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Sexual & Reproductive Health in the Middle East and North Africa

A GUIDE FOR REPORTERS

Farzaneh Roudi-Fahimi and Lori Ashford

This guide provides a variety of regional and national data, trends, and other information on sexual and reproductive health in the Middle East and North Africa. It is available online at: www.prb.org/reports/2008/mediaguide.aspx.

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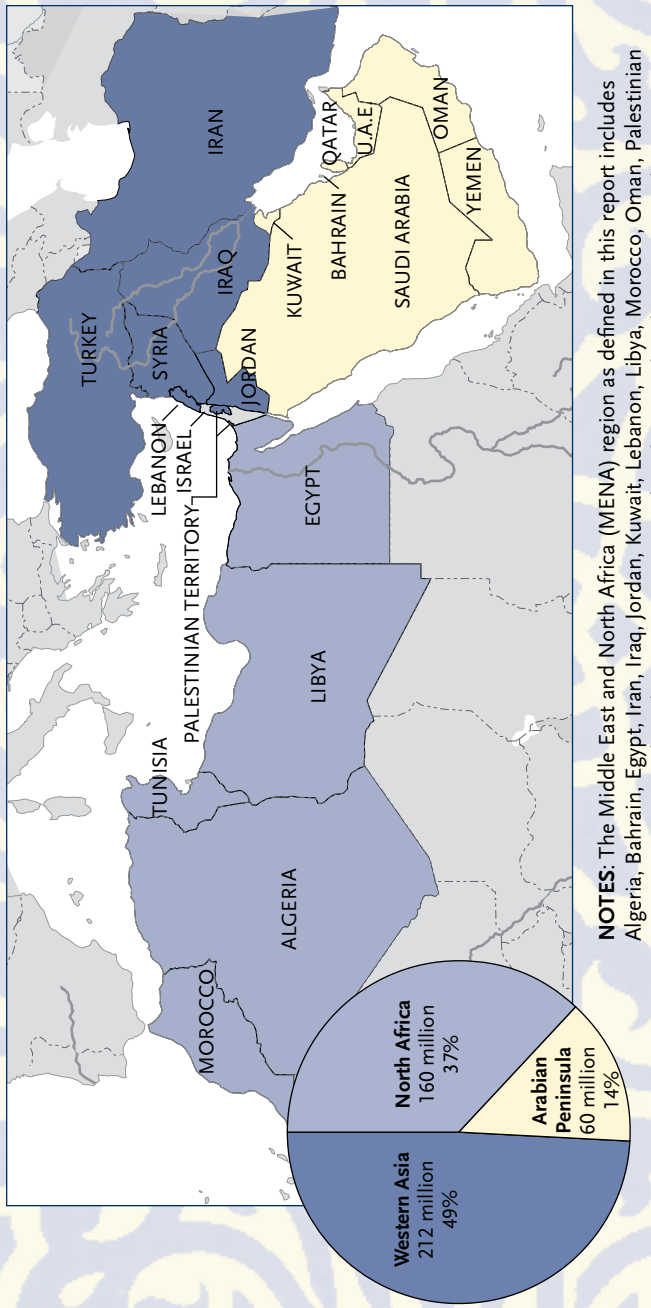

NOTES: The Middle East and North Africa (MENA) region as defined in this report includes Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestinian Territory, Qatar, Saudi Arabia, Syria, Tunisia, Turkey, the United Arab Emirates, and Yemen.

Some of the country boundaries shown are undetermined or in dispute.

SOURCE: UN Population Division, *World Population Prospects: The 2006 Revision* (2007). http://esa.un.org

1 Why Should Sexual and Reproductive Health Issues Concern the Media?

KEY POINTS

- **Sexual and reproductive health relates to both human rights and development.**
- **Sexual and reproductive health issues touch on sensitive aspects of people's lives and tend to be surrounded by cultural taboos.**
- **Journalists can report responsibly and objectively on these issues to break taboos, educate the public, and bring the issues to policymakers' attention.**

Sexual and reproductive health is a broad concept encompassing health and well-being in matters related to sexual relations, pregnancies, and births. It deals with the most intimate and private aspects of people's lives, which can be difficult to write about or discuss publicly, particularly in the Middle East and North Africa (MENA) region.

Cultural sensitivities and taboos surrounding sexuality are particularly pronounced in the MENA region, and make the role of the media vital in providing objective information about sexual and reproductive health matters (see Box 1, page 5). The media has the power to break the culture of silence that surrounds sexual and reproductive health, a silence that all too often prevents people from seeking information and care and prevents governments from putting the issues on their development agendas.

This guide aims to bring together the latest available data on sexual and reproductive health for countries in the MENA region, to help journalists educate the public and make the case for policymakers that poor sexual and reproductive health contributes to social inequalities and hinders social and economic development.

Sexual and Reproductive Health for All

The right to health is acknowledged internationally as a universal human right. Sexual and reproductive health relates to the health and well-being of individuals, families, and society, and is increasingly part of international and national development discourse.

Reproductive health and sexual health were first defined in the Programme of Action of the 1994 United Nations International Conference on Population and Development:

> ***Reproductive health*** *is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and process. 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.*

Rooted in the principles of human rights, sexual and reproductive health implies that:

- Men and women have the *right* to be informed and have access to safe, effective, affordable, and acceptable methods of family planning of their choice.
- The *right* to have access to health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.
- 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.
- Reproductive health care 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 infections.

Sexual and Reproductive Health: A Development Agenda

The landmark International Conference on Population and Development, held in Cairo in September 1994, was the first UN conference to recognize the links between sexual and reproductive health, women's status, and social and economic development. The conference document —Programme of Action, also known as the Cairo agreement—provides a comprehensive framework for slowing population growth and improving people's lives.

The Cairo agreement recognizes that sexual and reproductive health affects and is affected by people's relationships and by the broader context of their lives, including their economic circumstances; education; employment opportunities; family structures; and political, religious, and legal environment. The interconnections have also been recognized in other UN agreements, most notably the Platform of Action of the Fourth World Conference on Women held in Beijing in 1995, the Millennium Development

Box 1

Reporting Responsibly on Sensitive Issues

Most people's experience of sexual and reproductive health is very personal and private. In producing stories on this topic, journalists need to consider certain ethical issues:

- **Confidentiality.** People may be abandoned by their community or suffer violence from their spouses or family members if their identity is revealed in a story. If people are ostracized as a result of talking to a journalist, their ability to earn a living can be affected.
- **Stigma.** People may feel guilty or ashamed about their past actions or experiences (for example, contracting a sexually transmitted infection). Journalists should be sensitive to this and always treat the people they talk to with dignity.
- **Legality.** Journalists need to make sure they aren't putting people at risk of arrest or imprisonment by asking them to talk about their sexual behavior.
- **Checking facts.** All the facts in a story should be double-checked to avoid misleading readers or unnecessarily increasing their health risks.

Researchers and research organizations are important sources for journalists to obtain information to prepare accurate and unbiased new stories (see Sources in Appendix 3). But new—and particularly sensational—research results should be reported with caution. Apparent medical breakthroughs or scare stories about risks need to be thoroughly examined. Sometimes conclusions are drawn from a very small sample of people. Reporters should ask researchers how representative they believe their work is, and/or ask other experts in the field about the relevance of the findings. It is essential to have a basic understanding of statistics and to not draw general conclusions that may be invalid.

If a researcher indicates that a particular solution—such as cheaper medical supplies or better trained staff—might solve a specific problem, reporters can ask the researcher to expand on what needs to be done to achieve that. Journalists can then follow up by asking the relevant authorities what they are doing to address the problem.

ADAPTED FROM: Panos, *Panos Media Toolkit on Communicating Research* No. 4 (www.panos.org.uk/relay).

Goals (that came out of the 2000 UN Millennium Summit), and the Global Reproductive Health Strategy adopted by the World Health Assembly in 2004.

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2 Marriage

KEY POINTS

- **Families in MENA are undergoing major changes as couples are marrying and having children later. In a break from the past, some women are not marrying at all.**
- **Still, early marriage persists in some communities and disadvantages young women.**
- **Unconventional marriages among young people appear to be rising, even though the number of these marriages is still small.**

The family is the center of life in the culture of MENA countries. Families provide social security for the elderly, sick, or disabled, and an economic refuge for financially dependent relatives. Families take great pride in their responsibilities; thus, marriage is both an individual and a family matter.

Marriage is a rite of passage for young people to a socially, culturally, and legally acceptable sexual relationship. Evolving around costly ceremonies, marriage is a well-defined turning point that bestows prestige, recognition, and societal approval on both partners, particularly the bride. While young men and women generally choose their spouses today, marriage remains a social and economic contract between two families.

Age at Marriage Is Rising and More Women Never Marry

New patterns of marriage and family formation have emerged in the MENA region: Early marriage is no longer universal, as fewer women are marrying before age 20 (see Figure 1, page 9). The average age at marriage for both men and women is rising, and some are not marrying at all.

The data on the percentage of women ages 35 to 39 who have never married provides evidence that marriage is no longer universal, because the likelihood of a single woman marrying after age 40 is quite low.

- In Lebanon and Algeria, about one-fourth and one-fifth of women in this age range, respectively, are never married (see Figure 2, page 9).
- In Jordan, Kuwait, Libya, Morocco, Palestine, Qatar, Syria, and Tunisia, at least 10 percent of women never marry.

Changing marriage patterns reflect broader social and economic changes taking place throughout the region: More people are living in urban areas and adopting modern lifestyles; young people are staying in school longer; and young women are more likely to work outside the home in paid jobs.

In Egypt, Palestine, and Yemen, many women still marry early, but in Palestine marriage is less universal than in Egypt and Yemen. According to a 2006 survey conducted by the Pan Arab Project for Family Health, nearly 10 percent of 15-to-19-year-olds and 50 percent of 20-to-24-year-old Palestinian women are married. And 10 percent of 35-to-39-year-old Palestinian women have never been married.

Early Marriage and its Consequences

Despite the overall trend toward later marriage, there are still population groups for whom early marriage remains common. Some families decide to marry off their daughters at young ages; traditional values about protecting girls' virginity and family honor play a major role in these decisions. The highest rates of early marriage are in Yemen and Egypt. In Yemen, marriage among women ages 15 to 19 declined from 27 percent in 1997 to 17 percent in 2003—but this latter figure still represents an estimated 200,000 women.

In Egypt, 12 percent of women ages 15 to 19 were already married in 2005. That amounts to more than 500,000 young women because of Egypt's large population. About 23 percent of 19-year-old Egyptian women are already mothers or pregnant.

What's more, data on national averages mask the extent of early marriage among some groups within a country. Early marriage can have a number of consequences:

- Women who marry early are more likely to drop out of school and are typically more socially isolated.
- They often are pressured to begin childbearing soon after marriage.
- They typically know less about family planning, sexually transmitted infections, and other sexual and reproductive health matters than women who marry later.
- They often lack the power to make decisions about their own health, especially if their husbands are much older.
- Together, these factors make it more likely that the women and their infants will face a greater risk of poor health.

Thus, disadvantages of early marriage make it harder for families to escape the vicious cycle of illiteracy, large numbers of children, and poverty.

Figure 1

Women Ages 15 to 19 Who Are Married

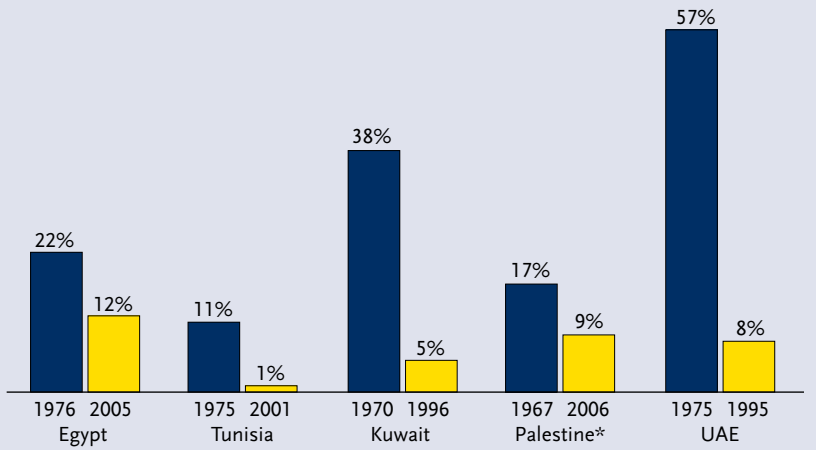
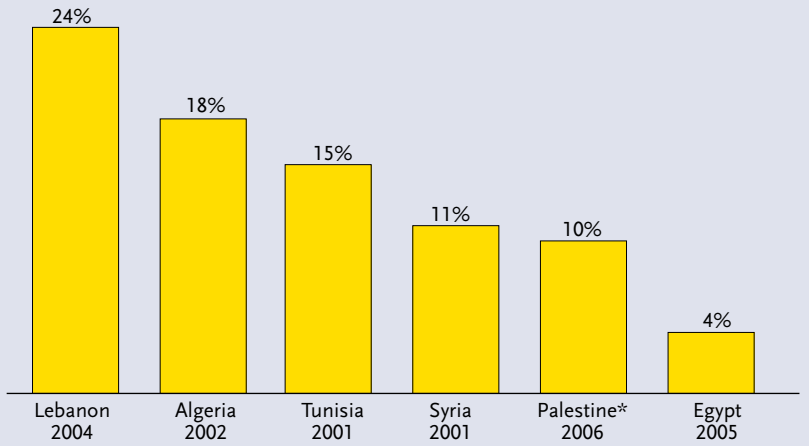


Figure 2

Women Ages 35 to 39 Who Are Never Married



*Refers to the Palestinian population living in Gaza and the West Bank (including East Jerusalem).

SOURCES: United Nations, *World Fertility Report 2003*: tables II.9 and II.11; Pan Arab Project for Family Health Survey (Tunisia 2001 and Palestine 2006); Gulf Family Health Surveys (UAE 1995 and Kuwait 1996); and Demographic and Health Surveys (Jordan 2002 and Egypt 2005).

Kin Marriages and Polygyny

A distinct feature of families in MENA is the relatively high rate of consanguinity, a practice that involves marriage between blood relatives (cousins in particular). Marriage between blood relatives is particularly high in Libya and Saudi Arabia, where more than 40 percent of married women ages 15 to 49 are wed to their first cousins. Marriage between close relatives can jeopardize the health of their offspring, as can marriage among families with a history of genetic diseases.

Polygyny—men having more than one wife—is also still practiced in some communities in the MENA region. Polygyny is believed to be somewhat more common in the Arab countries of the region. A 2001 survey in Syria showed that 5 percent of married women ages 15 to 49 were co-wives.

Unconventional Marriages

Unconventional marriages are appearing in some countries as young people are delaying marriage—particularly young urban adults. Generally hidden from the couples' families, *urfi* marriages (such as in Egypt) and temporary marriages (such as in Iran and Lebanon) are undertaken to avoid the difficulties of a standard marriage and to give a sexual relationship some legitimacy. The high cost of marriage and the high rate of unemployment among young people are often blamed for the prevalence of these forms of marriages. While statistics on unconventional marriages are scarce, the increasing number of contested paternity cases reflects the practice.

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3 Childbearing

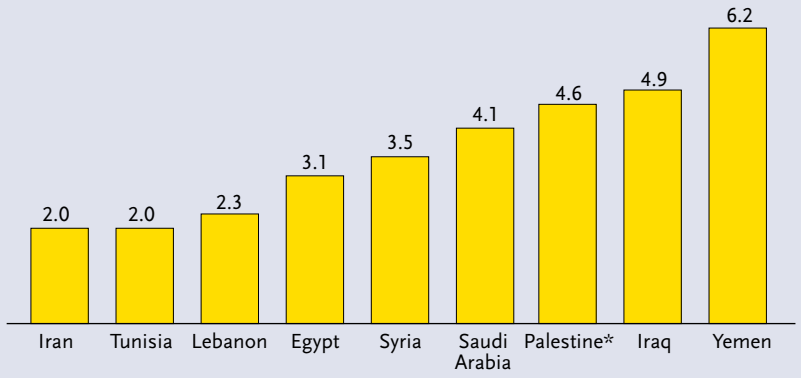
KEY POINTS

- **Smaller families are increasingly common in the MENA region.**
- **Girls enrolled in secondary school are more likely to delay marriage and childbearing, thereby lowering fertility (births per woman) and population growth.**
- **About 10 percent of couples worldwide have problems conceiving children.**

Along with changes in marriage, childbearing patterns have changed dramatically in the past several decades in the MENA region. The total fertility rate—lifetime births per woman—dropped from about seven children in 1960 to three children in 2005 for the region as a whole (see Figure 3).

