality rate is about seven deaths per 1,000 unsafe abortions. This rate falls to one in 1,000 in Latin America and the Caribbean and to 0.5 in 1,000 in Europe. Section 3 presents more information on this issue.

**Table 2.7**  
**Maternal deaths due to unsafe abortion**

Source: WHO 2004b

Region	Number of maternal deaths	
	due to unsafe abortion	% of all maternal deaths
Africa	29,800	12
Asia	34,000	13
Latin America and the Caribbean	3,700	20
Europe	300	17

*Access to adequate medical care and skilled birth attendants*

A major underlying cause of maternal death is poor access to adequate medical care during pregnancy and childbirth. Fifteen percent of pregnant women, even under the best of circumstances, will experience a serious complication that requires medical attention. Most of these complications are treatable if appropriate medical care is accessed. Yet, only 53 percent of women worldwide have access to a midwife or doctor during their childbirth, and only 40 percent of women in developing countries give birth in a hospital or other health facility.

From 1990 to 2003, the percentage of births assisted by a skilled attendant rose globally from 41 to 57 percent. Indeed, most parts of the world have seen great increases in this area: from 27 to 38 percent in Southern Asia; from 45 to 76 percent in Eastern Asia and the Pacific; and from 74 to 86 percent in Latin America and the Caribbean. However, sub-Saharan Africa with the highest MMR has only had a slight increase from 40 percent to 41 percent (table 2.8).

**Table 2.8**  
**Trends in percentage of births attended by skilled birth personnel in 58 countries, 1990–2003<sup>a</sup>**

Notes:  
a. Data from Demographic and Health Surveys (DHS), multiple indicator cluster surveys (MICS) and comparable surveys, weighted by the number of births

b. Data for deliveries in institutions, not in the home

Source: UNICEF's Childinfo 2005

Region	Births covered by the data for the survey period (%)	Births attended by skilled personnel (%)		Change 1990–2003 (%)
		1990	2003	
Sub-Saharan Africa	61	40	41	3
Southern Asia	97	27	38	42
Eastern Asia and Pacific	80	45	76	68
Latin America and Caribbean <sup>b</sup>	70	74	86	16
Total	75	41	57	38

***HIV/AIDS and other STIs***

*HIV/AIDS*

The HIV/AIDS pandemic is devastating families, communities and societies worldwide – currently taking 3.1 million lives per year while infecting nearly 5 million more. It is estimated that around 40.3 million people are infected with

HIV, 25.8 million of whom reside in sub-Saharan Africa (UNAIDS 2005a). Few, if any, countries remain untouched by the epidemic, while some have been devastated by its toll – especially those in sub-Saharan Africa. Countries' experiences with AIDS have become increasingly divergent, with prevalence rates among adults in different countries ranging from a fraction of a percent to well over 30 percent. The virus is spreading through different populations at different rates. In sub-Saharan Africa and parts of the Caribbean, the epidemic is clearly established in the general population and is largely spread through heterosexual contact. In the Russian Federation, Eastern Europe and parts of Asia, injection-drug users are at highest risk of exposure, while in other regions transmission is largely due to men having sex with men or to commercial sex work. But no matter the epidemiological pattern, it is almost always the poor and marginalized that are at highest risk of exposure.

Additionally, while experience in HIV prevention has grown and deepened over the past decade, recent DHS show that many people worldwide lack practical knowledge on how to prevent HIV infection. While most people had heard of HIV/AIDS, more than half the women and men in most countries worldwide lacked comprehensive and correct knowledge on how to prevent HIV infection. In Benin, for example, only 27 percent of men and 35 percent of women fully know how to prevent HIV. Similarly, only one in three men and fewer than one in four women in Mali comprehensively know how to protect themselves (table 2.9). The proportion of men aged 15–54 who know that condom use is a way of preventing HIV/AIDS varies widely in developing countries – from 9 percent in Bangladesh to 82 percent in Brazil (Greene et al. 2006).

**Table 2.9**  
**Knowledge of**  
**HIV/AIDS, men and**  
**women, in selected**  
**sub-Saharan African**  
**countries<sup>a</sup>**

Countries	Respondents who have heard of HIV/AIDS (%)		Respondents who have knowledge of HIV prevention methods (%) <sup>b</sup>	
	Male	Female	Male	Female
Benin	98	96	27	35
Burkina Faso	96	96	37	14
Cameroon	99	98	66	54
Ghana	99	98	70	62
Kenya	99	99	67	55
Malawi	100	99	55	49
Mali	98	90	31	23
Mozambique	98	96	52	35
Nigeria	97	86	47	32
Rwanda	100	100	62	48
United Republic of Tanzania	100	99	63	58

*Notes:*

a. The surveys were undertaken between 2000 and 2004

b. The percentage of respondents who, in response to a prompted question, say that people can protect themselves from contracting HIV by having no penetrative sex, using condoms or having sex only with one faithful, uninfected partner

Source: Data compiled from DHS HIV/AIDS Survey Indicators Database 2005

**Abused women were more than twice as likely as non-abused to have poor health**

### *Sexually transmitted infections<sup>6</sup>*

The prevalence of curable and incurable STIs (including HIV/AIDS) is higher in sub-Saharan Africa and in Latin America and the Caribbean than in other regions. STIs are an important co-factor that increases the risk of HIV/AIDS infection. The estimated annual prevalence of curable STIs per 1,000 people among men and women aged 15–49 ranges from almost 119 infections in sub-Saharan Africa to 71 in Latin America and the Caribbean, to 50 in Southern and Southeastern Asia and 21 in Northern Africa and the Arab States. And of the 40.3 million adults and children living with HIV/AIDS in the world, 25.8 million live in sub-Saharan Africa, 7.4 million in Southern and Southeastern Asia and 2.1 million in Latin America and the Caribbean (UNAIDS 2005a).

In some parts of the developing world, men may be prepared to use condoms but are unable to obtain them, especially young men and those with limited resources or living in rural areas. When sexually experienced sub-Saharan African men aged 15–24 were asked if they knew where to obtain condoms, only half or fewer of those in rural areas of Chad, Guinea, Mali, Mozambique and Niger knew of a source. Today, an estimated 6–9 billion condoms are distributed each year for family planning and for STI prevention, but many more – approximately 19–24 billion a year – are needed to protect populations from unplanned pregnancies, HIV and other STIs.

### *Gender-based violence*

Gender-based violence is a significant public health problem that affects millions of women worldwide. It is often considered to be a private matter and therefore many women do not report the violent incidents. Gender-based violence against women is practiced both by partners and non-partners, but intimate partner violence (IPV) is the most common form of violence in women's lives. Between a quarter to half of women have been victims of sexual violence by an intimate partner (WHO 2005c). Among adolescent girls this figure jumps to more than one in three (WHO 2002).

A recent study undertaken by WHO among 24,000 women in 10 countries<sup>7</sup> found that abused women were more than twice as likely as non-abused to have poor health, including reproductive health, and both physical and mental problems. These women also had increased risk of contracting an STI, including HIV/AIDS. Among pregnant abused women, 4–12 percent reported being beaten during pregnancy, including being kicked and punched in the abdomen (WHO 2005c). Though inequities and certain social norms perpetuate abuse, partner violence appears to have a similar impact on women regardless of where they live, or their economic and cultural background. Due to the impact of gender-based violence on women's lives and rights, violence-prevention programming must be integrated into programs and policies that aim at children, youth, HIV/AIDS and SRH.

**Lacking an integrated understanding of the SRH concept, governments have tended to lower its priority in poverty-reduction discussions**

### **Why hasn't SRH been given higher priority?**

#### *Disparate elements, multiple owners, multiple discourses*

One of the reasons why SRH is not a priority issue is the complexity of the concept itself. All health outcomes are complexly determined by social factors, economic factors and health system responses. But SRH issues are more intricately implicated in social dynamics, power relationships and individual decisions. SRH is also comprised of disparate elements including safe motherhood, family planning, child health, harmful traditional practices, women's empowerment, gender-based violence, etc. Its breadth requires multidimensional and multisectoral action in health, education, information, statistical and women's ministries. Without clear 'sectoral ownership' it is hard for decision makers and implementers to take up the burden of a coordinated response.

Moreover, since the components of SRH fall under the province of different national actors (and international donors), the separation of functions has led to competition rather than synergies. In a similar fashion, the SRH agenda has suffered from its checkered allocation to diverse MDGs (i.e., safe motherhood to Goal 5, child mortality to Goal 4, gender equality to Goal 3, HIV/AIDS to Goal 6) and from the exclusion of family planning. Lacking an integrated understanding of the SRH concept, governments have tended to lower its priority in poverty-reduction discussions.

Part of the difficulty also is that there are multiple discourses regarding SRH. A public health framework emphasizes risks and costs. A rights framework emphasizes freedoms, guarantees and mechanisms. A moral framework gives higher priority to responsibilities and proscriptions. An instrumentalist framework seeks demonstrated – often quantified – consequences and attributions of causality. A less stringent discourse about linkages and relations explores correlations without examination of mechanisms. An institutional framework emphasizes goal-directed processes and pragmatic organization. Further, varying cultural definitions compete in multicultural settings.

Yet, the groups advancing differing concerns have difficulty engaging in constructive dialogue about this important area of human experience. Human rights arguments for increasing access to reproductive health may be advocated by rights advocates but are not taken to be determinative. Instrumentalists worry about the proliferation of rights claims and claimants and do not admit the arguments as evidence for decisions. Institutional analysts may grasp the complexities of social action and actors, but often cannot motivate action rather than analysis, particularly when a complex set of diverse institutions are directing outcomes.

Worse, different constituencies advance the different perspectives. Rights perspectives are championed by civil society organizations. Instrumentalist perspectives are the chosen discourse of decision makers addressing fiscal constraints. Institutional analyses are the province of academics. There are often few opportunities for these groups to directly engage each other.

**Progress  
in gender  
equality and  
in access to  
reproductive  
health will  
catalyze  
additional  
changes and  
contribute  
to virtuous  
circles of  
accelerating  
progress that  
will foster  
development  
beyond 2015**

Decisions arise out of a complex political process that unfolds over time. National strategy definition and operational planning takes place within organizations and processes that exclude key actors and their differing perspectives. NGOs are infrequently given full partnership roles in national policy discussions. These tensions are particularly relevant when the topic under consideration involves sex, reproduction and gender relations. In many countries, various cultural groups have different understandings and positions on these matters (and on associated service provision). This further reduces discussion and attention so political divisions can be avoided. This political hesitancy is reinforced when there is stigma associated with public discussion. Reproductive health has become a fit topic for international discussion and consensus only within the last 10–15 years.

#### *Diverse time scales*

The targeted time frame for the MDGs also helps direct attention away from some elements of the SRH agenda. Changes in attitudes and behavior generally unfold over extended periods of time. It is no surprise, then, that the targets and indicators chosen for the gender equality goal are ones that are measurable, where countries have the capacity, in the short term. These include increased female enrollment rates in education, gender balance in enrollment ratios, women's participation in the non-agricultural labor force, and women's representation in parliaments.

Clearly, population dynamics and fertility and mortality transitions develop over long periods of time as well. However, even within the short time horizon of the MDGs dramatic impacts can be seen on the size of infant, child and school-age entrant population cohorts as a result of both mortality reduction and fertility reduction. The largest impacts on overall population structures result from variations in observed fertility.

Moreover, the extended time frame of change in demographic behavior and in gender relations does not mean that they will not contribute immediately to progress and development. To the contrary, progress in gender equality and in access to reproductive health will catalyze additional changes and contribute to virtuous circles of accelerating progress that will foster development beyond 2015.

#### *Lack of sufficient attention to women's situations and rights*

The first MDG target – elimination of gender disparities in primary and secondary education – which was to be achieved by 2005 has not been met. The MDG lagging most in attainment is Goal 5: Improve Maternal Health. Maternal mortality has not declined in the highest mortality groups. The commitment of political actors to address gender equality concerns needs more convincing demonstration.

As noted above, the targets and indicators chosen for the gender equality goal are those that are measurable within the MDG time frame. Important

**It is easier to quantify the effects of failing to invest in SRH than to specify the gains from investments**

and more subtle issues regarding the dynamics of gender inequality were not included in the MDG framework. These have been highlighted by the UN Millennium Project Task Force on Education and Gender Equality (2005d), which has made a list of proposed indicators to track progress on their strategic priorities for Goal 3 (see table 2.10).

#### *Priority-setting mechanisms*

Some methods that inform decision-making on investments in health are biased against SRH<sup>8</sup>. Investments in preventive health measures are frequently accorded lower priority than curative investments because of the classes of actors involved (e.g., medically trained personnel without public health sensitivity). In many areas of health people's exposure to risks and their ability to avoid them is given less concern than the treatment response of the health system.<sup>9</sup>

A disease-oriented (rather than health-oriented) discourse and a concentration on evaluation and allocation methods (e.g., DALYs) focused on disease conditions helps undermine support for preventive interventions, for multisectoral strategies and for health promotion. Pregnancy is not a disease (unless there are complications and/or interactions with other diseases) and children are a natural and expected part of relationships. That the timing and spacing of children (and eventual limitation of family size) is a health decision and that access to relevant information and services could be a health system priority is not as obvious. The analytic tools offered to developing countries do not sufficiently value SRH interventions like family planning. (For a longer discussion, see AbouZahr and Vaughn 2000.)

Many national planners learned development economics before the recent analytical advances on the effect of age structures on poverty reduction (see Section 3, Goal 1). Returns on investments are difficult to calibrate when different categories of investment in different sectors are relevant and when returns are diverse and non-monetized. Health risks avoided, opportunities seized and the like may be easier to capture than direct returns realized. It is easier to quantify the effects of failing to invest in SRH than to specify the gains from investments. However, this does not fit into a decision-making frame related to the marginal impact of specified new investments.

#### *Victim of its own success – forecasts and projections*

The increases in contraceptive use, and corresponding declines in fertility, attained over the past several decades have been a significant contribution of family planning and reproductive health programs (see above.) The United Nations Population Division's estimates and projections of global, regional and national populations (UNDESA 2001, 2004, 2005) have decreased projections of global population size in some revisions (with small increases less noted in public discussion). Additional analyses indicate that a growing

**Table 2.10**  
**Strengthening the MDG framework to measure women's empowerment**  
 Source: UN Millennium Project 2005d

Seven strategic priorities for women's empowerment developed by the UN Millennium Project Task Force on Education and Gender Equality		MDG women's empowerment measures		Additional women's empowerment indicators recommended by the UN Millennium Project Task Force on Education and Gender Equality
	Targets	Indicators		
1. Strengthen opportunities for postprimary education for girls while simultaneously meeting commitments to universal primary education	Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	9. Ratio of girls to boys in primary, secondary and tertiary education 10. Ratio of literate women to men, 15–24 years old		<ul style="list-style-type: none"> <li>The ratio of female to male gross enrollment rates in primary, secondary and tertiary education</li> <li>The ratio of female to male completion rates in primary, secondary and tertiary education</li> </ul>
2. Guarantee sexual and reproductive health and rights	Target 6: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio  Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	16. Maternal mortality ratio 17. Proportion of births attended by skilled health personnel  18. HIV prevalence among pregnant women aged 15–25 years 19. Condom use rate of the contraceptive prevalence rate		<ul style="list-style-type: none"> <li>Proportion of contraceptive demand satisfied</li> <li>Adolescent fertility rate</li> </ul>
3. Invest in infrastructure to reduce women's and girls' time burden	No sufficient target	No sufficient indicator		<ul style="list-style-type: none"> <li>Hours per day (or year) women and men spend fetching water and collecting fuel</li> </ul>
4. Guarantee women's and girls' property and inheritance rights	No sufficient target	No sufficient indicator		<ul style="list-style-type: none"> <li>Land ownership by male, female or jointly held</li> <li>Housing title, disaggregated by male, female or jointly held</li> </ul>
5. Eliminate gender inequality in employment by decreasing women's reliance on informal employment, closing gender gaps in earnings and reducing occupational segregation	Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015  Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth	11. Share of women in wage employment in the non-agricultural sector  45. Unemployment rate of young people aged 15–24, each sex and total		<ul style="list-style-type: none"> <li>Share of women in employment, both wage and self-employment, by type</li> <li>Gender gaps in earnings in wage and self-employment</li> </ul>
6. Increase women's share of seats in national parliaments and local governmental bodies	Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	12. Proportion of seats held by women in national parliament		<ul style="list-style-type: none"> <li>Percentage of seats held by women in national parliament</li> <li>Percentage of seats held by women in local government bodies</li> </ul>
7. Combat violence against girls and women	No sufficient target	No sufficient indicator		<ul style="list-style-type: none"> <li>Prevalence of domestic violence</li> </ul>

**Investments in reproductive health capacity-building and service delivery are often omitted from development plans**

number of countries have reached or gone below replacement fertility levels, presaging population decline and accelerated population ageing.

As the number (and size) of countries with persistently high fertility declined, a new discourse challenging the high fertility/high population growth rationale for program attention was developed and championed by opponents of the SRH agenda. In this view, the success of population programs meant that they were no longer relevant to the emerging development paradigm of the 21st century (Wattenberg 1997; Eberstadt 2002).

This record has led some to consider lower family size preferences and realized fertility levels as inevitable, not requiring special attention or investment. However, this fails to recognize that national experience shows many examples of delayed or stalled fertility declines and suggests that projections are often optimistic about the pace of fertility decline once near-replacement levels are attained (Bongaarts 2002; Bongaarts 2005; Casterline and Roushdy 2005). Moreover, projections are not forecasts. They are the results implied from specified assumptions. Most projections use assumptions predicated on continuation of past progress in expanding access to SRH services, including family planning.

Donor countries face different demographic situations. Some are experiencing or facing national population declines. Because population aging is most pronounced in the more developed countries of Europe and Japan, where persistent low fertility has become the norm, the view that reduced priority should be given to population growth issues has resonated with the domestic concerns of donor communities. As often occurs (sometimes benevolently and sometimes with unintended negative consequences), the developing countries became pawns of an internal donor dialogue. The race against population growth was, in effect, declared over before everyone crossed the finish line.

Governments also tend to reify population projections. Investments in reproductive health capacity-building and service delivery are often omitted from development plans, even as projections of incremental declines in population growth are presented in the situation descriptions.

### ***The changing institutional architecture***

The shift away from project support to a program approach in development assistance – appropriately justified to increase efficiency and ownership – was the start of a process that continues to reduce the ability of donors to earmark funds for particular services. Recently, several major donors for health system development (including the UK's DFID and the World Bank) have increased their level of assistance provided as direct budget support, reducing their ability to speak up for too-often neglected areas of women's health. At the same time, though, vertical pipelines exist for some interventions (e.g., HIV/AIDS) to the detriment of overall health system capacity-building.

**The morality-driven politicization of many of the behaviors and desires associated with sex and reproduction polarizes discussion and promotes a judgmental rather than an outcome-oriented public health approach**

Within developing countries themselves, health sector reform increasingly incorporates decentralized priority setting. This has provided a mechanism for national authorities to shift their responsibility. Yet such processes should neither absolve governments from setting guidelines for lower level choices nor excuse them from providing vital central support mechanisms – like functioning logistic systems needed to supply programs with high quality essential drugs, commodities and service practices.<sup>10</sup>

### *Sensitivities*

Matters related to life and death, relationships and pleasure will always arouse strong emotions. The morality-driven politicization of many of the behaviors and desires associated with sex and reproduction polarizes discussion and promotes a judgmental rather than an outcome-oriented public health approach.

Aspects of SRH not reflected in the existing MDG monitoring framework also address some hot-button issues. The topic of abortion, for example, despite the carefully crafted ICPD compromise, mobilizes debate and resistance. Even measuring the reduction of unsafe abortion, or abortions in general, as an indicator of progress in SRH access would often be a political impossibility. Gender relations and adolescents' needs for information and services add further controversy. Even family planning, some 50 years after the first establishment of programs in developing countries, remains problematic for decision makers responding to concerns in some cultural communities, despite the increase in contraceptive use in countries representing all major cultural traditions.

The position on abortion adopted by the international consensus at the ICPD has long remained a lightning rod that galvanized opponents of the SRH agenda while invigorating NGOs to press for implementation and the expansion of the consensus. The result of additional negotiations at the 1999 review of the Programme of Action (ICPD+5) was the retention of the Cairo understanding (that induced abortion not be promoted as a method of family planning, that its legal status be determined by national sovereign decisions, and that it be made safe where not prohibited by law), with the elaboration and extension that where the procedure is legal it should be accessible and supported by investments to ensure availability. This sensible compromise only further angered opponents of abortion in particular and of reproductive health and rights programs in general. With the political backing of several important countries, the issue was raised repeatedly during the processes of both the 10th year regional reviews of ICPD in 2004 and the World Summit in 2005.

Adolescent SRH is another topic that raises political concerns for governments. Information and education efforts about sex and reproduction directed to the young can mobilize opposition.<sup>11</sup> The international consensus

**Donor  
constraints  
can complicate  
national  
discussion  
and SRH  
implementation**

understandings recognize the need for a balance between the rights and responsibilities of parents and the needs and increasing capacity and maturity of the young (UN 1994). Different groups understandably view the point of ‘balance’ differently. Many governments are reluctant to address the public health dimensions of age of sexual initiation or acknowledge the sexual activity of young and unmarried people.

Harmful traditional practices – including FGC, low women’s status, early marriage and gender-based violence – involve issues of cultural identity and change and the definition of the public and private sphere of behavior and policy concern. Many countries are addressing these issues in national legislation, but others are reluctant.

Donor constraints can complicate national discussion and SRH implementation. The United States, a major donor, has strict rules forbidding the provision of development assistance funding for population and reproductive health to developing country institutions that perform abortions (even when permitted by law), provide information about abortion providers, lobby to change national abortion laws, disseminate information about the legal status of abortions or partner with organizations that undertake these actions. In 2005 this set of restrictions was extended to include potential recipients of funding for HIV/AIDS prevention, treatment and care. (It also requires that a set percentage of HIV/AIDS funding be provided to faith-based organizations.) This poses a challenge to national health institutions that wish to receive donor support while implementing national policies and programs or revising them consistent with their own priorities, values and cultural traditions. Given the large amounts of money involved, both in supporting family planning/reproductive health and in HIV/AIDS funding, both positive aspects of the donor’s actions, such restrictions are implicitly coercive.

At the same time, donor contributions can facilitate inclusion of SRH concerns in national discussions. The United States, for example, highlighted the importance of family planning, and greatly increased funding for contraceptives, in its discussions with the Government of Ethiopia.

Various donors have also been influential in raising the priority of adolescent health, gender equality, harmful traditional practices, trafficking in women and gender-based violence. Such concerns are often advanced by NGOs within countries, but the availability of donor support provides further legitimacy and resources.

***The strange case of HIV/AIDS***

In the MDG framework, reinforced by the proliferation of bilateral and multi-lateral vertical funding mechanisms, HIV/AIDS has been classified with communicable diseases. In this framework it is not explicitly recognized as a disease largely propagated through sexual contact.

**The separation of the HIV/AIDS community and the reproductive health community has deep historical roots**

The separation of the HIV/AIDS community and the reproductive health community has deep historical roots. The family planning movement (the source of the reproductive health initiative) was reluctant to address STIs. It saw services for these as primarily directed to men and worried about stigma being re-attached to its growing legitimacy. That the HIV/AIDS pandemic was, in its earliest years, misunderstood as a disease only of men who had sex with men contributed to this hesitancy. The HIV/AIDS community was more aware of the broader population impact and potential for the transmission of the disease and resented its exclusion from the donor aid flows directed to population, including condom provision. Now the tables are turned in priority, resource availability and potential for stigma.

The trend of resource allocations over the last decade has shown differing concern with different aspects of SRH. Significant advances have been made in mobilizing resources for addressing the HIV/AIDS pandemic. Even so, a high proportion of these allocations have been devoted to treatment and care rather than prevention, the core HIV/AIDS issue addressed in the ICPD Programme of Action (UNFPA, UNAIDS and NIDI 2005; Population Action International 2004; UN 2005d). Increases in other reproductive health funding have been more modest, and targeted investment in family planning programs has declined (as discussed in Section 3 under Goal 8).

Movements of international attention for funding priority are in part affected by the tyranny of the new. The family planning movement's initial rise resulted from both the analysis of the impacts of rapid population growth in donor and national communities and from the development of new and effective methods of contraception, initially oral pills and later injectables, implants, female condoms, etc. Expansion of family planning services involves the extension of a largely established set of methods<sup>12</sup> to populations not previously reached and to new entrants to the reproductive years and efforts to improve the quality of care.

The development of antiretroviral medications to treat HIV/AIDS offers the prospect of changing a deadly disease into a chronic one and benefits from its relative novelty. Maintaining necessary levels of attention and investment is a recurring problem for providers and maturing technologies. The rationale for voluntary family planning to address the impact of high population growth in least developed countries remains valid. But the panache of a new technology is gone.

The magnitude of the HIV/AIDS pandemic and the depth of its impact on development have appropriately attracted policy attention and funding. High-level policy statements emphasize the need for better linkages between HIV/AIDS and reproductive health intervention efforts (UNFPA 2004f; UNFPA and UNAIDS 2004). As operational models improve, this focus could increase the momentum for comprehensive integrated programming.

**Progress  
in national  
efforts to  
address SRH  
can serve  
as a signal  
of overall  
improvement  
in health  
systems in  
general**

The selection of prevention as a major thematic focus for World AIDS Day in 2005 may signal an important turning point. The Millennium Project Task Force on HIV/AIDS recommended renewed attention to prevention (UN Millennium Project 2005i). An important policy document has now outlined a UN system-wide strategy for addressing HIV prevention that emphasizes SRH concerns (UNAIDS 2005c).

As will be discussed in the next section, improving SRH and guaranteeing rights related to sex and reproduction can have immediate impacts on the prospects and requirements for progress on the MDGs. This is due to the linkages explored earlier in this report, the catalyzing effect of participatory mechanisms and responsive public systems and the savings in public expenditure that can be effected from appropriate investments. Because of its particular sensitivities, progress in national efforts to address SRH can serve as a signal of overall improvement in health systems in general and in the development of accountability and responsiveness to an active citizenry.



## The impact of ensuring universal access to SRH and rights on achieving each of the MDGs

Ensuring universal access to sexual and reproductive health (SRH) is important in and of itself. Indeed, the promotion of healthy, voluntary and safe sexual and reproductive choices for individuals and couples, including such decisions as those on family size and timing of marriage, is essential for human well-being. Throughout human history, sexuality and reproduction have been fundamental aspects of personal identity and key to creating fulfilling personal and social relationships. SRH is also a human right, as elaborated in numerous international human rights instruments, including the Convention on the Rights of the Child (see Section 1).

Moreover, ensuring universal access to SRH and rights is also instrumentally important for achieving the Millennium Development Goals (MDGs). The achievement of many Goals – including improving maternal health, promoting gender equality and combating HIV/AIDS – depends *directly* on making access to SRH services widespread. Other Goals, such as reducing extreme poverty and attaining environmental sustainability, share a less direct – but no less certain – relationship with SRH.

This section explores the evidence that links SRH to the achievement of each of the MDGs. The discussions will describe both the magnitude of the link between SRH and each Goal, as well as the various pathways – both direct and indirect – through which ensuring universal access to SRH and rights acts to affect their achievement.

Access to SRH and to other health services have their greatest impact on fertility and mortality, shaping the longer-term course of population dynamics. In addition to affecting individual Goals, evolving population trends define the magnitude of and shape the response needed to accelerate development.

**The  
achievement  
of the MDGs  
is put in  
jeopardy  
by high  
population  
growth**

**A contextual issue: population dynamics and progress on the MDGs**

The achievement of the MDGs is influenced by such population dynamics as growth, fertility and mortality levels, age structure and rural–urban distribution. Each developing country has its own unique combination of demographic factors, and the prospects for progress toward the MDGs are affected by these dynamics.

The achievement of the MDGs is put in jeopardy by high population growth. The pace of this growth differs among regions, with the developed regions having an annual growth rate of 0.3 percent while the less developed regions have a growth rate that is almost five times as fast at 1.4 percent. The least developed countries have an annual growth rate of 2.4 percent, creating an even bigger challenge in these countries (UN Population Division 2005b). Because of these high growth rates the population of the less developed regions is expected to rise from 5.3 billion today to 7.8 billion by 2050 (median variant). The largest population growth will happen in 50 of the least developed countries, and it is estimated that the least developed countries as a whole will double their population size.

The high population growth in the less developed regions is due to fertility rates higher than the replacement level. Between 2000 and 2005, the least developed countries had an average fertility rate of 5.02 children per woman while the rest of the less developed countries had a fertility rate of 2.58 children per woman. Of the 35 less developed countries that had a fertility rate of more than five children per woman in that time period, 30 belonged to the group of least developed countries (UN Population Division 2005b).

The prospect of achieving economic development is connected to the possibility of increasing productivity and investments in areas such as education, nutrition and health. Population momentum joined with declining fertility rates provides a unique chance to spur economic development as the work force increases and the dependency burden of society decreases. This economic possibility, however, is contingent on policies that create jobs for the growing work force. On the other hand, a society with a high dependency burden spends more of its output on consumption than on investments in education, nutrition or health, with negative consequences for development. A change in the dependency burden means that more resources are available to invest in the human capital of the population. Declining fertility levels as well as a changing age structure are thus important elements of the possibility for investing in development.

Young people between the ages of 10 and 24 account for 28 percent of the world's total population, a majority of them living in developing countries. Compared to the more developed countries, where 20 percent of the population is between 10 and 24, this age group makes up 29 percent of the total population in the less developed countries (UNFPA 2005d). High fertility

**The emigration of trained medical personnel is undercutting health systems in sub-Saharan Africa, compounding the high mortality risks (including from HIV/AIDS)**

levels lead to large cohorts between the ages of 0 and 9. The resulting young age dependency burden in the least developed countries and regions creates expanding demand for resources to and investments in education, nutrition and health just to keep pace with population growth. Projected declines in birth rates, should adequate resources help realize them, will allow greater investment in quality improvements as coverage demands moderate.

The working-age population (between the ages of 15 and 60) is expected to rise in the least developed countries over the next 50 years from 53 percent in 2000 to 61 percent in 2050, but it will fall marginally in the less developed countries as a whole from 61 percent in 2000 to 59 percent in 2050 (UN Population Division 2005b).

Until the HIV/AIDS epidemic, mortality levels were expected to continue to decline in all regions. The epidemic has reversed this tendency in countries where HIV/AIDS is most prevalent, especially in sub-Saharan Africa (UN Population Division 2005a). From a societal perspective, when people die early investments made are wasted and future productivity is lost. Life expectancy at birth is lower in the developing regions than in the more developed regions, but it is estimated to increase in both less and least developing countries (UN Population Division 2005b). However, the challenge remains in the countries severely affected by HIV/AIDS – the estimated increase in life expectancy is dependent on successful implementation of HIV/AIDS prevention and treatment programs. Efforts must be made to ensure that the ‘age bulge’ is not hollowed out by the epidemic’s advance.

Migration, both internal and international, also conditions the prospect for progress towards the MDGs. It is an economic and social strategy complexly affected by both push and pull factors, and this report will not address this demographic process apart from a couple of brief comments. The distribution, density and relocation of populations have implications for public service delivery systems and for the development of market responses to basic needs. The emigration of trained medical personnel is undercutting health systems in sub-Saharan Africa, compounding the high mortality risks (including from HIV/AIDS). Recent research is starting to address the implications of migration for development processes in general and the attainment of the MDGs in particular (International Organisation for Migration 2004).

**Goal 1: Eradicating extreme poverty and hunger**

*Eradicating extreme poverty*

The relation of population dynamics in general and reproductive health specifically to poverty has been a topic of intense debate for much of the last 40 years. Population trends affect the course and prospects for poverty reduction. And the diverse and changing population dynamics have had dramatic impacts in selected regions of the world.

**Somewhere  
between 25 and  
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attributable to  
demographic  
change**

Sub-Saharan Africa remains in a poverty trap in which demographic factors – high fertility, high infant and child mortality and excess adult mortality (including that due to HIV/AIDS) – play significant roles (UN Millennium Project 2005a). This region has seen the least change in these outcome measures and still lags behind other major sub-regions, despite improvement over the past two decades on process measures of the strength of family planning and reproductive health programs (Ross et al. 2005).

Eastern Asia<sup>13</sup> has seen dramatic declines in the number of persons living in income poverty, while high levels of poverty persist in some parts of Southern Asia (at 31 percent). There have been significant gains in China, Indonesia, Thailand and Viet Nam (fully half of the world's global decline in those estimated to be living in poverty has occurred in China). The region shows some of the most striking examples of what is now called 'the demographic bonus'. In fact, when first observed, and before it was appreciated as a general phenomenon, it was named 'the East Asian miracle'.

