dustrialized countries, a clinical view continues to dominate, with reproductive health seen as a specialty of obstetrics and gynecology. Characteristic of this clinical view is its focus on negative outcomes and the separation of services dealing with reproductive issues (Graham 1998). Recent years, however, have seen the rise of a more comprehensive concept of reproductive health, formulated in 1994 at the International Conference on Population and Development (ICPD) in Cairo as follows: '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 processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so' (Program of Action 1995, p. 202).

As this definition makes clear, sexual health is considered as a central feature of reproductive health. In line with this very broad definition, the scientific literature discusses a large range of reproductive concerns, with a preponderance of reproductive problems and risks (Graham 1998). The most well-known health risks associated with reproduction are sexually transmitted diseases (STDs), including HIV/AIDS, maternal mortality, unsafe abortion, adolescent pregnancy, and infertility. Over the last several years, the comprehensive ICPD definition of reproductive health has come to include additional aspects such as female genital mutilation and violence against women.

### 2. Major Reproductive Health Risks

Reproductive heath risks or health crises are the source of high morbidity and mortality rates worldwide. Most are avoidable. The prevalence of reproductive risks or 'outcomes' varies enormously among populations throughout the world. The greatest differences in negative outcomes exist between developed and developing countries. At the same time, the clear improvement in the reproductive health of women in developed countries is a relatively recent achievement and can be traced back primarily to key medical advances (introduction of antiseptics, discovery of sulfonamide, modern obstetrics), as well as changes in gender roles. The significant reproductive risks women in Europe and the United States continued to face even until the turn of this century are described by Shorter in A History of Women's Bodies (1982).

The following section will outline the spread of some major reproductive health crises. Although not all concerns (such as infertility) can be presented in detail, attention will be given to the gravest dangers in terms of individual and public health (see Miller and Rosenfield 1996). Despite decreasing fertility rates in many parts of the world, it has not been possible to reduce *maternal mortality*. According to WHO statistics, every year 585,000 women die as a result of

# Gender and Reproductive Health

With the world's population increasing at an alarming rate, reproductive health has become the focus of growing attention in recent years. While reproductive concerns and activities also influence men's health, both scientific studies and health policies primarily focus on the female gender. Because women become pregnant and can bear children, the risks of reproduction present a greater threat to their health.

## 1. Definition of Reproductive Health

Although research has long examined how human reproduction affects overall health, the concept of 'reproductive health' is relatively new. In many inpregnancy complications. More than 98 percent of these deaths occur in the developing world (Spicehandler 1997). In 1991, WHO calculated the incidence of maternal death for a woman in North America at 1:4,000, while her counterpart in West Africa faced a risk of 1:18. Both high overall fertility rates and the high rate of adolescent pregnancies in less developed countries contribute to the high incidence of maternal mortality. Compared with women aged 20–24, the risk of maternal death for women between the ages of 10 and 14 is five times greater, and between the ages of 15 and 19 twice as high (Miller and Rosenfield 1996).

According to WHO estimates, about every one in four pregnancies is intentionally terminated. Of an estimated 45 million abortions performed each year, almost half (ca. 20 million) are performed under unsafe and septic conditions. Most of these risky abortions, in turn, occur in developing countries. Illegal and unsafe abortions are responsible for another spectrum of morbidity (for example, cervical trauma, pelvic peritonitis, jaundice, chronic pelvic pain); if worst comes to worst, these cases end fatally (an estimated 50,000-100,000 deaths each year). Here one of the most important determinants for mortality risk is the illegality of the abortion (Miller and Rosenfield 1996). But also the high rate of legal pregnancy termination, for example in Central and Eastern European countries (until the end of the 1990s, abortion was the most common form of birth control), is problematic and has serious consequences for women's reproductive health. Short-term and longer-term repercussions of repeated abortions or abortions performed under unfavorable conditions in Eastern Europe include higher incidences of anemia, infertility, and premature delivery (Bruyniks 1994).