Figure 3

Average Number of Births per Woman, Selected Countries



*Refers to the Palestinian population living in Gaza and the West Bank (including East Jerusalem).

SOURCE: Donna Clifton, Toshiko Kaneda, and Lori Ashford, *Family Planning Worldwide 2008.*

By around 2005, only four countries had fertility rates at or above 4.0 children per woman: Iraq, Saudi Arabia, the Palestinian Territory, and Yemen.

- Yemen's fertility rate has edged downward in recent years, but is still the region's and one of the world's highest at around six children per woman.
- In Lebanon, Iran, Tunisia, and Turkey, fertility is at replacement level—the number of children needed to replace their parents—of about two children per woman.
- Worldwide, average fertility is 2.7 children per woman.

Education and Fertility

Education is the single most important factor influencing both age at marriage and age at first birth in MENA countries, since women in the region tend to give birth soon after marriage. Among married Egyptian women ages 25 to 29, for example, those with no education had married at age 18, on average, and had their first child by age 20; those with a secondary or higher education married at an average age of 23 and had their first child by age 25.

More-educated women not only start childbearing later, but they are also more likely to use family planning to achieve their desired family size.

Infertility

About 10 percent of couples worldwide have problems conceiving children. According to international research, about one-third of infertility cases (defined as the inability to conceive after 12 months of intercourse without contraception) can be attributed to male factors. Another one-third of cases can be attributed to factors affecting women, and the remaining one-third results from problems in both partners or from unexplained causes.

Box 2

Population Growth in MENA

Dramatic improvements in health and longevity during the second half of the 20th century sparked rapid population growth in MENA and other developing regions. Advances in medicine and public health, including antibiotics, immunization, and sanitation, caused death rates to plummet after 1950. The MENA region's fertility remained relatively high, creating a large surplus of births over deaths. MENA's population grew from an estimated 103 million in 1950 to 376 million in 2000 (see figure).

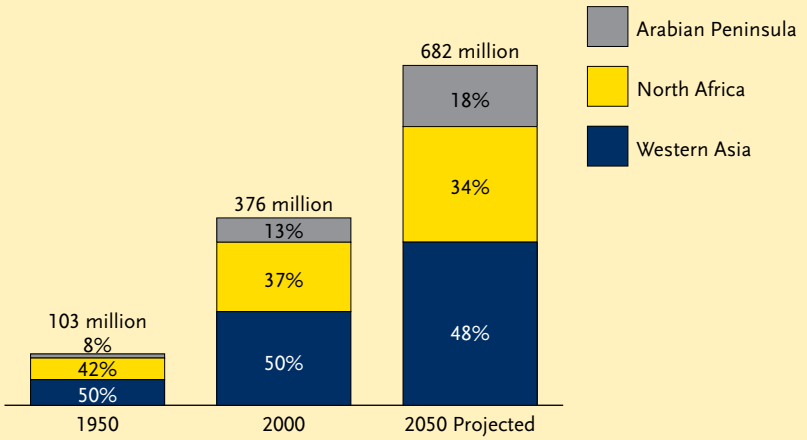
Immigration also contributed to population growth in the oil-rich Gulf states. Economic expansion following the jump in oil revenues in the 1970s attracted millions of foreign workers to Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Young people ages 15 to 24 account for about one-fifth of the total population in MENA. Even though these young people—around 100 million of them in 2008—are expected to have fewer children than their parents did, the sheer number of youth creates momentum for continued population growth in the region.

The future population size of the region and each country depends largely on the childbearing decisions of today's young people. The United Nations estimates that, by 2050, MENA will add about 300 million people to its population and grow to around 682 million.

Population growth puts pressure on MENA's fragile natural resources. The MENA region is the most arid in the world, and population growth has exacerbated water scarcity. The availability of renewable fresh water in most countries is already less than 1,000 cubic meters per person per year—the threshold below which a country or region is recognized as water-scarce.

The oil-rich Gulf states have been able to address water shortages by importing fresh water and using expensive technologies such as desalination to meet the growing demand of their populations. But these options are not feasible for resource-poor countries such as Yemen or the Palestinian Territory. Ironically, these two populations have the highest rates of population growth in the region due to their high fertility.



SOURCE: UN Population Division, *World Population Prospects: The 2006 Revision* (2007). http://esa.un.org

Although there is nothing to suggest that infertility is more common in MENA countries than elsewhere, the issue is especially important in the region. Cultural values in the region praise motherhood and stigmatize childless women, pressuring women to become pregnant soon after they marry. Those who do not become pregnant often seek medical treatment, sometimes at great expense.

Treatment for infertility might entail the following:

- For the man, it might include drugs and/or surgery to improve the quality and quantity of the semen and sperm.
- A woman may receive drugs to help ovulation or have surgery to open or repair blocked tubes or to remove excess uterine tissue.
- Artificial insemination is an option for couples who have trouble conceiving. Also, in-vitro fertilization combines egg and sperm outside the womb. The resulting embryo is then implanted in the woman's uterus.

Couples can also take advantage of these treatments by using donor eggs, sperm, or embryos. Iran is the only Muslim country in which such third-party donations are sanctioned by religious authorities and by law.

Overall, assisted reproductive technologies are increasingly available in the region, mainly through private providers. These technologies, however, are not always necessary or successful. Countries in the region lack standards to ensure the quality of infertility treatment and to contain costs.

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4 Family Planning

KEY POINTS

- **Family planning improves family health and benefits society.**
- **Islam supports the use of family planning.**
- **The majority of married women in the MENA region use family planning.**
- **Still, many women who prefer to avoid a pregnancy are not using any contraceptive method.**

Family planning improves the health of women and their families. Using contraception to delay or stop childbearing allows women to give birth at the healthiest times for themselves and their children, thereby lowering maternal and child deaths and disabilities. International data suggest that siblings born three to five years apart are more than twice as likely to survive to age 5 as siblings born less than two years apart.

In addition, some contraceptive methods—notably male and female condoms—prevent both pregnancy and sexually transmitted infections, including HIV.

Investing in family planning is cost-effective for governments, because the supplies and services are relatively inexpensive. The benefits extend well beyond family health. Reducing unwanted births lowers national costs for health care and education, reduces financial burdens on families, and reduces pressure on limited natural resources.

Islam and Family Planning

Islamic scholars have generally justified contraceptive use, arguing that Islam is a religion of moderation. They point to the principles of "liberty" or "permissibility" in Islam—that is, everything is lawful unless explicitly designated otherwise in the Quran or in the Prophet's tradition (*Sunnah*). The Quran does not prohibit birth control, nor does it forbid spacing or limiting pregnancies.

Islam sanctions family planning on several grounds, including:

- Spacing pregnancies to protect the mother's health.
- Preventing the transmission of hereditary or infectious diseases to offspring.
- Avoiding economic embarrassment to the family from too many children.

Legal scholars who interpret Islam as permitting contraception assume that the method would be safe and practiced only for good reasons, such as preserving the family's health and well-being. Yet, a majority of theologians who have approved modern contraceptive use have expressed reservations about female and male sterilization. Some people disapprove of male sterilization in particular based on its mistaken analogy to castration, which is prohibited in Islam.

Contraceptive Methods

Contraceptive methods are generally categorized as modern—which rely on products and clinic services—or traditional—which rely on a couple's behavior (see Figure 4). Traditional methods of contraception include withdrawal, periodic abstinence (also called the rhythm or calendar method), abstinence after a birth, and breastfeeding. These methods are prone to failure. For example, research shows that about 20 percent to 25 percent of women practicing periodic abstinence or withdrawal may become pregnant within a year.

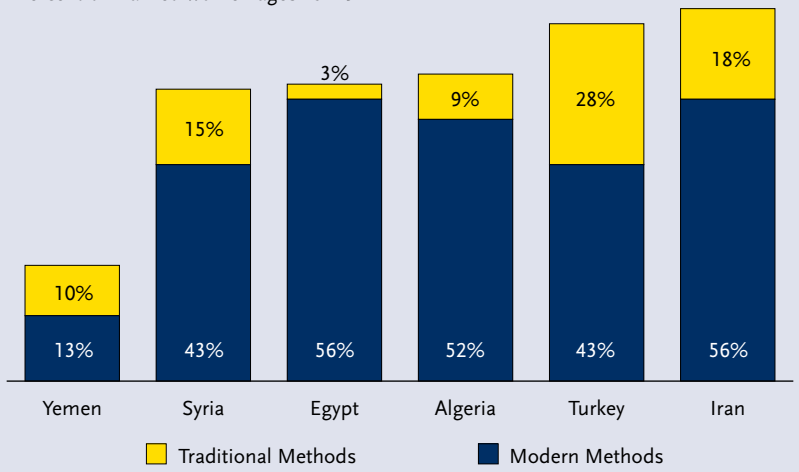
Though not all modern contraceptive methods are available everywhere, they include:

- Oral contraceptives (the "pill"), containing the hormones estrogen or progestin, or a combination, taken daily in monthly cycles.
- Intrauterine devices (IUDs), which can remain in place three to 10 years, depending on the type.
- Hormonal injections, given every two to three months, depending on the type.
- Hormonal implants (inserted under the skin), which can remain in place from three to seven years.
- Male and female condoms, which must be used consistently and correctly each time a couple has sex.
- Other "barrier" methods such as diaphragms, cervical caps, and foams/jellies, which also require consistent and correct use.
- Male and female sterilization, which are meant to be permanent.

Sterilization, implants, IUDs, injections, and the pill (if used correctly) are 99 percent to 100 percent effective. Condoms and other barrier methods are more prone to failure and therefore have lower effectiveness rates.

Figure 4

Contraceptive Use in the MENA Region



SOURCE: Donna Clifton, Toshiko Kaneda, and Lori Ashford, *Family Planning Worldwide 2008.*

Emergency Contraceptives

Emergency contraceptives are a specific combination of oral contraceptives that can help prevent pregnancy if taken within 72 hours of unprotected intercourse. They are intended to be a backup method and not a method of ongoing contraception. The U.S. Food and Drug Administration approved two products in 1998 for emergency contraceptive use, and most countries in the world have registered such a product. In places where a specific product is not registered or widely available, higher doses of regular pills can be used to avoid a pregnancy, but women must consult with a health provider about how to do this safely and effectively.

Knowledge about emergency contraception and access to it remain a challenge in much of the world. According to the International Consortium on Emergency Contraception, most governments in the MENA region have not officially approved or registered these products, and no information is available on whether women can obtain them privately. There are a few exceptions:

- In Lebanon and Algeria, the products are registered and available in pharmacies with a prescription.
- In Tunisia and Turkey, the products are registered and available without a prescription.

New Contraceptive Methods

Most modern methods result from investments made years ago. Virtually all modern methods have undergone a long process of research and testing for safety and effectiveness and must have regulatory approval before becoming available. Researchers are continuously working to develop new methods, many of which are similar to those available today but are more effective, less costly, have fewer side effects, and are easier to provide.

A new category—hormonal contraception for men—is currently undergoing clinical trials for effectiveness. Hormonal contraception for men would offer a reversible and convenient way to prevent pregnancy, much as it does today for women.

Cost of Contraceptive Methods

Long-acting and permanent methods require few clinic visits yet offer many years of protection against pregnancy, and rank among the most cost-effective. However, some methods, although inexpensive in the long-run, may have high up-front costs that can affect their availability as well as users' choices.

Current Contraceptive Use

Rising educational levels and expanding health services have contributed to increased use of contraception throughout the region. Egypt, Iran, and Turkey were the first countries in the region to establish national family planning programs as part of their development plans to improve health and well-being of their populations. By around 1980, one-quarter of their married women were using modern contraception.

During the 1990s, modern contraceptive use rose dramatically in the MENA region. More than one-half of married women now use a modern method of contraception in Algeria, Egypt, Iran, Morocco, and Tunisia (see Appendix 1).

The highest rate of overall contraceptive use is in Iran, where the rate is similar to that in the United States. In both countries, 74 percent of married women use contraception, but the rate of modern contraceptive use is higher among American women (68 percent) than among Iranian women (56 percent).

The pill and IUD are the most popular family planning methods in the MENA region. The pill is the most popular method in countries such as Algeria and Morocco. The IUD is the most popular in countries such as Egypt, Jordan, Syria, and Turkey.

Use of *male methods* (withdrawal, condoms, and male sterilization) is relatively low in MENA, except in Iran and Turkey. In Turkey, about 11 percent of married women of reproductive age report using a condom as a method of family planning, the highest rate in the region.

Although legal in MENA countries, male sterilization is rarely promoted as a family planning method, except in Iran. Iran's family planning program provides all modern family planning methods free of charge, including both female and male sterilization, as well as condoms. Iran has the only condom factory in the region.

Contraceptive Use by Education and Wealth

In general, women with more education (particularly secondary school or higher) are more likely to use family planning than women with only a primary school education or no education. This relationship holds true not only in the MENA region but throughout the world. Similarly, women who are better-off economically are more likely to use contraception than poorer women (see Figure 5).

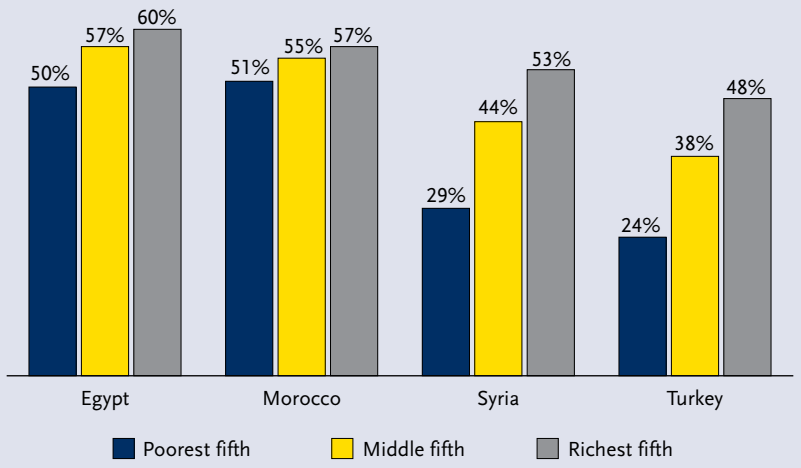
Disparities in contraceptive use are also seen between rural and urban areas. Women living in rural areas typically are poorer, less educated, and have less access to services than women in urban areas.

One way for governments to remove social and economic barriers to contraception is to provide universal access to family planning services through

Figure 5

Modern Contraceptive Use by Wealth Quintile

Percent of married women ages 15–49



NOTE: Researchers used survey data to divide the populations into five groups of equal size based on an index of household assets. The first, third, and fifth groups are shown here.

SOURCES: Demographic and Health Surveys; and UNICEF, Multi-Indicator Cluster Survey. Survey years are from 2003 to 2006.

national, primary health care systems. In Morocco, the health ministry made great strides in the last decade in increasing contraceptive use among poorer, mostly rural women—thereby narrowing the gap between poor and better-off women in the country (see Figure 6).

Unmet Need for Family Planning

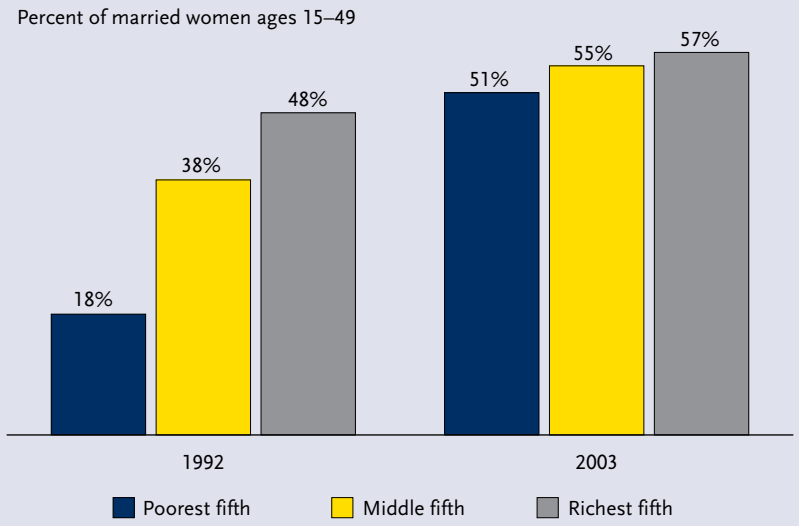
Women who wish to delay or stop childbearing but are not using contraception are referred to as having an *unmet need* for family planning. Unmet need ranges from 6 percent of married women in Turkey to 51 percent in Yemen (see Figure 7). Where unmet need is high, it is most pronounced among poorer and less educated women.