Recent analyses suggest that somewhere between 25 and 40 percent of macroeconomic growth is attributable to demographic change (Birdsall et al. 2001). This is split roughly evenly between the effects due to decreased mortality (health affects productivity) and those due to declining fertility (allowing a deepening of human capital investment). At the societal level there is a remarkable one-time opportunity when the proportion of the population of labor force age (15–60) is large relative to the more 'dependent'<sup>14</sup> younger and older populations. This demographic bonus, though, is not guaranteed. It is an opportunity and a challenge that depends on the right priorities, policies and strategies.

Population dynamics also have an impact on the national incidence of poverty and inequality. A study of 45 countries estimated that the average poverty incidence would have fallen by one third if the crude birth rate had fallen by five per 1,000 in the 1980s (Eastwood and Lipton 2001). The effect of declining fertility in Brazil has been equal to economic growth of 0.7 percent of GDP per capita each year (Paes de Barros et al. 2001).

Cleland and Sinding (2005) stress the influence of fertility on economic development and the need for careful analysis in priority setting. Based on evidence showing that one third of Eastern Asia's economic development is attributable to the short- and long-term effects of fertility decline, they argue that high fertility rates and population growth will have a higher effect on the demographic composition and macroeconomic prospects in most of Africa than HIV/AIDS. This is because the HIV/AIDS pandemic is either on the decline or will not be as widespread as in the countries of Southern Africa. The short- and long-term effects of fertility decline as in East Asia could contribute greatly to economic development.

At the household level, smaller families can reduce the depth of poverty and increase per child investments in the future, provided there are also

**The largest difference between rich and poor families is not in their desired or ideal family sizes but in their ability to implement their preferences**

supportive policy frameworks at the level of government. Together, these societal and household transformations offer the opportunity for rapid social and economic development if investments are made in health, education and the quality of life, and attention is given to addressing disparities in the distribution of these benefits. In Asia, such attention has often been paid. Many countries have, for example, attained relative parity in girls' and boys' access to education at the primary level, and growing attention is being given to ensuring equal and higher access to secondary education as well (UN Millennium Project 2005h).

Of course, reaping the rewards of the demographic bonus depends on the wider social and economic context pointed to in other UN Millennium Project documents (UN Millennium Project 2005a). Among the conditions that need to be met are the development of stable governance, accountability mechanisms (that allow feedback into policy of the impacts of decisions), conducive trade policies, greater transparency in decision-making and greater opportunities for women. Such improvements in governance are important, but they are not enough to meet the Goals. Countries also need to increase public investments in health, education, basic infrastructure, agriculture and environmental management. Since many of the poorest countries are too poor to afford these investments that are vital for economic growth, they are stuck in poverty that can only be ended if increased aid is made available.

When institutions exist that permit the accelerated flow of information throughout a society (mass media, civil society organizations, social networks), it is possible to have wide dissemination of information of the benefits of smaller families, accurate feedback of the returns to investments in children (hastening the quantity–quality tradeoff) (Montgomery et al. 1999) and quicker recognition of the increased chances of children surviving. Together with an appreciation of the higher support levels given later by children who have received human capital investments, this reduces old-age support motivations for persistent high fertility. The experience of countries that had relatively early and/or rapid fertility transitions demonstrates that such institutional mechanisms can be highly facilitative – e.g., village family planning groups in Indonesia (Shiffman 2004); microcredit groups in Bangladesh (Levine et al. 2004).

In the absence of information-disseminating networks or campaigns, the poor are less likely than their wealthier compatriots to recognize the signals that facilitate fertility decline, including the benefits from investments in children's schooling, increased opportunities for women, changes in child survival prospects, legal changes and operational improvements affecting the health system and reproductive health delivery (Greene and Merrick 2005).

However, the largest difference between rich and poor families is not in their desired or ideal family sizes but in their ability to implement their preferences. Access to services for the poor can be adversely affected by clinic placement,

**Pregnancy  
and childbirth  
are serious  
risks for poor  
women**

hours of service and user fees (UN Millennium Project 2005b). Health clinic personnel may also provide better services to less impoverished clients.<sup>16</sup>

It will be a long time before the demographic window opens for the poorest countries, but work towards it now will safeguard the future. It will also protect the present. Pregnancy and childbirth are serious risks for poor women. Many, and unwanted, children impose a heavy burden on them. High levels of fertility contribute directly to poverty, reducing women's opportunities, diluting expenditure on children's education and health, precluding savings and increasing vulnerability and insecurity.

***Eradicating hunger***

The Millennium Summit roadmap identified the reduction of global hunger and malnutrition as priority development targets. Reproductive health programs can help improve the nutritional status of women and their children and advance progress on the hunger and maternal and child health targets.

Nutritional deficits have a profound effect on productivity and health (UN Millennium Project 2005g). Nutritional requirements for women of reproductive age increase during pregnancy. Supplemental feeding programs for pregnant women, improving women's knowledge of the nutritional requirements of themselves and their children and increasing women's power to negotiate access to needed nutrition must be part of a multi-intervention strategy.

Closely spaced pregnancies place women at increased risk of anemia and other conditions of absolute and relative malnutrition (WHO 2005b). This can lead to developmental challenges for children, including those risks associated with low birth weights. (Important findings are referenced in Goal 4 on child mortality.)

Progress in alleviating hunger also requires targeted inputs to improve agricultural productivity. Community level cooperative action can ensure implementation of soil improvement, better water management and other components of an integrated approach to agricultural productivity. The full set of interventions needed to reduce hunger is described in the report of the UN Millennium Project's Task Force on Hunger (2005g).

However, rapid population growth fueled by high fertility desires and/or poor implementation of preferred family sizes can lead to the sub-division of land holding (e.g., through successive shrinking of plots included in inheritances). Decreasing sizes of family plots can change the individual calculus of cost and benefits in various productivity-enhancing interventions (Population Action International 2003). At the same time, though, population pressure can provide incentives for technology shifts. These Boserupian effects (Boserup 1987), however, do not mitigate environmental constraints and require carefully chosen interventions. In local experiments where population pressure, assisted by other facilitating conditions, contributed to significant technological adaptations (e.g., the Machakos district in Kenya<sup>17</sup>) the danger

**Declining fertility levels may increase the available schooling opportunities for children**

of soil degradation remained significant without appropriate compensatory interventions. Another reproductive health challenge to agricultural productivity and progress on the hunger target arises from the impact of the HIV/AIDS pandemic on the rural workforce in highly affected countries.

**Goal 2: Achieve universal primary education**

While Goal 2 focuses on achieving only universal primary education, this section will discuss the impact of SRH, including family planning, on achieving universal access to *all* levels of education, not just primary. The discussion of Goal 3, then, will focus on how access to SRH is essential for achieving gender equality more broadly.

Discussing the impact of SRH on access to educational opportunities (without separating the discussion by level of education) has many advantages. Firstly, it is useful to describe the impact of SRH on a sector broadly (such as for education or environment), as policy at the national level is often shaped in this way. Secondly, and importantly, SRH affects various levels of education in similar and overlapping ways. For example, girls may be taken out of school to care for siblings at any time during their education. Pregnancy-related drop-outs, too, may occur at any level of education, including the primary level.

Conventional wisdom suggests that fertility levels, including parental and adolescent fertility, have an impact on both children's access to schooling and their educational attainment. Girls in small families are less likely to drop out of school due to pregnancy, or to be pulled out due to the costs of schooling or the indirect costs of foregone household labor if a child attends school. As family size increases, however, such costs increase – making it more likely for children to be taken out of school. At the societal level, declining fertility levels may increase the available schooling opportunities for children, as competition for such population-level resources declines. Evidence does exist to bear out these theories to an extent, although the relationships are often quite complex.

***Family size linked to educational attainment, especially for girls***

At the household level, conventional wisdom suggests that as families grow larger, parents can less afford to send each child to school due to the direct costs of schooling. Children's contributions to the household are also foregone when they attend school, and often such contributions are needed simply for the family to survive. This is especially true of girls, whose traditional role is to care for younger siblings and help with household chores. Thus, there is a strong incentive for larger families to keep children, especially girls, at home and out of school. In countries where the state is relatively weak and has limited enforcement powers, families often have greater control over children's access to public resources, such as schooling, which makes it difficult for children to access education without their parents' consent.

**There is a strong incentive for larger families to keep children, especially girls, at home and out of school**

Most empirical studies on educational attainment in countries where family size has been on the decline have found that a child's school attainment is negatively associated with the number of siblings with whom the child lives (National Research Council and Institute of Medicine 2005). Throughout the 1990s this relationship was investigated in a number of developing countries, and this result was often found to be the case (though the size and statistical significance of this relationship varied greatly between settings) (Lloyd 1994).

There is also evidence from these studies that the gender gap in educational attainment may be explained by parental preference for sending boys to school when a family has limited resources (National Research Council and Institute of Medicine 2005). There are two possible explanations for this. Firstly, parents choosing to have fewer children are also less likely to discriminate against girls. Secondly, girls may have more siblings than boys and face greater resource constraints as a consequence. This explanation is more relevant to societies with high fertility rates and strong son preference. Gender disparities in education, then, would decrease with falling family size, as girls would no longer be likely to come from larger families. Jensen (2003) found this to be the case in India, where gender disparities in education occurred because girls tended to have more siblings than boys and children in larger families often had less schooling.

But caution should be used when interpreting results from many of these analyses. While these studies found family size to be significantly associated with schooling, the estimated effects were often relatively small compared to other factors (see literature review by Kelley 1996 and Lloyd 1994). A recent Brazilian study, for example, found that declining family size was one of the factors contributing to the rising school enrolment rates in the 1990s. The number of siblings aged 0–6 had negative impacts on the child's school enrolment, with a slightly more negative impact on girls over boys. There was also a negative effect of siblings aged 7–17, though this effect was much smaller (Lam and Marteleto 2002). But this impact, while significant, had less influence on enrolment rates than did parental schooling, which accounted for a substantial proportion of the increase in rates. Furthermore, many investigations also found that the relationships between family size and schooling were mediated by other contextual factors including level of economic development, government expenditure on education, phase of the demographic transition and family structure.

#### *Level of economic development*

Some level of economic development is required for family size to have an impact on schooling. If a community is without a school, then clearly family size will have no effect on children's educational attainment. Similarly, if parents perceive schools to be of poor quality, unsafe or located far from the home, they are likely to question the benefit of sending children to school, no matter the size of their family. Evidence of the importance of economic development on the relationship between family size and schooling has been found in some studies where larger

**Educational attainment was found to be linked to family size, as older children were increasingly likely to be pulled out of school**

negative impacts existed in urban rather than rural areas. Also larger negative impacts of family size on schooling were found in the more developed countries of Latin America and Southeastern Asia compared to the less developed countries of Southern Asia and sub-Saharan Africa (Lloyd 1994).

*Government expenditure on education*

As States increasingly subsidize education, the impact of parental resources on children's access to schooling becomes less important. In some poor settings the probability that a child will enter school is not affected by family size – given that there exists free access to primary education and young children entering school (often ages 5–8) are of relatively low value in terms of domestic labor. So, the main determinants of entering schools were shown to be parental schooling and school-to-home distance. However, educational *attainment* was found to be linked to family size, as older children were increasingly likely to be pulled out of school due to costs of schooling and their increasing ability to contribute to household responsibilities.

*Phase of demographic transition*

Parents' motivation to control their own fertility can be linked to their desire to make greater investments in each of their children. At this point in the demographic transition, declines in family size are found to be better linked with investments in childcare, including schooling (Lloyd 1994).

*Family structure*

The pattern of resource sharing within a family differs across societies and cultures, as well as varying across family structures. As has been widely reported, greater investments in children's welfare, including schooling, often occur in households where mothers have more control over spending. Women's earnings and decision-making power within the family would therefore influence children's schooling. Also, in societies where child support is spread across the extended family, the size of the immediate family has less impact on children's educational attainment. Some evidence of this mediating effect comes from studies undertaken in Israel and Kenya (Lloyd 1994).

***Schoolgirl pregnancy linked to educational attainment***<sup>18</sup>

There is ample evidence that adolescents and youth in developing countries are having sexual encounters at an early age. And as the period between menarche and marriage lengthens (as discussed in Section 2), girls' exposure to pregnancy risk also increases. In most countries, schoolgirls whose pregnancies are detected are required to drop out of school, at least temporarily. While in many settings rules are currently being liberalized to provide for the possibility of reentry, the number of new mothers returning to school tends to be low. Thus, there is a high cost associated with becoming known to be pregnant while still in school.

A pregnant schoolgirl has to choose between dropping out or undergoing an abortion that is typically illegal, and therefore likely to be unsafe, in order to remain in school. Boys who are involved in girls’ pregnancies do not face these same risks.

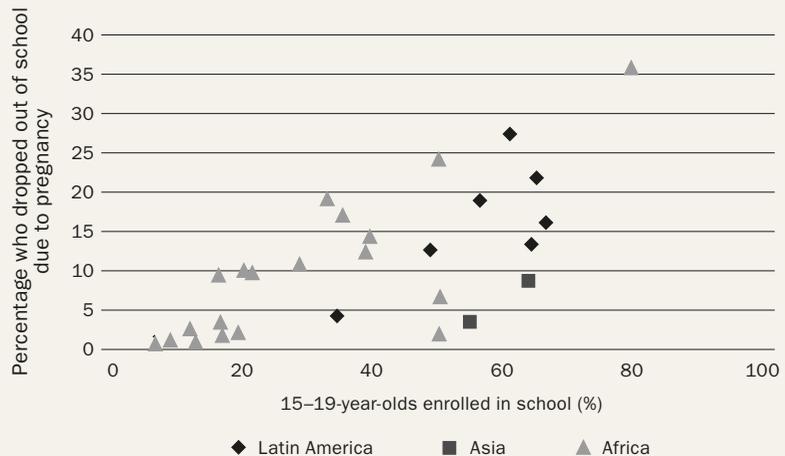
A growth in the percentage of girls attending school after puberty inevitably leads to a rise in the risk of pregnancy among students. Figure 3.1 maps the variation across countries in the percentage of births to 15–19-year-old girls that were reported among schoolgirls according to the percentage enrolled. It ranges from approximately 1–25 percent (excluding South Africa) as enrollment rates rise from approximately 10 to 70 percent, with a growing range of values at higher levels of enrollment. (The rates for South Africa are atypically high, possibly due to the availability of a government childcare grant for new mothers.) However, the percentage of all births to 15–19-year-olds that are attributable to schoolgirls are no higher than 25 percent of all pregnancies and can be as low as 10 percent in countries where 60 to 70 percent of students are still enrolled in school. Thus, even in the most extreme case, the 70 percent of the adolescents attending school contributed no more than 25 percent of all births, and therefore the 30 percent of the adolescents who are not enrolled contributed no less than 75 percent of the births.<sup>19</sup> Rarely do more than 10 percent of those who have dropped out of school report pregnancy as the reason (figure 3.2). In half the countries where recent data have been collected, reported rates fall below 5 percent.

While all of those reporting pregnancy as a reason for dropout did indeed have a birth, it is still likely that these self-reports often capture the proximate but not the underlying causes of dropout. Many factors in the school environment may be discouraging to girls. Girls who are less motivated to continue school are likely to be the ones to have unprotected sex and more likely to take their pregnancies to term than more motivated and successful girls. Policies designed to reduce the risk of pregnancy among those who want to or need to leave school for other reasons are unlikely to have a significant effect

**Figure 3.1**  
**Percentage of mothers aged 15–19 who dropped out of school due to pregnancy, by level of school attendance**

Note: This figure only includes girls who actually gave birth.

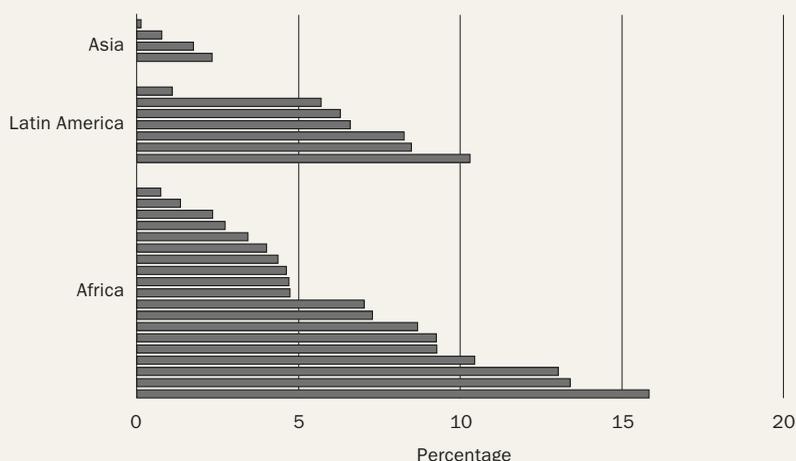
Source: Lloyd 2006



**Figure 3.2**  
**Percentage of women**  
**aged 20–24 (who ever**  
**attended school)**  
**reporting pregnancy as**  
**reason for dropout**

Note: Each bar represents  
 a country

Source: Lloyd 2006



on dropout rates, unless they are combined with other educational policies designed to enhance the quality and equity of the learning environment for girls. Recent research has looked at whether reductions in pregnancy-related dropouts would make a difference that is large enough to warrant policy attention. It concluded that payoffs are likely to be greatest in countries that are within intermediate levels of socio-economic development and have begun to address gender discrimination (box 3.1).

Of course, HIV/AIDS reduces the availability of teachers and affects the quantity and quality of education services.

**Box 3.1**  
**Reducing teen**  
**pregnancies can**  
**complement**  
**efforts to address**  
**barriers to gender**  
**equity in schooling**

Source: Elondou-Enyegue  
 2006

Programs that specifically target girls or programs that address issues that disproportionately affect girls will narrow gender gaps in education. While there are many reasons for pupils to drop out of school – such as lack of money, distance to school, poor grades and so on – few are inherently sex-specific. Conventional wisdom then suggests that pregnancy-related dropouts, which are highly sex-specific, would offer a clear explanation for this gender gap.

Recent research has used schooling life tables to estimate how much the gap in education between girls and boys would narrow if one specific cause of dropout was reduced. The researchers simulated the potential impact of pregnancy-related dropouts on gender parity in educational attainment. They showed that these impacts vary widely across countries, and tend to be greatest in countries that are socio-economically intermediate and have begun to address gender discrimination. For example, in Chad, it was found that passage through primary school, associated with a 50 percent decline in the female-to-male enrollment ratio in school participation, was associated with gender discrimination alone. In Kenya and Zambia, pregnancy-related dropouts within secondary school were the limiting factor in gender parity at that level of education. Based on these results, policies to reduce pregnancy-related dropouts may be important to pursue in these countries.

**Ensuring  
universal  
access to  
SRH and  
rights is  
essential for  
achieving  
gender  
equality**

*Early marriage linked to educational attainment*

There is a wide body of literature on the impact of women's education on age at marriage. But less work has focused on the impact of marriage on women's education and, specifically, to answering the question: "Are girls withdrawn from school to marry?"

Early marriage is associated with teen pregnancy, which can lead girls to withdraw from school. In many societies most pregnancies still take place in the context of marriage and so high levels of early marriage are associated with high levels of adolescent fertility. In developing countries, between half and three quarters of all first births to married women occur within the first two years of marriage (Singh and Samara 1996). This makes it more difficult for girls to continue their schooling.

Mathur et al. (2003) have shown that enrollment of young women in secondary school is inversely related to the proportion of women married before age 18, but the cause of this association is not clear. Other small surveys have also indicated that married young girls, compared to their unmarried counterparts, have limited social networks, are less mobile, have less income-generating opportunities, face heightened exposure to health risks and have higher levels of overall fertility (Haberland et al. 2004). More research is needed to determine the extent of the impact of early marriage on girls' schooling across developing countries.

In Bangladesh in the early 1990s, a secondary school scholarship program for girls was introduced based on the assumption that financial constraints were the main reason for parents keeping their daughters out of school. The girls did not pay fees and free books were provided. Furthermore, the parents were compensated for the loss of their daughters' work at home. This program resulted in a sudden increase in marriage postponement, as parents were also required to sign a bond that their daughters would not marry before age 18. However, the parents' positive response to the incentives was partly because they knew that a daughter with better education would marry a better-off man (UNICEF 2001a).

**Goal 3: Promote gender equality and empower women**

Ensuring universal access to SRH and rights is essential for achieving gender equality. The UN Millennium Project's Task Force on Education and Gender Equality (2005d) explicitly recognized that this plays a direct role in women's empowerment, and thus made it one of their seven strategic priorities for achieving Goal 3 (as discussed in Section 2). These priorities, derived from previous international agreements and conferences, include:

1. Strengthening opportunities for post-primary education for girls while simultaneously meeting commitments to universal primary education.
2. Guaranteeing SRH and rights.
3. Investing in infrastructure to reduce women's and girls' time burdens.

**Involving men in reproductive health is crucial to promote gender equality and to improve men's reproductive health**

4. Guaranteeing women's and girls' property and inheritance rights.
5. Eliminating gender inequality in employment by decreasing women's reliance on informal employment, closing gender gaps in earnings and reducing occupational segregation.
6. Increasing women's share of seats in national parliaments and local government bodies.
7. Combating violence against girls and women.

As the report of this Task Force explains, guaranteeing sexual and reproductive health and rights is essential for "building women's capabilities, taking advantage of economic and political opportunities and controlling their destinies". It has also recommended that the proportion of contraceptive demand met and the adolescent fertility rate be additional women's empowerment indicators for the achievement of this (see table 2.10).

Involving men in reproductive health is crucial to promote gender equality and to improve men's reproductive health. As stated by Green et al. (2006), successful male involvement is critically dependent on addressing the social and cultural norms that impede health. Masculinity is an evolving concept, and even though the gender socialization around men and boys is often negative, more positive models of masculinity exist and should be reinforced in programs and policies. Men care for their families and their own health and, when they are provided with the opportunities, many men will seek reproductive healthcare. Research has found that in order to involve men, special attention has to be given to their needs. To make men feel more comfortable with using SRH services, clinics and facilities have been designated just for them.

***Increasing the likelihood of girls' and women's survival and improving their health and well-being***

Guaranteeing SRH and rights is important to ensure that girls and women lead longer and healthier lives. It has strong and direct impacts on their well-being – by reducing negative health outcomes and by facilitating positive ones. Reproductive disabilities, injuries and ill-health are suffered disproportionately by girls and women, and negatively affect their survival, health and well-being and reduce their empowerment. More than simply preventing disease, disability and death, access to SRH and rights helps foster positive health states in women.

As discussed in Section 2, such positive health states are difficult to measure, but clearly access to SRH and rights would lead to substantial increases in women's happiness and well-being. SRH programs go beyond simply making available family planning information and services and address a range of issues that have an impact on women's lives – from preventing STIs (see Goal 6 for detailed discussion) and pregnancy-related disabilities (see Goal 4 for detailed discussion), to combating gender-based violence, FGC and sex trafficking, to reducing forced early marriage.

**Each year  
800,000  
people are  
trafficked  
across  
borders,  
80 percent  
of whom  
are women  
and girls**

*Gender-based violence and sexual coercion*

Sexual and reproductive healthcare works to reduce women's exposure to gender-based violence, sexual coercion and rape, which clearly do enormous harm to girls' and women's reproductive health as well as their physical and mental well-being. Sexual violence takes many forms: coerced sex in marriage and dating relationships, rape by strangers, systematic rape during armed conflict, sexual harassment, sexual abuse of children, forced prostitution and sex trafficking, child marriage, and violent acts against the sexual integrity of a woman (such as FGC or virginity inspections).

Sexual violence has a profound impact on women and is associated with significant emotional trauma and long-term mental health problems. One population-based study found that 33 percent of women with a history of sexual abuse exhibited psychiatric disorders, compared to 15 percent of women that experienced physical violence and 6 percent of women with no history of abuse (WHO 2002). Abused women have also reported higher rates of depression, post-traumatic stress, sleep difficulties, behavioral problems and even suicide than non-abused women. In many societies, women who are raped or sexually abused are ostracized by the community, leading to greater feelings of social isolation.

Moreover, sexual violence is also associated with physical trauma, such as vaginal bleeding or infection, fibroids, decreased sexual desire, genital irritation, chronic pelvic pain, urinary tract infections as well as exposure to various STIs. These same women are also at risk of experiencing unintended pregnancy, and not only from the encounter itself. Studies have found that adolescent girls forced into sex are less likely to use condoms or other contraception in future sexual encounters.

*Sex trafficking*

Sex trafficking is a growing problem. Trafficking is defined as "the recruitment, transportation, purchase, sale, transfer, harboring or receipt of persons by threat or use of violence, abduction, fraud, deception or coercion (including the abuse of authority) or debt bondage for the purposes of placing or holding such a person, whether they pay or not, in forced labor or slavery-like practices in a community other than the one in which such person lived at the time" (definition presented by the Special Rapporteur on Violence Against Women to the UN Commission on Human Rights 2000).

It is estimated that each year 800,000 people are trafficked across borders, 80 percent of whom are women and girls who are bought and sold worldwide mostly for commercial sex. This figure does not include the substantial quantity of women and girls who are trafficked within their own country. The greatest number of victims of trafficking is believed to come from Asia, the former Soviet Union and Central and Eastern Europe (UNFPA 2005a).

**Guaranteeing  
SRH and  
rights  
includes  
protecting  
women from  
forced early  
marriages**

Trafficking is a violation of the victim's human rights and threatens a healthy life. A field research undertaken in nine countries shows the harm suffered by people trafficked into prostitution: 60–75 percent of women had been raped, 70–95 percent had been physically assaulted and 68 percent met the clinical criteria for post-traumatic stress disorder (U.S. Department of State 2005). Poverty, the low status of women, economic and social inequalities within and between countries, as well as the demand for low-wage labor and sex work, drive women and girls – and sometimes boys – into this inhumane situation.

*Female genital cutting (FGC)*

SRH and rights include the right to be protected from harmful traditional practices, such as FGC, which have profound effects on girls' and women's well-being. FGC refers to the removal of all or part of the clitoris and other genitalia. In its extreme form – called infibulation – the clitoris is removed and both labia are sewn together to the two sides of the vulva, leaving a small opening through which urine and menstrual blood can pass.

It is estimated that between 100 and 140 million women and girls, most of whom live in Africa, the Arab States and Asia, have undergone FGC. This rite of passage in many cultures may cause hemorrhaging, infection and even death, and it exposes young girls to serious and lasting physical and emotional trauma. Long-term chronic health problems are also likely and include constant urinary tract infections, reproductive tract infections and more severe menstrual pain. Finally, the ability to experience pleasure from sexual encounters is largely destroyed (WHO 2000b).

*Forced early marriage*

Guaranteeing SRH and rights includes protecting women from forced early marriages. The reasons given for early marriage include age-old traditions, protecting girls from unintended and out-of-wedlock pregnancies or building ties between families or communities. But marriage of girls by coercion or before they are old enough to give full and free consent is not only harmful to their health and well-being but also violates their human rights, as elaborated in the Universal Declaration of Human Rights:

“Men and women of full age...have the right to marry and found a family. They are entitled to equal rights as to marriage, during marriage and its dissolution.... Marriage shall be entered into only with the free and full consent of the intending parties” (Universal Declaration of Human Rights, Article 16).

***Enabling women to participate in income-generating activities and in the life of their community and to continue schooling***

Making SRH and rights access more widespread would enable women to satisfy their desire for spacing or limiting children. It would thus provide them with the ability to better balance household responsibilities (including

childrearing) with activities outside the home, including economic, political and educational activities. Participating in community and political life, increasing educational attainment and expanding income-generating opportunities improve a woman's ability to lead a more full and creative life by providing her with greater voice in the choices that shape her life and that of her community (see box 3.2).

**Box 3.2**  
**Access to family**  
**planning changes**  
**women's lives**

Source: FHI 2005 and  
 Simmons 1996

Several studies have been conducted during the last decade to analyze the impact of family planning on women's lives. The results from these, primarily focus-group interviews, show that family planning gives women more freedom to pursue work, education and community activities because they can decide on the number and spacing of their children.

Family planning enhances women's ability to earn an income outside the home. A study from the Philippines shows that women with one to three children earned approximately 1.12 times the income of women with four to six children and twice the income of women with seven or more children. Increased income in the family gives better options for improved health and educational outcomes.

In Bangladesh, the realization of the desire to have fewer children, combined with external exposure to the economic and health benefits of having fewer children, had a positive effect on educational opportunities for girls. Women saw the future advantage of investing in their children's education, and the prospect of better employment opportunities for girls increased mothers' motivation to give them a chance of getting educated.

However, the positive impact family planning has on women's lives is restricted by social, political and economic factors. Women still bear the responsibility for taking care of the household. A study from the Philippines shows that women spent on average 46 hours working outside the home and 23 hours at home doing household chores. Due to social and economic obstacles, only 32 percent of women in Zimbabwe worked outside the home even though they were interested in taking up employment.

Moreover, when the traditional gender roles of women and men are challenged due to women's freedom as a result of family planning, there may be adverse effects on women. Many women in these studies have experienced domestic violence, in some cases even increased violence. To help achieve gender equity, family planning programs should include men in the process as well as link contraceptive use with programs that focus on other aspects of women's lives such as microcredit, vocational training and programs that seek to increase women's political participation.

These studies show that family planning can have a positive impact on women's lives, especially if it is supported by programs that affect other areas of their lives.

At an individual level, the ability to control one's reproduction translates into having greater control over activities that would be constrained by pregnancy, childbirth and childrearing. Investing in a career, for example, would be inconceivable for a woman with no control over the timing and spacing of her pregnancies. If a woman has eight children spaced on average two years apart, she could be absent from the labor force for 16 years, if not more. Compare this to a woman having just two children spaced two years

apart. Reducing family size by six children could lead to a gain in the time a woman is potentially able to be in the labor force. Participating actively in community life, too, is more difficult for a woman who does not have reproductive choice.

At a societal level, control over one's reproductive life may lead to changes in traditional gender-based roles, where women are largely responsible for domestic work and childrearing. Given that such traditional roles tend to place women in less powerful roles than men, the inability of a woman to control her reproduction may perpetuate female disempowerment at a societal level, leaving her less able to participate in the decisions that impact her life (UN Millennium Project 2005d).

Many experts attribute the significant shift in gender roles in the rich countries during the second part of the 20th century to the advent of oral contraceptives and their widespread adoption by women in the 1960s (Oppenheim Mason 1994). Probably one of the most dramatic transformations in development over the past 30 years has been women's increasing role in the labor force, and this shift reflects fundamental changes in women's work and family roles. According to the National Research Council and Institute of Medicine (2005), these changes have been greatly catalyzed by women's ability to limit their fertility and to control the timing and spacing of their children. And this has led to an increased ability of women to shape their careers over their lifecycle. Women's educational opportunities, too, are limited if they are unable to control their fertility, as discussed under Goal 2. Access to credit and training can also enable women to play an increased role in their community when combined with access to family planning (box 3.3).

**Box 3.3**  
**Improving family**  
**economies with**  
**microcredit**  
**and access to**  
**family planning**

Source: Adapted from  
 UNFPA 2005c

In Dong Loi, a small farming community in the uplands of northern Viet Nam, an initiative combining microcredit and reproductive health services, established by the Viet Nam Women's Union with UNFPA support, is demonstrating that women's leadership can help poor families rise out of poverty.

The members of a women's cooperative have seen their household incomes double in two years, largely through the breeding and sale of livestock purchased with loans. Extra funds allow participants to keep their children in school, buy supplies such as fertilizers and seeds, and even purchase computers or other consumer goods. "Because of this project, the economy of the entire village has improved," says group leader Dinh Thi Nga. "Another reason for our success is that nearly every woman in my group is practicing family planning." The project has taught Dong Loi two important things: "First, women can play important roles in community development if given the chance, and second, in order to do that we need access to credit and training as well as to reproductive health and family planning services. The two are intimately linked to economic development," Nga adds. Microcredit is not sufficient by itself but can provide an opening for poor women, leading to greater resources and autonomy and spurring development of larger additional finance sources.

**Maternal behavior and fertility are important determinants of child health and survival**

**Goal 4: Reduce child mortality**

An estimated 11 million children die every year from preventable causes such as pneumonia, diarrhea, malnutrition, acute respiratory infections, malaria and AIDS. On average, 61 babies die for every 1,000 live births in developing countries, compared to 8 deaths per 1,000 live births in developed regions. In some African countries, including in Benin, Burkina Faso, Chad and Ethiopia, more than 1 in 10 children die by their first birthday.