The prevalence of STDs has serious consequences for the health of women and their unborn children. The WHO estimates that more than 330 million cases of treatable STDs (such as chlamydia infection, gonorrhea, syphilis) occur each year, the vast majority in the developing world, particularly in sub-Saharan Africa (Drennan 1998). There are two reasons why STDs in general are understood as more serious for women than for men (Drennan 1998, Miller and Rosenfield 1996, Program of Action 1995): (a) during vaginal intercourse, the likelihood of infection from man to woman is higher than from woman to man. and (b) STDs in women are often not diagnosed and treated until the disease is in a later (and thus more serious) stage because in women the symptoms are often less conspicuous in their early stages (see Sexually transmitted diseases).

Among STDs, HIV and AIDS are particularly threatening; at the end of 2000, the HIV virus had infected almost 36.1 million people worldwide, about 18.3 million men and 16.4 million women as well as about 1.4 million children (UNAIDS/WHO 2000); the majority of these cases involve people in developing countries. In some parts of the world, the AIDS epidemic has already dramatically shortened the average life expectancy (Drennan 1998). While HIV and AIDS initially presented more of a threat to men than to women, there are now countries, including the United States and several sub-Saharan African nations, in which HIV is spreading faster among women than among men.

### 3. Determinants of Reproductive Risk Behavior

A range of factors influences reproductive health. Particularly important is the quality of medical care during pregnancy and birth. The main reason for the high reproductive morbidity and mortality rates in developing countries is found in inadequate healthcare structures. Inadequate contraceptive behavior (or the lack thereof) is also responsible for a variety of risks to reproductive health (in particular unintended pregnancy and STDs); for this reason, special attention is paid to risky sexual behavior in connection with reproductive health (see *Sexual Risk Behaviors*).

Contraceptive behavior is influenced by a variety of internal and external factors, summarized in a model designed by Bruyniks (1994). Here knowledge of effective contraception and attitudes toward various methods of contraception are postulated as essential determinants of contraceptive behavior. Knowledge and attitudes are influenced by internal factors (age, intelligence, moral values) and external factors (access, social environment). It is precisely in less developed countries that access to contraceptive services is frequently blocked by financial, geographic, legal, or other barriers. Psychosocial acceptance or rejection of certain contraceptive methods in the social environment also plays a decisive role (Miller and Rosenfield 1996). Another issue is whether knowledge and positive attitudes toward effective contraception are in fact reflected in reproductive behavior, and depends on such personality variables as assertiveness or selfefficacy (Schwarzer and Fuchs 1995), as well as external barriers such as financial dependence (Wyatt 1994) or physical violence.

The social status of women is an essential factor in determining their contraceptive behavior. Social status influences not only the knowledge of efficient contraceptive methods and attitudes toward contraception, but also the possibilities for women to prevail in decisions for (or against) sexual activity and contraception, if need be against their male partner's wishes. Social status is a multidimensional concept; in terms of reproductive health, the educational level of women is the central and most frequently studied dimension. Also relevant are aspects such as political participation, employment and earnings, economic autonomy, as well as the reproductive rights of women (Kawachi et al. 1999). Williamson and Boehmer (1997) analyzed different status variables as predictors of

female life expectancy in 97 less developed countries. They found a positive correlation between the status of women and female life expectancy. Again, aspects of women's status apart from their educational level were important for determining female life expectancy. Of these other dimensions of women's status, reproductive autonomy had a particularly strong effect. This reproductive autonomy is operationalized via contraceptive prevalence as an indicator of women's control over their reproductive behavior.

The influence of social status on the (reproductive) health of women can also be found in developed countries. One recent analysis examined how the morbidity and mortality of women in 50 American states is related to different indicators of social status (Kawachi et al. 1999). Higher political participation was associated not only with lower overall female mortality but also with lower rates of death from different causes, including death due to reproductive risks such as cervical cancer or infant mortality. This analysis also examined an index for 'reproductive rights' ('reflecting reproductive well-being and autonomy') in connection with indicators of health. The index was operationalized in eight legal and political indicators reflecting the reproductive well-being and reproductive autonomy of women (for example, access to abortion services without a waiting period, public funding of infertility treatments, existence of a maternity stay law, whether gay or lesbian couples can adopt, etc.). For this indicator, however, no relationship to mortality was established, although a minor correlation to self-reported illness was found ('selfreported days of activity limitations').