In addition to women with unmet need for family planning, other women who are using family planning can become pregnant if their contraceptive method fails or if they use their method incorrectly or inconsistently. Research suggests that, among women in MENA, rates of contraceptive failure and stopping use of a method are substantial. A recent study of unmet need for family planning in Syria has revealed that half the women who have had abortions had been using a family planning method when they became pregnant. Of those, 44 percent were using a traditional method, and 25 percent were using oral contraception.

According to another study, if contraceptive failures were eliminated and all women continued using their methods, fertility rates in Egypt and Jordan would drop from current rates of 3.1 and 3.5 births per woman, respectively, to only 2.0 births per woman. Contraceptive failure or stopping use often results from a lack of counseling and follow-up on the part of health providers. Health providers play a critical role in informing women and couples about the best methods for their particular circumstances (for example, whether a woman is breastfeeding or wants no more children); how to use the methods correctly; and possible side effects of modern methods, such as irregular bleeding or weight gain, and what to do about them.

Figure 6

Morocco: Modern Contraceptive Use by Wealth Quintile, 1992 and 2003/04

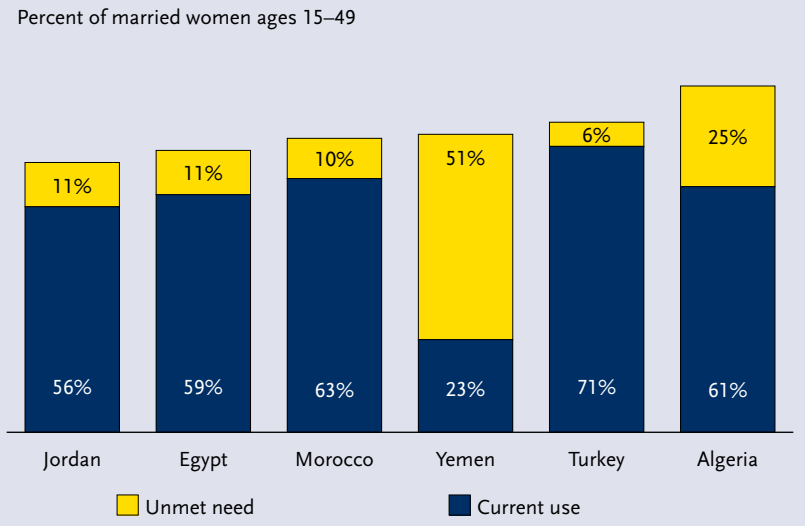


NOTE: Researchers used survey data to divide the populations into five groups of equal size based on an index of household assets. The first, third, and fifth groups are shown here.

SOURCE: Morocco Demographic and Health Surveys.

Figure 7

Demand for Family Planning



NOTE: Total demand for family planning includes women who are currently using contraception plus women who prefer to avoid a pregnancy but are not using a contraceptive method. The latter women are referred to as having "unmet need" for family planning.

SOURCE: Donna Clifton, Toshiko Kaneda, and Lori Ashford, *Family Planning Worldwide 2008*.

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5 Maternal Health

KEY POINTS

- **The use of health care during pregnancy is low in the MENA region compared with more developed regions, and the use of care after childbirth is even lower.**
- **Despite improvements in maternal health in MENA, the World Health Organization estimates that more than 16,000 women die there each year due to pregnancy-related causes—with two-thirds occurring in just four countries: Egypt, Iraq, Morocco, and Yemen.**
- **Maternal deaths are largely avoidable. The most effective way to prevent them is to have deliveries attended by skilled health personnel.**

Maternal health has greatly improved in the MENA region as education and health care have expanded and strengthened. On average, today's mothers are more educated, have their first child at a later age, give birth to fewer children, and have better access to health services than a generation ago—all factors that contribute to better maternal health.

Still, about half of the 10 million women who give birth every year in MENA experience some kind of complication, with more than 1 million of them suffering from serious complications, such as severe bleeding or infections, that could lead to long-term illness or even death. Each year, more than 16,000 women in the MENA region die of complications related to pregnancy and childbirth, although deaths vary greatly by country (see Appendix 1).

International estimates suggest that for every maternal death, at least 30 women suffer long-term disabilities, such as damage to the reproductive organs or constant leaking of urine or feces. The extent of these disabilities is difficult to estimate because women may not recognize or report the symptoms. Poor maternal health reflects persistent poverty and discrimination against women.

Low birth weight is also a sign of poor maternal health, because it usually results from the mother's poor health and nutritional status during pregnancy. In Yemen, 32 percent of babies weigh less than 2.5 kilograms, the standard

definition for low birth weight. Yemen has the highest rate of low birth weight in the region, as well as the highest female illiteracy and the highest maternal mortality.

In about one-half of MENA countries, less than 10 percent of babies are born with low birth weight. In Algeria and Lebanon, 6 percent of babies are born with low birth weight—the lowest rate in the region, and similar to Canada's rate.

Maternal Mortality Worldwide and in MENA

Worldwide, more than one-half million girls and women die of pregnancy-related causes each year. Complications of pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in most developing countries.

The developing world accounts for 99 percent of all maternal deaths. These deaths are largely avoidable. In richer countries, skilled birth attendants and emergency obstetric care save all but a few women who suffer complications of pregnancy or childbirth.

According to international research, teenage girls are twice as likely as women over age 20 to die of complications of pregnancy and childbirth. The youngest mothers face the greatest risks: Girls ages 10 to 14 are five times as likely as women ages 20 to 24 to die of these complications.

The *2002 Arab Human Development Report* calls maternal mortality a "key health challenge" and points out that the region's level of maternal mortality is much higher than Latin America and the Caribbean's or East Asia's (see Table 1).

- According to the World Health Organization, only Kuwait has reduced maternal deaths to a level considered low by international standards (a maternal mortality ratio of not more than 5 maternal deaths per 100,000 live births).
- Maternal mortality is relatively low in Qatar and Saudi Arabia, yet it is higher than in countries outside the region with similar per capita incomes.
- Women in Yemen have the greatest chance of dying from pregnancy-related causes, a 1-in-39 lifetime risk. In Yemen, there are 430 maternal deaths per 100,000 live births—nearly 4,000 deaths annually.

Data on maternal mortality must be interpreted cautiously because of the difficulty in collecting such data. It can be collected through registrations of deaths, surveys of households and hospitals, or a combination of these two methods. Each method has limitations. Not all countries list maternal causes as a cause of death in their official death records. Furthermore, many women

die outside the health system, and their deaths may go unrecorded or be misclassified. Conducting surveys to collect data on causes of maternal deaths is expensive because the surveys require a large sample size. As a result, the poorest countries most in need of reliable data do not have them.

Egypt is one of the few developing countries that conducted two nationally representative surveys measuring the level and causes of maternal mortality. The surveys were conducted in 1992/93 and 2000, with funding from the United States Agency for International Development (USAID) and technical support from international organizations. The surveys covered a sample of deaths of women of childbearing age that occurred in all governorates during that year.

The 1992/93 survey identified both unavoidable and avoidable factors contributing to maternal deaths, including low-quality obstetric care. In response, the Ministry of Health and Population, in collaboration with international partners such as the USAID-funded Healthy Mother/Healthy Child

Table 1

Maternal Mortality Around the World, 2005

	Maternal deaths per 100,000 live births	Lifetime risk of maternal death
World	**400**	**1 in 92**
Industrialized countries	8	1 in 8,000
Developing countries	450	1 in 76
Sub-Saharan Africa	920	1 in 22
South Asia	500	1 in 59
Middle East & North Africa	**210**	**1 in 140**
Latin America & Caribbean	130	1 in 280
East Asia & Pacific	150	1 in 350
Central & Eastern Europe	46	1 in 1,300

NOTES: The regions are those used by UNICEF (United Nations Children's Fund). Country data are shown in Appendix 1. To allow for comparisons among countries, pregnancy-related deaths are usually expressed in two ways: 1) the maternal mortality ratio, a ratio of deaths per 100,000 live births; and 2) lifetime chance of dying due to pregnancy-related causes that reflects a country or region's maternal mortality ratio as well as its fertility rate. The risk is greater for women with high fertility (numbers of births) because they are pregnant more often and therefore face the risk of death, however small, more often than women with lower fertility.

SOURCE: World Health Organization, *Maternal Mortality in 2005: Estimates Developed by WHO, UNICEF, UNFPA, and the World Bank*: appendix 8.

program, implemented a series of activities to improve quality of care, with a special focus on Upper Egypt and rural hospitals. As a result, maternal mortality appears to have declined significantly in the country, from 174 maternal deaths per 100,000 live births in 1992/93 to 84 maternal deaths per 100,000 live births in 2000.

Major Causes of Maternal Death and Disability

One purpose of the 1992/93 and 2000 maternal mortality surveys was to understand what avoidable factors were contributing to maternal deaths. Researchers collected data by examining the medical records of women who had died from maternal causes, talking to family members about the case, and assessing in detail what led to those deaths. These cases illustrate the complex set of issues that play a role in maternal deaths.

The 2000 survey revealed the following:

- Only around one-fifth of maternal deaths were considered unavoidable.
- About one-half of maternal deaths occurred during delivery or within hours after delivery.
- About three-fourths of maternal deaths were due to direct causes—conditions related to pregnancy. This finding is consistent with studies in other developing countries.
- Severe bleeding (hemorrhage) was the most frequent cause of death, followed by pregnancy-induced hypertension (dangerously high blood pressure), ruptured uterus, infection, and pulmonary embolism.
- Among indirect causes—conditions aggravated by pregnancy—cardiovascular disease was the most common (see Table 2).

Some complications of childbirth, such as severe bleeding, lead to death within hours. Other causes, such as infections and obstructed labor, can kill women after days of suffering. For women who survive the complications, they may suffer disabilities such as severe anemia, damage to the reproductive organs or nervous system, chronic pain, infertility, or long-term conditions such as obstetric fistula—a hole between the vagina and the rectum or bladder that causes constant leaking of urine and feces.

Interventions to Save Women's Lives

Maternal deaths are largely avoidable. Three main pathways can help reduce maternal deaths: planning pregnancy, preventing complications of pregnancy and childbirth, and preventing death from complications. These pathways rely on a well-functioning health system that provides family planning, antenatal care, safe delivery services, and postnatal care to all women.

Planning pregnancy. Research has shown that women face a greater risk of pregnancy-related death or disability if they have too many pregnancies, have pregnancies spaced too closely together, become pregnant when they are too young or too old, and do not wish to have a child. Women can better plan their pregnancies if they have access to contraceptive information and services (see section on family planning, page 15).

Routine antenatal care. Access to good quality care during pregnancy and a good referral system can improve maternal health. The World Health Organization recommends that pregnant women have at least four antenatal visits, starting in the first three months of pregnancy. The proportion of women in the MENA region having the four recommended visits ranges from one in 10 in Yemen to nine in 10 in Jordan.

Table 2

Main Causes of Maternal Death, Egypt, 2000

Single main cause of maternal death	% of maternal deaths
Direct causes	**77**
Hemorrhage (severe bleeding)	30
Pregnancy-induced hypertension	13
Ruptured uterus	8
Infection (genital sepsis)	6
Pulmonary embolism	6
Anesthesia	5
Caesarean section	4
Unsafe abortion	3
Other direct cause	2
Indirect causes	**20**
Cardiovascular disease	10
Infectious and parasitic diseases	3
Digestive disorders	3
Other indirect causes	4
Unknown causes	**3**

SOURCE: Egypt Ministry of Health and Population, *National Maternal Mortality Study, 2000*: table 7.

Antenatal visits allow for screening and treatment of sexually transmitted infections, malaria, hookworm, and anemia; immunization against tetanus; and detection and treatment of pregnancy-induced hypertension (high blood pressure). These visits also give health providers the chance to educate women about diet and healthy behaviors and to give women nutritional supplements to combat anemia and other nutrient deficiencies. Many pregnancy-related problems are caused by a lack of vital nutrients—especially iron, iodine, folate, and vitamin A.

While nearly all women in industrialized countries receive antenatal care, many pregnant women in MENA countries seek antenatal care only when they have a complaint. According to a study in Morocco, 50 percent of women who did not seek antenatal care during their pregnancies felt that they did not need it because they had no problems.

The relatively low rates of antenatal care in the region are due in part to a lack of public awareness about the importance of medical care during pregnancy. The widespread ignorance about anemia provides a good example. Although anemia is very common throughout the MENA region (regardless of income), few anemic women recognize the symptoms, such as fatigue, and seek treatment. Pregnant women who are anemic have less tolerance for blood loss and less resistance to infection, putting them at higher risk of illness and death.

Skilled assistance at delivery. The most effective way to prevent maternal deaths is to have deliveries attended by skilled personnel who can recognize and treat or refer any complications that arise. Skilled personnel include health professionals such as physicians, nurses, and midwives, but do not include traditional birth attendants who have not been trained to perform emergency life-saving medical interventions.

To address complications, skilled attendants need access to medical equipment and facilities for emergency care. Emergency obstetric care includes the ability to perform surgery (for Caesarean deliveries), anesthesia, and blood transfusions; management of problems such as anemia or hypertension; and special care for at-risk newborns.

Providing such care requires medically trained staff, a good logistics system for medical supplies, a functioning referral system, and good supervision. Wherever possible, families and communities should have specific plans for transporting women who suffer from serious complications to facilities that can provide essential care.

In the higher-income countries of the region, the vast majority of deliveries take place in health facilities with skilled attendants. In countries where skilled attendance at birth is not universal, the challenge is to close the gap between rural and urban areas (see Figure 8). In Morocco, for example,

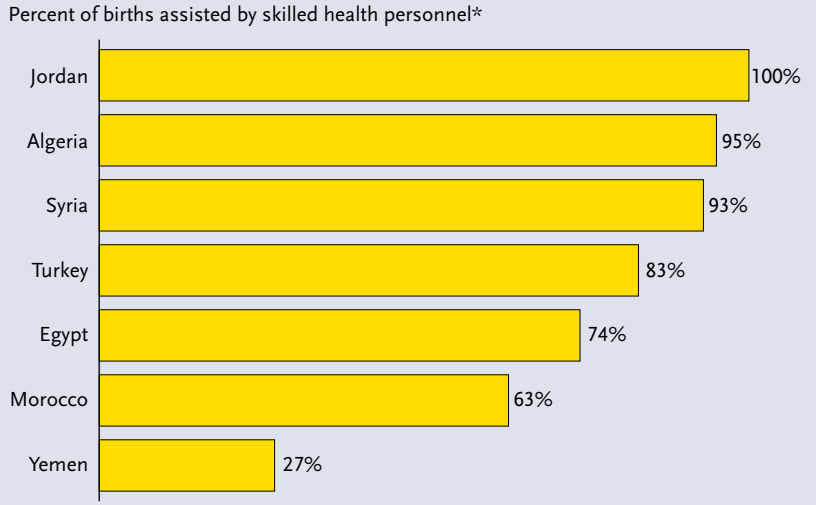
40 percent of rural deliveries versus 85 percent of urban deliveries are attended by skilled birth attendants.

Postnatal care. Rates of postnatal care in MENA are even lower than the rates of antenatal care. Health services often neglect care for women during the postnatal period (up to 42 days after birth, also known as the postpartum period), even though women and their newborns face significant health risks during this period.

Postnatal care is important for identifying and treating childbirth-related injuries and illness, promoting breastfeeding, and counseling couples about appropriate family planning methods for spacing or limiting births. Home visits by health personnel can help reach women who have difficulty leaving the home because of health complications or cultural beliefs that women should stay home following childbirth. Most practitioners in the MENA region do not offer home visits, however.

Figure 8

Skilled Attendance at Childbirth in the MENA Region



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SOURCE: UNICEF, *The State of the World's Children 2008.*

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6 Abortion

KEY POINTS

- **Worldwide, about one in five pregnancies ends in abortion.**
- **Abortions performed in unsafe conditions remain a significant cause of maternal deaths globally.**
- **Restrictive abortion laws do not eliminate abortions but make them less safe.**
- **International consensus calls for providing women with health care for complications of unsafe abortion.**

The term "abortion" generally refers to induced abortion—a procedure intended to end a pregnancy, although technically it includes spontaneous abortion (miscarriage) as well. Induced abortion has traditionally been synonymous with surgical abortion procedures until recently, when medical abortion became available (see Box 3, page 32).