Reducing poverty, ensuring a clean and safe environment and other improvements in living conditions to improve sanitation, reduce endemic infections and improve housing and increased access to health services are critical to improving child health. Additionally, having access to SRH services, including family planning, has a direct and important impact on child mortality, especially infant mortality.

Maternal behavior and fertility are important determinants of child health and survival. Children born to very young mothers are at an increased risk of suffering complications. Similarly, children born too closely together also have an increased risk of ill health. High-risk births – including those to adolescents and those spaced too closely together – account for a large proportion of births in developing countries, which then contributes to higher infant mortality rates. Ensuring universal access to SRH, including voluntary family planning, is therefore critical for avoiding such high-risk births by allowing women to choose the timing and spacing of their births and thus to improve their child's health.

It has been found that in countries where fewer than 10 percent of women use a modern contraception method, the average infant mortality rate is 100 deaths per 1,000 live births, compared to 79 per 1,000 in countries where 10–29 percent of women use modern contraceptives and 52 per 1,000 live births in countries where more than 30 percent or more do so (AGI 2002).

Moreover, the survival of the child is linked to the health and survival of the mother. It has been estimated when a mother dies, surviving children are more likely to die than children living with both parents. A study in Bangladesh, for example, found that when a mother dies during childbirth the surviving children were three to ten times more likely to die within two years than children who live with both parents (UNICEF 2001b). This link further increases the need to also educate fathers in taking care of their children.

***Delaying childbirth to reduce child deaths***

Births to adolescents account for 60 of every 1,000 births each year – totaling 17 million babies. Children born to teen mothers are twice as likely to die during their first year of life compared to those born to women in their 20s and 30s. Among mothers younger than 20, infant mortality rates average 100 deaths per 1,000 live births compared to 72–74 deaths per 1,000

live births among mothers 20–29 and 30–39. In all countries – rich and poor alike – infant deaths to women under 20 are higher than for women in any other age group (table 3.1).

**Table 3.1**  
**Mother's age and infant mortality**

*Note:* Low-income countries have a mean per capita income of less than US\$1,000; middle-income countries have a mean per capita income between US\$1,000 and US\$3,000; and high-income countries have a mean per capita income greater than US\$3,000

*Source:* AGI 2002, data compiled from UNDP 2001

Age of mother	Infant deaths per 1,000 live births			
	All countries	Low-income countries	Middle-income countries	High-income countries
Less than 20	100	135	96	62
20–29	72	99	68	45
30–39	74	97	72	48
40–49	94	111	90	68

Young teen mothers are at higher risk of experiencing serious complications during pregnancy and childbirth because their bodies often have not yet fully matured. They are also much more likely to have poorer nutritional habits and are less likely to seek adequate antenatal and post-partum care, leading to higher rates of low birth weight, malnutrition and poor health outcomes in their children. Malnutrition is an underlying factor in more than half of all under-five deaths, and children born to women with poor nutritional status are more likely to suffer malnutrition.

Adolescents also have a high unmet need for family planning services, which increases their risk of exposure to pregnancy and thus to having children with poorer health outcomes. The majority of adolescents do not use modern contraception. In 4 of 19 countries in sub-Saharan Africa, for example, no more than 10 percent of adolescents do so. As few as 1 percent of married adolescents in some parts of this region use modern contraception.

### ***Improving childbirth spacing to reduce child deaths***

Birth spacing – the practice of delaying the period between births – is an important lifesaving measure for both mothers and children. For mothers, properly spacing births lowers the risk of maternal mortality, third trimester bleeding, anemia, premature rupture of membranes and malnutrition. For children, it lowers the risk of fetal death, preterm birth, low birth weight and neonatal death, as well as stunting and wasting.

New evidence indicates that when children are born at least three years apart, the health and survival rates of the mother and child significantly improve. Previous research had indicated that a two-year birth interval was optimal. However, compared to 24–29 month intervals, 36–41 month intervals are associated with a 28 percent reduction in stunting and a 29 percent

**The promotion  
of exclusive  
breastfeeding  
is an  
important  
global priority  
for increasing  
the health  
of infants**

reduction in underweight (Catalyst Consortium 2004a). Rutstein (2005) assessed the outcomes of pregnancies in 17 countries and found that children born three or more years apart are healthier at birth and are more likely to survive infancy and childhood (figure 3.3).

The Alan Guttmacher Institute (2002) also reports that when births are spaced less than two years apart, the infant mortality rate is 117 per 1,000 live births, compared to 64 per 1,000 when births are spaced two to three years apart and 47 per 1,000 when births are four or more years apart. This effect was found in every developing region worldwide. In less developed countries, if no births occurred within 36 months of a preceding birth the infant mortality rate would drop by 24 percent and the under-five mortality rate would drop by 35 percent. In total numbers this would annually amount to 3 million children under age five, or roughly 30 percent of the total child mortality. A minimum of three years birth spacing is also important for enhancing the child's cognitive and social development (Catalyst Consortium 2004a).

Furthermore, women with pregnancies spaced too closely together do not have sufficient time to rebuild their nutritional stores, leading to the mother's poorer nutritional status and worse health outcomes for her child. Additionally, maternal depletion syndrome – or the physiological stress that occurs in a woman if gestation overlaps with lactation – may further worsen the mother's nutritional status. Such poor nutrition leads to low birth weight, preterm birth, stunting and changes in breast milk content.

***Promoting breastfeeding and appropriate childcare***

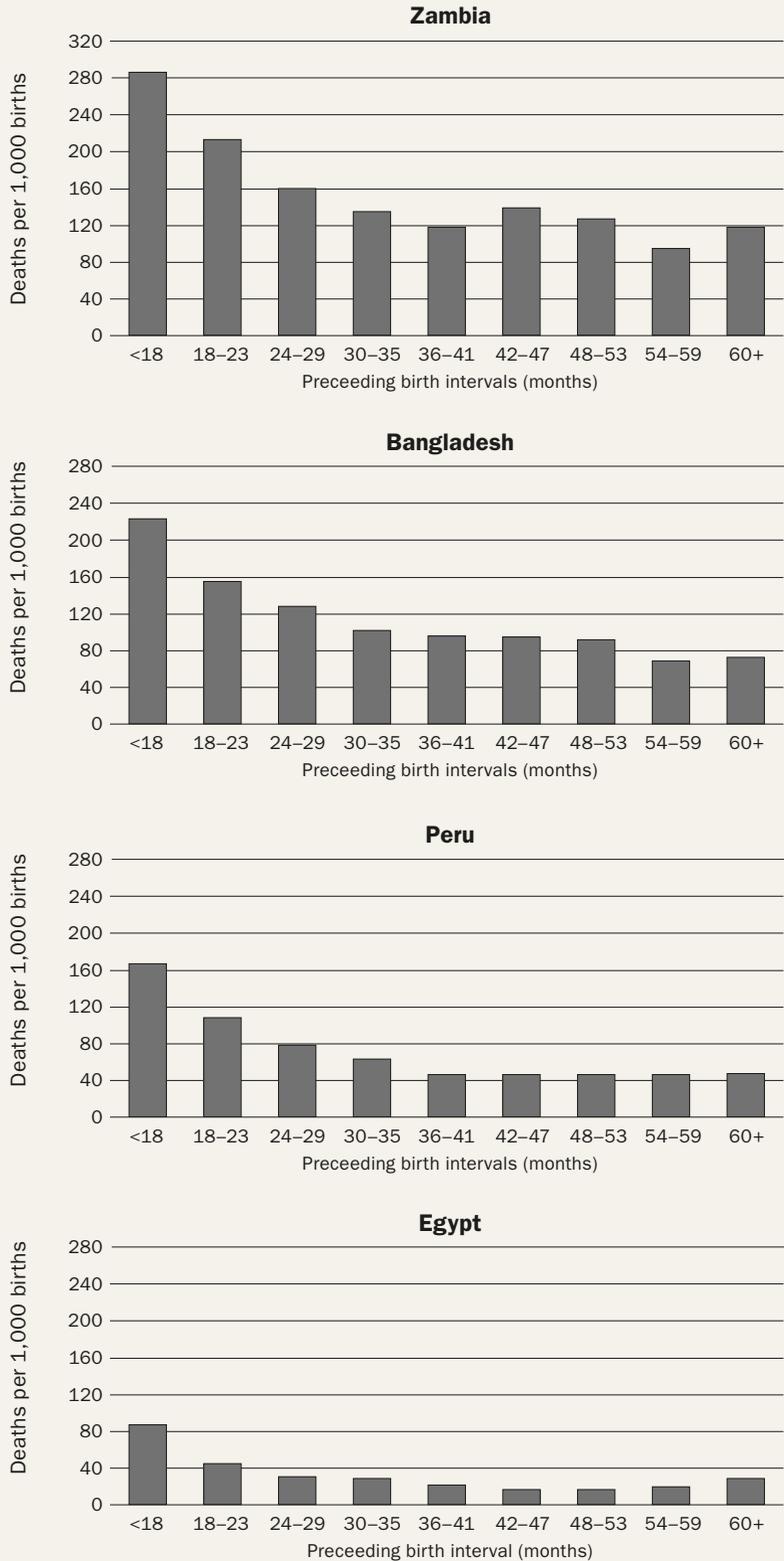
Breastfeeding provides children with important and live-saving nutrition that protects them from infectious and chronic diseases and helps them to recover more quickly from illness. Infant feeding guidelines, developed by WHO, UNAIDS and UNICEF (2005), recommend that a mother exclusively breast-feed her infant for six months in order to give the child the best chances for healthy growth and development.

Breastfeeding is the most effective intervention to prevent diarrhea and acute respiratory diseases – the leading causes of death from infectious diseases among infants (Jones et al. 2003). A study has shown that infants who are not breastfeed have a six-fold greater risk of dying from an infectious disease in the first two months than infants who are breastfed (WHO 2000a).

The promotion of exclusive breastfeeding is an important global priority for increasing the health of infants. Exclusive breastfeeding remains atypical even in countries where breastfeeding is commonly used as part of the infant's nutrition, and programs have been initiated to increase its use. Studies have shown that counseling can effectively promote exclusive breastfeeding: Only 12 percent of women who had no home visits after birth practiced exclusive breastfeeding, compared to 50 percent who had three home visits and 67 percent who had six home visits (Morrow et al. 1999).

**Figure 3.3**  
**Under-five mortality rate**  
**by duration of birth**  
**interval in four**  
**countries**

Source: Data from Rutstein 2005



**That women die of preventable causes during childbirth is a tragedy. This tragedy is compounded when the pregnancy was not even intended**

Intensive demand feeding also initially provides protection against pregnancy immediately after a birth by delaying the return of menses (i.e., lactational amenorrhea). Women having closely spaced births are more likely to discontinue breastfeeding too early and thereby increase the risk of infant mortality. Furthermore, recent work suggests that an HIV-positive mother may reduce the risk of post-natal HIV transmission when she exclusively breastfeeds her child as compared to giving mixed feeding (Iliff et al. 2005). Prevention of mother-to-child transmission of HIV/AIDS and treatment of the affected increases child survival.

### **Goal 5: Improve maternal health**

Each year more than half a million women die from preventable complications of pregnancy and childbirth. As noted in Section 2, while a woman in developed countries stands a 1 in 2,800 lifetime risk that she will die of pregnancy-related causes, this increases to 1 in 61 in developing countries and a deplorable 1 in 16 in sub-Saharan Africa. Lifetime risk of maternal mortality reflects both the number of pregnancies and the safety of each delivery. That women die of preventable causes during childbirth is a tragedy. This tragedy is compounded when the pregnancy was not even intended.

Making access to SRH and rights more widespread could decrease childbirth- and pregnancy-related mortality and morbidity by reducing the number of pregnancies that place women at heightened risk of experiencing such complications. As discussed above, high-risk pregnancies include those that occur too late or early in life, or those that occur too soon after a previous birth.

Pregnant women with poor nutritional status are also at particularly high risk of suffering pregnancy-related and childbirth complications that may result in death. Malnutrition in women during pregnancy and childbirth as well as throughout their lifecycle has been associated with obstructed labor, obstetric fistula, anemia and higher susceptibility to infections, which increase the risk of maternal mortality and morbidity. Even in the best of circumstances, about 15 percent of pregnant women experience complications that require emergency obstetric care.

But beyond reducing maternal mortality, ensuring universal access to SRH and rights is directly related to achieving the goal of improving maternal health. And as the Task Force on Child Health and Maternal Health asserts, this requires policies and interventions that go beyond simply reducing maternal mortality. In fact, an unmistakable 'gap' exists between the broader goal of improving maternal health and the narrow target of reducing maternal mortality.

The broad concept of SRH, as endorsed in the ICPD Programme of Action and in the Beijing Platform of Action, nicely captures the health and well-being aspects of pregnancy, reproduction and childrearing, which are essential to reaching the goal of improving maternal health. Indeed, ensuring universal access to SRH is essential for achieving Goal 5 on improving maternal health.

**Today, about  
201 million  
women have  
an unmet  
need for  
modern  
contraception**

### *Access to family planning services and information*

Today, about 201 million women have an unmet need for modern contraception – increasing their chance of high-risk or unintended pregnancies and thus placing them at risk of complications in pregnancy, childbirth or from an unsafe abortion. The number of unintended pregnancies would be reduced by increasing access to SRH, including family planning services and information.

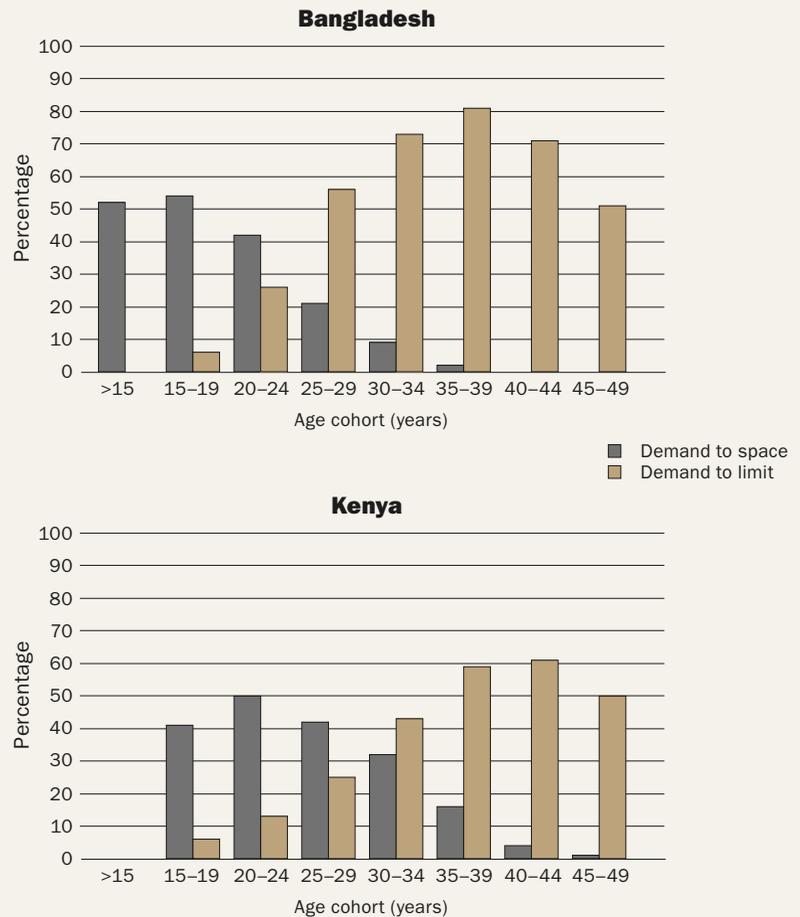
As described under Goal 4 on child health, birth spacing is important for better health outcomes for both children and mothers. Women face increased risk of morbidity and mortality when there is less than 15 months and more than 59 months between births (Conde-Agudelo and Belizán 2000). Birth intervals of 9 to 14 months are associated with greater risks of maternal death (150 percent), third trimester bleeding (70 percent), premature rupture of membranes (70 percent) and anemia (30 percent). Catalyst Consortium (2004a) also reports that data from 19 countries in Latin America and the Caribbean show that maternal morbidity and mortality increase among the youngest mothers. As compared to mothers aged 20–24, teen mothers have four times the risk of dying, 4.5 times the risk of eclampsia and 3.7 times the risk of puerperal endometritis.

DHS data from various countries confirm the great demand for birth spacing among married women. Younger women especially want to delay their next pregnancy and have longer birth intervals, and some are also interested in delaying their first birth despite the common assumption that women want to have their first child right after marriage (Jansen 2005). In most countries more than 50 percent of non-first births occur less than 36 months after the previous birth (Rutstein 2005). Among married women of childbearing age, demand for birth spacing represented between 33 and 75 percent of demand for family planning services in 14 of 15 countries examined by Rutstein (2005). This demand ranged between 25 and 66 percent of total unmet need. In Mozambique, for example, nearly one in five post-partum women expressed a desire to increase the spacing of their births. But these women were not using family planning services to do so. Finally, research shows that younger women have a greater need for contraceptives to delay and space births, while older women have a greater need to limit births (Jansen 2005) (figure 3.4).<sup>20</sup>

There are several explanations for why women's spacing desires are not fulfilled. Socio-cultural settings may limit birth spacing: the man's desire for a son right after marriage; the women's worth measured by her fertility and motherhood capacity; the man's sense of control over his partner's sexuality; or pressure from the woman's mother-in-law. Religious perceptions that prohibit the use of contraception can also hinder birth spacing desires even though the concept of birth spacing is not discouraged. The lack of availability and accessibility of family planning services also serve as an element in hindering couples and women from spacing their children (Catalyst Consortium 2004b).

**Figure 3.4**  
**Share of total**  
**demand for family**  
**planning, interest in**  
**spacing and limiting**  
**by age cohort in**  
**Bangladesh (2004)**  
**and Kenya (2003)**

Source: DHS STATcompiler 2005  
 accessed at  
[www.measuredhs.com](http://www.measuredhs.com)



### *Access to care during pregnancy and delivery*

As also described in other parts of Section 3, access to antenatal and post-natal care is essential to improving maternal and child health. The impact of interventions to improve the nutrition of pregnant women, and the impact on the health of women and their children, is described under Goal 1 on halving poverty. The impact of post-natal care and breastfeeding on children is described under Goal 4 on child mortality. And the impact of offering malaria and HIV/AIDS treatment to pregnant women for both themselves and their children, is described under Goal 6 on HIV/AIDS and malaria.

Antenatal care is important for both mother and child as it provides the mother with information on nutrition and the micronutrients she needs to grow a healthy fetus and to stay healthy herself. It also provides the opportunity to track STIs (including HIV/AIDS), malaria and other health risks that can have severe consequences for both mother and child if the right

**Despite the crucial role of antenatal care, only about 70 percent of births in developing countries are preceded by even a single antenatal care visit**

precautions are not taken. Furthermore, antenatal care provides an opportunity to teach the mother about how to take care of her infant and give it the best start in life.

Despite the crucial role of antenatal care, however, only about 70 percent of births in developing countries are preceded by even a single antenatal care visit. In terms of numbers, 36 million women receive no antenatal care annually. By region, the estimates are 21.6 million in Asia, 1.5 million in Latin America, 2.9 million in the Arab States/Northern Africa and 9.5 million in sub-Saharan Africa (Ross et al. 2005).

Yet, there has been progress during the 1990s. A study of 49 countries with multiyear surveys showed that the percentage of women receiving antenatal care had gone up from 53 percent in 1990 to 64 percent in 2000 – an increase of 21 percent. Women living in urban areas are twice as likely to use antenatal care as rural women, as are women with secondary education compared to women with no education (AbouZahr and Wardlaw 2002).

Many women in both developing and developed countries become anemic during pregnancy – on average 23 percent of women in developed countries and 52 percent in developing countries (WHO, UNICEF and UN University 2001). Some of the most common causes of anemia are poor nutrition, iron and other micronutrient deficiencies, and malaria (WHO 2005b). Anemia in women during childbearing increases maternal mortality. Studies by WHO reveal that maternal mortality due to anemia ranges in Asia from 27 per 100,000 live births in India to 194 per 100,000 live births in Pakistan, and in Africa from 35 per 100,000 live births in Senegal to 82 per 100,000 live births in Kenya (Brabin et al. 2001). However, different definitions of anemia may influence the recorded prevalence of anemia-related deaths in these countries. Overall, 40 percent of all maternal perinatal deaths are linked to anemia, and favorable pregnancy outcomes occur 30–45 percent less often in anemic mothers. Beside the risk of maternal mortality, anemia also causes adverse health outcome like tiredness and a weaker immune system, which increase the likelihood of infectious diseases (WHO, UNICEF and UN University 2001). Younger women are estimated to have an even greater risk of anemia-related death (Brabin et al. 2001).

Infants are also affected by their mother's anemic status. The odds for premature birth and low birth weight increase across the range of anemia. For example, research from Jamaica shows a 50 percent greater chance of mortality in the first year of life for those infants whose mother had not received any iron supplementation during pregnancy. Also, research shows that children born to non-anemic mothers have distinctly higher blood volumes, red cells volumes and circulating hemoglobin mass than those infants born to anemic mothers. Children of anemic mothers are also more likely to become anemic themselves (Allen 2000). In such cases infants require more iron than is supplied by breast milk at an earlier age than other infants

(WHO, UNICEF and UN University 2001). Iron supplementation during pregnancy can improve the health of both mother and child.

Care during delivery is essential for reducing maternal mortality. The World Bank has estimated that 74 percent of maternal deaths could be avoided if women had access to interventions needed to address complications during pregnancy and childbirth (UN Millennium Project 2005b). As most complications during childbirth are unpredictable, access to emergency obstetric care is a necessary health service that must be available 24 hours a day, seven days a week to prevent maternal death and disability. Yet, this service is unavailable to many women in developing countries. Timing has proved to be a critical step in preventing maternal death and disability, and a concept of three ‘stages of delay’ has been developed to identify the obstacles that delay timely management of complications (box 3.4).

**Box 3.4**  
**The three**  
**‘stages of delay’**  
**in seeking**  
**emergency**  
**obstetric care**

The stages of delay are divided in three phases:

*Phase 1: Delay on deciding to seek care*

The decision to seek care is grounded in socio-economic and cultural factors, e.g., lack of money to pay for the services or resistance to the use of modern medical services. This phase is also connected to the other phases as decisions depend on the quality, accessibility and service of the health facility. Women and their families may choose not to seek care, for example, because they know that the facility is not functioning (UN Millennium Project 2005b).

*Phase 2: Delay in arriving in a healthcare facility*

Is there a health facility available and if so are there means of transporting women to it? Basis emergency obstetric care should be provided in health centers and small maternity homes. This covers administration of antibiotics, oxytocics or anticonvulsants; manual removal of the placenta; removal of retained products following miscarriage or abortion; and assisted vaginal delivery with forceps or vacuum extractor. Comprehensive emergency obstetric care, which also covers caesarean section and safe blood transfusion, is typically provided in district hospitals (UNICEF, WHO and UNFPA 1997). Guidelines from the UN recommend that for every 500,000 people there should be four facilities that provide basic emergency obstetric care while one facility should provide comprehensive emergency obstetric care (ibid.).

*Phase 3: Delay in receiving adequate care once a woman arrives at a healthcare facility*

This phase relates to the health facility itself and the quality of care that is available there. It is necessary for an optimal facility that equipment, tools and essential drugs as well as trained, skilled birth attendants are available and sufficient. However, the challenge is to balance these needs because when equipment, tools and essential drugs are not available, skilled birth attendants remain non-functional, and vice versa (Fortney 2001).

One chronic maternal morbidity that is a result of lack of access to emergency obstetric care is obstetric fistula, which affects an estimated 2 million women and girls worldwide (box 3.5).

**Box 3.5**  
**Obstetric fistula**  
**– a devastating**  
**condition caused**  
**by obstructed**  
**labor**

Source: Wall et al. 2005;  
 UNFPA and EngenderHealth  
 2003

Obstetric fistula most often develops during prolonged, obstructed labor in countries where women have no access to emergency obstetric care, particularly caesarean section. Obstructed labor that is unrelieved by medical intervention can last for several days, often resulting in a stillborn infant and in fistula. Fistula is a hole that forms due to the prolonged pressure of the baby's head on the woman's vagina and bladder and/or rectum. The fistula leaves the woman chronically incontinent with no control over her urine and/or bowel movement. Besides the physiological effects of fistula on the woman, it also often leads to social exclusion by her husband, family and community.

A study undertaken in sub-Saharan Africa revealed that the majority of women suffering from fistula are under the age of 20, illiterate and poor. The risk of obstetric fistula often begins when young girls marry early and get pregnant before their body is fully developed to go through a pregnancy. They then give birth at home alone or under the care of an untrained birth attendant and are in labor for a prolonged period of time and without access to emergency obstetric care. Further risk is added to those girls who have grown up malnourished with the result of stunted growth.

Obstetric fistula was once common in developed countries but today is a virtually unknown phenomenon there. It has also been relatively hidden in the places where it occurs due to the fact that it primarily affects women who are among the most marginalized and because the stigma associated with the condition kept women from coming forward. This also means that the existing scientific research is old and that very little is known about the impact fistula has on the quality of life of women in developing countries, including accurate data on prevalence and incidence.

The lack of proper healthcare systems is responsible for this devastating maternal condition, and fistula is said to be a tracking indicator for inadequate healthcare services for poor pregnant women in the developing world. Furthermore, as stillbirth in this situation is also a consequence of lack of obstetric care, interventions to make emergency obstetric care available and accessible will have a positive effect on both maternal health and infant mortality.

Fistula can be repaired even if the woman has lived with the condition for several years. It is a fairly cheap surgery, but because most women who develop fistula are poor young women with no access to financial resources, it remains only a distant dream for many. Indeed, many women do not even know that their condition can be treated. While surgery repairs the physiological damage, education and counseling are also needed to integrate the woman back into society again.

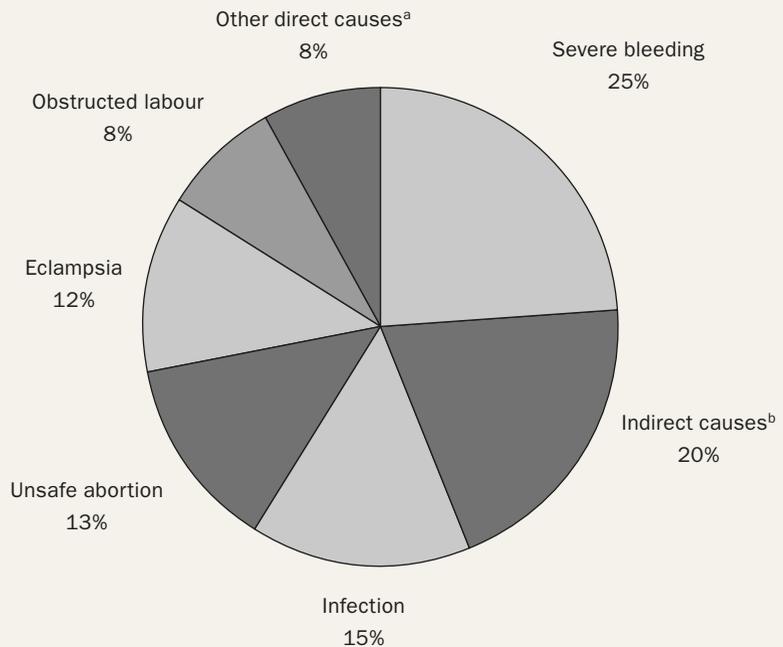
As more than half of maternal deaths occur less than 24 hours after birth and two thirds within the first week, post-partum care plays a crucial role in preventing maternal mortality. Post-partum care in developing countries is usually extremely limited and often has less than half the level of uptake for antenatal or delivery care (WHO 2005b). Post-partum care can prevent

complications such as post-partum bleeding and also provides an opportunity to introduce the mother to family planning. Furthermore, given the fact that many infants die within the first four weeks of life, post-partum care is also essential to the health and survival of the newborn.

**Figure 3.5**  
**Causes of maternal mortality, 2000**

*Notes:*  
a. Includes ectopic pregnancy, embolism and anesthesia-related complications  
b. Includes anemia, malaria and heart disease  
Total is more than 100 percent due to rounding

Source: UN Millennium Project 2005b, data adapted from Abouzahr 2003



***Post-abortion counseling and access to safe abortion services, where permitted by law***

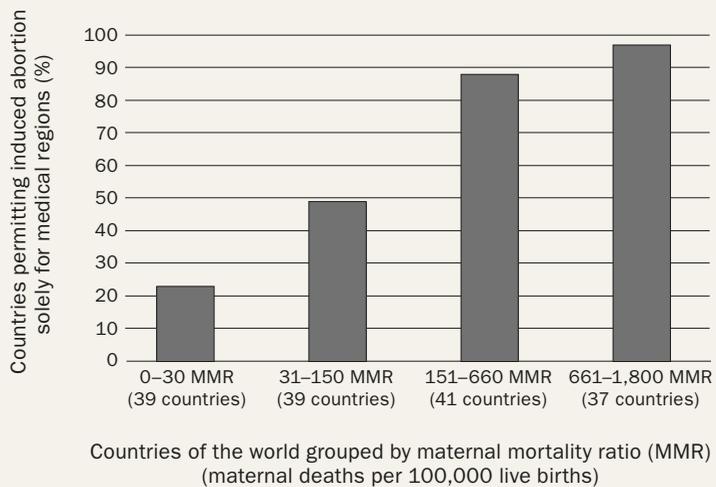
High rates of unintended pregnancies are associated with higher incidences of abortion, and specifically unsafe abortions, which further place women at risk of death and disability. It is estimated that of the 19 million unsafe abortions that occur in developing countries each year, 70,000 result in a woman's death – accounting for 13 percent of maternal mortality globally (WHO 2004b). Nearly 100 million women alive today will experience the risk and trauma of an unsafe abortion during their lifetimes if no new actions are taken. Young women are particularly affected, as two out of every three unsafe abortions are experienced by 15–30-year-olds and 14 percent to women below the age of 20 (Crane and Hord Smith 2006).

Most countries with restrictive abortion laws are in the developing world, and women in these countries are the most likely to suffer or die from the

complications of unsafe abortions. Although legal abortion does not guarantee safety in places where providers are not trained or barriers prohibit broad access to services, evidence points to a strong correlation between less restrictive abortion laws and policies, safer abortion and reduced maternal mortality. Maternal deaths in Romania, for example, dropped immediately and precipitously after abortion was legalized in that country in 1989 (WHO 2004b).

**Figure 3.6**  
**Relationship between**  
**restriction of**  
**abortion laws and**  
**maternal mortality**

Source: Crane and Hord  
 Smith 2006, data adapted  
 from McKay et al. 2001



Morbidity from unsafe abortion is an even greater problem, and includes sepsis, hemorrhage, cervical trauma and uterine perforations, as well as chronic or permanent conditions. Between 20 and 30 percent of unsafe abortions cause reproductive tract infections. Of these, 20-40 percent develop into pelvic inflammatory disease or bilateral tubal occlusion and infertility. Between 10 and 50 percent of women experiencing unsafe abortion will need medical attention, although not all women seek or can find such care when the need arises (AbouZahr and Åhman 1998).

Lack of use or access to contraceptives is a major cause of unwanted pregnancy: More than half of all women in the developing world are at risk because they are using a traditional method with high failure rates; they are using a reversible method that requires regular resupply; or they are using no method at all (AGI and UNFPA 2003). And since no contraceptive works perfectly every time, even widespread modern contraceptive use will not completely eliminate the need for recourse to abortion.

**Box 3.6**  
**Emergency**  
**contraception**  
**and the reduction**  
**of recourse**  
**to abortion**

Sources: AGI 2003a;  
 Planned Parenthood  
 Federation of America, Inc.  
 2004; WHO 2004c

Safe and effective hormonal preparations are available that can prevent a pregnancy by inhibiting ovulation, altering the ability of sperm to fertilize an ovum or inhibiting implantation in the womb. Taken within 72 hours of unprotected intercourse, progestin-only preparations reduce the risk of pregnancy by 89 percent; combination estrogen-progestin preparations reduce it by 75 percent. Unprotected intercourse can occur when there is coerced or unplanned sex and when barrier methods break or are dislodged or when other contraceptives are improperly used. Emergency contraception prevents pregnancies. In contrast, medical abortion terminates pregnancies. Emergency contraceptive pills should not be given to a woman who has a confirmed pregnancy, though they are believed to have no adverse health effects on the pregnant woman or her fetus if taken early in pregnancy.

Reduction in unplanned pregnancies leads to lower abortion rates. It has been estimated that 43 percent of the decline in abortions that took place between 1994 and 2000 in the United States was due to the increased availability of emergency contraception.