Along with social status, gender roles have an Important influence on reproductive decision-making and behavior. Gender roles refer to 'normative expectations about the division of labor between the sexes and to gender-related rules about social interactions that exist within a particular cultural-historical context' (Spence et al. 1985, p. 150). Traditional gender roles, which assign women the subordinate and dependent role in the partnership, are regarded as a particular risk for reproductive health. As Drennan (1998) shows in a detailed overview, in many developing countries men are the primary decision-makers about sexual activity, fertility, and contraceptive use. It is assumed that women who are not permitted to reject sexual intercourse or to decide about contraception have little means to influence their reproductive health. Cultural norms about femininity or masculinity might also harbor reproductive risks. In many Latin American or Caribbean countries, for example, promiscuous behavior among men is regarded as proof of their masculinity (Drennan 1998). The risky sexual behavior of their (marriage) partners frequently endangers women by increasing such risks as STD transmission. In many countries, recently married women continue to face strong pressure to prove' their fertility; contraception is rarely practiced, and even adolescent or very young women become pregnant with the well-known attendant risks to the health of mother and child. In India, for example, 40 percent of all women between the ages of 15 and 19 are already married, and of these only 7 percent use contraceptives (Jejeebhoy 1998).

Gender inequality is expressed in various ways, including fewer educational opportunities for women, violence against women, female genital mutilation, and economic inequities (Miller and Rosenfield 1996). Some examples of gender inequality are concentrated on less developed countries, while others, such as violence against women and economic inequalities, are also found in developed countries. Gender roles are not independent of women's social status: improvements in social status, especially better education, generally go hand in hand with changes in traditional gender roles.

### 4. Promoting Reproductive Health

The ICPD Program of Action contains wide-ranging recommendations and calls for improving the reproductive health of women, especially in developing countries. What is innovative about this program in comparison to earlier approaches is that efforts to achieve this goal do not rely solely on isolated measures such as better access to contraceptive services. Rather, the program serves as a reminder that the essential requisite to bettering reproductive health is a fundamental improvement in the social status and rights of girls and women. The ICPD Program of Action lists the following points:

(a) Access to appropriate health care services: prenatal and postnatal care, obstetrics and emergency obstetrics care, treatment of STDs, abortion by qualified medical practitioners.

(b) Availability of contraceptive services: access to safe, effective, affordable, and acceptable methods of family planning.

(c) Sex education, including education for the adolescent population.

(d) Strengthening the legal, economic, and social position of girls and women.

The recommended measures of the IPCD conference continued to direct the greatest share of attention to women as the major agents of change. In the meantime, focus has shifted to include the male partner since the critical behavior unit is the sexually active couple (Becker and Robinson 1998). Overviews of research in this area (for example Becker 1996) show that reproductive health interventions (especially family planning) targeted at couples are more effective than those targeted at one or the other sex. The pair approach to reproductive health does, however, presume a certain level of equality between man and woman. In countries where very patriarchal structures continue to predominate, it is sometimes necessary to

#### Gender and Reproductive Health

provide initial separate services and consultations to men and women. In their report on an intervention program in Bangladesh, for example, Becker and Robinson relate how the male villagers first had to be convinced to 'allow' their wives to use contraceptive devices (Becker and Robinson 1998).

Improving the couple's communication is an essential way to increase men's participation and to promote reproductive health (Drennan 1998). In many less developed countries, only a minority of spouses talk about issues like sexuality and family planning. Demographic and Health Surveys in Nigeria, Senegal, and Pakistan conducted in the 1990s, for example, report that only one-quarter of men currently married had discussed family planning with their wives. The percentages in Cameroon (31 percent) and Ghana (37 percent) were not much higher. Drennan (1998) discusses social and cultural factors that obstruct couple communication. It is taboo in many societies to talk about sexuality. In addition, the inferior status of women often found in traditional societies continues to aggravate communication.

Many recent approaches to promoting reproductive health and preventing unintended pregnancies and STDs/HIV share a perceptible shift from models of behavioral change centered on the individual to attempts to include the partner and to consider the social network. This development can be traced back to the increasing awareness that sexual/reproductive behavior is strongly determined by social norms (Bond et al. 1999).

See also: Family and Gender; Fatherhood; Rape and Sexual Coercion; Reproductive Rights in Affluent Nations; Reproductive Rights in Developing Nations; Sexual Risk Behaviors; Sexuality and Gender; Sexually Transmitted Diseases: Psychosocial Aspects

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### M. Sieverding

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