Ideally, unwanted pregnancies and abortions would be rare or nonexistent. In reality, many women experience unintended pregnancies and resort to abortion—making abortion a public health issue everywhere in the world. It is even more of a concern in countries where access to safe abortion is limited, because unsafe abortion accounts for 13 percent of maternal deaths worldwide.

In countries where laws restrict women from seeking abortion and doctors from providing them, women may self-induce abortions or obtain clandestine abortions that are usually unsafe. WHO defines unsafe abortion as "a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both."

Induced abortion is safe when performed by qualified persons using correct techniques and in sanitary conditions. In the United States, for example, where abortion is legal, the death rate from induced abortion is 0.6 per 100,000 procedures, making it as safe as an injection of penicillin. Spontaneous abortion (miscarriage) is rarely fatal and seldom presents complications.

Incidence of Abortion

According to a WHO study on unsafe abortion published in 2007, about one in five pregnancies (42 million out of 210 million) each year are voluntarily aborted. About half of abortions are performed safely (22 million) and half (20 million) are unsafe. Among unsafe abortions, about 5 million, or one in four, requires medical care for severe complications.

Data on abortion are not easily collected. Very few organizations are able or willing to undertake the effort to collect such data, and health providers and the women themselves may not report the abortions, particularly where the practice is restricted.

WHO estimates that around 1.5 million unsafe abortions occurred in the MENA region in 2003, accounting for 11 percent of maternal deaths. For every woman who dies, many more suffer from long-term complications such as reproductive tract infections and infertility.

Box 3

Medical Abortion: A New Alternative for Women

Medical abortion (also referred to as medication abortion) is the most important revolution in sexual and reproductive health since the introduction of oral contraceptive pills in 1960s. It is revolutionary because health care providers do not need to perform an invasive procedure. For women, it provides a sense of privacy because they can take the pills in their own homes.

Women are first given a drug called mifepristone, which is taken orally, followed one-to-two days later by a prostaglandin, misoprostol or gemeprost, inserted in the vagina. This combination results in complete abortion in more than 96 percent of cases.

Medical abortion is increasingly available in Tunisia and Turkey, where abortion services are legally available. In countries where abortion is restricted, medical abortion raises some uncertainty about the interpretation of existing laws and regulations, since these laws were generally formulated on the basis of surgical abortion procedures.

As with other abortion procedures, however, restrictive laws can make medical abortion unsafe and expensive. Women may resort to buying the drug on the black market, where some of the drugs may be counterfeit. Governments may choose to regulate the practice of medical abortion separately from existing abortion laws. They can stipulate standards for such abortions through legislation or through health system regulations.

SOURCES: World Health Organization, *Frequently Asked Clinical Questions About Medical Abortions*; and Beverly Winikoff, "Medical Abortion New Opportunities for Meeting Women's Needs," presentation at the Global Safe Abortion Conference, London, Oct. 23-24, 2007.

- A 2003 Demographic and Health Survey in Turkey (where abortion services are available on demand) showed that about one in 10 pregnancies ends in induced abortion.
- A national survey conducted by Damascus University and the Ministry of Health in Syria (where abortion is restricted) asked married women about abortion: Nearly 4 percent said that they had at least one induced abortion in their lifetime. About half of these women said that they would be willing to repeat it if they needed to, although they acknowledged that using family planning is important to prevent unintended pregnancies in the first place.

Abortion Procedures

Abortion is safest when performed early in pregnancy. Safe methods of abortion used during the first trimester (12 weeks) of pregnancy include vacuum aspiration, dilation and curettage, and medical abortion. (The length of a pregnancy is measured from the first day of a woman's last menstrual period.)

- Vacuum aspiration removes the contents of the uterus by applying suction through a tube inserted into the uterus. Either an electric pump or manual aspirator is used to suction the uterine contents. Both procedures are usually performed on an outpatient basis.
- Medical (or medication) abortion uses one or more drugs, most commonly mifepristone (known as RU486) and misoprostol (also known as Cytotec), to expel the contents of the uterus. The procedure usually requires at least two outpatient visits and the abortion is almost always complete within a week. In less than 5 percent of cases where abortion is incomplete, vacuum aspiration or dilation and curettage is required.
- Dilation and curettage (D&C) uses mechanical dilators to open the cervix and metal instruments, called curettes, to scrape the uterine walls. The procedure is usually performed under heavy sedation or general anesthesia and has a higher risk of complications such as bleeding, infection, and perforation. WHO advises that this procedure be used only where vacuum aspiration or medical abortion are unavailable.

In some countries, such as Bangladesh, women within a few weeks of a missed menstrual period can undergo a procedure called menstrual regulation, which uses vacuum aspiration or medication to induce menstruation, but does not test for a pregnancy.

For pregnancies of more than 12 completed weeks since the women's last menstrual period, the two most widely used methods are dilation and evacuation (D&E) and medical abortion.

- Dilation and evacuation (D&E) involves dilating the cervix and using a combination of suction and instruments to remove the contents of the uterus.
- Medical abortion uses one or more drugs, usually in multiple doses, to cause uterine contractions and end the pregnancy.

Legal Status of Abortion

Abortion laws around the world span a wide range from very restricted (prohibited except to save a woman's life) to unrestricted. Within that range, countries may specify a number of conditions under which a woman may have an abortion, for example, for health or socioeconomic reasons.

Laws also may:

- Limit the time period of the pregnancy during which an abortion can be performed.
- Require the authorization of several doctors.
- Require the husband's or parent's approval.
- Specify the types of medical facilities where abortions can be performed and health care personnel who can perform them.
- Require counseling before an abortion can be performed.

Requirements such as these may be intended to protect women and raise the quality of care, but they may also serve as barriers to accessing safe abortion. In countries where abortion is legal, abortions are more likely to be performed by trained health professionals, be more available, and cost less. In these countries, maternal deaths and injuries tend to be lower than in countries with more restrictive policies.

The majority of women in MENA (about 80 percent) live in countries where abortion laws are restrictive:

- 55 percent live in countries where abortion is permitted only to save the mother's life.
- 24 percent live in countries where abortion is permitted to preserve the woman's physical or mental health.
- Twenty-one percent of all women in MENA live in Tunisia and Turkey, the only countries in the region (along with Israel) where abortion is allowed on request during the first trimester of a pregnancy (see Table 3).

Written laws or policies on abortion do not necessarily reflect what is actually practiced in a given location, because women, families, and health care providers may lack knowledge of the laws or interpret them differently. Physicians may lack knowledge of the law because it is unclear or because government guidelines are not available on how to interpret restrictive or

Table 3

Legal Status of Abortion in MENA Countries

Prohibited except to save the life of the woman	Permitted to preserve the woman's physical or mental health	Without restriction as to reason
Egypt, Iran, Iraq, Lebanon, Libya, Oman, Syria, UAE, Yemen	Algeria, Bahrain, Jordan, Kuwait, Morocco, Qatar, Saudi Arabia	Tunisia, Turkey

SOURCE: Center for Reproductive Rights, *The World's Abortion Laws 2007 Poster*.

vague laws. Even in cases when abortion is legally permitted, women may be unable to get a safe abortion due to:

- Lack of trained providers.
- Lack of adequately equipped medical facilities.
- Providers unwilling to perform abortions because of extensive procedural requirements, personal beliefs, or social stigma.
- Lack of resources to pay for a safe abortion.
- Social stigma or family disapproval.

Post-Abortion Care

Women who seek medical treatment after an unsafe abortion may require extended hospital stays, ranging from several days to several weeks. This consumes hospital resources, including personnel time, bed space, medications, and blood supply. A study in Egypt—where abortion is highly restricted—found that treatment of complications of unsafe abortion consumed a large share of resources in a nationally representative sample of hospitals. Almost one in five obstetrical and gynecological hospital admissions were for post-abortion care, and almost 65 percent of those abortions were believed to have been induced.

International health organizations generally recommend post-abortion care to include:

- Emergency treatment for complications of induced abortion or miscarriage.
- Counseling to identify and respond to women's emotional and physical health needs and other concerns.
- Family planning services to help women prevent an unintended pregnancy.
- Management of sexually transmitted infections.
- Reproductive or other health services provided on site or through referrals to other facilities.

The 1994 International Conference on Population and Development, in its consensus Programme of Action, called on all governments to provide post-abortion care regardless of the legal status of abortion in their countries. Now, many countries in the MENA region, including Algeria, Egypt, Iran, Morocco, and Syria, offer post-abortion care as part of government-provided health care services.

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7 Sexually Transmitted Infections and HIV/AIDS

KEY POINTS

- **Millions of people in MENA, both men and women, suffer from sexually transmitted infections, yet only a small fraction are treated.**
- **Sexual contact is the main mode of HIV transmission in MENA.**
- **The low number of HIV/AIDS cases in MENA does not mean the risk is low.**

The following sexually transmitted infections (STIs) are known to be common worldwide, although the prevalence of each type of infection in the MENA region is unknown because data are scarce. Recognizing, diagnosing, and treating STIs is critical, however, because they can have serious health consequences for women, men, and in some cases, their children.

- **Chlamydia**, if left untreated, causes pelvic inflammatory disease, which can lead to ectopic pregnancy (a pregnancy outside the womb) and infertility.
- **Genital herpes** is a highly contagious infection that passes easily between sexual partners and can also be passed from a mother to her baby.
- **Gonorrhea** often does not have symptoms in women and can lead to pelvic inflammatory disease and infertility if left untreated.
- **Human papillomavirus (HPV)** is one of the most common STIs and has dozens of sub-types. Specific types of this virus lead to cervical cancer if left untreated (see section on cervical cancer, page 55).
- **Syphilis**, if left untreated, can damage the nervous system, heart, or brain, and can ultimately cause death. In pregnant women, the infection greatly increases the risk of stillbirth and birth defects, making early testing during pregnancy critical.
- **Trichomoniasis** is a common STI caused by a parasite that affects both women and men. Symptoms are more common in women, for whom it is also most curable. Failure to cure it can increase the risk of HIV transmission and low birth weight in babies.

Very few studies on STIs in the MENA region have been conducted, making it impossible to compare rates among countries or track trends in individual countries. The limited available data suggest that the number of people in MENA suffering from STIs is higher than expected. In Morocco, for example, 600,000 sexually transmitted infections are estimated to occur each year.

Box 4

Facts About HIV/AIDS

AIDS –acquired immunodeficiency syndrome—is caused by the human immunodeficiency virus (HIV). Once infected with HIV, a person remains HIV positive for life. An infected person can have HIV for many years, even a decade or more, before becoming ill and dying from the disease. Without treatment, the virus weakens the body's immune system over time and leads to a variety of AIDS-related illnesses. The most common of these is tuberculosis, the leading cause of death for people infected with HIV.

HIV is spread through blood, semen, vaginal secretions, breast milk, and contaminated syringes and needles. The most common mode of transmission is through unprotected sexual intercourse with an HIV-infected partner. HIV can also be transmitted from an HIV-positive mother to her child during childbirth. It cannot be transmitted through casual physical contact, sneezing, coughing, or by mosquitoes or other insects.

Currently, there is no cure for HIV/AIDS. The scientific challenge of producing an AIDS vaccine has so far eluded scientists. However, antiretroviral therapy (ART) can help keep the virus from replicating in the body and reduce HIV-related illnesses, allowing patients to live longer, higher-quality lives. Still, outside of North America, the vast majority of people living with HIV are not receiving ART because of its high cost and the challenge of delivering and administering it effectively.

In 2008, an estimated 33 million people are living with HIV/AIDS worldwide, of which two-thirds are in sub-Saharan Africa. In some sub-Saharan African countries, such as Botswana and Swaziland, one-fourth or more of women ages 15 to 49 are infected. The AIDS epidemic has resulted in a large number of orphans (children who have lost one or both parents) in hard-hit countries. Moreover, around 2.5 million children under age 15 are living with HIV.

SOURCES: Joint United Nations Programme on HIV/AIDS (UNAIDS), *2007 AIDS Epidemic Update*; International Labour Organization (ILO), *An ILO Code of Practice on HIV/AIDS and the World of Work* (2001); and Peter K. Lamptey et al., "HIV/AIDS Evolving Impact on Global Health," in *Dawning Answers: How the HIV/AIDS Epidemic Has Strengthened Public Health*, ed. Ron Valdiserri (2002).

Reproductive Tract Infections

Reproductive tract infections include sexually transmitted infections, infections caused by an overgrowth of natural organisms in the genital tract, and infections acquired during improperly performed medical procedures, including unsafe abortion. The infections can have fatal consequences (as in the case of cervical cancer, which can result from HPV infection (see section on cervical cancer, page 55). Reproductive tract infections can also have long-term health impacts such as infertility, irreversible damage to fetuses or infants, and increased risk of HIV transmission. They can cause persistent pain and discharge that reduce the quality of life and productivity of those affected.

Of the millions of reproductive tract infections that occur in the region, only a small fraction are recognized by the affected individual, or diagnosed and treated. A pioneering study in rural Egypt revealed that more than one-half of the women in the study had symptoms of at least one reproductive tract infection.

HIV/AIDS

HIV/AIDS is a disease that spreads silently (see Box 4). The number of people living with HIV/AIDS in MENA increased from 87,000 in 2003 to 152,000 in 2005, according to UN estimates. While these numbers appear small compared with those in other parts of the world, the number of infections is increasing in every single country in the region. More important, the low number of HIV infections does not mean the risk of expansion is low.

MENA's relatively low HIV-prevalence rate—estimated to be 0.1 percent to 0.2 percent of adults ages 15 to 49 (see Table 4, page 40)—can be attributed in part to the region's conservative social and cultural values, which discourage premarital sex and encourage faithfulness within marriage. Also, male circumcision is nearly universal. Research has shown that circumcision is associated with lower rates of HIV infection. A study in South Africa, for example, found that circumcised men were 60 percent less likely than uncircumcised men to contract the virus from an HIV-infected partner.

HIV/AIDS in MENA appears to be concentrated among sex workers, men who have sex with men, and injecting drug users. But HIV infections can spread from these high-risk groups to the general population when, for example, husbands visit sex workers or injecting drug users share contaminated needles and later have unprotected sex with their wives. An estimated 90 percent of people who are infected in the MENA region are not aware that they have HIV.

Married women and young people are among the most vulnerable for HIV, because married women assume their husbands are faithful, and young people are assumed to abstain from sex before marriage. These assumptions are not true for everyone. Regardless of the mode of infection, dealing with the social implications of HIV infection is much harder for women, because there is widespread discrimination against women and a culture that usually blames women for problems.

Warning Signs

Although the number of people living with HIV/AIDS in MENA is believed to be low, some warning signs point toward the potential for the expansion of HIV:

Tuberculosis (TB) and HIV/AIDS are two diseases that often occur in the same patient. Globally, TB is increasing because of the HIV/AIDS epidemic. The risk of TB is 50 percent higher among HIV cases and is the leading cause of death among people living with HIV/AIDS. In MENA, the levels of HIV infection among TB patients seem to be rising—reaching 3.3 percent in Yemen, 2.0 percent in Oman, and 1.8 percent in Iran.

Sexually transmitted infections are present but often untreated. For example, a study in Greater Cairo found that 36 percent of sex workers and 24 percent of men who have sex with men had curable sexually transmitted infections. In addition, 8 percent of women attending family planning clinics, 5 percent of drug users, and 4 percent of women attending antenatal clinics were found to have at least one sexually transmitted infection. Untreated infections such as syphilis and gonorrhea, in either men or women, can increase the risk of HIV transmission.

Table 4

Estimated Number of People Living With HIV/AIDS in Selected Countries in MENA

	Number of adults and children living with HIV/AIDS		Percent of adults (15–49) living with HIV/AIDS, 2005
	2003	2005	
Algeria	9,800	19,000	0.1
Egypt	4,300	5,300	0.1
Iran	37,000	66,000	0.2
Lebanon	1,600	2,900	0.1
Morocco	17,000	19,000	0.1
Tunisia	4,400	8,700	0.1

SOURCE: *UNAIDS, 2006 Report on the Global AIDS Epidemic*: annex 2.