**Goal 6: Combat HIV/AIDS, malaria and other diseases**

Ensuring universal access to SRH, including family planning, is essential for achieving Goal 6, and especially for combating HIV/AIDS. SRH services are a key instrument to HIV prevention – from providing condoms, to supplying drugs to prevent mother-to-child transmission, to offering HIV testing and counseling services. SRH information can promote abstinence and safer sexual behavior. Integrating reproductive health services with HIV prevention programs, then fostering widespread access to these services, is a critical component of any strategy to achieve Goal 6.

Ensuring that essential medicines are available throughout the country is also vital to combating HIV/AIDS, malaria and other diseases. A list of essential drugs and commodities to be procured by countries, including those for reproductive health, has been developed by WHO and UNFPA (2003). Included in this list are HIV-prevention commodities, such as male and female condoms and drugs to prevent mother-to-child transmission.

In sub-Saharan Africa, where the AIDS crisis has devastated numerous countries, HIV/AIDS is the leading cause of premature death. Southern Africa continues to be the worst affected region with HIV prevalence rates surpassing 25 percent. Due to the HIV/AIDS epidemic, life expectancy in this region has dropped to under 40 years of age (UNAIDS 2004). Women are increasingly those living with and dying of HIV/AIDS, especially in developing countries. In 2003, women accounted for half of new HIV infections globally, and almost 6 in 10 new infections in sub-Saharan Africa.

***Combating AIDS***

Globally, 80 percent of HIV cases are transmitted sexually. Another 10 percent are transmitted perinatally or during breastfeeding (Askew and Berer 2003). Only one in five people in the world at risk of contracting HIV have

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this decade**

access to even basic prevention services. In 73 countries where more than 10,000 people are living with HIV, only one in ten pregnant women had been offered HIV counseling and testing, anti-retroviral therapy or counseling on breastfeeding options (UNAIDS, UNFPA, IPPF and AGI 2004). It has been estimated that access to basic prevention services could prevent 29 million of the 45 million new infections projected to occur in this decade (UNAIDS, UNFPA and UNIFEM 2004).

For many women in developing countries, contact with the healthcare system – while infrequent – occurs mainly for SRH services, especially during pregnancy. This makes such points of contact invaluable for HIV prevention services, including condom distribution, HIV testing and counseling and exploring treatment options. And many men are in need of information and education about the health risks their sexual behavior can pose for themselves and their partner.

Ensuring universal access to SRH and rights would therefore have a strong and direct impact on reducing HIV transmission by providing (at least) services and information to (Berer 2003):

- encourage consistent and effective use of condoms
- influence sexual behavior through education, counseling and risk reduction
- prevent mother-to-child transmission of HIV
- reduce the prevalence of STIs.

*Encouraging consistent and effective use of condoms*

According to UNAIDS, WHO and UNFPA, the male latex condom is the single most efficient available technology to reduce sexual transmission of HIV infection (and other STIs). Condoms must therefore be a key component of any national prevention strategy used to reduce sexual exposure to HIV (WHO, UNAIDS and UNFPA 2004). The female condom is also increasingly being recognized as a preventive method to protect against HIV/AIDS and STI transmission. Other components of prevention may include delaying sexual initiation, abstinence and reducing the number of sexual partners in addition to the correct and consistent use of condoms.

One recent review of multiple studies found that the consistent use of condoms during sexual intercourse reduces HIV incidence by 80 percent (Weller and Davis 2002). The most conclusive evidence of condom effectiveness in reducing HIV transmission comes from studies of couples in which the male partner was HIV-positive while the female was not. It was found that HIV transmission decreased by 84 percent in women who always used condoms as opposed to those who used them occasionally or never. In another study of such couples across Europe, none of the HIV-negative partners became positive. And in a study conducted in Haiti, the infection rate among such couples that always used condoms was 1 in 100 persons.

**In many countries of sub-Saharan Africa, among the ‘riskiest’ behaviors for women in terms of HIV infection is just getting married**

Successful prevention programs in several countries also provide evidence of condom effectiveness. In Thailand, for example, the ‘100 percent condom policy’ led to an increase in the use of condoms among commercial sex workers and their clients from 14 percent in 1989 to 98 percent in 1994. This coincided with an 80 percent drop in new HIV infection rates after rates peaked in the early 1990s (UNDP 2003). Similarly, a recent analysis of Uganda’s AIDS epidemic showed that increased condom use, alongside delay in age of first sexual intercourse and reduction in the number of sexual partners, was an important contributor to the declining HIV prevalence rates. Finally, vigorous promotion and de-stigmatization of condom use in Brazil and Cambodia also contributed to stabilizing the prevalence rates in those countries and further controlling their epidemics (WHO, UNAIDS and UNFPA 2004).

Despite the need for effective and consistent condom use to reduce HIV transmission, there is still a wide ‘condom gap’ in many developing countries. A recent study suggests 21.2 billion condoms were needed in 2005 to protect sexually active people against HIV/AIDS and that the number will increase to 24.3 billion per year by 2015 (UNFPA 2005e). It has been estimated that as recently as five years ago only 6 to 9 billion were actually available (Upadhyay et al. 2000).

Condoms need to be provided at low or no cost in order to ensure their effective and consistent use. Further, other cultural and societal barriers often pose obstacles to condom use, especially for women and girls. Large-scale investments will need to be made in education and awareness programs that promote and de-stigmatize condom use among both women and men. At the same time, female-controlled methods to prevent sexual transmission of HIV need to be made increasingly available (see below).

#### *Influencing sexual behavior through education and risk reduction*

SRH services include counseling (for both men and women) to reduce exposure to risky sexual behavior that may increase a person’s chances of contracting HIV (or transmitting it to others), including having multiple partners or engaging in unsafe sex or other risky practices.

In many countries of sub-Saharan Africa, however, among the ‘riskiest’ behaviors for women in terms of HIV infection is just getting married (AGI 2004). Unprotected sex with a non-monogamous husband greatly increases a woman’s likelihood of being exposed to HIV. Young women are especially vulnerable to HIV infections because they have less power to negotiate safe sex. Table 3.2 shows that in countries with the highest HIV prevalence rates, many more young women aged 15–24 have HIV compared to young men. It is estimated that for every boy in the 15–19 age group infected with HIV in sub-Saharan Africa, there are 5–6 girls (UNFPA 2004a).

Underlying power dynamics between men and women in many developing countries also prevent women from accessing condoms and then insisting on

**Table 3.2**  
**Countries with the highest HIV prevalence rate in adults, and HIV prevalence rate in young females and males, end 2001**

Source: UNFPA 2005d, data compiled from UNAIDS 2002b

Country	HIV prevalence rate (%) in adults (15–49)	HIV prevalence rate (%) in young people (15–24)	
		Women	Men
Botswana	38.8	45.0	19.3
Zimbabwe	33.7	39.6	14.9
Swaziland	33.4	47.4	18.3
Lesotho	31.1	51.4	23.5
Namibia	22.5	29.2	13.3
Zambia	21.5	25.4	9.7
South Africa	20.0	30.8	12.8
Malawi	15.0	17.9	7.6
Kenya	15.0	18.7	7.2
Mozambique	13.0	18.8	7.8
Central African Republic	12.9	16.3	7.0
Cameroon	11.8	15.3	6.6

their use. Women often have little power to negotiate sexual relations, including whether and when to have intercourse as well as whether to use condoms. The ‘ABC Approach’ (*Abstain, Be faithful and use Condoms*) must be adapted to address power imbalances between the genders, and other societal factors, that lead to an increased vulnerability to HIV infection among women. An important step in addressing such power dynamics is to ensure universal access to SRH and rights, and ensure that family planning services and HIV/AIDS prevention efforts actively target men in their programs.

Uganda’s success in reducing its HIV prevalence has been attributed to an effective prevention strategy that included promoting condom use as well as changing sexual behavior, such as by promoting monogamous relationships and sexual abstinence. Fewer Ugandans reported having sex at a young age between 1995 and 2000 than in the late 1980s. The proportion of women aged 15–17 who ever had sex decreased from 50 percent in 1988 to 46 percent in 1995 and 34 percent in 2000. Similarly, there were large declines between 1989 and 1995 in the number of men aged 15–19 who had ever had sex, although these declines slowed between 1995 and 2000. More Ugandans were also monogamous during the early 1990s, especially unmarried women, although this decline slowed in the late 1990s. Finally, the use of condoms increased, especially among unmarried men and women, with 57 percent of sexually active men and 37 percent of sexually active women using condoms in 2000 compared to 39 percent of men in 1995 and negligible levels of women in 1988 (AGI 2003b).

#### *Preventing mother-to-child transmission*

In 2003, an estimated 630,000 infants worldwide became infected with HIV during their mother’s pregnancy, labor or delivery, or as a result of breastfeeding.

**Voluntary  
contraceptive  
services to  
help HIV-  
positive  
women  
prevent  
unwanted  
pregnancies  
should be  
a central  
component  
of national  
prevention  
strategies**

Without intervention, there is a 15–30 percent risk of HIV transmission during pregnancy and delivery and an additional 10–20 percent risk during breastfeeding (CDC 2005). Many of these infections could have been avoided by ensuring mothers' access to a regimen to prevent mother-to-child transmission. This could be effectively delivered through SRH services, and specifically antenatal, delivery and post-partum care. It is especially important in countries where the proportion of pregnant women with HIV/AIDS is high, such as Botswana, Lesotho and Swaziland where over 30 percent of pregnant women are HIV-positive (UNAIDS 2004). In 2003, however, only 1 percent of HIV-positive women in Burkina Faso, Ethiopia, Malawi, Nigeria and South Africa had access to such services and information (AGI 2004).

According to UNAIDS guidelines, such a regimen would include (Berer 2003):

- early access to antenatal care before 34–36 weeks of pregnancy
- voluntary HIV counseling and testing
- minimum package of antenatal care, including screening and treatment of anemia and STIs and vitamin supplementation
- delivery care by a skilled attendant
- counseling on infant feeding and caring, and support for mother's infant feeding choices.

In Haiti, expanded reproductive health centers (or Ghesakio centers) are providing an integrated package of services in efforts to reduce mother-to-child transmission. Such services include counseling on HIV transmission and prevention, psychological and social support and, in some cases, antiretroviral treatment to HIV-positive mothers. Between 1996 and 2003, the mother-to-child transmission rates were reduced from 30 percent to 8 percent. Additionally, 90 percent of women identified as HIV-positive returned for follow-up visits; 70 percent of women chose a family planning method to prevent a new pregnancy; and the contraceptive prevalence rate rose from 3 percent to 21 percent. Zambia and Zimbabwe are also experimenting with expanding reproductive health centers to include HIV counseling and services, with initial positive results.

Moreover, in cases where the woman is HIV-positive, pregnancy prevention should also be seen as HIV prevention. Voluntary contraceptive services to help HIV-positive women prevent unwanted pregnancies should be a central component of national prevention strategies. Studies have found that contraceptive use among HIV-positive women who do not want to become pregnant is at least as cost-effective in reducing mother-to-child transmission as using the antiretroviral drug, nevirapine (AGI 2004).

*Reducing the prevalence of STIs*

HIV infection is up to 10 times more common in people with either current or prior STIs. And the risk of HIV infection grows with increasing numbers

**Women are at higher risk of contracting STIs than men and of suffering worse physical and emotional stress due to such infections**

of STI episodes (FHI and USAID 2001). One reason for such high co-infection rates is that lifestyle and behavioral risk factors are similar for both STI and HIV exposure. A second reason is that STIs may directly enhance transmission of HIV. Thus, prevention and treatment of STIs, while important in its own right, is also an important component of strategies to reduce HIV transmission. And SRH services are critical to reducing the prevalence of STIs by providing such services as testing, counseling, condom distribution and treatment.

Women are at higher risk of contracting STIs than men and of suffering worse physical and emotional stress due to such infections. Women are biologically more susceptible to many STIs, and this is compounded by their limited power to negotiate condom use during sexual encounters – placing them at even higher risk. At the same time, women are more likely to suffer complications from STIs for two key reasons. Firstly, they are more likely to suffer asymptomatic infections that are then left untreated – 70 percent of women with STIs do not have symptoms compared to 10 percent of men (UNFPA 2004b). Secondly, they are less likely to seek treatment, even for symptomatic infections. And the consequences on women's well-being are even higher given that women with STIs are more likely to experience stigmatization, infertility and even abuse and abandonment.

Less than a third of men in many developing countries know that two ways of avoiding STIs are condom use and either abstinence or having only one, uninfected partner. Among all men aged 15–54 in sub-Saharan Africa and Latin America and the Caribbean, 4–18 percent had two or more partners in the past year and did not use a condom the last time they had intercourse. In addition, at least 3 in 10 men aged 15–54 who had an STI in the past year did not tell their partners. Still, many men with STIs take action to avoid spreading the infection. For example in Brazil and Peru about two fifths of men aged 15–54 said they avoided having intercourse while they were infected, and in the Dominican Republic, more than half said they did so. Roughly 1 in 10 infected men in a few countries reported that they continued to have intercourse but used a condom (Greene et al. 2006).

Few large-scale investigations have been conducted to demonstrate the impact of STI control on HIV transmission. Experience in Thailand showed that the incidence of STIs dropped at the same time that new HIV infections fell. The incidence of STIs was reduced by 80 percent in less than five years through intensified STI control and condom distributions programs ('100 percent condom policy' as described above). Some limited evidence from Mwanza, Tanzania found that improving the case management of STIs reduced the incidence of new HIV infections by 40 percent. But in nearby Rakai, Uganda, mass distribution of antibiotics to treat STIs reduced neither STIs nor HIV transmission. Clearly, more research is needed to clarify the role of STIs in facilitating HIV transmission. Still, given the many overlaps

**Women who are also infected with HIV experience higher frequency and density of parasitemia, and have more anemia and more adverse birth outcomes**

in the prevention strategies for controlling STI and HIV transmission, preventing STIs will also work to improve prevention of HIV. Furthermore, access to condoms would generally decrease the risk of contracting STIs, including HIV.

#### *Combating malaria*

Every year more than 25 million pregnancies occur to women in malaria-endemic regions (UN Millennium Project 2005c). Pregnancy reduces women's immunity to malaria, which can lead to adverse health outcomes for the mother, including anemia, involuntary abortion, intrauterine growth retardation, cerebral malaria and even death. Severe anemia due to malaria increases the risk of maternal mortality. The health and survival chances for the infant are also affected by malaria, which increases the risk of stillbirth and low birth weight.

The combination of pregnant women having both malaria and HIV increases the adverse health outcome. Women who are also infected with HIV experience higher frequency and density of parasitemia, and have more anemia and more adverse birth outcomes (UN Millennium Project 2005c).

It is recommended that women in malaria-endemic areas receive two preventative treatments of an effective anti-malarial drug during their pregnancy (known as intermittent preventative treatment (IPT)). However, less than 5 percent of pregnant women in malaria-affected areas have access to effective treatment. Universal access to SRH services would help to ensure that pregnant women at risk of malaria receive such treatment. In Malawi, this regimen has been shown to reduce placental infection from 32 percent to 23 percent and low birth weight from 23 percent to 10 percent. It was also shown that when offered it, more than 75 percent of pregnant women agreed to receive this regimen (RBM 2002). The supply of insecticide-treated bed nets also plays a crucial role in reducing the burden of malaria.

#### **Goal 7: Ensure environmental sustainability**

Human beings are dependent on the environment in order to survive. On the one hand, humans transform natural resources into food and products to feed themselves and accelerate economic activity. On the other hand, humans are dependent on a safe and clean environment for health reasons.

The past century of population growth has put increasing pressure on natural resources as the scale of human needs and activities expands. Population growth among other factors has led to cropland expansion, intensified farming, housing sprawl and overuse of water and forests.

The ICPD also recognized the linkages between population and environment and concluded, "Demographic factors, combined with poverty and lack of access to resources in some areas, and excessive consumption and

**The poor do not exhaust natural resources because they are not aware of the consequences but because poverty leaves them with no other options**

wasteful production patterns in others, cause or exacerbate problems in environmental degradation and resource depletion and thus inhibit sustainable development” (UN 1994, para. 3.25).

***Population pressure: An indirect driver of environmental degradation***

Today, populations living in countries with scarce natural resources are growing more rapidly than the world population as a whole, putting even greater pressure on these biologically fragile zones (Engelman et al. 2000). Furthermore, population growth is highest in countries with the fewest resources to invest in people’s health, education and family planning as well as sustainable environmental policies.

Though population growth can be linked to environmental degradation, it is not, as the ICPD Programme of Action acknowledges, the only cause of the environmental challenges that the world faces today. Rather, population growth is linked to the environment in a complex dynamic with causes like poverty and inequality, and policy and market failures. The UN Millennium Project Task Force on Environmental Sustainability also recognizes that there are several drivers to environmental deterioration, and that demographic change plays a powerful role (UN Millennium Project 2005e). The overall environmental impact can be seen as a result of population growth, the technology available and the levels of consumption.

Poverty and inequality exacerbate stress on natural resources as they force people to use the most unprotected and fragile resources, which are often the only natural resources left from commercial use (UNFPA 2001). The poor do not exhaust natural resources because they are not aware of the consequences but because poverty leaves them with no other options. The poor also have the least access to technology that can spur an efficient use of natural resources.

Furthermore, policy failures to protect natural resources and ensure nature is preserved result in natural resources depletion and degradation with consequences for both biology and humanity (Cincotta and Engelman 2000).

The urgent need to end poverty in developing countries creates an environmental challenge, as increased economic activity is needed to get the poor out of poverty. At the same time, environmental degradation that has already taken place further deepens poverty (UNFPA 2001). And rural communities that depend on agriculture for their livelihood face even greater challenges in an environmentally degraded nature where soil and water are polluted and depleted.

Developed and developing countries have different income and consumption patterns. The wealthiest fifth of the world’s population, mostly from developed countries, accounts for 72.7 percent of the world income, while the poorest fifth accounts for 1.8 percent (Dikhanov 2005). If every

**Box 3.7**  
**Population growth**  
**stresses natural**  
**resources**

Source: Engelman et al.  
2000.

Scarcity of natural resources especially burdens the poor, who are directly dependent on these for their livelihood and development. Scarcity also means that women may need to walk much further to fetch wood and water, and thereby spend much more time on such activities – time that could otherwise have been used in income-producing activities.

*Water*

As populations grow, less water is available per person; currently 505 million people already have to live with water scarcity. With the projected future population growth, between 2.4 and 3.2 billion people may be living in water-scarce situations by 2025. This does not take into account the low quality of water or the unequal access to water sources between different population groups.

*Cropland*

Agriculture provides the world with an essential part of its food, and poor people are especially dependent on their agriculture outcome. The supply of land that could be converted into farmland is limited, and per capita farmland is declining. By 2025, it is estimated that between 557 million and 1.04 billion people will live in land-scarce countries with problems of food self-sufficiency.

*Forests*

Forests provide wood for many human activities and contain over half the world's plant and animal life. Furthermore, they remove carbon dioxide from the atmosphere. The ratio of forests to human beings has declined in past years, and the number of people who by 2025 will live in forest-scarce countries is estimated to triple from 1.8 billion to 4.6 billion people.

human being in the world copied the rich groups' consumption patterns it would have catastrophic consequences for forests, water, soil and air. One striking example concerns carbon dioxide emission: The richest 20 percent of the world's population emit 62 percent of the total emission, while the poorest 20 percent only account for 2 percent (Engelman et al. 2000).

For this reason it is of utmost importance that developed countries change their consumption pattern to make sure that developing countries are able to increase their consumption and income and get out of poverty. In line with this, not all populations have similar impacts on the environment, indicating that political priorities and technological solutions have an influence on the environmental impact.

Providing SRH services and giving couples a realistic choice to decide on the number of children they want can help balance natural resource use with the needs of the population. Avoiding unwanted births would have an effect on future population growth and thereby the degree to which the environment is degraded. But as the complex linkages suggest, environmental sustainability must be a result of biological conservation programs, technological advancement and human development efforts that give people the right to choose the number of children they want.

*Improving the lives of slum dwellers*

The world's urban population is estimated to grow from 2.1 billion in 2000 to 5 billion in 2030. This growth accounts for almost all of the world total population growth for the period and will primarily take place in the less developed countries (UN 2002).

About 924 million people, or 31.6 percent of the world's urban population, lived in slums in 2001, most of them in developing countries. On average, slum dwellers account for 43 percent of the urban population in developing regions and 78 percent of the urban population in the least developed countries. To compare, only 6 percent of the urban populations in developed regions live in slums. The majority of slum dwellers live in Asia, accounting for 60 percent of the world's total (UNHABITAT 2005).

The fact that a large amount of the world's poor live in urban areas and that this number will grow in the future means that poverty reduction strategies also need to address this group. However, it is important to recognize that not all the urban poor live in slums and that policies addressing slum dwellers, therefore, will not automatically reach all the urban poor. Also, while it is often concluded that urban people are better off than people in rural areas, there are big differences within urban populations (UN Millennium Project 2005f). Urban averages can blur wide health differences within cities, and breakdowns in income groups show that the urban poor often face health risks that are nearly as or as bad as those of the rural poor.

The fertility rate of rural women is generally higher than that of poor urban women. At the same time urban poor women have significantly higher fertility rates than non-poor urban women (table 3.3). This translates into higher population growth rates among the poor urban populations than among the non-poor, which creates even bigger challenges in meeting their needs.

<b>Table 3.3</b>	<b>Region</b>	<b>Urban poor</b>	<b>Urban non-poor</b>
<b>Ratio of fertility rates among poor and non-poor urban women to fertility rates among rural women, by region</b>	Northern Africa	0.89	0.78
	Sub-Saharan Africa	0.92	0.85
	Southeastern Asia	1.11	0.93
	Southern, Central, Western Asia	0.97	0.82
	Latin America	0.90	0.67
	Total	0.93	0.80

Source: Montgomery et al. 2003

The unmet need for contraception of the urban poor is higher than that of the urban non-poor, though lower than for people in rural areas (table 3.4). In Southeastern Asia, though, unmet need is slightly higher among poor urban populations than among rural ones. Generally, urban women are more likely to use contraception than rural women, but it is important to note that urban

women appear to use contraceptives less effectively, resulting in equal rates of unintended pregnancies (Montgomery et al. 2003).

**Table 3.4**  
**Predicted unmet**  
**need for married**  
**women aged 25–29 by**  
**rural–urban residence**  
**and, for urban areas,**  
**by poverty status**  
**(percentages)**

Region	All rural	Urban poor	Urban non-poor
Northern Africa	27	16	12
Sub-Saharan Africa	34	31	24
Southeastern Asia	22	23	16
Southern, Central, Western Asia	24	22	15
Latin America	25	16	10

Source: Montgomery et al. 2003

In terms of maternal health, rural populations are worse off than urban populations. Maternal mortality is generally higher in rural areas. On average only 20 percent of births among rural populations are attended by a trained physician or a nurse/midwife, compared to 40–60 percent among urban populations. However, the smallest cities have lower levels of skilled birth attendants than the larger cities (Montgomery et al. 2003).

A similarity between rural and poor urban populations can be found in their lack of use of modern health institutions. A study in the slums of Karachi in Pakistan found that local care was pursued first before seeking modern health facilities located outside the neighborhood. The lack of use of modern health facilities is also related to male consent to use such facilities (Montgomery et al. 2003).

In urban areas, it is inadequate to measure access to reproductive health services in terms of the distance to the service, as is done in rural areas. Urban populations face different challenges in accessing these services due to greater density and transportation problems: It may take a longer time to reach services because transportation is not sufficient and might be time-consuming. User fees might also be a problem in the cities, impeding the poor from using reproductive health services. Though reproductive health services are considered to be of better quality in urban areas, various comparisons have not always supported this view (Montgomery 2004).

HIV/AIDS is a great health concern in cities, and the absence of the social control of behavior that can be found in rural areas may lead to riskier sexual behavior in urban areas. Prostitutes, urban sexual networks, drug users and communities of migrants separated from their families may all increase the risk of STIs and HIV (Montgomery 2004). Under these circumstances adolescents may also face greater challenges in leading healthy sexual lives, increasing the risk of STIs and HIV/AIDS.

**An international partnership is required to provide adequate financing for national SRH strategies**

Much is still to be improved for slum dwellers and the urban poor to increase their reproductive health outcomes, and it is important to acknowledge the different needs and circumstances that these people have and live under compared to their peers in rural areas.

**Goal 8: Global Partnerships**

*External and domestic financial resources for population assistance*

An international partnership is required to provide adequate financing for national SRH strategies. At the 2002 International Conference on Financing for Development in Monterrey, the international community agreed that official development assistance (ODA) must complement private investment flows to finance the public investments needed to achieve the MDGs and other internationally agreed development goals. The principle of international co-financing for national development strategies was operationalized at the 2005 World Summit, where countries resolved to “implement comprehensive national development strategies to achieve the internationally agreed development goals and objectives, including the Millennium Development Goals” by 2006 (UN 2005b).

The ICPD was the first international conference to estimate the resources needed to achieve the agreed action plan. The resource estimates included four components: family planning; reproductive health; STIs and HIV/AIDS; and basic research, data and population and development analysis (see box 4.17 for definitions). Each component should be integrated into basic national programs for population and reproductive health. The estimated total costs for all components were US\$17.0 billion (in 1993 US\$) by 2000 (UN 1994, para. 13.15). Two thirds of the costs were expected to be met by the developing countries themselves, while the other third was to be provided from such external sources as donor countries. It was recognized that the least developed countries as well as some low-income countries would require substantial external resources to implement their programs.<sup>21</sup>

The estimated resources for the HIV/AIDS component were low primarily because they only covered selected elements of prevention and did not include the costs for treatment and support. In 1999, when the five-year follow-up to the ICPD programme was held, it was acknowledged that, “since the HIV/AIDS pandemic is having a more severe impact than was originally projected, special attention should be given to providing promptly the necessary resources” (UN 1999, para. 97). New estimates for the HIV/AIDS component that were later made by UNAIDS – to include prevention, treatment and support – indicated that US\$14.9 billion would be needed in 2006 and US\$22.1 billion in 2008 (UNAIDS 2005b).

The estimated costs for reproductive health were also low as only safe maternity services were taken into account. Resources for data and policy needs were conservative as well.

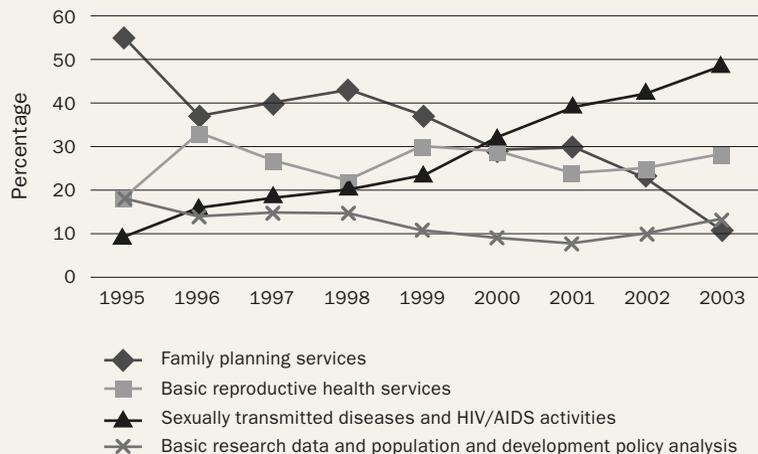
It is important to recognize that the Programme of Action estimates did not include all issues brought up at the conference, and that additional resources are still needed for other objectives and goals (later incorporated in the MDGs) like the improvement of women’s status and empowerment, and the strengthening of primary health systems (UN 1994, para. 13.17–13.19).

Although it is difficult to determine the exact resource flows to population assistance,<sup>22</sup> it is possible to get a rough idea of the resources available and needed for this including for reproductive health. In 2003, 4.5 percent of total ODA was attributed to population assistance, up from 3.7 percent in 2002 (UNFPA 2005b). Funding from donors was US\$3.2 billion in 2002, US\$4.7 billion in 2003, US\$4.5 billion in 2004 and projected to reach US\$6.4 billion in 2005 (UNFPA 2005b).

The increasing funding for population assistance is largely due to a higher resource flow towards HIV/AIDS activities. The ICPD Programme of Action estimated requirements only for selected prevention efforts, but accurate national reporting by intervention type has proven difficult. Compilation of HIV/AIDS resource flows now includes allocations to prevention, treatment and care. Inclusion of treatment costs significantly inflates the share of total needs in population assistance going to HIV/AIDS relative to the ICPD expectations. (See Section 4 for a new analysis that recognizes higher HIV/AIDS.) Unfortunately, this has happened at the expense of other areas within population assistance (figure 3.7). Donor assistance for HIV/AIDS activities as a share of total population assistance has increased notably from 32 percent in 2000 to 43 percent in 2002 and 47 percent in 2003. Overall, 83 percent of the increase in donor assistance for population activities from 2002 to 2003 was due to HIV/AIDS-related activities.

**Figure 3.7**  
**Annual expenditure for the four components of population activities as a percentage of total population assistance, 1995–2003**

Source: Data compiled from UNFPA, UNAIDS and NIDI 2004



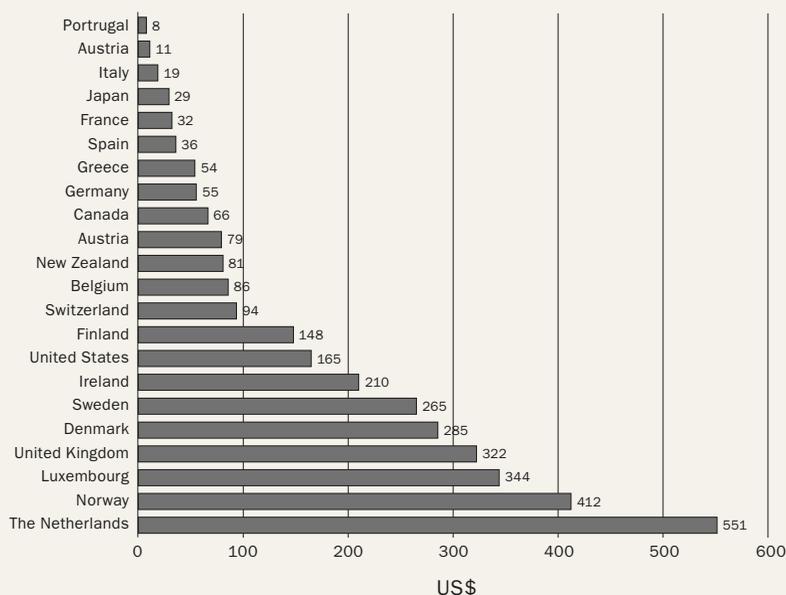
While funding for basic reproductive health services increased after the ICPD from 18 percent in 1995 to 30 percent in 1999, it subsequently decreased to 28 percent in 2003. Family planning has received less and less attention since the ICPD, and its funding as a share of total population assistance dropped from 55 percent in 1995 to 11 percent in 2003.

However, the increased attention to HIV/AIDS activities is not enough to adequately address the pandemic, especially in sub-Saharan Africa (UNFPA 2005b). At the same time the demand for family planning and reproductive health services is expected to increase in the near future, fueled in part by the increasing number of people of reproductive age. Therefore, there is a growing need for funding if the promises made are to be kept.

Donor countries vary in how much of ODA they contribute to population assistance. Denmark, Luxembourg, the Netherlands, Norway and the United Kingdom were the leading contributors to population assistance as a share per million dollars of gross national income (GNI) in 2003 (figure 3.8). In 2003, only five countries gave more than the 4 percent of ODA to population activities agreed at the ICPD: Finland, Luxembourg, the Netherlands, Norway and the United States. The number of countries providing 4 percent of ODA to population activities has decreased since 2002 where nine countries gave more than 4 percent<sup>23</sup> (UNFPA, UNAIDS and NIDI 2005). In 2003, the United States was the leading contributor in absolute terms and in its share of ODA going to population assistance (11.5 percent). However, relative to the size of its economy it is only in the middle range of donor countries.<sup>24</sup>

**Figure 3.8**  
Population assistance  
by donor country  
per million US\$  
of gross national  
income (GNI), 2003

Source: Population Action  
International 2005



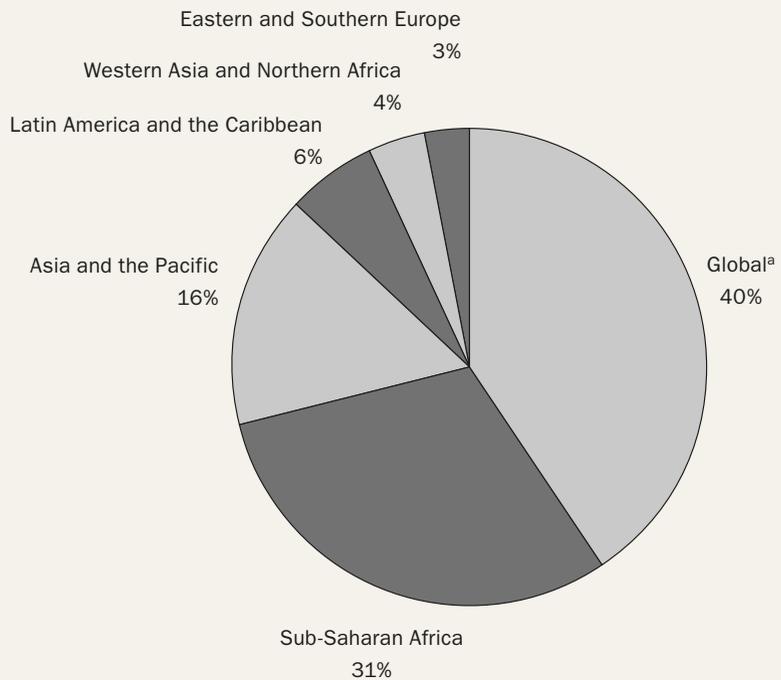
Population activities in developing countries also receive external assistance from supporters other than donor countries. Development banks, especially the World Bank, foundations and NGOs contribute important resources for population assistance. The development banks contributed US\$501 million in 2003 in loans and accounted for 10.3 percent of the total population assistance, while funds from foundations and NGOs accounted for 8.1 percent (UNFPA, UNAIDS and NIDI 2005).

In 2003, 158 developing countries and territories received external population assistance. Sub-Saharan Africa received one third of this assistance (31 percent) but the region also includes the majority of the least developed countries. Asia and the Pacific received 16 percent of the total external population assistance and Latin America and the Caribbean received 6 percent (figure 3.9).

**Figure 3.9**  
**Final donor expenditures for population assistance, by geographical region, 2003 (total assistance US\$3,846,900)**

*Notes:*  
 a. Global includes allocations to global and inter-regional activities.  
 Totals include bilateral, multilateral and NGO expenditure.

*Source:* Data from UNFPA, UNAIDS and NIDI 2005



Domestic expenditures for population activities are estimated to have increased to US\$12.5 billion in 2004 from US\$11 billion in 2003. Asia was expected to mobilize the largest amount of financial resources in both 2004 and 2005. Roughly a quarter of all domestic expenditures for population activities are spent on STIs and HIV/AIDS. Latin America spends about three quarters and sub-Saharan Africa just over half of their funds on AIDS. Consumers contribute a large amount of the total domestic financial resources,

ranging between 25.5 percent in Eastern and Southern Europe to 63.1 percent in Asia and the Pacific (see table 3.5).

**Table 3.5**  
**Global domestic**  
**expenditures**  
**for population activi-**  
**ties by region, 2003**  
**(US\$ thousands)**

Region	Government	NGOs	Consumers <sup>a</sup>	Total	Consumers share of total (%)
Sub-Saharan Africa	229,411	73,116	200,735	503,262	39.9
Asia and the Pacific	2,935,656	69,811	5,128,592	8,134,059	63.1
Latin America and the Caribbean	879,161	100,916	701,570	1,681,647	41.7
Western Asia and Northern Africa	235,416	31,179	144,546	411,141	35.2
Eastern and Southern Europe	149,679	8,235	54,184	212,098	25.5
Total	4,429,324	283,256	6,229,626	10,942,206	56.9

Note:

a. Consumer spending on population activities covers only out-of-pocket expenditures and is based on the average amount per region, as measured by the World Health Organization (WHO) for healthcare spending in general. For each region, the ratio of private out-of-pocket to per capita government expenditures was used to derive consumer expenditures in the case of population activities

Source: UNFPA 2005b, data compiled from van Dalen and Reuser 2005

Even though domestic expenditures are increasing, many developing countries (and in particular the poorest countries) require adequate ODA. Within the time frame for the MDGs they cannot reach a level of sustainable domestic funding anywhere near two thirds of the costs for population activities.

### *Providing access to essential reproductive health drugs and supplies*

Providing access to reproductive health drugs and supplies is crucial to the achievement of the MDGs and to the improvement of health in developing countries. Access to reproductive health commodities needs to be maintained, and provided if lacking. Without these commodities there will, for example, be no contraceptives to prevent unwanted pregnancy and transmission of STIs, including HIV/AIDS; no equipment to provide a clean and safe delivery for both mother and child; and no medicine to treat STIs and maternal conditions.

The ICPD+5 Key Actions clearly defined governments' responsibility in securing reproductive health commodities, stating that:

“Governments should strive to ensure that by 2015 all primary health-care and family planning facilities are able to provide, directly or through referral, the widest achievable range of safe and effective family planning and contraceptive methods; essential obstetric care; prevention and management of

**Reproductive  
health  
commodity  
security  
is about  
ensuring a  
secure supply  
and choice of  
commodities**

reproductive tract infections, including sexually transmitted diseases; and barrier methods, such as male and female condoms and microbicides if available, to prevent infection.” (UN 1999, para. 53)

Reproductive health commodity security is about ensuring a secure supply and choice of commodities such as contraceptives (including condoms), maternal health supplies, and HIV/AIDS and other STI treatment and prevention. These commodities need to be provided to rural and urban populations, rich and poor, young and old, as well as women and men. Securing reproductive health commodities requires a system that provides the right quantities of the right products in the right condition in the right place at the right time for the right price (Hare et al. 2004).

In many developing countries, securing these drugs and supplies remains a challenge. It is crucial that national capacity building is developed in order to secure sustainable forecasting, logistics, financing, procurement, warehousing, stock monitoring, distribution of commodities and training and management of human resources. The need to provide and secure reproductive health commodities will be discussed further in Section 4.

## What needs to be done

In the Outcome Document of the 2005 World Summit, the world's leaders have recognized the importance of sexual and reproductive health (SRH) access to the attainment of the Millennium Development Goals (MDGs). As discussed in Section 1, this is the culmination of a long sequence of international, regional and global political events between 1994 and 2005.

The translation of this most recent recommendation into operational strategies is the primary task of national action. Many countries have had national population policies for several decades. Many of these were adjusted following the International Conference on Population and Development (ICPD) to incorporate the full range of issues under the rubric of reproductive health (UN 1999; UNFPA 2004e). The greater challenge has been the allocation of resources (funds, personnel and institutional priorities) to implement the resulting national plans.

Political will for action is a necessary condition for the rollout of any action plan and its being taken to scale. Accordingly, it is a measured component of assessment of the strength of national programs for family planning, maternal mortality and other components of reproductive health (Bertrand and Escudero 2002; Ross and Maudlin 1996; Ross et al. submitted for publication). As SRH touches on a range of sensitive issues (including gender relations and harmful traditional practices), legitimization of program efforts by political leaders in speeches, policies and personal appearances has been an important element of the more successful programs (Seltzer 2002).

The mobilization of community support is at least as important as high-level pronouncements. Major transformations in health system priorities are most effective if they are demand-driven.<sup>25</sup> Effective linkages of community and home-based priorities and interventions to the formal health system are

**The linkages of SRH to progress on various MDGs requires the inclusion of a population and SRH situation analysis in needs assessment exercises**

essential to sustained progress. This message is a central analytical position of the Task Force on Child Health and Maternal Health (Chapter 3 in UN Millennium Project 2005b).

This support, from the highest political to the grassroots community level, must be directed to key tasks for effective implementation and accelerated development. These tasks are:

1. Integrating SRH analyses and investments into national poverty reduction strategies and sectoral strategies
2. Integrating SRH services into strengthened health systems
3. Systematically collecting data
4. Acting on the Reproductive Health Quick Impact Initiative
5. Meeting the needs of special populations.

**Task 1: Integrating SRH analyses and investments into national poverty reduction strategies**

*Planning*

As emphasized in *Investing in Development* (UN Millennium Project 2005a), the MDGs invite countries to adopt a goal-oriented or needs-based approach to development. Instead of asking, “What progress can be made given currently available resources?” the new question must be “What will it take to achieve the MDGs?” As this report shows, this goal-oriented approach must also be extended to SRH. The linkages of SRH to progress on various MDGs, therefore, requires the inclusion of a population and SRH situation analysis in the needs assessment exercise undertaken by countries during their national development strategy exercises.

This analysis should include:

- Baseline and alternate population projection scenarios related to varying degrees of attainment of priority development goals
- Examination of the impact of the scenarios on the size and timing (i.e., the dynamics) of key population groups subject to priority interventions across all the MDGs
- Modeling of the implications for resource requirements to reach targeted coverage levels, and examination of the potential for reallocating resources differently among interventions or for investing in further quality enhancements
- Consideration of the costs and benefits of SRH interventions, including cross-sectoral benefits.

Several countries of Latin America and the Caribbean have performed Country Population Assessments with the assistance of the United Nations Population Fund (UNFPA). Population elements are often included in UN Common Country Assessments (CCAs) – a component of integrated UN system support to national programs. However, these analyses are frequently

inputs into planning of support within the UN system – for example, in the United Nations Development Assistance Framework (UNDAF) – and are not always coordinated with bilateral, foundation and civil society inputs under a common national development plan.

The record of incorporation of population dynamics and reproductive health into poverty reduction strategies to date is disappointing (Danguilan/UNIFEM 2005). Some countries have incorporated population issues (e.g., Armenia, Azerbaijan, Bangladesh, Ethiopia, Ghana and Indonesia) (UN 2005a). But the translation of brief sections on population dynamics into programming for MDG progress is often lacking. National Population and/or Reproductive Health Strategy documents are rarely referenced in these exercises.

The initial collaborations with national counterparts undertaken by the UN Millennium Project on MDG needs assessments were conducted prior to the development of the Reproductive Health Costing Tool and did not have the opportunity to analyze the impact of population dynamics on the projections of resource requirements (UN Millennium Project 2004). When this analysis is included, the accumulated savings in projected resource needs can be considerable. The first line of table 4.1 shows the cumulative additional resources required to satisfy unmet need for family planning compared to those required to attain the contraceptive prevalence rate consistent with the UN Population Division's medium variant projection. The second line shows the resulting savings from antenatal, maternal and newborn health requirements over the same time period (2005–2015). The graphs that follow (figure 4.1) show the time course of investments and saving in one specific country: Uganda.

**Table 4.1**  
**Projected costs for family planning and resulting savings in maternal and newborn care (2005–2015) (US\$millions)**

	Bangladesh	Cambodia	Ghana	Tanzania	Uganda
Family planning	62	26	13	13	67
Other maternal and newborn health	-103	-56	-28	-45	-266

Source: Vlassoff and Bernstein  
2006

These analyses reflect the savings to be attained from family planning investments. Other investments in SRH also generate savings over time. For example, reductions in maternal mortality lead to improved health outcomes for children. The gains go well beyond direct savings.

### *Monitoring*

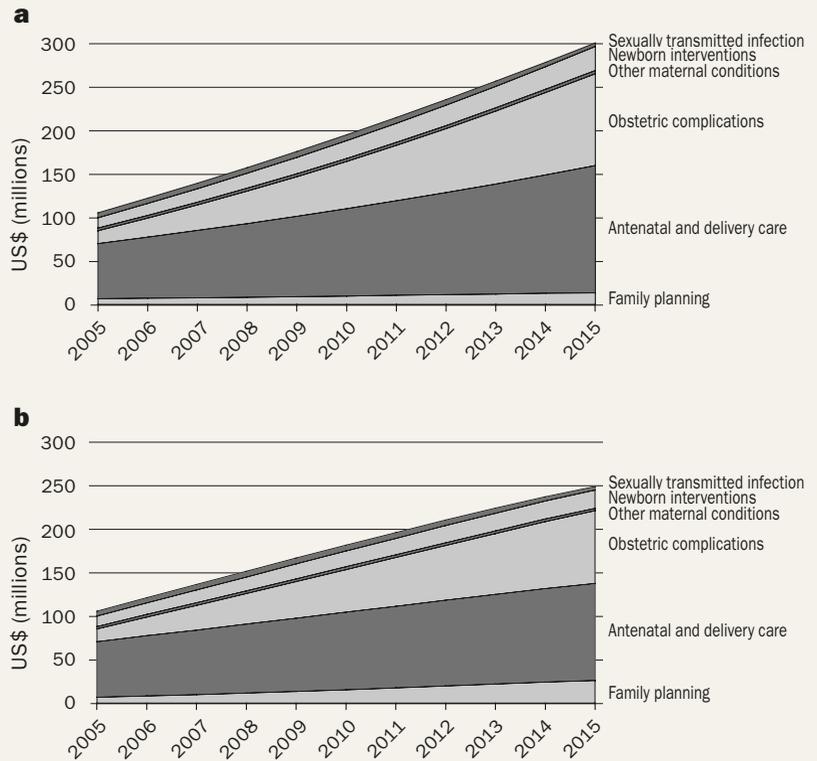
Some countries have given heightened attention to population and SRH in their national MDG monitoring and development processes. Bangladesh, for

**Figure 4.1**  
**Costs of SRH in**  
**Uganda 2005–2015:**  
**a. UN medium variant**  
**projection and**  
**b. Unmet need**  
**satisfied projection**  
**(2005 US\$)**

*Notes:*  
 All data points are model-based  
 Certain costs are not included but roughly equal in both scenarios (e.g., building and equipping new facilities and pre-service training)

The costs of SRH in this computation exclude HIV/AIDS and capital investments

Source: Vlassoff and Bernstein 2006



example, revised the language of Goal 4 to “Improve maternal and reproductive health”. Additional targets related to SRH were added in several reports.

Development strategies, including poverty reduction strategy papers (PRSPs), as well as medium-term expenditure frameworks (MTEFs) and CCAs/UNDAF can also incorporate indicators related to SRH conditions and program development. SRH conditions indicators include measures of health status and fertility for the population as a whole and/or for specific population groups. For example, India, among other countries, monitors the situation of the poor explicitly. Program development indicators include process measures: service use and access, proportions of service delivery points with full staffs, equipment and supplies, and proportions of service delivery points offering particular SRH services (choice among methods of contraception, emergency obstetric care, and voluntary counseling and testing for reproductive infections, including HIV/AIDS).

The selection of indicators should reflect national priorities and national conditions. Several compilations of indicators have been produced over the past decades. (See *Compendium of Indicators for Evaluating Reproductive Health Programs*, Bertrand and Escudero 2002; *Indicators for Population and Repro-*

*ductive Health Programs*, UNFPA 1998; *Reproductive Health Indicators for Global Monitoring*, WHO, UNICEF and UNFPA 2000.)

At the international level, the World Health Assembly recognized the centrality of monitoring access to SRH to strategies to achieving health-related MDGs. It recommended the incorporation of a target of universal access to reproductive health into monitoring frameworks (see box 4.1) along with other supporting interventions.

**Box 4.1**  
**World Health**  
**Assembly**  
**resolution 58.31**

Source: WHO 2005a

The World Health Assembly resolution *Working Towards Universal Coverage of Maternal, Newborn and Child Health Interventions* appealed to the nations of the world to accelerate progress towards maternal, newborn and child health by strategies including heightened attention to reproductive health.

The Fifty-eighth World Health Assembly,

1. URGES Member States to:

(1) Commit resources and to accelerate national action towards universal access and coverage with maternal, newborn and child health interventions, through reproductive health care;

(2) Establish or sustain national and international targets, and to establish monitoring mechanisms for measuring progress towards the achievement of agreed goals, particularly the target on universal access to reproductive health by 2015;

(3) Involve all key stakeholders, including civil society organizations and communities, in setting priorities, developing plans and programmes, measuring progress and evaluating impact;

(4) Improve the quality and completeness of vital registration and other relevant household-survey data, where appropriate, to reflect mortality differentials among mothers, infants and under-fives;

(5) Adopt and implement, in line with international agreements, the legal and regulatory frameworks to promote gender equality and protect the rights of women and children, including equal access to health care, with special attention for those thus far excluded, particularly the poor, the marginalized and the underserved;

(6) Ensure that national strategic-planning and budgetary processes include interventions at political and programme level to strengthen health-care delivery systems for effective and rapid advance towards universal coverage, including:

(a) realigning the content of programmes for maternal, newborn and child health and nutrition, incorporating their management structures and services, and embedding them in core development processes for health systems in order to ensure that reproductive health care is fully integrated;

(b) addressing the workforce crisis by drawing up national plans for development of human resources for health that include financial incentives and mechanisms for equitable deployment and retention, especially for rural primary care, so as to give the poor better access to care;

(c) building realistic scenarios, with their costing and budget implications, for scaling up the health systems required for delivering maternal, newborn and child health care;

- (d) building the institutional capacity to manage appropriate financing reform, inter alia a move from user fees to prepayment mechanisms and pooling systems, including tax-based and insurance systems, in order to achieve the goal of universal access and financial and social protection;
- (e) building a national consensus around the need for moving towards universal coverage, with mechanisms for predictable, sustained and increased funding; around maternal, newborn and child health at the core of the citizen's health care, including entitlements where appropriate; and around the human-resources-for-health crisis as a national priority;
- (f) creating partnerships between government, civil society organizations, private sector entities and development agencies to maintain the political momentum, overcome resistance to change, and mobilize resources;
- (g) establishing participation mechanisms for not-for-profit civil society organizations and religious organizations in order to strengthen accountability mechanisms and systems of checks and balances.

A list of basic SRH indicators for program monitoring was adopted in a joint consultation of WHO and UNFPA (WHO and UNFPA 2004)

As recommended by the Task Force on Child Health and Maternal Health of the UN Millennium Project (2005b), it is important that the MDG monitoring framework reflect the role of SRH in improving maternal health, as well as in achieving the other Goals, notably Goal 3 on gender equality and women's empowerment. The Task Force proposed a short set of indicators (see Appendix 1) related to contraceptive prevalence, unmet need for family planning (expressed as the proportion of desires for family planning satisfied), availability of emergency obstetric care and adolescent fertility.

International experts at a meeting convened by WHO reviewed the Task Force's recommendations. It was their assessment that measures of the availability of emergency obstetric care, while important to monitoring Goal 5, needed further technical development. They strongly recommended the adoption under Goal 5 of a target of universal access to reproductive health and the use of the other indicators recommended by the Task Force (WHO 2005e).

Besides specific SRH indicators, indicators that monitor women's empowerment play a crucial role in the attainment of Goal 3. As discussed in Section 2, the indicators in the current MDG framework are insufficient, and there is a need for more differentiated gender indicator monitoring in national frameworks( see table 2.10).

### **Task 2: Integrating SRH services into strengthened health systems**

Family planning programs in developing countries started as vertically organized programs, often with substantial inputs of donor resources (Seltzer

2002). The lack of effective integration in the normal structure of public health systems (e.g., separate staffs and facilities, lack of promotion opportunities, different supply chains and lack of domestic resource allocation) brought – as all vertical programs do – some advantages and distinct disadvantages. The advantages included specialized training and skills and guaranteed consistent funding. The disadvantages, however, were significant. The most skilled and ambitious staff sought better opportunities, donor vicissitudes could lead to changes in programmatic emphases and priorities (unrelated to local needs) and uncertainty in funding, including lack of domestic funding, eroded policy priority in planning and finance decisions, etc.

The ICPD Programme of Action placed reproductive health – including family planning – within the main rubric of health delivery. In the aftermath of ICPD, countries began to review and reform their programs to better integrate SRH and incorporate it into their institutional structures and processes for primary healthcare. By the 10-year review of implementation of the Programme of Action, 136 countries had reported the readjustment of their programs. Nearly two thirds of these countries had started integrating their services after the ICPD. However, comprehensive service integration remains an uncompleted task. Table 4.2 shows that many important integration tasks have been undertaken by less than a third of the countries.

### *A framework for integration of services*<sup>26</sup>

While many countries have implemented multiple measures towards service integration, a clear framework for addressing integration challenges has not guided the effort. With such a framework, it is possible to assess the degree of and operational requirements for effective provision of quality care.

**Table 4.2**  
**Specific measures**  
**taken by 136 countries to integrate SRH in primary healthcare**

*Note:*  
a. Based on multiple responses; therefore percentages may add up to more than 100

Source: UNFPA 2004e

Measures taken	Countries	
	Number	% <sup>a</sup>
Primary health care services expanded to include family planning	62	46
National plans/programmes/strategies on reproductive health integration	48	35
Information on STIs and/or HIV/AIDS prevention integrated	43	32
Information on teenagers and youth integrated	31	23
Integration through reproductive health providers	27	20
Integration through institutional changes on reproductive health	25	18
Information, education, communications(IEC)/advocacy campaigns on reproductive health integration	14	10
National policies to integrate reproductive health	14	10
Local plans/programmes/strategies on reproductive health integration	12	9
Information on treatment of infertility integrated	10	7

**A continuum of care involves two key elements: a continuum of services and a continuum over time**

People are central to efforts to provide better-integrated services. Therefore, any efforts to integrate services must be centered on a ‘*continuum of care*’ over a person’s life cycle. A continuum of care involves two key elements: a continuum of services and a continuum over time.

A continuum of services aims to provide services that meet all of the client’s needs in a convenient and affordable way. For a pregnant woman coming for her antenatal visit, it means talking about the pregnancy but also checking if there are other relevant issues such as partner violence, nutritional problems or the need for condoms to prevent HIV infection during pregnancy. It implies discussing her relationship with the father of the child and the effects of her pregnancy on her employment or schooling.

A continuum over time means that SRH care must be linked over time, from one visit to the next, to ensure continuity and provision of appropriate advice and services. This may mean noting repeated symptoms of violence against women; recording contraceptive side effects and following up clients through outreach if they do not come back to the clinics; and, for HIV/AIDS, starting from counseling and extending to testing, treatment and follow-up care. Continuum over time calls for a continuum of information to support the patient and healthcare provider. At each point, the provider(s) must have access to records about the entire process so they can make all the pieces available as needed.

This continuum is thus far more than simply the integration of single-purpose programs like family planning with other single purpose programs like safe motherhood or STIs. What is envisaged is a much more fundamental shift in systems support and staff attitudes.

*Integrating support systems*

Consideration of health systems is important, because systems affect, both positively and negatively, how services are delivered. It is the system that determines effective linkage (or non-linkage) between levels and services when all healthcare needs cannot be provided at the same place or time. It is the system that ensures that well-trained staff and properly stocked and equipped facilities are in place. If the system is weak, or fragmented by multiple vertical programs, it fails to realize the necessary links between services needed by an individual and therefore fails to provide support for a continuum of care. Integrated services may or may not require all or part of the health system to be integrated. The goal is integrated *services*; whether and how the *system* should be integrated (as distinct from coordinated) will be largely context-specific.

In a continuum of care or a ‘linked response’ model, different types of integrated services are provided at different levels (e.g., family planning and antenatal care at a primary health clinic or surgical contraception at a hospital), but the staff are able to assess an individual’s needs and refer her or

him across different levels when services are not available at the level initially accessed. A well-functioning system ensures that referral mechanisms are in place (within the public sector and between public and private sectors), and that patient information is also referred so that other providers have a complete picture of patient needs and care requirements. A well-functioning system ensures that patients are referred in a timely manner to other services that are well equipped and operational.

*What effective integration requires*

*Integration of services at the level of the client.* A continuum of care may be best achieved through provision of a spectrum of integrated packages for different categories of clients. For example, services for adolescents might include information and counseling on sexuality and reproduction, and skills to negotiate abstinence, offer contraceptives and provide referrals to adolescent-friendly services for abortion where permitted by law, STI/HIV testing and treatment (successful in South Africa). The important thing is

**Box 4.2**  
**Lessons from**  
**past experiences**  
**of integration**

Source: Mitchell et al.  
2006

*Integrated services and systems require more management expertise.* Management for integrated systems is more complex than for single-issue vertical programs and therefore requires clear, realistic and specific roles and responsibilities at each level of service delivery as well as investment to equipping staff with appropriate decision-making skills to undertake these.

*It is more difficult to hold managers accountable in an integrated environment.* Managers of integrated programs must be trained in, and required to report on, decision-making processes transparently and accountably.

*Monitoring and evaluation of integrated services is complex.* Regular monitoring of integrated programs is essential and should include process as well as input and impact indicators.

*Integration can lead to a loss of focus on or within SRH.* Program planners and managers must be clear, specific and realistic in defining integrated services. A list of country-specific core indicators should be developed. These indicators are likely to be nationally defined, to safeguard key priority areas, but should allow for some adjustment to local contexts.

*Specialized technologies or skills can be lost if integration is done inappropriately.* If programs are to be successful, they must ensure planning that monitors, tracks and preserves specialized skills/services while making them available in an integrated services environment. Operational standards and guidelines could do much to ensure this, in particular clarifying the roles, and required numbers, of providers and specialists at different levels.

*Logistics and procurement are complex and may be weakened by integration.* Before integrating multiple logistics systems, all these systems should be brought up to a similar (high) level of efficiency since the integration of two systems that have different levels of efficiency will have a negative impact on the better functioning one and thus pull down the whole system.

**Indicators of progress should be measured on a regular basis to ensure that the program is actually able to achieve its objectives**

to ensure a client receives a continuum of care regardless of the level of care s/he initially accesses.

*Client-centered information.* One key to successful delivery of integrated services is the capacity to track the progress of each patient over time, providing the physician, other health workers, the managers and the patient with information about clinical progress and administrative processes. This patient-centered information system both allows the continuity of care required for quality service delivery, and provides the database from which to analyze program effectiveness through the analysis and aggregation of patient data over time. Examples include antenatal cards and electronic record systems.

*Realistic, specific planning and monitoring and flexible management.* An effective plan in an integrated environment specifies what the most important activities or goals are and why, and provides a detailed outline for achieving them. The goals set should be reachable, and indicators of progress should be measured on a regular basis to ensure that the program is actually able to achieve its objectives. Due to inadequate resources, training or infrastructure, a phased approach to implementation, which gives more time to build capacity and to incorporate specific local contexts, may be more efficient. Above all, the integration of services needs to be flexible at all levels of planning and in terms of how quickly to proceed. Constant monitoring of progress is important because it can identify unpredicted changes in the environment or slow progress on planned activities, and thus enable plan adjustments.

*Strong health systems.* Integrating systems does not make weak systems strong. In order to be effective and deliver good quality services, integrated programs must be supported by several systems that operate properly, including management, information, financing, logistics, personnel and planning and monitoring systems. These systems must be strengthened both before and as integration occurs.

*Involved, motivated, competent human resources.* In an integrated service environment, job definitions are more complex. Each staff member needs to have a broader base of knowledge to address a wider array of problems presented by each client, as well as an understanding of the referral network so that problems that cannot be immediately addressed can be referred for appropriate care. Although integration can be a challenge for staff (who may sometimes impede implementation), it can also have significant benefits. Reorganizing services through program integration can give managers the opportunity to relocate staff if needed, or change job responsibilities that might otherwise be difficult to achieve. Since it is not uncommon for there to be staff shortages, integration can provide an opportunity to reallocate staff to achieve a more even distribution of personnel and skills. This can be an effective way of achieving the teamwork that is necessary for effective integration, with staff

building on each other's skills and knowledge to contribute to the overall success of the program.

There are some special considerations for SRH services that deserve particular attention when talking about integrating services (box 4.3).

**Box 4.3**  
**Special**  
**considerations**  
**for SRH**

Source: Adapted from  
Mitchell et al., 2006

In integrating services, there are some special considerations for SRH services. These fall under three broad categories. The point of reference underlying all these discussions is the continuum of care provided for the client.

*Service orientation*

- Care must be provided for health needs at every stage of the life cycle
- Confidentiality is particularly critical for sensitive health issues like family planning, STIs and violence against women.

*Diverse target populations*

- Integrated services need to be appropriately packaged for different groups, recognizing that the needs of adolescents are different from those of married, child-bearing women and those of sexually active men.

*Specialist service considerations*

- Not all SRH problems can be dealt with by the primary healthcare provider – some may require referral to a tertiary level of care, notably surgery including emergency obstetric care
- Other SRH services requiring special attention include: HIV/AIDS, violence against women and abortion (where legal), all of which require confidential client-centered services and good referral links between service levels and related services outside the main health sector (including social support and legal aid).

*Achieving a continuum of care: steps to a matrix of services*

Integrated services can provide many benefits to the client, but can also, as noted above, be more complex to plan and manage and run the risk of losing the momentum that has been achieved in some single purpose programs. In an effort to harness the benefits of integration, Mitchell et al. (2006) have developed a matrix approach to planning and monitoring integrated services. This approach, first developed with the cooperation of the World Bank Institute, indicates a step-by-step process for managers that helps to identify the specific services that will be included in an integrated program at each level of the health system. Central to this process is the development of standards of service for each level that define the staffing requirements, pharmaceutical and supply needs, equipment and physical infrastructure that will be required for each type of service to be offered. The steps in the process, and existing guidelines or tools that can be used to achieve each step, are given in table 4.3.

It should be noted that these steps to achieve the matrix of services described require that the relevant *systems* inputs become functioning and adequate.

**Table 4.3**  
**Matrix on planning and monitoring integrated services**

*Notes:*

a. The WHO Health Metrics Network has a compilation of country-specific and generic health systems indicators that can be used for prioritization

b. The four papers from DFID's Monitoring Sexual and Reproductive Health Programmes can be found at <http://www.jsieurope.org/issues.html>

Source: Mitchell et al. 2006

Steps to define and plan a matrix of services	Existing tools and guidelines
<b>1. Prioritize program interventions</b> (ideally based on prevalence and need indicators and covering all key sexual and reproductive health issues)	<ul style="list-style-type: none"> <li>• WHO Health Metrics Network Indicators<sup>a</sup></li> <li>• Key sexual and reproductive health indicators from WHO, UNICEF and UNFPA (2000) and WHO (1997)</li> <li>• AGI and UNFPA (2003), <i>Adding It Up</i></li> <li>• National data on prevalence/importance of sexual and reproductive health issues</li> </ul>
<b>2. Develop standards of services</b> (apply these to each service delivery level)	<ul style="list-style-type: none"> <li>• National and WHO professional sexual and reproductive health service standards</li> </ul>
<b>3. Inventory of facilities</b> (checklists to identify infrastructure/equipment requirements at each level to achieve standards identified in Step 2)	<ul style="list-style-type: none"> <li>• National and WHO professional sexual and reproductive health service standards</li> <li>• WHO and UNFPA lists of minimum service requirements (2003)</li> </ul>
<b>4. Develop costing standards</b> (to determine costs of standards in Step 2 for each intervention identified in Step 1)	<ul style="list-style-type: none"> <li>• International guidelines on specific interventions (e.g. from WHO, World Bank, UN Millennium Project)</li> </ul>
<b>5. Initiate work plan</b> (within budget and resource constraints)	<ul style="list-style-type: none"> <li>• Source material for planning and logistics</li> </ul>
<b>6. Monitor facility improvement and service delivery</b>	<ul style="list-style-type: none"> <li>• Horstman et al. (2002), manual and indicators lists for M&amp;E of sexual and reproductive health programs</li> <li>• Key sexual and reproductive health indicators from WHO, UNICEF and UNFPA (2000) and WHO (1997)</li> <li>• DFID's monitoring impact and effectiveness in sexual and reproductive health programs<sup>b</sup></li> </ul>
<b>7. Feedback to inform systems and policy inputs</b>	<ul style="list-style-type: none"> <li>• Mechanisms will be country-specific but will include reports and face-to-face meetings between managers and policy/program decision makers</li> </ul>

Systems inputs also need to be systematically assessed and should be informed by the feedback loop that is step 7, since the previous steps will help identify systems inadequacies. Table 4.4 shows a completed matrix of services that are defined for each level of the delivery system. For each of the services and levels indicated in the table, steps 2–7 of table 4.3 should be applied.

This matrix format highlights both non-clinic interventions as well as clinic-based activities, giving a more complete picture of the total program. It also emphasizes the connections between the various parts of the system in areas such as referrals and communications. At whatever service level the client enters s/he will be connected to the next level of care (up or down) through referrals. This continuum is made possible by the systems inputs at each level, including the 'stewardship' function that WHO defines (2000c). This involves the systems managers overseeing and coordinating the inputs from non-public sectors as well as overseeing the quality, proper support and functioning of all the other inputs and structures.