Injecting drug use is the main mode of HIV transmission in Iran and Libya, and all MENA countries have reported HIV transmission though sharing of contaminated needles among injecting drug users. About one-half of injecting drug users who were admitted for detoxification in two hospitals in Tripoli, Libya, between 2000 and 2003 were HIV positive. A study of injecting drug users from a drug treatment center in Iran revealed that 41 percent of those who were sexually active had multiple partners; 50 percent had never used a condom; and 39 percent reported having exchanged money for sex. The study also showed overlapping behavior among injecting drug use, sex work, and men having sex with men.

HIV infection in MENA is mostly concentrated among people with high-risk behaviors—drug users, commercial sex workers, and men who have sex with men. But in Iran, the concentrated HIV epidemic among injecting drug users appears to be spreading to the general population through the partners and wives of drug users.

Stigma: A Major Barrier to Combating HIV/AIDS

Denial, stigma, and discrimination are major impediments to combating HIV/AIDS. Because of their conservative culture, people in MENA commonly deny the existence of HIV/AIDS in their country. But such attitudes, particularly among community leaders and policymakers, can be dangerous and can fuel an epidemic.

Stigma and discrimination against those who are infected force those at highest risk of contracting the disease—sex workers, injecting drug users, and men who have sex with men—to conceal their lifestyles. To avoid discrimination and becoming socially outcast, these people do not take advantage of counseling and testing, and they may not disclose their HIV status if they have a positive test result. Prevention programs, in turn, have difficulty finding and educating these individuals on how to prevent infecting others.

Civil societies and governments in the MENA region have a critical opportunity to act now, before the relatively low levels of HIV/AIDS infections spread further. Experience around the world shows that societies cope best with HIV and prevent its spread when governments are open about the issue, vigorously provide information and services to stem the spread of the disease, and collaborate with organizations that represent the affected communities. The Ugandan and Thai governments, for example, have successfully lowered HIV-infection rates in their countries by acting early and aggressively.

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8 Adolescents and Young Adults

KEY POINTS

- **Nearly one in five people living in the MENA region is between the ages of 15 and 24—the age at which most people initiate sexual activity.**
- **The primary risks to young people's health are not medical but behavioral, such as smoking, alcohol and illicit drug use, and unprotected sexual intercourse.**
- **Globally, half of new HIV infections are among young people ages 15 to 24.**

Around 100 million young people ages 15 to 24 are living in the MENA region today, making it the largest cohort in the region's history. The extent to which this large group of young people will become healthy and productive members of their societies depends on how well governments and civil societies invest in social, economic, and political institutions that meet the current needs of young people.

Changing Needs of Young People

Young people's lives today differ dramatically from those of their parents and grandparents, and consequently their needs are different. In the past, the transition from childhood to adulthood occurred abruptly through early marriage and early childbearing. But today, both young men and women spend more years in school and marry later. With puberty also starting earlier, largely because of better nutrition, the interval between childhood and adulthood has lengthened.

During this extended period of adolescence and young adulthood, young people may have sexual relations before marriage, putting them at risk for unintended pregnancies and sexually transmitted infections. Young married women also risk contracting these infections, even more so because they often marry older men who have had prior sexual relationships and who may have more than one partner after marriage.

The risks associated with sexual relationships, both married and unmarried, are heightened by young people's lack of access to information and services related to sexual and reproductive health. Programs that provide such information and services would benefit young people whether they are sexually active now or not—preparing them to make more informed decisions about marriage, sexual relationships, and childbearing.

Young people's experiences related to marriage and childbearing vary greatly across the region (see Figure 9). Yet they share a need for more and better information about sexual and reproductive health.

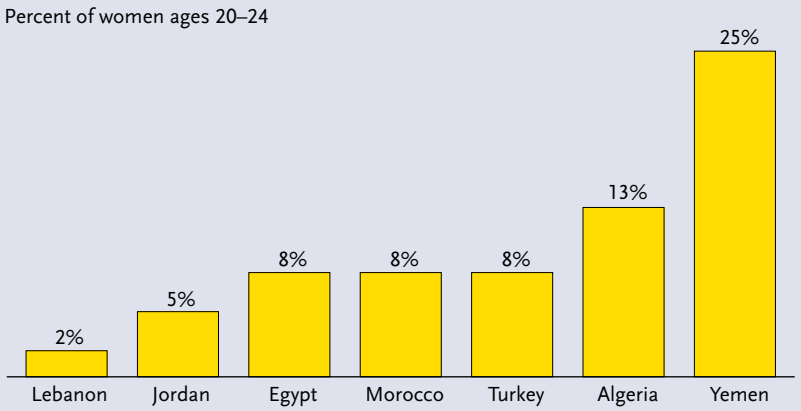
Sexually Transmitted Infections Among Young People

Studies show that the majority of young people in MENA have heard of HIV/AIDS (mainly through television), but fewer know how it is transmitted. Moreover, relatively few young people have heard about other sexually transmitted infections (STIs), even though the limited data available reveal that such infections are more common among young people than among other age groups.

- The 2005 Demographic and Health Survey in Egypt revealed that only 18 percent of married women ages 15 to 24 had heard of gonorrhea, syphilis, or chlamydia, all of which can be transmitted through sexual contact. However, 22 percent of these women reported having had abnormal genital discharge and genital sores and ulcers, which could be symptoms of STIs.

Figure 9

Young Women Giving Birth by Age 18



SOURCE: Donna Clifton, Toshiko Kaneda, and Lori Ashford, *Family Planning Worldwide 2008.*

- In a study conducted in Morocco, 40 percent of the STIs recorded were among young people ages 15 to 29, putting the estimated number of new STIs among this age group at 240,000 per year.
- A recent study of married women in Oman found that women under age 25 were twice as likely to have a sexually transmitted infection as women 25 and older.

Young people need to be informed about the signs and symptoms of STIs so they can seek treatment. If left untreated in women, some of the infections can result in infertility, which can be devastating because of the high value placed on childbearing. Untreated infections can also spread to others and increase the risk of HIV transmission.

Barriers to Informing Young People

The primary risks to adolescents' health are not medical but behavioral, such as cigarette smoking, alcohol and illicit drug use, early initiation of sexual activity, and low use of contraception. Thus, young people must have access to correct information to make informed choices that will greatly affect their future.

The MENA region is known for its strong family values and conservative and patriarchal culture, which, for the most part, benefit young people and protect their well-being. Some of the same norms, however, can become barriers to informing young people—particularly girls—about the health hazards of sexual relationships.

Cultural taboos are major obstacles to informed discussions about sexual and reproductive health issues, particularly with regard to young people. Premarital sexual relationships are forbidden, and talking about them or about sexuality in general is often considered taboo. The silence stems in part from the high value that society puts on a girl's virginity before marriage and the belief that talking openly about sexual and reproductive health might encourage unmarried youth to have premarital sex.

But reviews of sex education programs worldwide have concluded that sex education does not encourage early sexual activity, and can delay first intercourse and lead to more consistent contraceptive use and safer sex. Young people perceive more information to be beneficial. In a survey of university students in Gazvin, Iran, two-thirds of respondents said that they did not believe educating young people about unintended pregnancies and STIs would lead to sexual immorality (see Table 5, page 46).

Young people are generally reluctant to seek information about sexuality and reproduction from their parents, fearing their parents will assume they

are engaged in forbidden activities. Yet many parents are not well prepared to discuss sexuality with their children.

Anecdotal evidence suggests that some young people in MENA are resorting to unconventional marriages in order to sanction their sexual relationships. And because such marriages are generally kept secret from their families, these young people are less likely to seek sexual and reproductive health information and services (see section on marriage, page 7).

Opportunities to Inform Young People

Since the great majority of young people in MENA attend school, this is an ideal venue for reaching young people with sex education programs. Sex education curricula in MENA schools are rare, however, and where they do exist, the sections on sexual and reproductive health are often skipped because teachers are unprepared or embarrassed to teach them.

Table 5

Attitudes Toward Reproductive Health Issues Among University Students in Gazvin, Iran, 2001

Selected questions	Percent distribution of respondents		
	Agree	Disagree	No Opinion
Best way to prevent STIs and unintended pregnancies among youth is by practicing abstinence until marriage	58	24	18
Since they are not sexually active, singles do not need to receive reproductive health education	14	78	8
Educational materials on preventing pregnancies and STIs should be available at places where youth are gathered	76	11	13
Educating youth about how to prevent pregnancies and STIs leads to sexual immorality	20	68	12

NOTE: According to the source below, a total of 1,111 students participated in the survey: 654 female students and 457 male students, with an average age of 21.4 years and 22.7 years, respectively. Only 187 of the respondents were married.

SOURCE: M. Simbar, F. Ramezani-Tehrani, and Z. Hashemi, "The Needs of Reproductive Health of the University Students," *The Journal of Gazvin University of Medical Sciences* 28, Autumn Supplement 2003. (In Persian)

Across the region, high schools and universities are beginning to take on extracurricula activities providing HIV/AIDS education. Such activities can fill the gaps in educational systems on sexual and reproductive health matters. Parallel programs educating parents are helpful in fostering intergenerational communication.

Iran and Tunisia have taken pioneering steps in reaching out to young people to address their needs, through open discussions about adolescent sexual and reproductive health. Such discussions are less common throughout the region, however. Thus, the media play a key role in educating young people about sexual and reproductive health through their wide reach and ability to break taboos and misconceptions.

In many countries, young people have taken advantage of new communications technologies, including the Internet and social networks through mobile telephones, to seek health information. Another innovation, the telephone hotline, has been used successfully in Egypt and Oman to provide HIV/AIDS information to anonymous callers.

"ABC" programs that advocate Abstinence (as the first choice for young people), Being faithful (to your spouse or partner), and using Condoms (for those who are sexually active) have had some success in combating HIV/AIDS in other countries and can be adapted to the cultural norms of the region. However, the approach should be used in its entirety and should not stop at abstinence, as often happens in programs in the MENA region.

Furthermore, the ABC approach does not protect young married women whose husbands are not monogamous or are already infected when they marry. For this reason, premarital counseling is important to ensure that newly married men and women understand the risks of HIV and other sexually transmitted infections and how to protect themselves. In Iran, premarital counseling is mandatory for prospective brides and grooms, and promotes condom use for family planning and prevention of sexually transmitted infections, including HIV.

At the UN General Assembly's AIDS Review in 2006, nongovernmental organizations representing youth developed a Youth Message demanding that "HIV/AIDS be understood not as a moral and/or religious issue, but as a health issue exacerbated by social, cultural, political, and economic concerns." Health experts also generally agree that the "shame and blame" approach focusing on immorality as a cause of disease is not effective. Rather, the most effective policies and programs focus on protecting young people's health through education, skill building, health services, and supportive social networks.

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9 Female Genital Cutting

KEY POINTS

- **Female genital cutting is a cultural practice that is not sanctioned by any religion but has its roots in discrimination against women.**
- **It is both a reproductive health and a human rights concern.**
- **It is a community practice and consequently requires community actions for it to be abandoned.**

Female genital cutting consists of the removal of part or all of the female genitalia—a procedure that has no medical benefits but poses health risks for girls who undergo the procedure. It is a cultural practice that is not sanctioned by any religion but has its roots in gender discrimination.

According to the World Health Organization, more than 100 million women and girls in the world today have undergone some form of genital cutting, usually between ages 4 and 14.

- The great majority of girls who undergo the cutting live in 27 countries in Africa, and Yemen in the Arabian Peninsula.
- The prevalence of the practice ranges from 2 percent of married women (ages 15 to 49) in Niger and 5 percent in Ghana to 96 percent in Guinea and Egypt and 98 percent in Djibouti.
- About 3 million African girls and women are cut each year, with nearly half of them living in two countries: Egypt and Ethiopia.

Although nearly universal in Egypt, female genital cutting is unheard of in most other parts of the MENA region. Yemen is the only other MENA country with a substantial number of girls and women (23 percent) affected. In Yemen, it is practiced among communities of the Red Sea Coast.

A Human Rights Violation

The United Nations Children Fund (UNICEF) calls female genital cutting "one of the most persistent, pervasive and silently endured human rights violations." The 1989 Convention on the Rights of the Child identifies the cutting as both a violent and harmful traditional practice that compromises a child's right to the highest attainable standard of health.

A World Fit for Children, the report of the 2002 UN General Assembly Special Session for Children, explicitly calls for an end to "harmful traditional or customary practices, such as early and forced marriage and female genital mutilation."

Female genital cutting had been condemned as a violation of human rights as early as 1952, when the UN Commission on Human Rights adopted a resolution on the issue. The 1979 Convention on the Elimination of All Forms of Discrimination Against Women also recognized the human rights implications of the practice.

These international human rights declarations promote the right of an individual to participate in cultural life, but they do not uphold traditional practices that violate individual rights. In other words, culture cannot be used to justify inflicting physical or psychological harm on an individual (see Box 5).

Health Consequences

Female genital cutting has both immediate and long-term effects for the health of girls and young women who undergo the procedure. The effects depend on the type or extent of cutting, the expertise of the practitioner, the hygienic conditions under which the cutting is performed, and the overall health condition of the girl or young woman undergoing the procedure.

Though complications are most severe (even fatal) with the most extensive forms of cutting, any form of cutting can lead to serious health problems. The immediate effects of cutting include pain, shock, hemorrhage, urinary retention, infection and abscesses, failure to heal, and injury to the adjacent tissues. Complications that have lifelong effects include cysts and abscesses, recurrent urinary tract infections, difficulties with menstruation, chronic pelvic infections, pain during sexual intercourse, complications during childbirth, and difficulties in future gynecological care.

Why Is It Still Practiced?

Understanding how and why female genital cutting persists is crucial for developing strategies aimed at abandoning the practice:

- Female genital cutting is a manifestation of gender inequality that is rooted in the social, economic, and political structures of communities.
- It is an old and deeply entrenched social convention in communities where it is practiced.
- Girls who undergo the cutting bring honor and respect for themselves and their families, while those who fail to go through with it bring shame and exclusion.

Mothers organizing the cutting of their daughters, even if they recognize the risk of physical and psychological harm, still believe they must do it to raise the girl properly and prepare her for adulthood and marriage. The obligation can be understood as a social convention to which parents conform to ensure family honor. From the parents' perspective, failing to conform would bring greater harm.

Box 5

Cutting, Circumcision, or Mutilation?

Female genital cutting, also known as female circumcision or female genital mutilation, involves the cutting or alteration of the female genitalia for social rather than medical reasons. The term "circumcision" (*khitan* in Arabic) is widely used in local communities that practice it. But "female circumcision" is not used among health experts because it implies an analogy with male circumcision, which creates confusion between two distinct practices. Male circumcision involves cutting the foreskin of the penis without harming the organ itself. In the case of girls and women, the cutting is more damaging and invasive, reflecting deep-rooted gender inequality that assigns them an inferior position in society. While male circumcision may be seen as affirming manhood, female circumcision is perceived as a way to curtail premarital sex and preserve virginity.

The term "female genital mutilation" is commonly used by women's rights and health advocates who wish to emphasize the damage caused by the procedure. The World Health Organization adopted this term in 1990 and since then, it has been widely used in UN documents.

But in the mid-1990s, many local practicing communities and activists (particularly in sub-Saharan Africa) drew attention to the risk of "demonizing" certain communities and decided that female genital cutting was a more neutral term and more conducive to discussions on abandoning the practice. There is ongoing debate about the appropriate term for the practice and some organizations have decided to use both cutting/mutilation simultaneously.

SOURCE: UNICEF, "Changing a Harmful Social Convention: Female Genital Mutilation/Cutting," *Innocenti Digest* (2007).

Can It Be Abandoned?

Female genital cutting has already been abandoned in some communities and can be ended elsewhere, but it will take time. Strategies for abandoning female genital cutting need to work through the same mechanisms that perpetuate the practice: *social pressure*. The decision to abandon the practice must come from communities themselves and must reflect a collective choice.

As with any self-enforcing social convention, the parents' decision about whether or not to cut their daughter is conditioned by the choice of others. Thus, a critical mass of people is needed to bring about change in a community, even if they are not a majority in the beginning. The social stigma associated with not cutting can be reduced when enough individuals are willing to abandon female genital cutting and they work to persuade others to follow suit.

Education, especially of women, can play an important role in creating the momentum in a community to abandon female genital cutting. Daughters of mothers who are more highly educated are less likely to have undergone the procedure than daughters of mothers with little or no education. But, education by itself is not sufficient to lead to abandoning female genital cutting, as some highly educated families still have positive attitudes toward the practice. About half of Egyptian mothers who have completed secondary education or higher report that they would have their daughter cut (see Figure 10).