*Recommendations for effective integrated services<sup>27</sup>*

- *Systems must support a continuum of care.* Integration of services involves a continuum of care for each client as discussed above. Rather than

**Table 4.4**  
**Illustrative service package for related SRH services**

Note: Services offered at lower levels would normally be offered at higher levels as well, when appropriate, and are not repeated in higher-level cells

Source: Mitchell et al. 2006

Intervention	Community/household (outreach workers)	Clinic (or lowest level, fixed-site facility)	Health center: (a) in-patient surgery	District hospital (referral services)
<b>Family planning</b>	Community counseling Distribution of condoms, oral contraceptives	Manage/refer problems Provide injectables	Manage/refer problems Intra-uterine devices (IUDs) Norplant Surgical contraception <sup>a</sup>	Infertility
<b>Reproductive tract infections (RTI) control and management</b>	Information on safe sex Recognition of symptoms	Counseling Symptomatic screening Symptomatic treatment	Testing Full treatment of asymptomatic problems	Diagnostic procedures Specialized treatment HIV screening
<b>Pregnancy services: ante/post-natal care normal deliveries, management of emergencies</b>	Register pregnancies Home deliveries Recognize problems and arrange transport Post-partum family planning	Antenatal checks Tetanus toxoid (TT) vaccination Obstetric first aid Intravenous (IV) fluids Antibiotics Post-partum family planning	Deliveries and basic obstetric care Emergency obstetric care <sup>a</sup> PAC	Comprehensive emergency obstetric care Ectopic pregnancy
<b>Adolescent health</b>	Programs to educate parents School health programs Education to teens	Counseling Family planning information and commodities Pregnancy STI/HIV and abortion information/referral	Counseling Family planning information and commodities STI treatment Pregnancy services Abortion and HIV information/referral	HIV counseling and testing Abortion services
<b>Gender-based violence</b>	Education of men and women about female genital cutting (FGC) and intimate partner violence (IPV) Awareness of outreach workers to identify potential cases	Awareness program for local leaders of dangers of FGC, IPV Awareness of staff to identify potential cases of IPV	Awareness program for local leaders Counseling in cases of FGC, IPV and referral to specialist services	Counseling in cases of FGM, IPV and referral to specialist services
<b>Abortion/post-abortion care (PAC)</b>	Information about family planning and abortion services	Information and counseling of patients seeking abortion Diagnosis and referral of patients in need of abortion/PAC	Information, counseling and services for patients seeking abortion Diagnosis and treatment of patients in need of PAC Referral of complicated cases	Treatment of complex abortion and post-abortion cases
<b>Nutrition</b>	Identify and treat anemia Counsel pregnant women Vitamin A, iron, folate, growth monitoring	Manage supplementation program Treatment of acutely malnourished children	Treatment of acutely malnourished children Diagnosis of chronic malnutrition due to tuberculosis (TB), HIV, etc.	Referral of patients with suspected HIV

**The complexity of setting priorities in an integrated health environment requires fairer and more democratic mechanisms to be developed to ensure that the needs of the client are met**

initiating integration by merging systems, it is more effective to plan for service integration and then design systems that can support these services.

- *Develop client-centered information and referral systems.* Integration means that there are *referral mechanisms* in place, *for clients and their medical records* that ensure that each client receives a full range of needed care in a convenient and affordable way.
- *Incorporate the life-cycle approach.* Individual clients will need different types of service during their lifetimes, and the life-cycle approach forms the basis of the continuum of care over time.
- *Systems must be strong, not necessarily integrated.* Systems and policies (including priority setting, structure, financial management, personnel and information management) must support integrated services. This does not necessarily mean that all systems have to be integrated at all levels. There may be some management support systems that are best left vertical, depending on local conditions.
- *Use matrix tool for integration planning.* The delivery of integrated services requires detailed planning at both the strategic and operational level to ensure that referral mechanisms are in place, management systems are operational and staff have the resources and training needed for effective delivery. Tools such as the matrix of services presented in this report are needed to develop practical approaches to the delivery of integrated services.
- *Address priority-setting challenges.* The complexity of setting priorities in an integrated health environment requires fairer and more democratic mechanisms to be developed to ensure that the needs of the client are met. Neither donors nor bureaucrats nor technocrats should be allowed to have undue influence on the decision-making process, and better tools must be developed that incorporate technical, political and community considerations. Mechanisms such as sector-wide approaches (SWAps), PRSPs and performance-based programming may not sufficiently include local needs and constraints, nor necessarily lead to the equitable distribution of SRH services among the population. Donors and policy makers should fund and support the development of better indicators to measure the holistic, qualitative, empowering elements of SRH as envisaged at the ICPD and find better, more objective ways to collect and use 'evidence'.
- *Address SRH-specific issues.* Confidentiality and privacy are essential if clients are to be forthright about their sexual preferences, behaviors and history. Legal opinion and social customs may be in conflict with medical opinion with regard to abortion, adolescent health and violence against women including FGC, and stigma associated with specific diseases, occupations, or social class may interfere with effective care of patients.

- *Ensure long-term, coordinated and transparent donor commitment to SRH.* Donor funding, with its targeted use and need for programmatic accountability, has been one reason for the reliance on vertical programs in many countries and the fragmented approach to health sector planning. Changes to this approach are needed for service integration to occur. There is a need for renewed long-term commitment by donors to coordinating their inputs to develop effective referral and support systems and systems of accountability and monitoring that reflect the special requirements of integrated services. Further, because of the need for governments and non-governmental organizations (NGOs) to be more transparent in an integrated system, donors and other health actors need themselves to be more transparent, not only in terms of their funds but also in terms of their actual goals and long-term commitments.

#### **Box 4.4**

##### **Integrating SRH services with those for HIV/AIDS**

Integrating HIV/AIDS services with SRH services and vice versa is a central part of integrating health services. HIV/AIDS programs have in the past been separated from SRH programs, but it is time to reintegrate these two obviously interlinked health issues in order to optimize positive health outcomes. Aside from the direct link in terms of sexual transmission and transmission from mother to child, HIV/AIDS and SRH issues share many of the same root causes, including gender inequality, poverty, stigma and marginalization of vulnerable groups (WHO, UNFPA, UNAIDS and IPPF 2005a). The need for better integration of HIV/AIDS and SRH efforts has been highlighted in policy pronouncements, including the Glion Call to Action (UNFPA 2004f) and the New York Call to Commitment (UNFPA and UNAIDS 2004). A group of international donor and implementing organizations have specified key elements of integrated programming (WHO, UNFPA, IPPF and UNAIDS 2005b).

Integrating HIV/AIDS and SRH services has been shown to have several benefits. It helps to inform people of their HIV/AIDS status, reduce stigma associated with the disease, strengthen awareness about healthy sexual behavior, promote safer sex, increase access to and use of services, avert HIV transmission and unwanted pregnancies and save costs (UNFPA and IPPF 2004; WHO, UNFPA, UNAIDS and IPPF 2005a).

It also offers a significant opportunity to link HIV/AIDS with STIs, which increase the risk of HIV transmission. Integrating HIV/AIDS with maternal and infant health will reduce the risk of mother-to-child transmission as pregnant women can learn about their HIV/AIDS status at an early stage and appropriate action can be taken to reduce the risk of transmission. Furthermore, a platform opens to inform people about family planning, including information on how to deal with HIV/AIDS if one or both partners are infected.

There are many ways to integrate HIV/AIDS and SRH services. In Uganda, for example, the AIDS Information Centre (AIC) in one of the impoverished neighborhoods of Kampala offers HIV voluntary counseling and testing (VCT) with SRH services. A typical single visit, lasting from 45 to 90 minutes, includes pre-test counseling, HIV testing, HIV prevention counseling, delivery of test results and post-test counseling. In both pre-test and HIV prevention counseling, counselors mention the center's family planning services where the client can also get information on correct condom use. The client is offered condoms during post-test counseling and receives advice on how to negotiate condom use. While the clients are in the waiting room, reproductive health volunteers provide family planning information throughout the day and refer clients to counselors who can meet their particular needs (FHI 2004).

**Of particular concern and interest to stakeholders involved in implementing the SRH agenda at country level is the lack of basic information to ensure accountability related to a variety of SRH and population concerns**

### **Task 3: Systematically collecting data**

Evidence-based reproductive health means ensuring that SRH policies and interventions are informed by the best possible understanding of systemic, social, cultural, political and economic dynamics and trends to ensure that resources are channeled in the most equitable, effective and efficient manner possible.

This requires not only the capacity to collect relevant and internationally comparable data but also the skills and resources at different operational levels (from village level to central level) to analyze, widely disseminate and formally integrate compiled SRH-related information in national poverty reduction strategies, sectoral planning, regional and local implementation plans and other related development frameworks.

Most national monitoring systems in developing countries fail to satisfactorily perform these functions, mainly because the institutional arrangements for the coordination of the various actors and activities are not effective, and national statistical offices tend to be vastly underfunded. As a result, the data produced are often insufficient, incomplete and sometimes even irrelevant. Moreover, when good information is available, it is bypassed in the decision-making process by politics and ideology.

Developing countries that have gone through the steps of establishing surveillance, monitoring and evaluation structures at central levels often find that their national database is plagued by the absence of functional linkages across central, regional and district levels; the inability to sustain timely and complete reporting; and, at an even more fundamental level, the lack of agreement over key indicators for monitoring sector performance.

'Data gaps' (in quantity, quality and utilization) related to poverty markers, population characteristics, living conditions, spatial distribution, physical resources, system performance, household and community level behaviors – all highly relevant to sustainable improvements in SRH – often impede issue recognition, rational policy formulation based on efficiency and equity, appropriate forecasting, effective strategic planning and priority setting, proper monitoring of progress and impact assessment.

Of particular concern and interest to stakeholders involved in implementing the SRH agenda at country level is the lack of basic information to ensure accountability related to a variety of SRH and population concerns. These include reproductive health and education within the socio-cultural context for sexual and reproductive behavior; population dynamics and youth needs; urbanization and migration; deteriorating rural and agricultural conditions; poverty pockets; gender roles and relationships and belief systems; and gender-disaggregated data to provide a more accurate picture of women's economic contributions to society, including their management roles and their unpaid labor in the family and in the informal sector.

**Reproductive health service utilization depends both on the level of demand, the supply of information and services and the responsiveness of the health system, the community and individuals and couples**

*Possible strategic interventions*

The following are some of the interventions that can be taken to improve data collection:

- Definition of a basic package of information needs for health systems, including SRH, should be included in all major development frameworks. This basic package should be consistent with international monitoring frameworks and national program plans and include priority targets and indicators, secondary indicators, and indicators that can be compared regionally, internationally and over time
- Negotiation of accountability pacts between the donor community and recipient countries based on common monitoring and evaluation frameworks
- Establishment of a formal multisectoral Monitoring and Evaluation Unit chaired by the Ministry of Health
- Dedication of a fixed percentage (e.g., 10 percent, adjustable in light of progress in outcomes) of the budgetary allocation for SRH to monitoring and evaluation functions, including the improvement of effective standard data management
- Formalized links with research institutions
- Formalized links with NGOs and donors
- Reinforced technical capacity in thematic areas prioritized in national plans
- Development of a national monitoring and evaluation plan/program for SRH with clear objectives, time frame, resources and budget
- Development and dissemination of a data collection and analysis plan at the national, regional and district levels
- Development and implementation of a Health Management Information System (HMIS) from the district to the central level
- Development of a data distribution and information-sharing plan
- Results-based management approaches to allocations that recognize appropriate time frames for realization of returns on investments (including capacity investments).

**Task 4: Acting on the Reproductive Health Quick Impact Initiative**

The UN Millennium Project (2005a) has recommended a quick impact initiative involving reproductive health. This has two priority components: improving access to information and services, including family planning information and services; and closing the funding gap for commodities, supplies and logistics. These are mutually dependent actions. Reproductive health service utilization depends both on the level of demand, the supply of information and services and the responsiveness of the health system, the community and individuals and couples.

**In family planning, two key service gaps require focused attention: meeting unmet need and supporting correct and consistent use of contraceptives**

*Improving access to information and services*

Information gaps about SRH services have been substantially reduced over the last several decades. However, appreciation of health risks and appropriate responses remains incomplete, and historical preferences (e.g., for home births, even without a trained attendant, for contraceptive methods introduced early in a national program's experience, etc.) and cultural barriers to service utilization remain difficult to change. As information about services improves, weakened health systems are often challenged to respond to mobilized demand – lacking trained staff, supplies and effective referral systems.

Even in countries with relatively low contraceptive prevalence, knowledge that there are contraceptive methods that can help women control the timing and number of their births is often widespread. Recent survey results from the Demographic and Health Survey (DHS) indicate that in virtually all countries surveyed, over 90 percent of married women who are not using contraception and do not intend to use a method are aware of at least one method (data compiled from DHS STATcompiler 2005 accessed at [www.measuredhs.com](http://www.measuredhs.com)).

However, at the same time there are often widespread misconceptions about the effectiveness of specific methods<sup>28</sup> proper usage of available methods, side effects and the long-term effects of methods. Users of natural family planning methods (i.e., periodic abstinence) are too frequently unaware of the proper timing of low pregnancy risk. These information gaps are most pronounced among young people – as shown, for example, in many affected countries by compilations of their knowledge about the transmission of HIV/AIDS (an MDG indicator). Collaborative efforts with local information leaders (including religious authorities) can provide correct information within a culturally relevant context. The mass media can also play a strategic role in campaigning for better reproductive health (box 4.5).

In family planning, two key service gaps require focused attention: meeting unmet need and supporting correct and consistent use of contraceptives.

As articulated in Section 2 of this report, levels of unmet need remain high. Levels of unmet need for family planning among the young exceed those in all other reproductive ages, usually by a factor of two to three (figure 4.2). In sub-Saharan Africa the proportion of women wanting to limit or space their births that are not using a method of family planning often significantly exceeds that of contraceptive users.

Reasons for non-use are situation-specific. The primary ones are non-communication or disagreement about fertility preferences (with the former being more important); lack of information about method options and availability; health concerns and fear of side effects (some based on information failures); family or community disapproval; women's low decision-making power (with their partner or his family); cost of services and opportunity or social costs of acquisition; and perceptions of limited availability, access, quality of services as systemic barriers to use of family planning (including natural family

### Box 4.5 Mass media outreach in SRH

Source: UNFPA 2005c

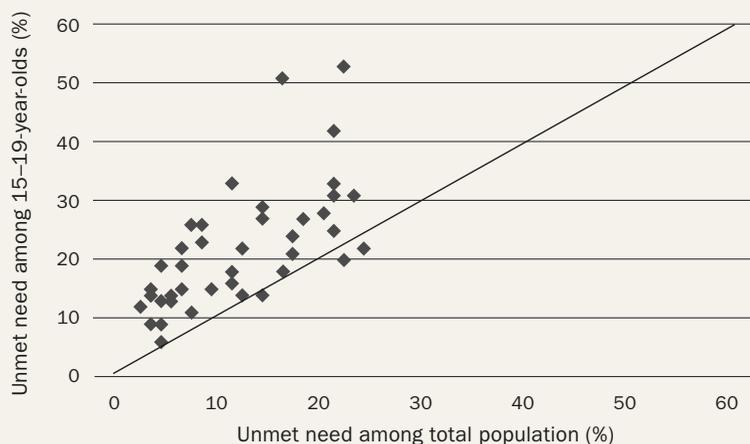
The mass media can help increase capacity and provide people with information they need to learn about reproductive health and where to seek services. Media are also being used to overcome shame, stigma and discrimination as well as help raise awareness and public and financial commitment to the issue. Various media channels can be used – e.g., magazines, radio and TV – and should be targeted to the population group in question. The following show some of the ways in which the mass media are being used in efforts to improve SRH:

- In Uzbekistan, a popular television soap opera airing since 2003 focuses on issues encountered in daily life, including substance abuse, HIV prevention and discrimination against people living with HIV/AIDS
- South Africa's 'Lovelife' program embarked on an innovative multimedia campaign to reach 12-to-17-year-olds before they become sexually active
- A multimedia initiative in Nicaragua, known as 'Sixth Sense', uses radio, a youth-led television soap opera and print materials on young people's rights. It has earned top ratings with young and adult audiences alike in hundreds of media outlets
- In Panama, a mass-media campaign against sexual exploitation was launched in November 2004 to publicize a law on sex tourism passed in 2000
- MTV's 'Staying Alive' is the largest global HIV/AIDS campaign, covering 166 countries and territories. Its 2004 campaign, focused on girls and women, was supported by UNFPA, UNAIDS, the World Bank, Family Health International and the Kaiser Family Foundation.

**Figure 4.2**  
Percentage unmet need for spacing among young people compared to the total population, in 40 low-and middle-income countries

Note:  
The country surveys took place between 1999 and 2004.

Source: DHS STATcompiler 2005 accessed at [www.measuredhs.com](http://www.measuredhs.com)



planning methods approved in a wide range of cultural traditions) (Bongaarts and Bruce 1995; Casterline and Sinding 2000). The ability of a country to remove these information and service barriers relates to its commitment to empower women and their partners to make effective choices.

**The increased emphasis on local health workers as agents for delivering a large array of interventions could significantly increase demand for many services**

While in many settings, especially in poor populations, reducing unmet need for contraception should be a key program strategy, it is also necessary to ensure that current users are using contraception consistently and correctly. A study in Peru (Jain 1999) demonstrated that greater reductions in unintended pregnancies would be attained by ensuring correct use of contraception than by advancing services to those with unmet need. But the situation varies in different settings, and attention to both concerns must be balanced appropriately.

Globally there are an estimated 76 million unplanned pregnancies each year. One fifth of these are among women using a modern contraceptive (some with inconsistent or incorrect use; some with method failure); nearly a seventh are among users of traditional methods and two thirds of these are among women who are not using any contraceptive method. This corresponds to annual pregnancy risks of 3.2, 15.6 and 36.5 percent, respectively, among modern users, traditional users and non-users (AGI and UNFPA 2003).

Improving the quality of SRH care (including effective integration of services) can be cost-effective (Rainey et al. 2003). Bundling multiple services – e.g., immunization with reproductive health outreach, follow-up care for intra-uterine devices with Pap smears and screening for reproductive tract infections (RTIs) – can significantly reduce the costs both to the health system and (with the reduction in the number of required visits) to the user. Further, while some quality improvements incur additional costs in supervision, training, facility equipment, etc., there is evidence that they lead to more consistent and correct use of contraceptive methods (box 4.6).

The increased emphasis on local health workers as agents for delivering a large array of interventions (evidenced in models being implemented in Ethiopia and Ghana, for example) could significantly increase demand for many services. Extensive training and backstopping will be required to ensure that quality standards are maintained. Reproductive health and other preventive services may be more sensitive to these considerations than treatment interventions.

### *Funding gap and system capacity issues*

Such approaches will also require heightened attention to the second component of the Reproductive Health Quick Impact Initiative: closing the funding gap for commodities, personnel, supplies and logistics.

The combination of unaddressed needs for SRH services, increasing demand for services and population growth ensure that a dramatic increase will be needed in domestic and donor budgets to attain the SRH-related MDGs in most countries. The rate of increase depends, nationally and regionally, on the dynamics of these components.

The costs of contraceptives, drugs and medical supplies required for SRH in developing regions are projected to be 86 percent higher in 2015 than they were in 2000 (increasing from US\$1.84 billion to US\$3.43 billion). The largest

**Box 4.6**  
**Quality of**  
**care increases**  
**contraceptive use**

Sources: Bruce 1990;  
Koenig 2003

The quality of health services is important for the user. For SRH, quality of care will enable users to take informed decisions that contribute to fulfilling their needs and improve their reproductive health. Quality of care refers to services that are affordable, appropriate, confident, effective and responsive to the user's needs. Improving quality of care, together with increasing accessibility, is a crucial step in reducing unmet need for contraception.

Quality of care from the user's perspective consists of six elements (Bruce 1990):

- *Choice of methods* should be offered on a reliable basis and in variety, taking into account couples' wishes in spacing and limiting
- *Information given to clients* during the service should enable them to adopt or continue with a contraceptive method
- *Technical competence* of both providers and facility is crucial
- *Interpersonal relations* between providers and clients are influenced by, for example, management style, resource allocation and the ratio of workers to clients
- *Mechanisms to encourage continuity* such as home visits should be in place
- *Appropriate constellation of services* is important to make the service convenient and acceptable to the users based on their current and pre-existing health needs.

*The impact on contraceptive use*

The quality of SRH care has an impact on the client's use of these services. Research in Bangladesh found that it influenced both the adoption and continuation of contraceptive use. The study looked into the influence of the quality of care from both clinic and fieldworker level, and the socio-economic characteristics of the women were taken into account (Koenig 2003).

The results show that respondents who resided in an area with a clinic categorized with high quality of care were significantly more likely to adopt a contraceptive method than respondents living in areas with a clinic categorized with low quality of care. The same result came up for respondents being served by a fieldworker: women served by fieldworkers providing high or very high quality of care were 60 percent more likely to adopt a contraceptive method than women being served with low quality of care.

Field worker quality was also associated with a one third reduction in all-method discontinuation (i.e., where method switching is an appropriate positive response). Field worker quality was defined as including responsiveness to questions, respect for privacy needs, provision of information, counseling sessions of at least 10 minutes, personal sympathy and offering a choice among contraceptive methods.

With respect to the adoption of a contraceptive method, the quality of care is important for women in all socio-economic strata. However, the quality of care of fieldworkers is crucial for the continuation of method for uneducated and poorer women, while it is not a key factor for educated and better-off women in their decision to continue.

This study reaffirms the importance of quality of care in program development, and underscores the need to pay special attention to poorer and uneducated women in order to offer them options to live healthier lives.

**Current mechanisms are not operating well enough to ensure the reliable availability of quality supplies and equipment when and where they are needed**

share of these supplies will be needed in the Asia–Pacific region (even when China and India are calculated separately). But the greatest rate of increase will be in Africa, where absolute requirements will increase by US\$482 million (or 161 percent) (UNFPA forthcoming).

Cost-effective approaches for developing countries to meet these needs combine donor grants, concessionary lending and national purchases at advantageous prices utilizing international bulk procurement mechanisms. National production and South–South trade in generic products are making increasing contributions, and progress is being made in pre-certification of suppliers, but these developments still require monitoring and analysis (Worley and Taylor/DFID 2005).

Current mechanisms, however, are not operating well enough to ensure the reliable availability of quality supplies and equipment when and where they are needed. Uncertainties derive from a variety of causes, including long supply chains, irregular donor support and poor coordination among donors, inefficiencies in customs clearance and in centralized warehouse systems, inadequate infrastructure, poor forecasting (both in volumes and types of supplies required), bureaucratic ordering systems and a shortage of trained personnel to address these concerns.

These systemic problems are not limited to supplies for SRH services. However, they are compounded by the multiple logistics systems operative for addressing different health system needs. Different supply chains (some associated with vertical donor pipelines for specific diseases or disease clusters) and multiple procurement processes are common within single countries. Greater investments are needed to improve national capacity to coordinate supply systems and make distribution more responsive to needs.

A Reproductive Health Supplies Coalition comprised of some 20 donors and donor-supported agencies, NGOs and representatives of national governments has been working to improve information exchange on availability and needs, strengthen supply systems, foster country ownership and national political and financial commitment for reproductive health supplies, improve coordination between international suppliers and country supply managers and expand the markets for private sector provision to appropriate population segments.

Donors have long been willing to address supply issues, especially with respect to contraceptive supplies. The more recent developments give greater emphasis to capacity generation than to emergency responses to stock-outs and other supply crises. The shift to a greater strategic focus on improving national commitment and capabilities is necessary to the development of more sustainable reproductive logistics systems. However, finding the appropriate division of constrained resources between meeting current emergencies and preventing future ones remains a challenge. Increases in available resources could loosen this constraint but the fiscal space remains

**Investments in health system improvement must also include allocations for such support functions as management, logistics and supplies**

tight. Allocation of national funds remains an important signal that countries can send that might encourage further donor responses. A coordinated effort to increase resources from national and international sources is required with significant allocations to strengthening national institutions. Such efforts should include improved feedback from local actors (governmental and non-governmental) on evolving demand and on supply quality and dependability.

Most reproductive health commodities are included in international-level lists of essential drugs and medicines (WHO and UNFPA 2003). However, the translation of these international guidelines to national ordering lists and supply mechanisms is incomplete. Integrated national plans are needed for the provision of the whole range of basic health services – defined in the UN Secretary-General’s 2005 report, *In Larger Freedom*, as “services to improve maternal and child health, support reproductive health and combat the killer diseases of HIV/AIDS, tuberculosis and malaria” (UN 2005c). Such efforts will require inclusion of WHO and UNFPA-recommended medicines and equipment for reproductive health in national medical lists. (This recommendation reiterates the statement of the Task Force on HIV/AIDS, Malaria, TB and Access to Essential Medicines.)

Many tools exist to help national managers project commodity needs and monitor supply chains – tasks essential to Logistic Management Information systems. On the projection side these include the Spectrum software of the Futures Group<sup>29</sup> and the Reproductive Health Costing model of the UN Millennium Project<sup>30</sup>. Managerial software includes the Country Commodity Manager (CCM)<sup>31</sup> and the PipeLine software<sup>32</sup>.

Investments in health system improvement must also include allocations for such support functions as management, logistics and supplies. Many analyses of human resources for health concentrate on personnel who are directly involved in service delivery. The need for larger cadres of trained and competent service contact staff is urgent in most developing country settings, and especially in the poorer countries. Scale-up plans to delivery services to attain the MDGs must also be implemented to ensure adequate support services.

In the area of SRH, it is also necessary to use local and community information effectively to ensure timely supply delivery and to monitor changes in demand. Two examples in Ethiopia highlight this point. Injectable contraceptive methods are in increasing demand there in rural areas and the public health system did not anticipate the increase (although contraceptive method preference can shift in relatively short time periods as information about new methods becomes available). Similarly, the interest within communities in encouraging voluntary counseling and testing for HIV/AIDS prior to marriage has greatly increased the need for such equipment and for skilled counselors. Feedback from local levels needs to be communicated effectively so public systems can respond.

**Box 4.7**  
**Missed**  
**opportunities to**  
**expand family**  
**planning services**

There are a variety of points of entry for increasing access to SRH that are currently under-exploited. A proactive strategy to integrate SRH within the health system is required, but as a heuristic it is useful to think of the opportunities in terms of a number of 'posts'. These are events after which potential beneficiaries are likely to be particularly receptive to information and services to improve their reproductive health and consider their future fertility intentions.

*Post-abortion*

Recourse to abortion is one of the most dramatic and desperate signals of an unintended pregnancy and, in all likelihood, exposure to reproductive health risks and failures in information. It signals a pregnancy that was not wanted, at that time or at all or with that partner (e.g., when it resulted from rape or incest) or that resulted from incorrect or inconsistent use of a contraceptive method.

Countries differ in the conditions under which they allow abortions to be performed legally. Most countries of the world allow an abortion when it is necessary to save the life of the mother (UN Population Division 2002b). However, advocacy for more liberal abortion laws is increasing in numerous countries, among them Brazil, Indonesia, Jamaica, Kenya, Mexico, Nigeria, St. Lucia, Trinidad and Tobago and Uruguay (Crane and Hord Smith 2006).

The international agreement on abortion is direct and clear. The legal status of abortion is supposed to be a matter decided in national legislation. In no circumstances is abortion to be promoted as a method of family planning. When abortion is not against the law it is to be safe<sup>33</sup> (UN 1994, para. 8.25). Additionally, when it is legal it should also be accessible (UN 1999, para. 63).

Access to contraception reduces recourse to abortion. A natural experiment in Central and Eastern Europe confirms that most countries respond to increased emphasis on especially modern contraceptive services with reduced abortion rates. In Kazakhstan, Kyrgyzstan, Moldova and Uzbekistan modern contraceptive prevalence rose 50 percent while abortion declined by about 50 percent. In the Russian Federation, the numbers are even more dramatic with a 74 percent rise in contraceptive prevalence mostly due to intra-uterine devices (IUDs) and the pill, while at the same time abortion rates declined 61 percent. In some countries, however, where investments in reproductive health do not keep up with demand for fertility limitation, both rates might increase during the transition (Westoff 2005).

Few countries have strong programs to ensure that women who have had a safe abortion, or who present to the health service suffering from sequelae of an unsafe abortion, receive family planning information and services to prevent repetition. There are two key issues that relate to further programming needs: First, ensuring that access to safe abortion is assured within the guidelines set by national laws, cultural values and the needs of their health situation; and second, ensuring that communities are informed of their options and choices.

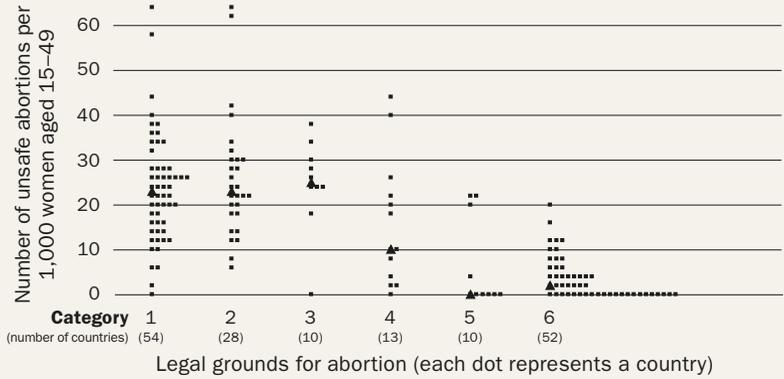
Evidence clearly demonstrates that the rate of unsafe abortion is raised and public health risks associated with unsafe abortion are compounded where access to abortion services is more strictly restricted (figures 4.3 and 4.4).

As figure 4.3 shows, unsafe abortion only begins to fall notably in situations where abortion is legal due to fetal impairment, for economic and social reasons or on request. The contrast is even more remarkable when abortion is legal for economic and social reasons or on request. Countries where abortion is permitted on a woman's request have a median unsafe abortion rate of 0 and 2 per 1,000 women, while countries where abortion

**Figure 4.3**  
**Rates of unsafe abortion due to legal restrictions on abortion, 2000**

Notes:  
 Categories are cumulative, with each level including those to its left  
 167 countries with data on both legal information and unsafe abortion estimates were included

Source: Berer 2004

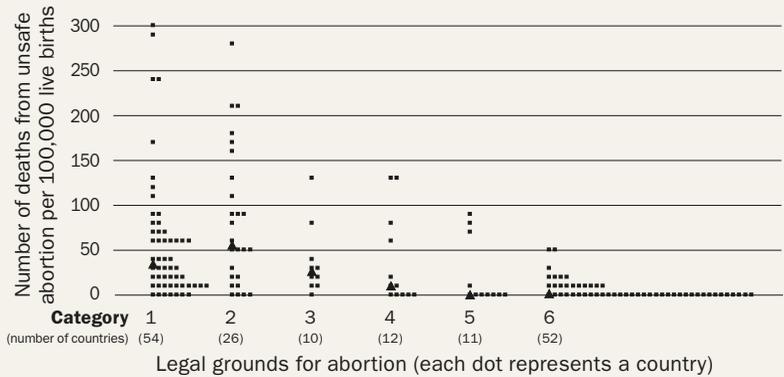


- Categories
- |                         |                               |
|-------------------------|-------------------------------|
| 1. To save woman's life | 4. Fetal impairment           |
| 2. To preserve health   | 5. Economic or social reasons |
| 3. Rape or incest       | 6. On request                 |

**Figure 4.4**  
**Rates of maternal mortality due to unsafe abortion by legal restrictions on abortion, 2000**

Notes:  
 Categories are cumulative, with each level including those to its left  
 165 countries with data on both legal information and unsafe abortion estimates were included

Source: Berer 2004



- Categories
- |                         |                               |
|-------------------------|-------------------------------|
| 1. To save woman's life | 4. Fetal impairment           |
| 2. To preserve health   | 5. Economic or social reasons |
| 3. Rape or incest       | 6. On request                 |

is fully illegal or only permitted to save a woman's life have a median unsafe abortion rate of 23 per 1,000 women (Berer 2004).

*Post-partum*

Among women who have recently delivered a child, motivation to delay their next pregnancy tends to be extremely high (Ross and Winfrey 2001). Information and services promoting nutrition and immunization infrequently provide counseling on birth spacing and family planning methods. Even in cultures where long birth spacing intervals have deep

historical and cultural roots (including post-partum abstinence and extended breastfeeding), the erosion of these traditional practices has progressed over recent decades but has not been replaced by improved access to family planning.

Stated motivation to delay the next pregnancy (and expand birth intervals) declines over time, and fairly rapidly after the first six to nine months, despite the evidence of health benefits to mothers and to children. Integrated counseling on maternal, newborn, child and reproductive health could improve health outcomes dramatically.