In most countries where it is practiced, cutting has generally declined in each successive generation. But the decline has been lower in countries where the practice is more widespread, such as Egypt. In Egypt, the prevalence has remained high for decades due to strong cultural beliefs that make it more challenging to change the practice. The 2005 Demographic and Health Survey in Egypt showed that more than 60 percent of women believe that the husband prefers the wife to be circumcised. Furthermore, many women see circumcision as ensuring that a woman will remain faithful to her husband. Only 13 percent believe that circumcision makes childbirth difficult (see Figure 11). These attitudes are held across different age groups in the country but vary by women's education and their economic class and rural-urban residence.

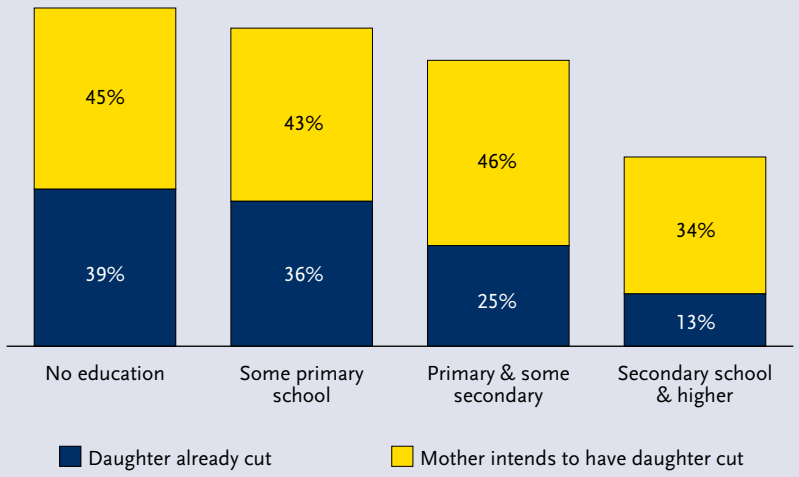
'Medicalization' of the Practice

In response to concerns about the adverse health effects of female genital cutting, many families in Egypt and elsewhere have turned to medical doctors, nurses, and midwives to perform the procedure. This is referred to as "medicalization" of the practice. Historically, traditional practitioners performed the cutting and continue to do so in most countries where it is practiced.

Parents who turn to medical staff believe that they are reducing physical and psychological harm by having the procedure done in hygienic conditions

Figure 10

Current and Expected Practice of Female Genital Cutting Before Age 18, by Mother's Education, Egypt 2005

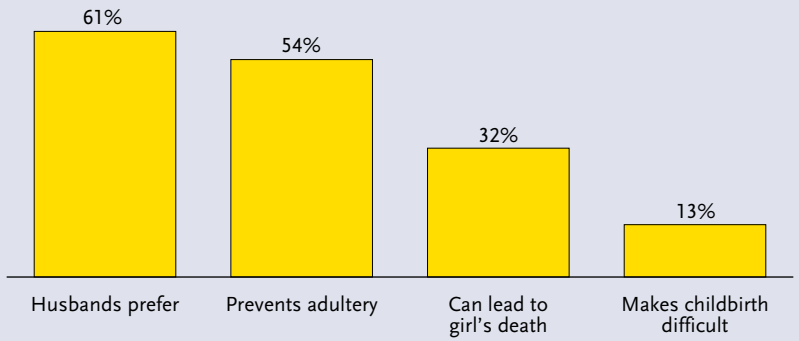


SOURCE: Egypt Demographic and Health Survey, 2005: table 16.3.

Figure 11

Beliefs About Female Circumcision in Egypt, 2005

Percent of ever-married women ages 15–49 who agree with various statements about female circumcision



SOURCE: Egypt Demographic and Health Survey, 2005: table 16.7.

and using anesthesia. The 2005 Demographic and Health Survey in Egypt shows that three-quarters of Egyptian girls under age 18 who had undergone the procedure had it done by medically trained personnel. The remaining girls had it done mostly by *dayas*, the traditional birth attendants.

Internationally, the medical profession has widely condemned the practice, and the World Health Organization has stated that female genital cutting should not be practiced by health professionals in any setting, including hospitals or other health facilities.

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10 Cervical Cancer

KEY POINTS

- **Cervical cancer is linked to sexually transmitted infections.**
- **Women living in MENA countries generally have a higher chance of dying due to cervical cancer than those living in more developed countries.**

Cervical cancer is unique among cancers of the reproductive system because it is linked to a specific cause—a sexually transmitted infection called the human papillomavirus (HPV). Cervical cancer has a major impact on the lives of women worldwide, particularly those in developing countries.

The disease results from the abnormal growth and division of cells at the opening of the uterus or womb—the area known as the cervix. The main underlying cause is HPV—a sexually transmitted virus that often has no symptoms. No cure exists for HPV infection, and while it remains stable or becomes undetectable in most cases, HPV can in some cases lead to precancerous conditions that progress to cancer over 10 to 20 years.

Thus, while a woman may contract HPV when she is young (for example, just after marrying a more sexually experienced man), she is unlikely to develop cervical cancer until she is 35 or older. If the disease is not detected and treated in its early stages, it is nearly always fatal.

Cervical Cancer Worldwide and in MENA

According to the latest global estimates, each year 493,000 new cases of cervical cancer are diagnosed, and 274,000 women die of the disease. More than 80 percent of new cases are in developing countries, where screening programs are not well established or effective. In the poorest countries, cervical cancer is the leading cause of cancer deaths among women.

The incidence (new cases annually) of cervical cancer varies widely in the MENA region. In many countries, such as Jordan and Qatar, rates are lower than those of more developed countries, which average 10 cases per 100,000 persons. However, incidence rates are higher in other MENA countries, though not as high as the developing country average (see Table 6, page 57).

While death rates from cervical cancer average 4 per 100,000 persons in more developed countries, mortality from this cancer is somewhat higher in MENA, most likely because the cancer is not detected and treated early and effectively.

Prevention and Treatment of Cervical Cancer

Prevention of HPV infection would sharply reduce cervical cancer rates. An HPV vaccine, now approved and available in some developed countries, would contribute greatly to preventing new cases of cervical cancer.

Traditionally, efforts to prevent cervical cancer have focused on screening women for abnormal cervical tissue, treating the condition before it advances, and providing appropriate follow-up care.

To date, screening has relied largely on the Pap smear, a test that has been used for decades to detect abnormal cell changes on the cervix. The test has achieved tremendous success in countries with advanced health systems that offer periodic, high-quality screening. But Pap smear screening programs are complex and costly to run and have failed to reach a significant proportion of women in places where health systems and infrastructure are weak.

Without access to viable screening programs, women from poor communities generally seek care only when they develop symptoms and the cancer is advanced and difficult to treat. Health care providers can do little to save women's lives at this stage, and drugs for easing pain may be unavailable.

Other barriers to screening and treatment include:

- A lack of awareness of cervical cancer and ways to prevent it.
- Difficulty getting to clinics and hospitals, particularly for multiple visits.
- High costs associated with laboratory tests and analysis.

Despite these barriers, cervical cancer can be prevented at low cost. Health care providers can use relatively simple technologies to screen women for precancerous conditions and treat abnormal tissue early. Screening is most critical for women in their 30s and 40s.

Among the most promising alternatives to the Pap smear are visual screening methods that require a simple vinegar or iodine solution and the eye of a trained health provider to spot abnormal tissue. Another alternative involves testing a woman for the presence of HPV on her cervix.

To be effective, these screening techniques must be linked with low-cost treatment procedures that require few follow-up visits. Relatively simple procedures can be used to either destroy or remove abnormal cervical tissue, depending on the size and severity of the affected area. The simplest and cheapest procedure, cryotherapy (freezing), uses extremely low temperatures to destroy abnormal tissue and can be done in a doctor's office.

The Alliance for Cervical Cancer Prevention has worked since 1999 to raise awareness about cervical cancer and introduce prevention and treatment strategies in low-resource settings. Their research has demonstrated that health programs can safely and effectively screen and treat women in just one or two clinic visits, using low-cost techniques.

Steps to prevent cervical cancer can form part of an overall strategy to improve women's health and promote equity in health care through primary

Table 6

Cervical Cancer in MENA: New Cases, Incidence Rates, and Death Rates, 2002

	Number of new cases	New cases per 100,000 population	Deaths per 100,000 population
Algeria	1,726	15.6	12.7
Bahrain	17	8.5	4.8
Egypt	2,713	9.7	7.9
Iran	1,118	4.4	2.4
Jordan	60	4.3	2.4
Lebanon	262	15.4	8.0
Kuwait	34	6.1	3.4
Morocco	1,550	13.2	10.7
Oman	46	6.9	3.9
Qatar	5	3.9	2.2
UAE	73	9.9	5.3
Tunisia	284	6.8	5.5
Turkey	1,364	9.9	5.3
Yemen	370	8.0	4.6
More developed countries	83,437	10.3	4.0
Less developed countries	409,404	19.1	11.2

NOTE: The incidence and death rates shown here are age-standardized rates. They are adjusted so that comparisons can be made among countries with different age structures (because the age of the population has a large impact on cancer rates).

SOURCE: International Agency for Research on Cancer, GLOBOCAN 2002 database.

health care. Practical tools for health providers are available from the Alliance for Cervical Cancer Prevention through its website and partner organizations.

Sources

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11 Sexual and Reproductive Health and Development Goals

KEY POINTS

- **Sexual and reproductive health is closely linked to social and economic development.**
- **Universal access to reproductive health care will contribute to meeting the Millennium Development Goals.**
- **Journalists play a crucial role in holding governments accountable for achieving their stated goals.**

Development experts increasingly see sexual and reproductive health care as vital for improving well-being and achieving other social and development goals. The use of modern contraceptives, for example, helps couples avoid unintended pregnancies and protects both mothers' and children's health. Other reproductive health care ensures healthy pregnancies and helps protect women and men against sexually transmitted infections and HIV/AIDS.

Three of the eight UN Millennium Development Goals (see Box 6, page 60) focus on health, each of which relates to aspects of sexual and reproductive health in one form or another:

- Goal 4: Reducing child mortality.
- Goal 5: Improving maternal health.
- Goal 6: Combating HIV/AIDS, malaria, and other diseases.

Reducing child mortality and improving maternal health require improved access to health services that provide modern contraceptives, antenatal and postnatal care, skilled birth attendance, and emergency obstetric care. Combating HIV/AIDS requires governments to actively prevent and treat HIV through information campaigns and services before an epidemic emerges in the general population.

In addition, improved sexual and reproductive health also contributes to reduced poverty (Goal 1). People who have smaller and healthier families tend to have higher productivity and savings and are better able to escape the vicious cycle of poverty, high fertility, and low education. Early marriage and childbearing is the main reason that young women in MENA leave school, a

situation closely related to Goal 3—empowering women and closing the gender gap in education. More-educated and empowered women are better able to negotiate relations and avoid contracting sexually transmitted diseases, including HIV/AIDS (Goal 6).

The Need for Action

Political will and leadership, followed by financial commitment, are fundamental to improving people's access to sexual and reproductive health services. Addressing young people's needs in the MENA region is particularly urgent because of their unprecedented numbers. Efforts to increase young people's access to health services have largely fallen short in the region because of cultural, social, and political constraints.

Parliamentarians and other political leaders are well positioned to promote age- and gender-sensitive health policies through legislation and regulation, and by acting as role models and spokespersons for reproductive health and rights. Policymakers' efforts are also crucial in supporting the development of a sustainable national health system that can meet the changing sexual and reproductive health needs of young people—both male and female, so that they can become productive and healthy adults.

The Role of the Media

The media plays a critical role in bringing sexual and reproductive health matters to the attention of people who can influence public health policies. These people include government staff and officials, leaders of nongovernmental organizations, including women's groups and religious groups, academics and health experts, and health advocates and other opinion leaders.

Many of these influential people read news reports and listen to broadcasts daily, and their opinions are shaped by them. Occasionally, one news

Box 6

The Millennium Development Goals

The Millennium Development Goals are a global development framework for improving people's lives and eradicating poverty. The goals resulted from the 2000 United Nations Millennium Summit, where leaders from 189 countries gathered and made a commitment to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. They also committed to creating a new global partnership for development.

The goals are wide-ranging and complementary. Each goal has quantifiable targets designed to help countries track their progress. Each target is also accompanied by measurable indicators that allow countries to identify areas in which they can improve. Most goals are meant to be achieved by 2015, and data from 1990 are used as benchmarks.

The eight goals and their selected targets are:

Goal 1. Eradicate extreme poverty and hunger

Halve, between 1990 and 2015, the proportion of people whose income is less than $1 a day, and halve the proportion of people living in hunger.

In MENA countries, income of less than $2 a day is a more meaningful measure of extreme poverty. The international definition of poverty may not conform to individual countries' definitions of poverty—the amount of money needed to sustain an acceptable standard of living. Each country is encouraged to use its national definition of poverty to monitor progress in reducing the number of people living below the poverty line.

Goal 2. Achieve universal primary education

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

Eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015.

Goal 4. Reduce child mortality

Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate.

Goal 5. Improve maternal health

Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

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

Have halted by 2015 and begun to reverse the spread of HIV/AIDS.

Goal 7. Ensure environmental sustainability

Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.

Goal 8. Develop a global partnership for development

Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system that includes a commitment to good governance, development, and poverty reduction both nationally and internationally.

SOURCE: UN Millennium Development Goals.

11 | Sexual and Reproductive Health and Development Goals

report can spur a decisionmaker to action. More often, however, a continuous flow of information is needed to educate diverse audiences about issues and inform public policy debates.

Journalists who prepare accurate and timely reports about sexual and reproductive health issues can:

- Bring taboo subjects out in the open, which is necessary for addressing many sexual and reproductive health problems.
- Monitor governments' progress toward achieving stated goals such as the Millennium Development Goals, thereby holding them accountable to the public.

The appendices that follow provide additional data for reporters to use in news reports, definitions of terms used in this guide, and sources of information for preparing factual stories on sexual and reproductive health.

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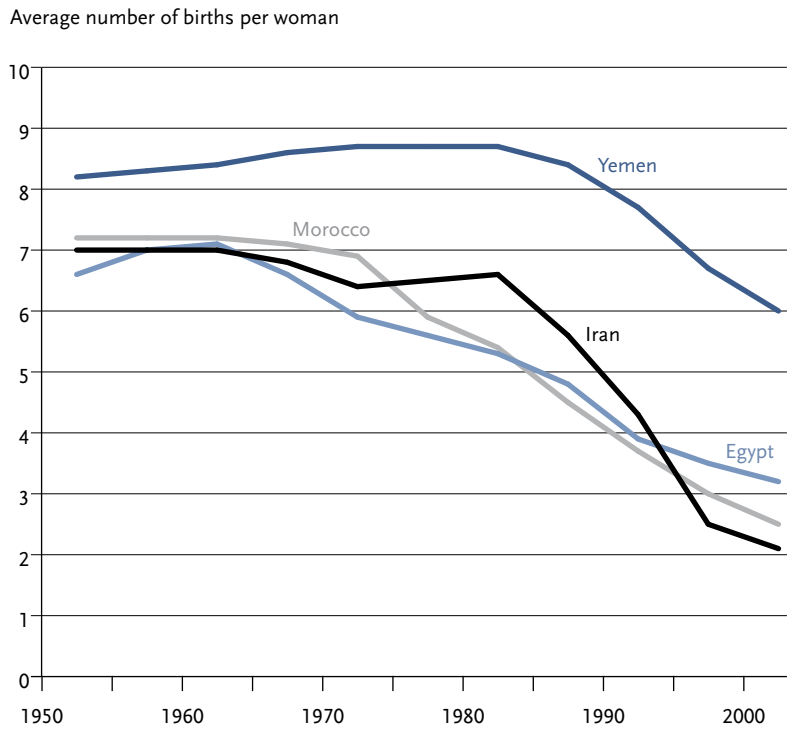
Appendix 1

Population and Reproductive Health Indicators by Country

Fertility has declined across countries in MENA, but at different paces.



SOURCE: United Nations Population Division, *World Population Prospects: The 2006 Revision* (2007).

Table A1.1

Female Population in MENA, by Selected Age Groups, 2008

	Female population (in thousands)			% of women ever married	
	15–49	15–19	20–24	15–19	20–24
Algeria	9,914	1,801	1,827	2	16
Bahrain	193	30	28	—	—
Egypt	19,926	3,822	3,790	12	51
Iran	21,234	4,157	4,339	16	52
Iraq	7,226	1,603	1,352	19	—
Jordan	1,616	307	296	6	34
Kuwait	730	95	107	—	—
Lebanon	1,136	185	178	3	19
Libya	1,733	268	313	—	—
Morocco	9,008	1,603	1,624	12	39
Oman	647	138	133	—	—
Palestine*	925	218	181	10	49
Qatar	171	25	23	—	—
Saudi Arabia	6,188	1,248	1,081	—	—
Syria	5,519	1,090	1,113	11	43
Tunisia	3,012	501	522	1	15
Turkey	20,801	3,366	3,338	12	50
UAE	942	121	145	—	—
Yemen	5,364	1,350	1,122	17	59

— Data not available.

*Palestine refers to the Palestinian population living in Gaza and the West Bank (including East Jerusalem).

Table A1.2

Selected Reproductive Health Indicators in MENA

	Total fertility rate	Maternal mortality ratio	% of births whose mothers had at least 4 antenatal care visits	% of births attended by skilled health personnel	% of infants with low birth weight
Algeria	2.4	180	—	95	6
Bahrain	2.6	32	—	99	8
Egypt	3.1	130	62	74	14
Iran	2.0	140	77	90	7
Iraq	4.3	300	—	—	15
Jordan	3.5	62	91	100	12
Kuwait	2.6	4	—	100	7
Lebanon	1.9	150	87	98	6
Libya	3.0	97	81	94	7
Morocco	2.4	240	30	63	15
Oman	3.4	64	—	98	8
Palestine*	4.6	—	—	99	7
Qatar	2.8	12	58	100	10
Saudi Arabia	4.1	18	—	96	11
Syria	3.5	130	51	93	9
Tunisia	2.0	100	79	90	7
Turkey	2.2	44	54	83	16
UAE	2.7	37	—	100	15
Yemen	6.2	430	11	27	32

— Data not available.

*Palestine refers to the Palestinian population living in Gaza and the West Bank (including East Jerusalem).

Table A1.3

Percent of Married Women (Ages 15–49) Using Contraception in MENA

	Any method	Modern methods	Traditional methods
Algeria	61	52	9
Bahrain	*62*	*31*	*31*
Egypt	59	58	1
Iran	74	56	18
Iraq	50	40	10
Jordan	56	41	15
Kuwait	*50*	*42*	*8*
Lebanon	58	34	24
Libya	*45*	*31*	*14*
Morocco	63	55	8
Oman	*24*	*18*	*6*
Palestine*	50	39	11
Qatar	43	32	11
Saudi Arabia	*32*	*29*	*3*
Syria	58	43	15
Tunisia	63	53	10
Turkey	71	43	28
UAE	*28*	*24*	*4*
Yemen	23	13	10

Data refer to the most recent surveys between 1997 and 2007. Data in italics refer to surveys between 1995 and 1996.

*Palestine refers to the Palestinian population living in Gaza and the West Bank (including East Jerusalem).

Table A1.4

Percent Distribution of Modern Contraceptive Users in MENA (Married Women Ages 15–49), by Method

	Pill	IUD	Condom	Sterilization**	Other modern methods
Algeria	88	4	4	2	1
Bahrain	*36*	*9*	*31*	*20*	*4*
Egypt	18	65	2	2	14
Iran	33	15	11	35	6
Iraq	37	31	3	7	23
Jordan	18	57	8	7	9
Kuwait	*68*	*16*	*7*	*5*	*4*
Lebanon	37	40	13	9	1
Libya	*38*	*44*	*4*	*13*	*1*
Morocco	73	10	3	5	9
Oman	*34*	*12*	*8*	*25*	*21*
Palestine*	18	64	10	6	2
Qatar	49	28	9	13	1
Saudi Arabia	*69*	*23*	*3*	*4*	*1*
Syria	30	60	4	3	3
Tunisia	21	52	3	20	4
Turkey	11	48	25	14	2
UAE	*50*	*16*	*8*	*18*	*8*
Yemen	47	25	3	13	10

Data refer to the most recent surveys between 1997 and 2007. Numbers may not add to 100 due to rounding. Data in italics refer to surveys between 1995 and 1996.

*Palestine refers to the Palestinian population living in Gaza and the West Bank (including East Jerusalem).

**Data on sterilization refer to female sterilization, as male sterilization is almost nonexistent in MENA countries, except for Iran. Sterilization is the most commonly used modern method in Iran. Among Iranian couples who have chosen sterilization as a method of family planning, 15 percent chose male sterilization and 85 percent female sterilization.

Appx. 1

Sources

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Appendix 2

Sexual and Reproductive Health Glossary

Abortion: Termination of pregnancy (expulsion or extraction of an embryo/fetus) before 22 weeks gestation or when the fetus weighs less than 500 grams. Abortion may be spontaneous—due to natural causes such as miscarriage—or induced.

Abortion procedures: For pregnancies up to 12 weeks gestation (12 weeks since the women's last menstrual period) vacuum aspiration, dilation and curettage, and medication abortion (defined below) are typically used. For pregnancies of more than 12 completed weeks since a woman's last menstrual period, the two most widely used methods are dilation and evacuation, and medication abortion. In some countries, women within a few weeks of a missed menstrual period can undergo a procedure called *menstrual regulation*, which uses vacuum aspiration or medication to induce menstruation, but does not test for a pregnancy.

- Vacuum aspiration removes the contents of the uterus by applying suction through a tube inserted into the uterus. Either an electric pump or manual aspirator is used to suction the uterine contents. With either procedure, it is usually performed on an outpatient basis. Vacuum aspiration is widely used through 12 weeks of pregnancy, though experienced providers can perform it safely through 15 weeks.
- Dilation and curettage (D&C) uses mechanical dilators to open the cervix and metal instruments, called curettes, to scrape the uterine walls. The procedure is usually performed under heavy sedation or general anesthesia and has a higher risk of complications such as bleeding, infection, and perforation. The World Health Organization advises that this procedure only be used where vacuum aspiration or medical methods of abortion are unavailable.

- Medication abortion uses one or more drugs, most commonly mifepristone (known as RU486) and misoprostol (also known as Cytotec), to expel the contents of the uterus. The procedure usually requires at least two outpatient visits and the abortion is almost always complete within a week. In 2 percent to 5 percent of cases where abortion is incomplete, vacuum aspiration or D&C is required.
- Dilation and evacuation (D&E) involves dilating the cervix and using a combination of suction and instruments to remove the contents of the uterus.

Abortion rate: The number of abortions per 1,000 women ages 15 to 44 or 15 to 49 in a given year. This measure describes the level of abortion in a population.

Abortion ratio: The number of abortions per 100 live births (as a proxy for pregnancies) in a given year. The abortion ratio indicates the likelihood that a pregnancy will end in abortion.

Abstinence: Refraining from sexual intercourse.

Adolescence: The transition between puberty and adulthood, generally defined as ages 10 to 19. Data on adolescent health, education, employment, and behaviors are often available for ages 15 to 19.

Amenorrhea: Absence of menstrual periods.

Anemia: Low levels of oxygen-carrying red blood cells, or hemoglobin, (concentration less than 110 grams per liter) in the blood. Anemia can be caused by excessive blood loss, not eating enough foods rich in iron and folic acid, frequent pregnancies, or by malaria and other parasitic diseases.

Antenatal period: The period from conception until the onset of labor, approximately 40 weeks.

Antiretroviral treatment (ART): A substance or combination of substances used to destroy a retrovirus (for example, the human immunodeficiency virus, HIV) or suppress its replication.

Acquired immune deficiency syndrome (AIDS): A progressive, usually fatal condition that reduces the body's ability to fight certain infections. It is caused by infection with human immunodeficiency virus (HIV).

Artificial insemination: The injection of semen into a woman's uterus (not through sexual intercourse) in order to make her pregnant.

Caesarean delivery: Removal of the baby and placenta through a surgical cut in the abdominal and uterine walls.

Cervix: The lower portion, or opening, of the uterus that extends into the upper vagina.

Childbearing years: The reproductive age span of women, assumed for statistical purposes to be ages 15 to 44 or ages 15 to 49.

Chlamydia: A sexually transmitted disease caused by the bacterium chlamydia trachomatis, often causing irregular bleeding and pain during intercourse in women, burning during urination in men, and discharge in both men and women. If left untreated, chlamydia can lead to pelvic inflammatory disease.

Circumcision (male): Removal of the foreskin or prepuce of the penis.

Clean delivery: Clean delivery is attended by health staff in a medical institution or by a trained birth attendant at home observing principles of cleanliness, including clean hands, clean surface, and clean cutting of the umbilical cord.

Clitoridectomy: Removal of part or all of the clitoris.

Clitoris: A small, erect body of the female genitalia, partially hidden by the labia. It is highly sensitive and can be a source of sexual pleasure and female orgasm. It is homologous to the penis of the male.

Contraceptive prevalence rate: The percentage of married women of reproductive age (usually ages 15 to 49) currently using a contraceptive method.

Conception: Union of an ovum (egg) and a sperm. Also known as fertilization.

Consanguinity: Marriage between relatives, most commonly between cousins.

Cryotherapy: The use of extremely low temperatures to freeze and destroy abnormal tissue. Used on the cervix to destroy abnormal cells that could progress to cervical cancer.

Domestic violence: Violence that occurs within a family or an intimate relationship, including wife beating and child abuse. The more specific term "intimate partner violence" (IPV) is defined as actual or threatened physical or sexual violence, or psychological or emotional abuse by a spouse, ex-spouse, boyfriend, girlfriend, ex-boyfriend, or ex-girlfriend. Some of the common terms used to describe intimate partner violence are domestic abuse, spouse abuse, battering, and domestic violence.

Dual protection: Using two types of contraceptive methods, a barrier method such as a condom and another method such as pills or intrauterine devices, to provide a simultaneous safeguard against both pregnancy and sexually transmitted infections (STIs), particularly HIV.

Eclampsia: A condition that can occur in pregnancy or immediately after childbirth, characterized by convulsions, followed by more or less prolonged coma. The woman usually has hypertension (high blood pressure), edema (swelling), or proteinuria (abnormal amounts of protein in the urine). The convulsions may occur before, during, or immediately after birth. It happens in about 5 percent of all pregnancies, and up to 25 percent of eclampsia happens during the postpartum period (after birth).

Ectopic pregnancy: Pregnancy outside of the uterus; a life-threatening condition that can cause massive internal bleeding or spontaneous abortion. The pregnancy must be surgically terminated.

Emergency contraception (EC): Methods used to prevent pregnancy after unprotected intercourse, such as when a contraceptive fails or when sex occurs without contraception. Two types of EC are emergency contraceptive pills (ECPs) and emergency copper-bearing IUD insertion. Both methods are safe and effective if service delivery guidelines and patient instructions are followed correctly.

Essential obstetric care (EOC): Provision of key lifesaving (emergency) and nonemergency interventions to prevent and manage complications of pregnancy and childbirth. Key components include Caesarean section; crucial medications such as anesthesia, antibiotics, sedatives, anticonvulsants, and fluid replacement; blood transfusions; manual removal of the placenta; and vacuum aspiration for incomplete abortion.

Exclusive breastfeeding: Feeding of an infant within one hour of birth until age 6 months exclusively with breast milk and no other fluid or food (not even water).

Family planning: The conscious effort of couples to regulate the number and spacing of births through artificial and natural methods of contraception. Family planning usually implies preventing conception to avoid pregnancy and abortion, but it also includes efforts of couples to become pregnant.

Female genital cutting (FGC): All procedures involving cutting away all or part of the external female genitalia or other injury to the female genital organs whether for cultural, religious, or other nontherapeutic reasons. There are different types of FGC. In the first, the clitoris is partly or completely removed. In the second, the clitoris along with small skin folds of the outer genitals is removed. In the third type, infibulation, the outside genitals are cut away and the vagina is sewn shut, with only a small hole left through which urine and blood can pass. FGC is also referred to as female genital mutilation (FGM) and female circumcision.

Fertility: The actual reproductive performance of an individual, a couple, a group, or a population. See also *total fertility rate*.

Fistula: An abnormal opening between two cavities (vagina/bladder or vagina/rectum) that can lead to incontinence (inability to retain urine and/or feces).

Folic acid: A vitamin B complex nitrogenous acid needed for the development of normal red blood cells. Deficiency of folic acid before pregnancy can result in neural tubal defects in the newborn/fetus.

Gender: Culturally defined roles and responsibilities for females and males that are learned, may change over time, and vary among societies.

Gender-based violence (GBV): Violence directed against a person on the basis of gender or sex. It includes acts that inflict physical, mental, or sexual harm or suffering, threats of such acts, coercion, and other deprivations of liberty. Examples of gender-based violence are sexual violence, domestic violence, emotional and psychological abuse, trafficking, forced prostitution, sexual exploitation, sexual harassment, and harmful traditional practices (female genital cutting, honor killings, and forced marriage).

Gender equity: The standardization of opportunities (and resulting benefits) between males and females.

Genital herpes: A highly contagious infection transmitted through intercourse (or oral or anal sex) with a person infected with sores or blisters, which may or may not be visible. One in four women and one in five men in the United States have the herpes virus. The virus can also be passed from a mother to her baby.

Genital prolapse: A condition in which the vaginal wall or uterus descends below their normal positions; part of the bladder or rectum may protrude from the vagina.

Gonorrhea: A sexually transmitted infection caused by the bacterium *Neisseria gonorrhoea*. It is a common cause of urethral and vaginal discharge and of discharging eyes in newborns. During pregnancy, gonorrhea infections can cause premature labor and stillbirth. Gonorrhea does not have symptoms in all women and, if left untreated, can lead to pelvic inflammatory disease and infertility.

Hemorrhage: Significant and uncontrolled loss of blood, either internally or externally from the body. Antepartum (prenatal) hemorrhage is that which occurs after the 20th week of gestation but before delivery of the baby. Postpartum hemorrhage is the loss of 500 ml or more of blood from the genital tract after delivery of the baby. A woman can lose 500 cc of blood in one minute, and can lose all of the blood in her body (5 liters) in 10 minutes.

Herpes: There are two types of genital herpes: herpes simplex virus-1 and herpes simplex virus-2. The herpes simplex virus (HSV) is a common cause of genital blisters and ulcers. During pregnancy, herpes may cause miscarriage or stillbirth.

Human immunodeficiency virus (HIV): A virus that attacks the body's immune system, making the body unable to fight infection. It can cause AIDS, which is the last stage of HIV infection. HIV is the most dangerous sexually transmitted infection.

Human papillomavirus (HPV): A sexually transmitted agent that infects the cells of the cervix and slowly cause cellular changes that may result in cancer. HPV is one of the most common STIs in the world and has dozens of sub-types, some of which lead to cervical cancer if cellular changes are not detected and treated early.

Hypertension: High blood pressure usually above 140 (systolic)/90 (diastolic). It has various causes, such as heart disease, kidney disease, and preeclampsia (a complication of pregnancy).

Incidence rate: The number of people contracting a disease per 1,000 population at risk for a given period of time (usually annually).

Incomplete abortion: An abortion whereby any products of conception remain in the uterus.

Induced abortion: The act of ending a pregnancy with surgery or medicine.

Indicators: Quantifiable measures of program performance and impact.

Infant mortality rate (IMR): The number of deaths of infants under age 1 per 1,000 live births in a given year.

$$\frac{\text{Deaths under age 1 in a year}}{\text{Live births in a year}} \times 1{,}000$$

Information, education, and communication (IEC): Activities designed to increase awareness or promote a certain health intervention or behavior.

Informed choice: An individual's ability to choose freely a contraceptive method or medical procedure, or adopt other health behaviors based on accurate and useful information and an understanding of her or his own needs.

Integrated services: Availability of multiple health services. For example, family planning and STI treatment through a single facility. Also implies a degree of coordination across services.

Intrapartum period: Within the period of labor and delivery.

Labor: The first stage of labor includes dilation of the cervix. The second stage encompasses delivery of the fetus. The third stage is expulsion of placenta and membranes.

Lactational amenorrhea method (LAM): A family planning method that relies on breastfeeding as natural protection against pregnancy for up to six months after childbirth. Women who use LAM must fully breastfeed or nearly fully breastfeed to protect themselves from pregnancy.