### *Post-infection*

The time after people learn their HIV/AIDS status is another opportunity to provide them with information and choices about their medication, condom use and family planning options. Couples and individuals may choose to avoid pregnancies, take antiretroviral medications (and provide them to their newborns), use condoms (particularly in discordant couples) or combinations of these strategies. Currently, because of increasing funding, treatment options are being expanded most energetically. The desire of some couples to avoid or delay pregnancy is often insufficiently explored.

Simulation studies (now being tested in field trials) attest to the cost-effectiveness of integrating family planning and HIV/AIDS services both in stemming the pandemic and improving overall reproductive health (Stover et al. 2003; Stover et al. 2005).

### *Post-child death*

The death of a child is too common in poor settings. Where child mortality is high a variety of strategies can be adopted to improve family welfare. Excess childbearing can seem a rational decision to ensure survival of the desired number of children (hoarding motivation) and later assistance from offspring (old-age security motivation). In the event of a death, parental grief can motivate a variety of responses including a desire to have another child (replacement motivation). These adaptive strategies have generated a large literature for decades. The major conclusion of this mountain of research is that:

- Replacement motivation effects are relatively small (Lloyd and Ivanov 1988)
- Anticipatory responses can be an important component of fertility decision-making
- Signals that mortality rates are falling (which might affect near-term behavioral choices) are less clear in poor settings/social strata and family preference changes might be delayed – resulting in excess pregnancies.

Another direct behavioral adaptation is possible in many settings. Particularly where cultural beliefs suggest that a child's life prospects are influenced by the strength of the mother and where birth intervals are small, a child's death may motivate the adoption of a contraceptive method to increase the next birth interval, restore the mother and increase the odds of a child's survival.

Community and health system responses to those who have recently lost a child, particularly a young child, can include information campaigns to promote better reproductive, maternal, newborn and child health practices. The Child Health and Maternal Health Task Force report (UN Millennium Project 2005b) and the UN Millennium Project Handbook on *Preparing National Strategies to Achieve the Millennium Development Goals* (2005k) identify the constellation of effective interventions.

### *Post-puberty/initiation*

Information about sex and reproduction (and SRH) is obtained directly and indirectly early in life. But much of it is incorrect or misunderstood, lacking context or experience and frames of reference (emotional, experiential or cultural) (WHO 2001; Hock-Long et al.

2003). Further, young people – particularly young girls – are extremely vulnerable to sexual advances (seduction, coercion, violence and temptation) if they are not equipped with information and bargaining skills and social support to exercise responsible choice. Both boys and girls need the opportunity to gain information and support about the full range of concerns – livelihoods, education, personal security, relationships, balancing autonomy and connection to their families – involved in their transition to adult social roles.

The time of introduction to adult society has traditionally been associated with various culture-specific initiation rites. This transition period is an appropriate time to establish new mechanisms to support messages and teach skills relating to adolescents' priorities and concerns, including those related to reproductive health, responsible sexuality, effective self-protection, contraception and both the risks and benefits in intimate relationships.

The lives of young people, further, are exceptionally diverse. Sizeable minorities lack one or more of the elements conducive to reduced exposure to risks, sexual and otherwise: for example, living at home with both parents and educational participation (Bruce and Chong 2006). New social mechanisms, including information transmitted in school, out of school and in communities can support the social participation of young people, consistent with their emerging capacities.

### **Task 5: Meeting the needs of special populations**

Attention to the needs of populations at particular risk of poor SRH outcomes has increasingly become a hallmark of national programming efforts and of increased concern to donor organizations. Recent surveys indicate the extent of this concern (Ross et al. submitted for publication).

The priority afforded to special population subgroups is a complex resultant of the needs of the groups, the understanding of those needs by decision makers and their importance as targets of national decisions. Judgments of allocated emphasis are, therefore, difficult to interpret with respect to the processes that generate them.

Asked to indicate the priority given to selected populations, expert respondents in countries did not strongly differentiate among unmarried youth<sup>34</sup>, the poor, rural populations, and post-partum and post-abortion women – though unmarried youth generally received less attention. However, there were significant regional variations.

The central Asian countries gave unmarried youth the greatest policy focus. Latin America and Francophone Africa were next. Countries in Asia gave this group low attention (and the lowest attention of any of the identified categories). Northern African countries and the Arab States were least likely to emphasize unmarried youth in their programming. The appropriateness of these degrees of concern to existing levels of risk requires further examination. National program analyses would profit from explicit examination of the congruency of risks and needs with program priorities.

In sub-Saharan Africa specific population groups were given less emphasis than in other regions. Notably, their highest scores were given to attending to counseling and contraceptive services for post-partum women.

### *Adolescents*

Young men and women are often underserved in development planning, including planning by SRH programs. Many MDG indicators refer to populations of young people, most often 15–24 year olds, but the institutional frameworks for addressing their needs are not organized around age categories or prepared to give the youth special attention.<sup>35</sup>

The area of SRH is particularly sensitive in many settings. The international understandings for example, in the Convention on the Rights of the Child and reiterated in the ICPD Programme of Action (box 4.8) speaks to the need to balance the rights of parents and the rights of children, recognizing the increasing capacity of the young. They also recommend that in all decisions the interests of the young should be given priority (UN 1989, article 3).

**Box 4.8**  
**ICPD recognizes**  
**adolescents’**  
**rights to**  
**reproductive**  
**health**

Source: UN 1994

The ICPD recognizes adolescents’ rights to reproductive health in a number of paragraphs:

“...Countries must ensure that the programmes and attitudes of health-care providers do not restrict the access of adolescents to appropriate services and the information they need...these services must safeguard the rights of adolescents to privacy, confidentiality, respect and informed consent, respecting cultural values and religious beliefs.” (Para. 7.45)

“Countries, with the support of the international community, should protect and promote the rights of adolescents to reproductive health education, information and care and greatly reduce the number of adolescent pregnancies.” (Para. 7.46)

“...Programmes should include support mechanisms for the education and counseling of adolescents in the areas of gender relations and equality, violence against adolescents, responsible sexual behaviour, responsible family-planning practice, family life, reproductive health, sexually transmitted diseases, HIV infection and AIDS prevention... Adolescents must be fully involved in the planning, implementation and evaluation.” (Para.7.47)

“Programmes should involve and train all who are in a position to provide guidance to adolescents concerning responsible sexual and reproductive behaviour, particularly parents and families, and also communities, religious institutions, schools, the mass media and peer groups.” (Para. 7.48)

While a growing number of countries are paying greater attention to the health information and service needs of youth, representative youth surveys now underway in several countries (Amuyunzu-Nyamongo et al. 2005) indicate adolescents’ reluctance to go to clinics. Young women and men – surveys included sexually active teens aged 14–19 – reported feeling shy and uneasy about SRH issues or expressed concern about negative reactions from service providers or the community.

Young people's exposure to diverse risks – including SRH risks – will determine both the immediate and long-term prospects for development. SRH issues are only one component of youth concerns, and often in the second tier of priority after education and livelihood training. But SRH issues interact with other concerns.

However, institutional arrangements for dealing with young people are rarely holistic and comprehensive. The diverse needs of youth might be assigned to different sectors, but their felt experience is not. Institutional approaches incorporating the perspectives and priorities of young people, encouraging their active participation and sensitive to their special needs, can involve them and empower their full citizenship.

Young people need information and services that are responsive to their particular situations. They are particularly sensitive to issues of privacy, honesty, compassionate counseling and active engagement. Youth-friendly services (box 4.9) seek to be responsive to these concerns and their impact needs monitoring.

**Box 4.9**  
**Factors that make**  
**health services**  
**youth-friendly**

Source: UNFPA 2003

Young people face many barriers when they seek SRH services. These include legal and policy constraints related to age and marital status; lack of privacy and confidentiality; fear that they will be treated badly at the facilities; inconvenient hours and locations of facilities; and high costs. However, health services can be made youth-friendly and should focus on:

*Service providers*

- Specially trained staff
- Respect for young people
- Privacy and confidentiality honored
- Adequate time for client-provider interaction
- Peer counselors available.

*Health facilities*

- Separate space or special times set aside
- Convenient hours and location
- Adequate space and sufficient privacy
- Comfortable surroundings.

*Program design*

- Youth involved in design, service outreach and delivery, and continuing feedback
- Drop-in clients welcomed or appointments arranged rapidly
- No overcrowding and short waiting times
- Affordable fees
- Publicity and recruitment that inform and reassure youth
- Boys and young men welcomed and served
- Wide range of services available
- Necessary referrals available.

*Other possible characteristics*

- Educational material available on site to take away
- Group discussions available
- Timing of pelvic examination and blood tests to meet needs
- Alternative ways to access information, counseling and services.

Normative frameworks controlling the service environment for all are particularly important for engaging and protecting the young. The International Planned Parenthood Federation (IPPF) Rights of the Client framework encapsulates key principles (box 4.10).

**Box 4.10**  
**IPPF Rights of**  
**the Client**

Source: IPPF 2004

Every family planning client has the right to:

1. *Information*: To learn about the benefits and availability of reproductive health services.
2. *Access*: To obtain services regardless of sex, creed, color, marital status, ethnicity or age.
3. *Choice*: To decide freely whether to practice family planning and which method to use.
4. *Safety*: To be able to practice safe and effective family planning.
5. *Privacy*: To have a private environment during counseling or services.
6. *Confidentiality*: To be assured that any personal information will not be communicated to third parties without their consent.
7. *Dignity*: To be treated with courtesy, consideration, attentiveness and respect.
8. *Comfort*: To feel comfortable when receiving services.
9. *Continuity*: To receive SRH and supplies for as long as needed.
10. *Opinion*: To freely express views on the services they receive.

The diversity of situation of adolescent populations (Bruce and Chong 2006) requires special attention, and certain population groups among adolescents require priority in program planning. A significant minority of young people does not live in situations that protect them from risk, and young mothers are at particular risk of marginalization and require special consideration (box 4.11).

Young married girls are at times more adversely affected than their unmarried counterparts. They are often subject to large age gaps between themselves and their marital partner, have high levels of unprotected sexual relations, are under intense pressure to become pregnant, often have low educational attainment, face highly limited peer networks, experience restricted social mobility and have little access to schooling options and modern media such as TV, radio and newspapers. Some research has even found that married girls with children have less access to schooling than unmarried girls with children. In Brazil, for example, it was found that unmarried girls with children had more than double the school-going rates of married girls with children (Bruce and Chong 2006).

Programs must address the actual needs and risks of young women in situational context. This requires detailed data on the situation of young people, married and unmarried, particularly in the area of SRH. A good example of reaching out to young people comes from Bangladesh (box 4.12).

**Box 4.11**  
**Meeting the**  
**special needs of**  
**married young**  
**first-time mothers:**  
**The IDEALS model**

Source: Adapted from  
 Bruce and Chong 2006

Due to the low social, family and community status that married girls hold, any approaches designed to meet the special health needs of married young, first-time mothers must also include their husbands, families and other gatekeepers. In 2003, Suellen Miller and Felicia Lester developed the IDEALS model, which focuses on the fundamental elements of approaches to help married adolescent girls achieve better maternal and infant health. The model includes:

- I = Immunize:** Mount school-based and community-based programs for immunization, tetanus shots, iron/vitamin supplementation, and malaria identification, treatment and control.
- D = Delay marriage and Delay first birth:** Early marriage often increases a girl's social isolation and places her in a position of low power in a new, extended marital household, potentially affecting maternal health in negative ways. Delaying a first birth may decrease the likelihood of pregnancy-induced hypertension, obstructed labor and anemia.
- E = Educate** beyond early marriage and early childbirth if they occur: Keep married, pregnant and parenting girls in school.
- A = Ensure Access** to youth-friendly, high-quality maternal services, antenatal care, birth planning (involving husbands and community members), skilled attendance, emergency obstetric care, post-partum care and child spacing.
- LS = Impart Life Skills** that last for a lifetime: Helping married girls acquire life skills (such as communication and negotiation skills, literacy, entrepreneurial skills and legal and financial literacy) is critical to reducing some of the social disadvantage they face, and vital to maximizing more medical/health-based interventions. Further, it improves their parenting skills and enriches their communities.

**Box 4.12**  
**Breaking down**  
**barriers to**  
**contraception**  
**in Bangladesh**

Source: Adapted from  
 UNFPA 2006a

Despite the fact that early marriage and childbearing are common in Bangladesh, young couples seldom seek reproductive health services. This is partly because the birth of a child proves a woman's fertility to her in-laws. As a way to reach out to married young people, a UNFPA-supported project identifies and registers newlyweds as well as young couples with one or two children, and offers them orientation sessions and one-to-one basic counseling.

The sessions serve to break the social and psychological barriers against contraceptive methods. The program also educates young couples about the risks of early childbearing and closely spaced births, and provides information on maternal and child health. Contraceptive use among newlyweds in this program has jumped significantly, and nearly one third of men have started attending these sessions on their own – indicating greater motivation, social mobility and family acceptance than in the past. Unmarried young men and women also attend sessions, suggesting growing demand for information among adolescents. An increasing number of sessions are being hosted in private homes, which shows wider community acceptance of SRH services.

***Reproductive health in humanitarian crisis***

A humanitarian crisis – whether it is due to conflict or natural disaster – poses an extreme challenge to the achievement of the MDGs. Structures and systems break down, making people much more vulnerable and increasing the need for

**The spread of STIs including HIV/AIDS increases because an emergency breaks up stable relationships, disrupts social norms on sexual behavior and coerces women as well as young girls and boys to exchange sex for food, shelter and income**

protection and service provision. Of the 34 poorest countries that are farthest away from achieving the MDGs, 22 countries are in or just emerging from conflict (UNFPA 2005c). At the same time the world has recently experienced devastating natural disasters – e.g., the Tsunami in Asia and the earthquake in Pakistan – that in a few minutes destroyed systems and infrastructure, including health systems.

The SRH situation during conflict and natural disasters deteriorates, increasing the likelihood of an unwanted pregnancy, maternal and infant deaths, and the transmission of STIs including HIV/AIDS. The breakdown of even a weak infrastructure means that SRH commodities, including contraceptives and basic equipment for a clean delivery (soap, a clean razor blade to cut the umbilical cord and plastic sheeting to lay on the ground), are in great undersupply and increases the risk of death and disability.

The sudden loss of medical support, as well as the trauma and malnutrition that often follow an emergency, means that pregnant women face a greater risk of maternal morbidity and mortality. The trauma that many people experience causes many pregnant women to miscarry or deliver prematurely, and the lack of even basic equipment for a clean delivery increases the risk of a fatal infection for both mother and child (UNFPA 2004b). Furthermore, the lack of contraceptive supplies increases the likelihood of an unwanted pregnancy, which, as shown, can be fatal.

The spread of STIs including HIV/AIDS increases because an emergency breaks up stable relationships, disrupts social norms on sexual behavior and coerces women as well as young girls and boys to exchange sex for food, shelter and income.

Gender-based violence, including rape, also increases during emergencies, making women and children more vulnerable to reproductive ill health. In some conflicts rape is used as a weapon to humiliate, dominate or disrupt (UNFPA 2004b) the enemy through impregnations, the spread of HIV and the breakdown of societies due to the social exclusion and post-traumatic stress many women face as a consequence of rape.

Finally, young people who are separated from their families and communities are much more likely to engage in risky sexual behavior and are more vulnerable to sexual exploitation (UNFPA 2004b). These factors increase the risk of early pregnancy, unsafe abortion and STI transmission, including HIV/AIDS.

Guidelines on reproductive health topics have been developed by the Inter-Agency Standing Committee (IASC) to help and guide field actors in humanitarian settings. A guide on gender-based violence focuses on prevention of and response to sexual violence, while another offers guidelines on how to respond to HIV/AIDS during emergencies (IASC 2003 and 2005).

## *Men*

Men play a crucial role in reproductive health both as clients, partners and agents of change. Programs in a number of countries have looked at ways of encouraging men to be better partners (box 4.13).

### **Box 4.13** **Encouraging** **men to be better** **partners**

Source: Adapted from  
UNFPA 2006b

#### *Côte d'Ivoire*

In response to the high prevalence of STIs, including HIV/AIDS, an UNFPA-supported project expanded military health centers to include diagnosis and treatment of STIs as well as family planning services. The project was based on the idea that the military can be motivated to adopt responsible sexual behavior and improve their families' SRH if they are fully aware of the threats of unprotected sexual contacts and if quality SRH services are available. To achieve this goal, high-ranking military were sensitized to the issues, research was conducted, military health centers were renovated and equipped, service providers were trained in contraceptive technology and communication skills, and condoms were distributed to soldiers going out on maneuvers. The results included an increase in the use of condoms and in the number of STIs treated. Because of an increased demand for condoms, a follow-up project was initiated to establish condom selling points in the military tuck shops.

#### *Dominican Republic*

A project in the Dominican Republic used barbers as a conduit for getting messages about prevention of HIV/AIDS and other STIs to almost half a million men. The barbers, who were trained in interpersonal communications, also distributed condoms and were encouraged to refer clients with STIs for treatment. The barbers were selected based on literacy and leadership skills, as well as an interest in community development. The organization Asociación Dominicana de Planificación Familiar provided the barbers with basic training, including lessons on proper condom use, refresher courses, informational materials and condoms. The barbers found that the extra services they provided increased the flow of customers for haircuts. Even after the project ended, the barbers continued to sell subsidized condoms through a social marketing mechanism and to provide referrals and information. Though the project was not focused on linking the barbers' work to clinics, it managed to involve a relatively hard-to-reach target population.

Green et al. (2006)<sup>36</sup> have come up with several programming recommendations on how to involve men in reproductive health. These include the following:

- *Most men want to care for their own health and that of their sexual partners.* When encouraged and provided with opportunities, many men will seek out reproductive healthcare. And, with a little support, many men are eager to challenge customs and practices that endanger women's health and are willing to participate in supportive SRH decision-making.
- *Male involvement programs should be designed as part of larger overall SRH strategies.* Constructive male involvement should be viewed as a

**When given opportunities and support, men are interested and motivated to adopt more equitable and healthful alternatives**

paradigm that needs to be integrated into the planning and development stage of any SRH program.

- *Male involvement programs should emphasize the broader contextual issues that men face and that can negatively affect their reproductive health, including drug and alcohol abuse, unemployment, fatherhood and male-to-male violence.*
- *Male involvement efforts of all types must be monitored and evaluated more consistently.*
- *Creative avenues for outreach to men are critical to achieving meaningful scale and meeting the needs of underserved communities.* Male involvement programs need to continue to be innovative in the ways they reach men. Programmers should utilize the existing key venues where men congregate or can be reached: in workplaces, bars, unions, schools and other locations.
- *Addressing critical reproductive health priorities requires expanding program content beyond traditional issues.* Most current male involvement programs tend to cover a limited number of ‘traditional’ reproductive health issues: family planning, maternal health and HIV prevention. Creative attempts must be made to involve men in other critical areas such as gender-based violence and FGC.
- *Although the gender socialization of men and boys is often negative, masculinity is an evolving concept and more positive models exist and can be cultivated.* When given opportunities and support, men are interested and motivated to adopt more equitable and healthful alternatives.
- *Men should be encouraged to share their experiences of masculinity with other men.* It is important and valuable to offer men alternative group experiences that challenge their traditional notions of manhood. Improving men’s understanding of their own motivations, fears and desires, their ability to broach topics relating to sexuality, and their respect for their partners’ wishes is central to improving reproductive health.
- *Addressing gender inequities and unbalanced power relationships requires more than simply working with women or involving men.* Addressing gender inequities requires focusing on *how* services are provided rather than specifying which SRH services should be provided and to whom. Truly gender-equitable male involvement programs will address gender dynamics and the negative consequences of the unequal balance of power between men and women.
- *Social crises may create opportunities for dialogue or paradigm shifts in gender relations.* The HIV epidemic has created an important opening for involving men in helping implement equitable steps to stem the epidemic in their communities.
- *Countries themselves will need to prioritize male involvement* for this work to be sustainable and to achieve an appropriate scale. To date, foreign

**When attention is given to both demand and supply issues, dramatic change can be effected rapidly within the context of voluntary choice and respect for rights**

donors have funded much if not most male involvement programming in the developing world.

- *The cross-sectoral collaboration called for repeatedly in recent years is vital.* Policies are needed to coordinate programs across sectors so that addressing men's and women's roles as they play out in SRH does not get relegated only to the health sector.
- *Strategic multisectoral, multi-stakeholder partnerships are key to effective programming.* Sectors beyond health such as education, law and employment are increasingly addressing gender inequities. Opportunities now abound for partnerships with a variety of influential stakeholders at various levels, including political, religious, educational, community and business leaders.
- *Appropriate staff training in gender analysis and working with men* greatly increases the effectiveness of outreach efforts and program activities. The confidence and effectiveness of program staff can be greatly increased through appropriate experiences and training.
- *Donors can play a key role in moving male involvement forward* by supporting operationally relevant research, such as studies to clarify linkages between macroeconomic processes, population dynamics and poverty, including the inter-generational transmission of poverty, and by supporting the inclusion of central themes related to reproductive health and gender in PRSPs.

### **Requirements for effective action**

#### *Political commitment*

Diverse settings show the importance of national commitment. As noted earlier, political statements of commitment have long been recognized as an essential component of national program strengths (Ross and Mauldin 1996; Ross and Mauldin 1997; Ross and Stover 2001). When political commitment wanes, programs suffer. When commitments are made from the highest political levels and are backed by support for programmatic action, rapid progress is possible (Shiffman 2004).

The pace of demographic change depends on the mobilization of demand and the means to satisfy it. When attention is given to both demand and supply issues, dramatic change can be effected rapidly within the context of voluntary choice and respect for rights (see box 4.14).

#### *Effective coordination*

Beyond the issues of health service integration addressed above, progress towards the MDGs requires effective integration of multisectoral programs. This has been widely recognized in one area related to sex and reproduction – HIV/AIDS – and should be seen as an important element of programmatic action in others. Coordinating mechanisms and institutions can mobilize stakeholders for the

**Box 4.14**  
**Dramatic**  
**demographic**  
**change within**  
**a decade: The**  
**case of Iran**

Source: Roudi-Fahimi  
 2002; Hoodfar and  
 Assadpour 2000

Iran is a great example of how the introduction of a family planning program can spur voluntary fertility decline by removing both cultural and economic barriers. The population growth before 1986 was 3.9 percent per year but it fell between 1986 and 1996 to 2 percent per year. In 2002 the rate had declined to 1.2 percent per year. This fall in population growth is due to a dramatic decline in the fertility rate in both rural and urban areas. In rural areas the fertility rate declined from 8.1 births per woman in 1976 to 2.4 births per woman in 2000. In urban areas the fertility rate declined from 4.5 births per woman in 1976 to 1.8 births per woman in 2000.

In 1989, Iran introduced a family planning program delivered through the primary healthcare facilities. The program has three major goals: to encourage families to delay first pregnancy and to space out births; to discourage pregnancy in women younger than 18 and older than 35 years; and to limit family size to three children. Before a couple gets married they have to pass classes in family planning. After marriage they have access to all modern contraceptive methods free of charge at public clinics. The lack of fees for contraceptives has given low-income couples the possibility to control their own fertility. This population policy has meant that contraceptive use among married couples increased from 37 percent in 1976 to 74 percent in 2000, and that the average age of marriage for a woman increased from 19.7 in 1976 to 22.4 in 1996.

The population policy introduced in 1989 was a result of a review in 1988 by government departments of population growth's impact on and implications for the new development plan that was formulated to reconstruct and develop the country after the war with Iraq had ended. The 1989 population policy replaced one that had promoted population growth during the war.

Before the policy was put in place, the approval of the religious community was sought. In 1988 the High Judicial Council declared, "There is no Islamic barrier to family planning." This decision was later discussed at a seminar for eminent clergy and physicians to gain their support. Some influential clergy were still not convinced and the Government decided to take the case to the Expediency Discernment Council of the System, which resolves disputes between the Parliament and the Guardian Council. The conclusion from this process supported the High Judicial Council's decision and the Government could introduce the policy without conflicting with Islam.

The family planning program was later followed by other supporting policies to remove the economic incentives for large families. These policies gave attention to, for example, reducing infant mortality, promoting women's education and employment and introducing social security and retirement plans.

The case of Iran shows that information and access to health facilities in both rural and urban areas as well as infrastructure play an important role in a successful family planning program. Furthermore, the support from the religious community was crucial to the success of the program. All these incentives helped create an understanding among the general public about the benefits of smaller families and spurred the dramatic fertility decline Iran has seen in the past 15 years.

design, implementation and monitoring of programs of implementation with diverse actors.

The recognition of the priority to be given to comprehensive approaches to empowering women, advancing gender equality and ensuring participatory approaches to development planning, implementation and monitoring is another key condition for development.

Strengthened partnerships across diverse constituencies with different, often sectoral, interests can mobilize attention to shared interests.

### *Community participation and cultural sensitivity*

Consistent with this vision is recognition of the vital role of community inputs to development planning. Local buy-in and investment in functioning health systems and the mobilizing of support from the wider community can produce dramatic results (box 4.15). Services can be better adapted to local conditions when staff are equipped with methods and guidelines to evaluate their own performance and supplement their evaluations with inputs from service beneficiaries. A variety of operations research approaches have been developed that facilitate such systematic examination (IPPF/WHR 1998 and 2000; USAID's COPE and MAQ initiatives 2006<sup>37</sup>).

#### **Box 4.15** **The Navrongo** **experiment in** **Ghana: community** **health services**

Source: Phillips et al. 2005; Debpuur et al. 2002

An experiment in community health services was launched in Navrongo, Ghana, in 1990 and is an excellent example on how "joint-implementation... of mobilizing community-based healthcare through traditional institutions combined with referral support and resident ambulatory care" (Phillips et al. 2005) can generate great achievements in reproductive health. Through community dialogue elders, chiefs and women's groups were engaged in the project, and their involvement in the construction of the Community Health Compound led to a feeling of community ownership. Volunteers were recruited and a nurse was posted at the Compound. The results over a three-year period show that:

- Fertility rates declined, especially among women 15–40 years old, and were a full birth lower than expected without intervention (a decline dominated by abstinence and delayed marriage)
- Contraceptive use increased, though discontinuation rates and inconsistent use were high
- Improvement in family planning use is dependent on community involvement and support
- Reassuring men that respected leaders accept family planning use – an activity that was done by the volunteers rather than the nurse – was an important element in promoting increases in usage
- Child mortality rates decreased dramatically, reaching a level below the MDG national planned trajectory in 2000 and achieving the Goal in 2005
- The decrease in child mortality was dependent on the involvement of the primary healthcare staff, i.e., the nurse, while the community volunteers had no impact.

The Navrongo experiment indicates that changes in reproductive health behavior can be attained in traditional African societies earlier thought to have little prospect for declines in fertility levels. The experiment is now being replicated in Ghana's 138 districts.

The local context – including structure and culture – must also be considered. Culturally sensitive approaches assess the role and power of different actors and look at how it is possible within these structures to affect policies, priorities and behaviors. Local communities have different cultural setups that influence the way strategies for implementation programs should be formed and approached. Partnering with local groups and individuals from within the community is therefore a crucial step in a successful program that seeks to promote human rights and healthier lives (box 4.16).

**Box 4.16**  
**Involving communities in improving quality of care**

Source: Stronger Voice for Reproductive Health 2005

Quality of care must be analyzed and implemented in a local context, as local priorities and culture are different. It is therefore crucial to involve community groups in efforts to improve quality of services. A variety of projects to involve communities have taken place under the initiative *Stronger Voices for Reproductive Health* (2005), and show different ways of addressing quality of care:

- In Kyrgyzstan, interdisciplinary working groups seek to increase community awareness of the contents of the recently adopted Law on Reproductive Rights. This law puts healthcare users in a position to demand quality services, and there is wide agreement among partners that decisions on the interventions to be pursued will and should be made by the communities themselves.
- In three different regions in Peru, the Government, coalition members and community action groups have initiated a project to improve the attitudes of healthcare providers towards adolescents who seek services. This initiative was put in place as adolescents stated that when they visit reproductive health facilities they are treated poorly and with no respect or confidentiality. The project will seek to mobilize organized groups of adolescents, particularly girls, to influence the way services are delivered.
- In the state of Haryana in India, the Department of Women and Children is implementing a project that focuses on community-based activities to mobilize women's groups to work on reproductive health and quality of care issues with the local village councils. At the same time, healthcare workers in the public health system will be trained on how to provide improved services that meet users' specific needs. This project is thus working with quality of care from both the demand and supply side.

In working with local partners, it is critical to include different groups in the community, from local leaders and custodians of prevailing cultural norms to such subgroups as women, adolescents and ethnic minorities (UNFPA 2005c). A positive negotiating environment has been shown to be important to create ownership around the program and thus increase the likelihood of successful implementation. In particular, partnering with 'local change actors' such as faith-based organizations is an invaluable strategy to shape conditions for acceptance and adoption of the necessary changes. Working with faith-based organizations, in fact, is vital in implementing a successful program in local communities where religious leaders have a strong influence on people's choices and lifestyles. Financially involving faith-based organizations by giving

them even small contributions may be an incentive to deeper involvement in the program and can increase the chance of program sustainability.

Bilateral and multilateral donor organizations (including UNFPA) have carried out programming in culturally sensitive contexts. Experience from nine country programs show that successful programming is linked to taking into account the local sociocultural context (UNFPA 2004c and 2004d). It is important when addressing culturally complex settings that technical and scientific research support the arguments for the importance of the program. These arguments are easier to relate to than cultural issues and can make acceptance easier to obtain.

Sensitivity around language has been shown to play a crucial role, especially in the early stages of the formulation of the program. For example, in some settings the use of the concept ‘family planning’ has been shown to have negative connotations while the use of ‘reproductive health and healthier families’ has had more positive outcomes. Patience and transparency are especially important when programs include elements of behavior change.

### *Resources for programs*

As discussed in Section 3 (under Goal 8), the ICPD Programme of Action contained estimates of the resources required to implement a basic package of population and reproductive health interventions. In the years since the ICPD much has been learned about the costs of basic health interventions, including health interventions. The ICPD estimates were based on strictly delimited allocations (box 4.17).

#### **Box 4.17** **The reproductive health resource estimates of the ICPD**

The ICPD consensus identified core components of reproductive health to be implemented at the primary healthcare level.

“Basic reproductive health, including family-planning services, involving support for necessary training, supplies, infrastructure and management systems, especially at the primary health-care level, would include the following major components, which should be integrated into basic national programmes for population and reproductive health:

*a In the family-planning services component* – contraceptive commodities and service delivery; capacity-building for information, education and communication regarding family planning and population and development issues; national capacity-building through support for training; infrastructure development and upgrading of facilities; policy development and programme evaluation; management information systems; basic service statistics; and focused efforts to ensure good quality care;

*b In the basic reproductive health services component* – information and routine services for prenatal, normal and safe delivery and post-natal care; abortion (as specified in paragraph 8.25); information, education and communication about reproductive health, including sexually transmitted diseases, human sexuality and responsible parenthood, and against harmful practices; adequate counselling; diagnosis and treatment for sexually transmitted diseases and other reproductive tract infections, as feasible; prevention

of infertility and appropriate treatment, where feasible; and referrals, education and counselling services for sexually transmitted diseases, including HIV/AIDS, and for pregnancy and delivery complications;

*c In the sexually transmitted diseases/HIV/AIDS prevention programme component – mass media and in-school education programmes, promotion of voluntary abstinence and responsible sexual behaviour and expanded distribution of condoms;*

*d In the basic research, data and population and development policy analysis component – national capacity-building through support for demographic as well as programme-related data collection and analysis, research, policy development and training.” (Para 13.14)*

At the same time, the ICPD recognized that the costed package did not include all interventions or all costs that would be necessary to achieve its goal of universally accessible reproductive health by 2015. Given the holistic nature of the goal, efforts in other areas such as education of the girl child would be required and additional resources would need to be expended. This is spelled out in three further paragraphs in the Programme of Action (UN 1994):

“Additional resources will be needed to support programmes addressing population and development goals, particularly programmes seeking to attain the specific social- and economic-sector goals contained in the present Programme of Action. The health sector will require additional resources to strengthen the primary health-care delivery system, child survival programmes, emergency obstetrical care and broad-based programmes for the control of sexually transmitted diseases, including HIV/AIDS, as well as the humane treatment and care of those infected with sexually transmitted diseases/HIV/AIDS, among others. The education sector will also require substantial and additional investments in order to provide universal basic education and to eliminate disparities in educational access owing to gender, geographical location, social or economic status etc.” (Para. 13.17)

“Additional resources will be needed for action programmes directed to improving the status and empowerment of women and their full participation in the development process (beyond ensuring their basic education). The full involvement of women in the design, implementation, management and monitoring of all development programmes will be an important component of such activities.” (Para. 13.18)

“Additional resources will be needed for action programmes to accelerate development programmes; generate employment; address environmental concerns, including unsustainable patterns of production and consumption; provide social services; achieve balanced distributions of population; and address poverty eradication through sustained economic growth in the context of sustainable development. Important relevant programmes include those addressed in Agenda 21.” (Para. 13.19)

The UN Millennium Project has carried out detailed country-level MDG needs assessments to estimate the resources required to attain the MDGs, and particularly the health MDGs. Additional work has been done on estimating requirements for maternal, newborn and child health interventions (WHO 2005d) and for HIV/AIDS interventions (UNAIDS 2005b).