Lifetime risk of maternal death: The probability of becoming pregnant combined with the probability of dying as a result of the pregnancy, accumulated across a woman's reproductive years.

Live birth: Complete expulsion or extraction of a baby from its mother, irrespective of the duration of the pregnancy, which after such separation breathes or shows other evidence of life such as beating of the heart.

Low birth weight: The weight at birth is less than 2,500 grams.

Manual vacuum aspiration: A method of removing tissue from the uterus by suction for diagnostic purposes or to remove the elements of conception.

Maternal morbidity: Illness or disability occurring as a result of or in relation to pregnancy, childbirth, or in the postpartum period.

Maternal mortality: The death of a woman while pregnant, during delivery, or within 42 days (six weeks) of termination of pregnancy. The cause of death is always related to or aggravated by the pregnancy or its management; it does not include accidental or incidental causes.

Maternal mortality rate: The number of women who die while pregnant or during the first 42 days following delivery per 100,000 women of reproductive age in a given year for any cause related to or aggravated by pregnancy, but not from accidental or incidental causes. The rate reflects the maternal mortality ratio and the fertility rate; it is influenced by the likelihood of becoming pregnant and by the obstetric risk.

$$\frac{\text{Number of maternal deaths in a year}}{\text{Women of reproductive age in the population}} \times 100{,}000$$

Maternal mortality ratio: The ratio reflects the risk women face of dying once pregnant. The number of women who die during pregnancy or during the first 42 days after delivery per 100,000 live births in a given year from any cause related to or aggravated by pregnancy, but not from accidental or incidental causes.

$$\frac{\text{Number of maternal deaths in a year}}{\text{Live births in a year}} \times 100{,}000$$

Midwife: A midwife has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery. She must be able to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period, to conduct deliveries on her own; and to care for the newborn and the infant. This care includes preventive measures, the detection of abnormal conditions in mother and child, the procurement of medical assistance, and the execution of emergency measures in the absence of medical help.

Millennium Development Goals (MDGs): A set of measurable goals created by world leaders at the United Nations Millennium Summit in September 2000 to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women.

Neonatal death rate: The number of deaths in the first 28 days of life per 1,000 live births in a given year.

$$\frac{\text{Neonatal deaths in first 28 days of life in a year}}{\text{Live births in a year}} \times 1{,}000$$

Obstetric emergency: A severe, life-threatening condition related to pregnancy or delivery that requires urgent medical intervention (emergency obstetric care) to prevent the likely death of the woman. It can occur any time during a pregnancy or up to six months after childbirth and occur suddenly without warning. The woman must be taken to a hospital or health facility without delay.

Pap smear: A test in which a smear of vaginal or cervical secretion is examined for exfoliated cells to detect cancer in an early stage.

Pelvic inflammatory disease (PID): A progressive infection that harms a woman's reproductive system. It occurs throughout the pelvic area, the fallopian tubes, the uterus, the uterine lining, and ovaries. PID can lead to infertility (sterility), ectopic pregnancy, and chronic pain.

Perinatal death: Death of a fetus occurring between the time a fetus weighs at least 500 grams (or after 22 completed weeks of gestation) and the seventh day after the birth of a live-born infant.

Perinatal mortality rate: This rate avoids the difficulty of defining a live birth and combines late fetal and early neonatal deaths.

$$\frac{\text{Stillbirths + deaths under 1 week}}{\text{Still + live births}} \times 1{,}000$$

Polygyny: a practice where a man has more than one wife.

Population increase (or Growth): The total increase resulting from births, deaths, and migration in a population in a given period of time.

Population momentum: The tendency for population growth to continue beyond the time that replacement-level fertility (see definition) has been achieved, because of the relatively high concentration of people in the childbearing years.

Post-abortion care: Includes emergency treatment of incomplete abortion and potentially life-threatening complications. It also refers to post-abortion family planning counseling and services.

Postneonatal mortality rate: The annual number of deaths of infants ages 28 days to 1 year per 1,000 live births in a given year.

Postpartum period: After childbirth; the period from the delivery of the placenta through the first 42 days after delivery.

Postpartum hemorrhage: The loss of 500 ml or more of blood from the genital tract after delivery of the baby, usually occurs in the first two to four hours after delivery but can occur later. In anemic mothers, a lower level of blood loss should be the cutoff point for starting therapeutic action.

Preeclampsia: A condition in pregnancy manifested by hypertension, edema (swelling), and/or proteinuria (excess protein in urine).

Prenatal period: The period between conception and birth (same as antenatal period).

Prevalence rate: The number of people having a particular disease at a given point in time per 1,000 population at risk.

Replacement-level fertility: The level of fertility at which women in the same cohort have exactly enough daughters (on average) to "replace" themselves in a population.

Reproductive age: See *childbearing years*.

Reproductive health: A state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

Reproductive rights: Human rights pertaining to reproductive and sexual life.

Reproductive tract infection (RTI): A general term that includes sexually transmitted infections, infections caused by an overgrowth of organisms normally present in the genital tract, and infections acquired during improperly performed medical procedures.

Safe motherhood: The goal of safe motherhood is to ensure that every woman has access to a full range of high-quality, affordable sexual and reproductive health services, especially maternal care and treatment of obstetric emergencies to reduce death and disability.

Septic abortion: An abortion procedure that results in uterine and pelvic infection.

Sexually transmitted infection (STI): Any infection acquired through sexual contact in a substantial number of cases. Also referred to as a sexually transmitted disease (STD).

Skilled birth attendant: Refers exclusively to people such as doctors, nurses, and midwives who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose, manage, or refer complications of pregnancy and delivery.

Spontaneous abortion: Miscarriage, or loss of a pregnancy due to natural causes.

STI or STD management: The care of a client with an STI/STD; this includes activities such as history-taking, physical examination, laboratory tests, diagnosis, treatment and health education about treatment and prevention, follow-up assessment, and referral when indicated.

Stillbirth: The death of a fetus weighing at least 500 g (or when birth weight is unavailable, after 22 completed weeks of gestation or with a crown-heel length of 25 cm or more), before the complete expulsion or extraction from its mother.

Stockout: No supplies are left of a given product or products.

Syphilis: A sexually transmitted infection caused by the bacterium *Treponema pallidum*; one of the causes of genital ulcers. If left untreated, syphilis can damage the nervous system, heart, or brain, and ultimately cause death. In pregnant women, the infection greatly increases the risk of stillbirth and birth defects, making early testing during pregnancy critical.

Total fertility rate: The average number of children that would be born alive in a woman's lifetime if she were to pass through her childbearing years conforming to the childbearing experience of each 5-year age-group of women from ages 15 to 49 in a year or given period. Also expressed as "lifetime births per woman" or "births per woman" and used to indicate the number of children that women are having today.

Traditional birth attendant (TBA): A traditional birth attendant is a person (usually a woman) who assists the mother during childbirth and who initially acquired her skills delivering babies herself or through apprenticeship to other traditional birth attendants. The TBA is generally an older woman who has borne one or more children herself and lives in the community in which she practices.

Trained traditional birth attendant: A trained TBA is one who has undergone a short course of training conducted by the modern health care system to upgrade her skills.

Trichomoniasis: A sexually transmitted infection caused by the bacterium *Trichomonas vaginalis*; one of the causes of vaginal discharge.

Unmet need for family planning: The percentage of married, fecund women who prefer to space or limit their births but are not using contraception.

Unsafe abortion: Defined as a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both. Unsafe abortions are characterized by the lack or inadequacy of skills of the provider, hazardous techniques, and unsanitary facilities.

Uterine prolapse: A condition in which the uterus protrudes into, and sometimes out of, the vagina.

Uterine rupture: Tearing or bursting of the uterus may follow obstructed labor, or may occur during pregnancy or labor following previous Caesarean section.

Vagina: The tube that forms the passage between the cervix/uterus and the vulva. It receives the penis during sexual intercourse and serves as the delivery passage for birth and for menstrual flow.

Vaginal discharge: The symptom or syndrome where women present with an abnormal discharge from their vagina. It can suggest vaginal infection or a cervical infection.

Vaginal fistula: A hole that develops between the vagina and the rectum or bladder, often as a result of obstructed labor (when the baby cannot pass through the birth canal). Openings in the birth canal allow leakage of urine or feces through the vagina, causing shame and stigma to women who suffer this maternal disability.

Violence against women: Any act that results in physical, sexual, or mental harm or suffering to women.

Youth: Young people ages 15 to 24.

Sources

Arthur Haupt and Thomas T. Kane, *Population Reference Bureau's Population Handbook*, 5th ed. (Washington, DC: Population Reference Bureau, 2004). www.prb.org/pdf/PopHandbook_Eng.pdf

Reproductive Health Outlook. www.rho.org

White Ribbon Alliance. www.whiteribbonalliance.org

Appendix 3

Sources of Information

Below are major sources of information on sexual and reproductive health and related topics. Many were used in preparing this guide.

Alliance for Cervical Cancer Prevention. In 1999, with support from the Bill & Melinda Gates Foundation, five international agencies launched a major new effort to prevent cervical cancer worldwide. This group of organizations, coordinated by the nonprofit group PATH, is working to clarify, promote, and implement strategies for preventing cervical cancer in developing countries.
www.alliance-cxca.org

Centers for Disease Control and Prevention (CDC) is a U.S. government agency whose mission is to promote health and quality of life by preventing and controlling disease, injury, and disability. It works throughout the United States and the world monitoring health, investigating health problems, conducting research, and implementing prevention strategies.
www.cdc.gov

Center for Reproductive Rights is a nonprofit legal advocacy organization based in the United States dedicated to promoting and defending women's reproductive rights worldwide.
www.crlp.org

Demographic and Health Surveys (DHS) project is a global data collection effort funded by the U.S. Agency for International Development and carried out by ORC Macro and in-country organizations. These nationally representative household surveys collect data on demographic patterns, fertility, health, and nutrition for policy and program planning.
www.measuredhs.com

Disease Control Priorities Project (DCPP) assesses the major causes of ill-health in developing countries and produces evidence-based analysis and resource materials to inform health policymaking. In 2006, DCPP released the second edition of *Disease Control Priorities in Developing Countries*, published by the World Bank with input from some 600 public health and policy experts.
www.dcp2.org

Global Health Council is a U.S.-based nonprofit membership organization comprising health-care professionals and organizations that include NGOs, foundations, corporations, government agencies, and academic institutions.
www.globalhealth.org

GlobalHealthReporting.org is a project operated by the U.S.-based Kaiser Family Foundation with major support from the Bill & Melinda Gates Foundation, providing journalists and others with the latest information on HIV, tuberculosis, malaria, and other topics.
www.globalhealthreporting.org

Guttmacher Institute is a U.S.-based nonprofit organization focused on sexual and reproductive health research, policy analysis, and public education.
www.guttmacher.org

International Consortium for Emergency Contraception was founded by seven internationally known organizations working in the field of family planning with a mission to expand access to emergency contraception worldwide but especially in developing countries.
www.cecinfo.org

Ipas is an international nonprofit organization that has worked for three decades to increase women's ability to exercise their sexual and reproductive rights and to reduce deaths and injuries of women from unsafe abortion.
www.ipas.org

Multiple Indicator Cluster Surveys (MICS) were developed by UNICEF in the mid-1990s to track progress toward the World Summit for Children goals. MICS surveys are now a major source of data for MDG monitoring, as well as the assessment of progress toward other international goals related to child health and HIV/AIDS.
www.unicef.org/statistics

Millennium Project. The Millennium Project was commissioned by the United Nations Secretary-General in 2002 to develop a concrete action plan for the world to achieve the Millennium Development Goals. Its task forces include more than 250 experts worldwide from the public and private sectors.
www.millenniumproject.org

Population Council. The Population Council conducts research worldwide to improve policies, programs, and products in three areas: HIV and AIDS; poverty, gender, and youth; and reproductive health. The Council has a Middle East program and regional office based in Cairo, and an Arabic section on its website.
www.popcouncil.org

Population Reference Bureau informs people around the world about population, health, and the environment, and empowers them to use that information to advance the well-being of current and future generations. PRB's International Programs aim to bridge the gap between research and policy on a wide range of topics including reproductive health, gender, global health priorities, population dynamics, the environment, and youth.
www.prb.org

Population Reports is a quarterly journal published by the Johns Hopkins University Center for Communications Programs and supported by the United States Agency for International Development that is designed to provide an accurate and authoritative overview of important developments in family planning and related health issues.
www.infoforhealth.org/pr

Pan Arab Project for Family Health (PAPFAM) operates under the auspices of the League of Arab States and aims to enable Ministries of Health and other national health institutions in the Arab region to obtain timely and reliable information for formulating, implementing, monitoring, and evaluating family health and reproductive health policies and programs.
www.papfam.org

Save the Children is an international nonprofit organization founded in the aftermath of World War I that works to improve the lives of children in need and mobilizes lifesaving assistance to children in times of war, conflict, and natural disasters.
www.savethechildren.org

United Nations Population Fund (UNFPA) helps governments formulate policies and strategies to reduce poverty, improve reproductive health, promote girls' and women's empowerment, and work for sustainable development. The Fund also helps countries collect and analyze population data that can help them understand population trends.
www.unfpa.org

World Health Organization is the UN's specialized agency for health. It was established in 1948. WHO's objective, as set out in its Constitution, is the attainment by all people of the highest possible level of health.
www.who.int

Center for Research on Population and Health (CRPH) of the Faculty of Health Sciences at the American University in Beirut supports a program of interdisciplinary research on population and health. The center is currently concerned with dimensions of health that relate to adolescents and risk behavior; reproduction; women and work; and older people. The center is involved in two major research projects: "Urban Health Study," which explores the health consequences of population change in the region; and "Choices and Challenges in Changing Childbirth," which produces scientific evidence on childbirth-related health care practices. CRPH also hosts the "Women Reproductive Health Working Group" (www.rhwg.org), a network of researchers from different disciplines, where they have the opportunity to exchange ideas and produce research on reproductive health and other topics relevant to the region.
wwwlb.aub.edu.lb/~webcrph/index.htm

Middle East and North Africa Program

PRB's Middle East and North Africa (MENA) program, initiated in 2001 with funding from the Ford Foundation, responds to the region's need for timely and objective information on population, socioeconomic, and reproductive health issues. The program raises awareness of these issues among decisionmakers in the region and in the international community in hopes of influencing policies and improving the lives of people living in the Middle East and North Africa.

MENA program activities include: producing and disseminating print and electronic publications on population, reproductive health, environment, and development topics (in English and Arabic); working with journalists in the region to enhance their knowledge and coverage of population and development issues; and working with researchers in the region to improve their skills in communicating research findings to policymakers and the media.

Graduate Fellowship Program

The Graduate Fellowship in Population, Sexual and Reproductive Health, and Development provides research awards to graduate students from selected MENA countries. The Fellows become part of a network of PRB-supported researchers and are invited to a two-week workshop on communicating with policymakers. In an active and participatory setting, the workshop helps the Fellows develop the skills to communicate research findings to decisionmakers for the improvement of policies and programs.

Policy Briefs

The policy briefs listed below are available in English and Arabic and can be ordered free of charge by audiences in the MENA region by contacting the Population Reference Bureau via e-mail (prborders@prb.org) or at the address below. Both versions (except for the Arabic version of *Population Trends and Challenges*) are also available on PRB's website: www.prb.org; or by ordering through PRB's online store: www.prb.org/Bookstore.aspx.

Youth in the Middle East and North Africa: Demographic Opportunity or Challenge? (April 2007)

Young People's Sexual and Reproductive Health in the Middle East and North Africa (April 2007)

Time to Intervene: Preventing the Spread of HIV/AIDS in the Middle East and North Africa (January 2007)

Investing in Reproductive Health to Achieve Development Goals: The Middle East and North Africa (December 2005)

Reforming Family Laws to Promote Progress in the Middle East and North Africa (December 2005)

Marriage in the Arab World (September 2005)

Islam and Family Planning (August 2004)

Progress Toward the Millennium Development Goals in the Middle East and North Africa (March 2004)

Making Motherhood Safer in Egypt (March 2004)

Empowering Women, Developing Society: Female Education in the Middle East and North Africa (October 2003)

Women's Reproductive Health in the Middle East and North Africa (February 2003)

Finding the Balance: Water Scarcity and Population Demand in the Middle East and North Africa (July 2002)

Iran's Family Planning Program: Responding to a Nation's Needs (June 2002)

Population Trends and Challenges in the Middle East and North Africa (October 2001)

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