In light of these recent studies, the 1993 resource estimates accepted at the ICPD can now be more clearly appreciated as a minimum estimate of resources

**In light of these recent studies, the 1993 resource estimates accepted at the ICPD can now be more clearly appreciated as a minimum estimate of resources**

– restricted only to a portion of the full range of interventions, within the health system and beyond – needed to ensure the realization of reproductive rights. In estimating direct delivery costs for family planning services, the 1993 methodology used regional aggregate unit costs, projected needs and increased coverage levels, and progressively reduced unit costs to reflect returns to scale. To this base – where family planning unit cost estimates also included some basic health delivery system and infrastructure costs relevant to safe delivery – were added specific requirements for safe delivery services at the primary healthcare level, selected HIV/AIDS prevention needs and some population data and policy requirements.

In the decade since that estimate was computed, additional information on detailed intervention costs have become available. Several adjustments (recognized as necessary in the original estimates) can now be attempted:

- Costs of specific family planning interventions can now be estimated, allowing system costs to be added explicitly rather than included in the total unit cost
- The focus on primary healthcare system delivery of safe delivery services has highlighted the need for supplementary inputs in order to provide for adequate emergency obstetric care at primary and higher levels
- The list of HIV/AIDS prevention interventions has expanded, and the relative contribution of focused SRH interventions within the new list of components is clearer
- The data needs for health and population policy can be better estimated, supplementing the original proxy of per capita census estimates
- Requirements for improvements in the health system in general and for the scaling up to universal coverage of services can be better approximated.

Preliminary estimates now allow an adjustment of the population and reproductive health funding targets. (Details of the methodology and results are reported in Vlassoff and Bernstein 2006) The new estimates use detailed disaggregated<sup>38</sup> direct service delivery cost estimates for family planning and other basic maternal and reproductive health services (including safe delivery, emergency obstetric care and neonatal survival/infant mortality interventions, STI prevention and treatment interventions and a broad range of HIV/AIDS prevention efforts<sup>39</sup>) and supplement them with:

- Overhead costs (e.g., maintenance, power, basic facility supplies, support staff, administration, communications, etc.)
- System improvement costs related to management, improved monitoring and evaluation and capacity for research and evaluation needs (based on UN Millennium Project 2005k).

Finally, preliminary estimates of additional capital and human resource requirements for attaining the targeted service coverage are added. Better

estimates of these needs come from ‘bottom-up’, country-specific MDG needs assessments. UN Millennium Project analyses (UN Millennium Project 2005a; UN Millennium Project 2005b) clearly demonstrate that most low-income countries need to substantially increase capital investments and operating expenditures to strengthen the health systems and scale up service coverage for meeting the Goals.

The results of these analyses (table 4.5) demonstrate that resource requirements for the basic SRH package will be significantly higher than estimated over a decade ago. By 2015 the required annual costs will be about US\$14 billion more than originally anticipated, reaching US\$36 billion.

**Table 4.5**  
**Revised total costs**  
**for achieving the ICPD**  
**Programme of Action**

Source: Vlassoff and Bernstein  
2006

	US\$ (2005) billions		
	2005	2010	2015
Basic reproductive health services (including family planning)	13.9	19.4	24.4
Sexually transmitted diseases and HIV/AIDS activities	4.1	9.7	11.1
Basic research data and population and development policy analysis	0.3	0.8	0.4
Total	18.2	29.8	35.8

The magnitude and share of required HIV/AIDS prevention investments are substantial. The underlying direct SRH intervention estimate (including family planning) are slightly lower than the 1993 estimates. Firstly, the ICPD fertility projections were lower than the medium variant projections, using a methodology incorporating the progressive satisfaction of unmet need for family planning. (The UN Population Division projections use a fertility path for each country based on expert judgments on the time needed to reach replacement fertility, or below, based on past national experience. This generally implies higher future fertility than stronger efforts to satisfy unmet need and make contraceptive use more effective would generate.) The above estimate uses the fertility projection of the current UN medium variant projection.<sup>40</sup> Secondly, the new methodology captures the health expenditure savings due to the projected fertility declines, while the earlier did not. However, the new estimates better capture health system requirements.

An additional analysis was undertaken, applying the new methodology, to compare the impact of meeting unmet need with the UN medium variant scenario.<sup>41</sup> This supplementary analysis produces broadly similar results for the SRH interventions tabled above but indicates larger savings in maternal and newborn reproductive health services gained by additional investments in meeting family planning preferences. Net savings increase over time.

Both the 1993 and the current resource projections omit supportive investments in other sectors (including investments for women’s empowerment). The current reproductive health estimates are also based only on direct service costs

and added health system costs (detailed above) and do not include the required information, education and behaviour-change communication and community-based interventions.<sup>42</sup> Further work is needed to elaborate these needs.

Even without these additional costs, the new analyses indicate the magnitude of investments required for SRH service delivery globally and in country applications. In UN Millennium Project focus countries, models analyzing SRH resource requirements (table 4.6) demonstrate the rapid growth of program needs. These models incorporate direct service delivery costs and include a doubling of health personnel salaries and funds for strengthening management systems, improving monitoring, evaluation and quality assurance and building capacity for basic research and development. Total resource needs increase rapidly. The rate of growth in budgetary requirements exceeds the increase in per capita costs because of the continuing pace of population increase. The needs for building and equipping new facilities and providing pre-service training must also be calculated to accommodate the successful scale-up of interventions. In Cambodia and Ghana meeting unmet need for family planning would reduce anticipated outlays in 2015 by over 15 per cent (Vlassoff and Bernstein 2006).

**Table 4.6**  
**Costs of SRH service**  
**delivery in five UN**  
**Millennium Project**  
**case countries,**  
**HIV/AIDS excluded,**  
**(2005 US\$)**

Regions	Millions			Per capita costs		
	2005	2010	2015	2005	2010	2015
Bangladesh	229.3	431.5	610.4	1.6	2.8	3.6
Cambodia	21.7	41.9	63.3	1.5	2.7	3.7
Ghana	48.0	71.2	97.6	2.2	2.9	3.7
Tanzania	140.2	263.5	382.3	3.7	6.3	8.4
Uganda	104.8	194.2	299.5	3.6	5.6	7.1

Source: Vlassoff and Bernstein  
2006

As seen in Section 3, donor allocations for SRH have lagged behind the projected requirements. A historical time series of estimates of the strength of family planning programs (1989–2004) has demonstrated continued improvement on many dimensions of program capacity. However, the most recent estimates are marked by a significant proportion of countries identifying shortfalls in international assistance as having a negative effect on their programs (Ross et al. submitted for publication). The expansion of family planning, maternal health and HIV/AIDS prevention efforts depends on the mobilization of political will, institutional capacity and technical and financial resources. Significantly greater resources will be required to reach the ICPD goal of universal access to reproductive health and to attain the MDGs.



## Messages from the UN Millennium Project Reports

### **Messages on SRH from the UN Millennium Project's report *Investing in Development* and the reports of the Task Forces**

#### *Investing in development*

(UN Millennium Project 2005a and Overview)

*SRH is an essential input for reaching the MDGs.* “It [sexual and reproductive health] entails healthy, voluntary, and safe sexual and reproductive choices – voluntary choices of individuals and couples about family size and family formation, including early marriage and other exposures to sexual risks. Reproductive health issues thus deal with vital (and frequently sensitive) concerns including sexuality, gender roles, male and female power relations, and social and personal identity....Action in sexual and reproductive health encompasses an analytic and programmatic framework, based on a human rights approach, rooted in stronger health systems, supported by communities, and accompanied by complementary interventions in other sectors.”

*Reproductive health should be included in MDG-based poverty reduction strategies.* One of the Key Recommendations made by the Millennium Project includes “The MDG-based poverty reduction strategies should: Focus on women's and girls' health (including reproductive health) and education outcomes, access to economic and political opportunities, right to control assets and freedom from violence.”

*Investments in expanding access to reproductive health can make large-scale progress in development immediately.* “Expand access to sexual and reproductive health services, including family planning and contraceptive information and services, and close existing funding gaps for supplies and logistics” is one of the Quick Impact initiatives to achieve the MDGs.

*Gender equality is essential for achieving the MDGs.* “Specific interventions to address gender inequality should be an intrinsic part of all MDG-based investment packages. They should also address systematic challenges such as protection of sexual and reproductive health and rights (including access to information and family planning services), equal access to economic assets such as land and housing, increased primary school completion and expanded access to post-primary education for girls, equal labor market opportunities, freedom from violence and increased representation at all levels of governance.”

*A demographic-related poverty trap exists.* “[Overcoming the poverty trap] is helped by a voluntary reduction in fertility, which promotes greater investments in the health, nutrition, and education of each child. We thus strongly support programs that promote sexual and reproductive health and rights, including voluntary family planning.”

*Strong health systems are needed to ensure universal access to basic health services.* “Health interventions are best provided through an integrated district health system centered on primary care and first-level referral hospitals with special measures to ensure that the health system reaches all groups in the population, including the poor and marginalized.”

*Demographic dynamics are interlinked with the risk of conflict.* “Poorer countries are more likely to have demographic regimes marked by high fertility and high mortality, resulting in low adult-to child ratios. Such demographic profiles are also associated with greater conflict risks. Indeed since 1945 almost every instance of massive one-sided violence (genocide or politicide) has occurred in countries with more than a two-to-one child-adult ratio.”

### ***Task Force on Hunger***

(UN Millennium Project 2005g)

*HIV/AIDS is exacerbating vulnerability to hunger in millions of chronically hungry households.* “The interactive threats of hunger and HIV/AIDS in parts of the world are leading to complex humanitarian crises, whereby people affected by AIDS are unable to grow food or work for a living. Moreover, malnourishment weakens the immune system and strength of those with HIV/AIDS, making them succumb more quickly to the disease.”

*Access to SRH services, especially for birth spacing, is needed to improve the nutritional status of women and children.* “Ensuring universal access to reproductive health services is essential for improving the nutritional status of pregnant women and their children, in particular through the proper spacing of births.”

*Supplemental nutrition programs are needed for pregnant women and children.* “The Task Force recommends supplemental feeding programs for underweight pregnant women and nursing mothers. They also recommend exclusive breastfeeding for up to six months to ensure optimal nutrition for

newborns. Finally, comprehensive school-based feeding programs may be an excellent platform to...serve as a vehicle for reaching the community, particularly pre-school children and pregnant or lactating mothers.”

### ***Task Force on Education and Gender Equality***

(UN Millennium Project 2005d; UN Millennium Project 2005h)

*Gender equality cannot be achieved without guaranteeing women’s and girls’ SRH and rights.* “Increasing women’s and adolescents’ access to a broad range of sexual and reproductive health information and services is one of the seven priorities for action identified by this Task Force.”

*Barriers to girls’ education need to be overcome to make schools more accessible and secure.* “Given the particular barriers to girls’ education, specific interventions are needed to make schools more accessible and secure for this population.”

*Additional SRH relevant indicators should be used to monitor Goal 3.* The Task Force recommends the inclusion of the indicators: the proportion of demand for family planning satisfied and adolescent fertility rate.

### ***Task Force on Child Health and Maternal Health***

(UN Millennium Project 2005b)

*Unwanted pregnancies contribute directly to maternal mortality.* “...increasing access to methods to control fertility can have a significant impact on the number of maternal deaths, by reducing the number of times that a woman runs the risk that a fatal obstetric complication will occur.”

*Adolescents, especially girls, are particularly vulnerable to ill health, and attention needs to be given to their SRH needs.* “For both biological and social reasons, adolescents, particularly adolescent girls, are a vulnerable group.... Despite the importance of adolescents, their reproductive and sexual health needs have long been ignored and their views silenced by decision makers influencing health and education policy and programs.”

*Equitable, well-functioning health systems are essential to reducing maternal mortality, and a fundamental shift in the approach to health systems is needed.* “Perhaps more than any other major child health or maternal health condition – or any major communicable disease for that matter – maternal mortality reduction depends on a facility-based health system that functions.... This includes access to contraception, since control over the number and spacing of children can have profound impact on the health and well-being of both women and their children. It also includes safe abortion services, where legal, as well as information and services for preventing and treating STIs, including HIV/AIDS.”

*An additional target and indicators should be used to monitor reproductive health.* The Task Force recommends an additional target on access to reproductive health under Goal 5: “Universal access to reproductive health

services by 2015 through the primary health care system, ensuring faster progress among the poor and other marginalized groups.” The recommendations on indicators include:

- Contraceptive prevalence rate (move from Goal 6 to Goal 5)
- HIV prevalence among 15–24-year-old pregnant women (move from Goal 6 to Goal 5)
- Proportion of desires for family planning satisfied (add to Goal 5)
- Adolescent fertility rate (add to Goal 5)
- Coverage of emergency obstetric care (add to Goal 5)
- Neonatal mortality rate (add to Goal 4).

### ***Task Force on HIV/AIDS, Malaria, TB and Access to Essential Medicines***

(UN Millennium Project 2005i; and UN Millennium Project 2005j)

*Special vulnerability of women and girls to HIV/AIDS exists and must be addressed.* “Prevention and care programs will fail if they ignore the underlying determinants of the epidemic: poverty, gender inequality, and social dislocation.”

*Universal access to SRH services and information are an integral part of the HIV/AIDS response.* “The fight against HIV/AIDS and the broader struggle for reproductive health should be mutually reinforcing. National governments should incorporate universal access to reproductive and sexual health services and information as an integral part of their AIDS responses. In addition, there should be greater integration of HIV and other reproductive health services, including MTCT, VCT, family planning, and safe motherhood.”

*SRH supplies need to be included on the list of essential medicines.* “National essential medicines lists must contain the UNFPA/WHO–recommended core medicines and devices for reproductive health.”

### ***Task Force on Environmental Sustainability***

(UN Millennium Project 2005e)

*Population growth is a key indirect driver of environmental degradation.* “...fertility is highest in the poorest countries as well as among the poorest people in these and middle income societies. It is clearly then no surprise that these same places have the highest levels of unmet need for family planning and reproductive health services, which, in concert with other health, education and gender equality issues, must be addressed with policies and programs to slow population growth and realize synergistic improvements.”

*Natural population growth is an important driver of urbanization.* “Population growth, with continued levels of fertility higher than people say they desire, contributes both to natural growth in urban areas and to the factors pushing migration from rural areas to urban areas and new rural settlements.”

***Task Force on Improving the Lives of Slum Dwellers***

(UN Millennium Project 2005f)

*Stark intra-urban health disparities exist, especially in terms of SRH outcomes.* “Poor urban women also have worse sexual and reproductive health outcomes than other urban women, and at times, their outcomes rival those of rural residents... Poor urban women are also much less likely to use contraception than other urban women, and again in some regions their usage rates resemble that for rural women.”

*High prevalence of STIs, including HIV/AIDS, exists in urban settings.* “The anonymity of city life, more permissive social and sexual norms, the presence of sex workers and other factors have contributed to the high prevalence of sexual transmitted diseases and HIV/AIDS in urban settings.”



## MDG interventions by area as recommended by the UN Millennium Project

The following contain reproductive health recommendations extracted from the 10 intervention areas recommended by the UN Millennium Project (2005a).

### **Intervention area 1: Investment in rural development**

Investments in rural development include interventions in poverty and hunger reduction; domestic water supply, sanitation, and water management infrastructure; rural transport; and rural energy services.

#### *Nutrition*

##### *Nutrition for infants, pregnant women, and nursing mothers*

Promotion of mother- and baby-friendly community initiatives, including exclusive breastfeeding for first 6 months and complementary feeding with continuing breastfeeding for infants ages 7–24 months. HIV-positive mothers should use replacement feeding when it is acceptable, feasible, affordable, sustainable, and safe. Provision of sufficient calories, protein, and micronutrients to pregnant women and nursing mothers, supported by nutrition extension workers and using locally produced food to the extent possible.

### **Intervention area 3: Investments in the health system**

Investments in the health system include interventions in child and maternal health; prevention, care, and treatment of HIV/AIDS, TB, and malaria; access to essential medicines; measures to strengthen health systems management and health services delivery; and sexual and reproductive health.

***Child health******Neonatal integrated package***

Clean delivery, newborn resuscitation, prevention of hypothermia, kangaroo care (skin-to-skin contact), antibiotics for infection, tetanus toxoid (TT), breastfeeding education (including education on replacement feeding for HIV-positive mothers) and hygiene education.

***Integrated management of childhood illness plus immunization***

Integrated approach to reduce child mortality, illness, and disability, which includes both preventive and curative elements to address leading causes of child mortality such as oral rehydration therapy and antibiotics for diarrheal disease, antibiotics for acute respiratory infection, care for measles, antimalarials for malaria, and nutritional supplements for malnutrition plus immunization.

***Maternal health******Emergency obstetric care***

Rapidly accessible treatment for delivery complications such as eclampsia, hemorrhage, obstructed labor, and sepsis. Emergency obstetric care requires functioning referral systems and well equipped and staffed district hospitals.

***Skilled attendance, clean delivery, and post-partum care***

Presence of trained and registered midwives, nurses, nurse-midwives, or doctors at birth with ability to diagnose and refer emergent complications as well as post-partum care (including counseling on nutrition, family planning, and parenthood skills).

***Antenatal care***

Routine care during pregnancy, including preventive and curative interventions such as blood pressure and weight monitoring, treatment of infections, nutrition and smoking counseling, intermittent preventive treatment for malaria, and anti-retrovirals for HIV-positive women to prevent mother-to-child transmission of HIV.

***Safe abortion services***

Access to post-abortion care, access to abortion counseling and, where permitted by law, safe abortion services.

***HIV/AIDS prevention******Improved linkages***

Effective joint programming between reproductive health and HIV/AIDS programs.

*Behavior change programs*

Programs to encourage safer sexual behavior, including condom social marketing, peer-based education, mass media campaigns, work-based programs, and school-based HIV education.

*Control of sexually transmitted diseases*

Routine screening and effective treatment of sexually transmitted diseases (such as syphilis, gonorrhea, and chlamydia).

*Voluntary counseling and testing*

Pre- and post-test counseling and HIV testing.

*Harm reduction for injecting drug users*

Actions to prevent transmission of HIV and other infections that occur through sharing of non-sterile injection equipment and drug preparations; specific programs include provision of sterile syringes and needles and drug substitution treatment.

*Prevention of mother-to-child transmission*

Prevention of transmission of HIV from infected women to their infants during pregnancy, labor, and delivery, as well as during breastfeeding (that is, replacement feeding when it is acceptable, feasible, affordable, sustainable, and safe); includes short-term antiretroviral prophylactic treatment; infant feeding, counseling, and support; and the use of safer infant feeding methods.

*Blood safety interventions*

Measures to reduce the risk of receiving infected blood through a transfusion, including HIV antibody screening, protocols to avoid unnecessary blood transfusions, and policies to exclude high-risk donors.

***HIV/AIDS care and treatment****Antiretroviral therapy*

Combination drug therapy to treat AIDS.

*Treatment of opportunistic infections*

Treatment of any infection caused by a microorganism that would not normally cause disease in a healthy individual.

*Orphan support*

Provision of support to orphans to minimize the impact of AIDS on their lives; includes school fee support, community support, and support to extended families.

***Access to essential medicine****Interventions to ensure availability, affordability, and appropriate use*

Incentives to direct research and development processes toward appropriate medicines for developing countries; establishment of national essential medicines lists (including preventive, curative, and reproductive health commodities, equipment, and supplies); ensuring reliable procurement and distribution systems; pre-qualifying quality suppliers and procurement and distribution facilities; monitoring systems to assure drug quality; elimination of user fees for essential medicines; programs to improve the way drugs are prescribed, dispensed, and used, including public media campaigns and education of providers.

***Health systems****Multiple interventions to strengthen health system*

Human resource training and salary enhancement, improving management capacity, enhancing monitoring and evaluation, strengthening quality control, strengthening medical information systems, increasing capacity for research and development, enhancing community demand, and improving infrastructure.

***Sexual and reproductive health***

(elements of integrated programming not covered under maternal health, child health, HIV/AIDS programs)

*Counseling on contraception and birth spacing*

Information and education on benefits and methods of family planning and birth spacing; appropriate follow-up on method satisfaction, consistent and correct use of method, and options for appropriate method switching.

*Universal access to contraception*

Program to ensure universal access to family planning choices, including effective modern contraceptive methods, and to guarantee reliably available and affordable supplies and choice among methods.

*Age-appropriate sexuality education and services (especially for adolescents)*

School and community-based education programs, mass media education programs, youth-friendly information and service delivery, beneficiary-driven programming to meet the information and service needs of diverse adolescent groups (including married adolescents), and programs to educate parents to improve adolescent reproductive health.

*Prevention and treatment of STIs*

Programs to detect and treat STIs (such as syphilis, gonorrhea, and chlamydia) and other reproductive tract infections that can increase the risk of HIV/AIDS and infertility and affect the choice of appropriate contraceptive methods.

*Outreach to men to increase participation and support in reproductive health*

Counseling and information services for men to address their reproductive health needs, support the decisions of their partners, and change gender and relationship norms to ensure greater gender equality; prevent gender violence and harmful traditional practices and promote collaborative decision-making; information and services for reproductive health in the army and police forces, including efforts to combat gender violence.

**Intervention area 5: Investments in gender equality**

Investments in gender equality include interventions for sexual and reproductive health access to property rights and work, security, participation and institutional reform, and data collection and monitoring.

*Sexual and reproductive health*

*Universal access to SRH information and services and protection of reproductive rights* (Service packages described under health interventions above.)

Legislation and awareness campaigns to protect the rights of individuals and couples to plan their families; to ensure access to sexual and reproductive health information and services; to discourage early marriage (at ages posing health risks), female genital mutilation, and other traditional harmful practices; and to expand access to safe abortions (where permitted by law) and review the legal status of abortion in order to improve public health while respecting national sovereignty, cultural values, and diversity.

*Security*

*Security for girls and women from violence*

Legislation and administrative actions to protect women against violence, promotion of awareness of women's right to seek redress, protection from perpetrators of violence (through access to shelters, services, and so on) and mechanisms to dispense justice to perpetrators.



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## Notes

- <sup>1</sup> A life-cycle approach is useful for understanding connections over time, as health events at one stage of life influence health outcomes at later periods in the lifespan, and may also influence the next generation throughout their lifespan.
- <sup>2</sup> The DALY is a tool for measuring medical impact. DALYs lost to a disease, injury or health condition represent the sum of two components: (a) the cumulative number of years lost as a result of premature death; and (b) the cumulative number of healthy years of life lost to disability. DALYs are further adjusted for age and the stage of life at which a disease or disability emerges. The calculation weights healthy life years lost by young adults more heavily than those lost by children or the elderly, and disabilities that occur immediately or in the short term more heavily than those occurring many years later (definition from AGI and UNFPA 2003).
- <sup>3</sup> The total fertility rate (TFR) is a synthetic measure: the number of children a woman would have over her reproductive years if she had as many children in each successive five-year age cohort as women of those ages are currently having. It approximates life-time fertility but is subject to biases related to the timing of fertility decline among different age groups.
- <sup>4</sup> The replacement level has a fertility rate of 2.1 children per women and indicates the level of stabilization of a given population.
- <sup>5</sup> This section is based on INFO 2004
- <sup>6</sup> This section is primarily adapted from the background paper of Greene et al. 2006.
- <sup>7</sup> The 10 countries in WHO's domestic violence study are Bangladesh, Brazil, Ethiopia, Japan, Namibia, Peru, Samoa, Serbia and Montenegro, Thailand and the United Republic of Tanzania (WHO 2005c).
- <sup>8</sup> For an extended discussion, see Rights and Reforms 2005.
- <sup>9</sup> There has been increased attention to life-style issues (e.g., obesity, smoking, alcohol use) leading to some disease processes. But public health interventions to influence these are under-funded.
- <sup>10</sup> A valuable and extended discussion of the implications of recent trends in health systems can be found in Ravindran and de Pinho 2005.
- <sup>11</sup> Evidence suggests that sex education successfully raises the age of first relations, reduces the number of partners and increases the use of contraception after initiation (UNAIDS

1997). Such education efforts also often include recommendations for abstinence. Some suggest that the only appropriate education for the young is in support of abstinence until marriage. Evidence on ‘abstinence-only’ education suggests that it can raise the age of sexual initiation (perhaps by six months on average) but leads to lower levels of protected intercourse after activity begins.

<sup>12</sup> This is not to suggest that development of improved contraceptives is not an ongoing activity. Oral pills, for example, have undergone several generations of improvement that have lowered required dosages and minimized side effects. Some methods have been widely available only within the last decade, and research on methods combining contraceptive and microbicidal action continues. However, funding for such research and development has not increased.

<sup>13</sup> This discussion relies heavily on Bernstein 2002 and UNFPA 2002b.

<sup>14</sup> There is probably a need to re-evaluate the ages of true ‘dependence’.

<sup>15</sup> They exempt Southern Africa from their argument because of the devastatingly high numbers of people there infected with HIV/AIDS.

<sup>16</sup> Service providers are more comfortable with and can often better communicate with clients more similar to them in class background. The relative exclusion of the poor also involves services provided for fees outside of normal clinic hours – an all too common occurrence in crowded public systems with inadequate compensation for staff.

<sup>17</sup> The nearness to Nairobi markets and the availability of feeder roads and other vital infrastructure may indicate the special conditions needed for population pressure to facilitate agricultural progress, rather than indicate a net positive effect of population growth.

<sup>18</sup> This section is adopted from the background paper of Lloyd 2006.

<sup>19</sup> This is an underestimate of the difference as some of those no longer in school were in school at the time they were pregnant.

<sup>20</sup> Unmet need for spacing includes pregnant women whose pregnancy was mistimed, amenorrheic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth, unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of a better method of contraception) (DHS definition).

<sup>21</sup> The two thirds/one third allocation in the Programme of Action (UN 1994, para. 13.16) was tentative and resulted from a combination of analyses and political considerations. Some very large programs (e.g., China and India) are substantially funded from domestic resources, and private sector (out-of-pocket) expenditures for health are important in many countries. It was explicitly stated in that paragraph that the poorest countries/regions would require a substantial share of the resources to come from external sources on a grant or concessional basis.

<sup>22</sup> A reason for the difficulty in measuring resource flow to population assistance can be found in the fact that many donors have moved from project to sectoral support, which

makes it more difficult to track resources. Another reason is incomplete reporting due to lack of staff, funding and proper reporting systems.

- <sup>23</sup> The nine countries that in 2002 gave more than 4 percent of ODA in population assistance are Belgium, Canada, Denmark, Finland, Luxembourg, the Netherlands, Norway, Switzerland and the United States.
- <sup>24</sup> As noted in Section 2, the United States places conditions on the use of its population assistance that can constrain national program priorities.
- <sup>25</sup> This is widely believed to have been a crucial factor in the substantial progress against maternal mortality made in Sri Lanka and some states in South India in the early 1950s. Such political pressure was also legitimized by high level policy commitments on equity and inequality reduction.
- <sup>26</sup> This section is adapted from Mitchell et al. 2006.
- <sup>27</sup> The discussion here provides context and guidance on the components of intervention strategies recommended in the UN Millennium Project's documentation of recommended interventions in SRH (UN Millennium Project 2005a).
- <sup>28</sup> These include misinformation about the actual high efficacy of latex condoms in preventing the transmission of STIs, including HIV/AIDS.
- <sup>29</sup> The Spectrum software is available at the Futures Group's homepage at <http://www.futuresgroup.com/Resources.cfm?area=2a&get=Spectrum>
- <sup>30</sup> The Reproductive Health Costing model of the UN Millennium Project is available at the Project's homepage at <http://www.unmillenniumproject.org/policy/needs03.htm>.
- <sup>31</sup> The Manual to the Country Commodity Manager (CCM) is available at UNFPA's homepage at <http://www.unfpa.org/publications/detail.cfm?ID=189&filterListType=1>
- <sup>32</sup> The PipeLine software is available at USAID's homepage at <http://deliver.jsi.com/2002/Software/index.cfm> (under 'Tools' in the 'Resources' menu).
- <sup>33</sup> This condition means that it is performed by qualified medical personnel in a properly equipped facility (WHO 2003).
- <sup>34</sup> Earlier sections of this report discussing unmet need for family planning among young people use data often restricted to married women only. Young people can be subject to risks and have information and service needs regardless of their marital status.
- <sup>35</sup> Ministries of Youth and Sports largely address recreational concerns. Education ministries and Labor ministries cover areas of priority to adolescents, but sector organizations do not promote an integrated approach to young people. Health ministries are rarely oriented to adolescent needs.
- <sup>36</sup> This section adapted from Greene et al. 2006.
- <sup>37</sup> MAQ (Maximizing Access and Quality of Care) is designed to promote quality services and remove barriers that can discourage clients from using services. The guidelines for clinical procedures in family planning look into adequate utilities, space, furniture and equipment, and provide regulations for commodities. COPE (Client-Oriented Provider-Efficient) is designed to help agencies and clinics determine how well their efforts to improve quality are working and to identify areas for improvement (USAID's homepage: [www.usaid.gov](http://www.usaid.gov)).
- <sup>38</sup> Elements include basic drugs, commodity and equipment costs, personnel requirements, basic overhead and supplementary investments for strengthening.
- <sup>39</sup> The estimates at the ICPD (see section 3) were restricted to four preventive service interventions. The new methodology recognizes that 12 of the 19 prevention interventions currently recommended are substantially SRH interventions (UNAIDS 2005b).
- <sup>40</sup> The current medium variant projection does not yet reach the lower fertility projected in the 1993 unmet need estimate, though the difference is now small. The 1993 unmet need projection has been slightly more accurate over the past decade than the 1992

medium variant has proven to be in most of the regions. The current unmet needs projection also implies lower fertility by 2015 (e.g., by 0.1 children in Western Africa with a medium variant at 4.8; 0.3 children in Southern Africa, medium variant 2.2; 0.4 children in Eastern Africa, medium variant 4.6; and 0.5 children in Middle Africa, medium variant 6.1).

<sup>41</sup> Derived from the needs to provide services to those now with unmet need for family planning by the end of the time period, without adjustments for increases in demand.

<sup>42</sup> These outlays were included (implicitly) in the regional cost per contraceptive acceptor that was the basis of the earlier methodology.

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# **The Millennium Development Goals**

**Goal 1: Eradicate extreme poverty and hunger**

**Goal 2: Achieve universal primary education**

**Goal 3: Promote gender equality and empower women**

**Goal 4: Reduce child mortality**

**Goal 5: Improve maternal health**

**Goal 6: Combat HIV/AIDS, malaria and other diseases**

**Goal 7: Ensure environmental sustainability**

**Goal 8: Develop a global partnership for development**

The Millennium Development Goals, adopted at the UN Millennium Summit in 2000, are the world's targets for dramatically reducing extreme poverty in its many dimensions by 2015 – income poverty, hunger, disease, exclusion and lack of infrastructure and shelter – while promoting gender equality, education, health and environmental sustainability. These bold Goals can be met in all parts of the world if nations follow through on their commitments to work together to meet them. Achieving the Millennium Development Goals offers the prospects of a more secure, just and prosperous world for all.

The UN Millennium Project was commissioned by UN Secretary-General Kofi Annan to develop a practical plan of action

to meet the Millennium Development Goals. As an independent advisory body directed by Professor Jeffrey D. Sachs, the UN Millennium Project submitted its recommendations to the UN Secretary-General in January 2005.

The core of the UN Millennium Project's work has been carried out by 10 thematic Task Forces comprising more than 250 experts from around the world, including scientists, development practitioners, parliamentarians, policy makers, and representatives from civil society, UN agencies, the World Bank, the International Monetary Fund and the private sector.

This report lays out the recommendations of the UN Millennium Project on sexual and

reproductive health. It details the centrality of this area to progress on human development and outlines five strategic interventions to improve sexual and reproductive health: integrate sexual and reproductive health analyses and investments into national poverty reduction strategies; integrate sexual and reproductive services into strengthened health systems; collect data for planning and monitoring systematically; launch the Reproductive Health Quick Impact Initiative; and meet the needs of special populations.

**Public Choices, Private Decisions:  
Sexual and Reproductive Health and the Millennium Development Goals**