Improving Women’s Health in Pakistan

Anne G. Tinker
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The World Bank
Washington, D.C.
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Foreword

Women's disproportionate poverty, low social status, and reproductive role expose them to high health risks, resulting in needless suffering and many preventable deaths. Yet cost-effective interventions exist to stop this unnecessary loss of lives. To achieve the greatest health gains at the least cost, national investment strategies should give considerable emphasis to health interventions for women, particularly during their reproductive years. Governments, external assistance agencies, nongovernmental health service providers, and local communities can join in partnership to adapt models and strategies from around the world to improve the health and nutrition of women.

This report provides information on the health problems of Pakistani women, whose health and general welfare are among the lowest in the world, and identifies steps to address these problems. It is designed to generate discussion among interested parties in Pakistan and elsewhere to promote policy and programmatic action.

The report is part of the process of developing and implementing the Bank's Health, Nutrition, and Population Sector Strategy. A key priority of the strategy is to work with countries to improve health, nutrition, and population outcomes for the world's poor, with emphasis on meeting the needs of the most vulnerable, such as women and children. It also seeks to allocate scarce public resources to achieve the greatest impact.

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Acknowledgments

This report was prepared by Anne Tinker (principal health specialist) for Barbara Herz (who initiated the effort), Richard Skolnik (who facilitated its completion), Hugo Diaz (task manager), Ian Morris, Siraj ul Haq, Bashirul Haq, and our government colleagues in the Ministries of Health and Population Welfare. Tazim Mawji, 1996 summer intern, assisted in the initial literature review. The effort of those who took the time to read and comment on the drafts of this report is greatly appreciated. Particular thanks are due to Harold Alderman, Vincent de Witt, Hugo Diaz, Fariyal Fikree, Kathleen Finn, Siraj ul Haq, Jim Herm, Pamela Hunte, Edna Jonas, Tom Merrick, Peter Miller, Homira Nassery, Zeba Sathar, and Chris Walker. The author wishes to express her appreciation to the many individuals from the government of Pakistan, nongovernmental organizations, and communities who kindly shared their experiences and insights.
Summary

Pakistan lags far behind most developing countries in women's health and gender equity. The sex ratio is one of the most unfavorable to women in the world, a result of excess female mortality during childhood and childbearing. One woman in every 38 dies in childbirth, and half of infant deaths result from poor maternal health and nutrition. Pakistan's extremely high fertility—relative to rates in other Asian countries—is the product of inadequate services that fail to meet contraceptive needs and a preference for large families that reflects women's traditional status. Lack of mobility, decisionmaking power, and income, as well as prohibitions against seeking care from male providers, present serious constraints to women's ability to use the limited services that are available. Against this history, however, are some positive recent developments that, if vigorously strengthened and sustained, could bring about significant development progress for women, families, and the national economy.

Status of Women's Health Services

Pakistan has not yet moved toward a reproductive health approach to family planning and women's health, despite the consensus reached at the 1994 International Conference on Population and Development among more than 180 countries, Pakistan among them, to adopt that approach. Ministry of Health services are generally curative and poorly administered, while Ministry of Population Welfare services have limited coverage and scope. A promising initiative is the recent effort to train and support community-based female workers, which would make services both more accessible and more acceptable to women.

The following are among the major issues affecting women's health in Pakistan:

- About 24 percent of Pakistani married women use contraception (usage is 40–80 percent in most of Asia), although this marks a substantial increase from the 9 percent in 1985.
- The gap between contraceptive use and the desire to space or limit births is one of the largest in the world. More than one-third of Pakistani women wish to space the next birth or limit the family to its current size but are not using contraception.
- Laws are highly restrictive on abortion, yet many women resort to unsafe abortion, which causes 5–13 percent of maternal deaths.
- One-third of births occur less than two years apart, which doubles the mortality risk for the newborn.
- More than 40 percent of Pakistani women are anemic.
- Only 20 percent of women are assisted by a trained provider during delivery.
- Pakistan ranks third among the world's countries in numbers of infants who die of neonatal tetanus, which can be prevented by immunizing the mother as part of prenatal care.
- Information and services to prevent and control reproductive tract infections (including transmission of HIV) and to combat gender-based violence are virtually unavailable.
- Households spend considerably less on women than on men in the event of illness.

The private sector, which accounts for about 60 percent of the total health expenditure, remains a largely untapped partner in the effort to improve reproductive health. There are a few exceptions, including the social marketing of contraceptives and a few, mainly urban-
based nongovernmental organizations (NGOs) active in health care.

The quality of care is depressed by a lack of responsiveness to women's special health needs and cultural factors associated with their disadvantaged status; shortages of staff (especially female and paramedical workers), supplies, and drugs; inadequate community outreach and counseling; lack of adherence to standard medical procedures; and weak supervision. These failures are reflected in underutilization of services, as well as poor health indicators.

**Strategies for Change**

Despite the many problems Pakistan faces, there are encouraging signs of progress. The public sector is initiating reforms, especially through the Social Action Program launched five years ago. A larger share of government health expenditures is being directed to basic health services, such as reproductive health and communicable disease control. Community-based female health workers are being supported to bring services closer to women. Contraceptive prevalence is rising to meet growing demand, particularly in the Punjab where most of the population lives. Furthermore, more girls are going to school. With increased and sustained effort, Pakistan has the potential to reduce its high maternal and child mortality levels and improve women's status. Effective change will require:

- Strong, consistent government commitment and decentralized management to increase equity and cost-effectiveness in the distribution of health services
- A shift from a top-down, physician-dominated system to a client-centered model emphasizing women bringing information and services to women
- Adoption of a reproductive health approach, including integration of health and family planning services and making the health departments more accountable for improving reproductive health outcomes
- Clear goals and indicators, with effective monitoring and evaluation systems
- Participation of NGOs, local communities, and women in planning and implementation

- Emphasis on multisectoral linkages, including attention to broader women's health concerns and girls' education.

**Program Priorities**

Program priorities will include greater access for women to female health workers, especially at the village level; proper incentives and supervision to improve quality, especially the quality of staff performance and the provision of adequate supplies; more effective counseling; and a functioning referral system. It would be advisable to develop demonstration projects in a limited number of districts, adapted to local conditions. The emphasis in the Punjab, for example, would be primarily on meeting existing demand, while in Balochistan, raising demand would be stressed. Recommended actions to improve women's health are noted below.

**Family planning**

- Meet existing and expanding need with increased access to a range of contraceptives.
- Strengthen communication activities for behavior change and develop strategies aimed at men and newlyweds.
- Effectively communicate the benefits of small families.
- Facilitate the expansion of social marketing.

**Maternal health**

- Increase awareness of the high disease burden on children as well as on women associated with poor maternal health.
- Improve prenatal, delivery, and postpartum care at peripheral health facilities.
- Emphasize that traditional birth attendants can be trained to reduce harmful practices, but that the referral system must be made functional to manage life-threatening complications.
- Strengthen the supervision and support of community-based workers and linkages with facilities to provide an effective continuum of care.

**Reducing morbidity throughout the life cycle**

- Initiate more gender-sensitive approaches, including public education, to combat gender-based vio-
Summary

violence and other culturally based problems, as well as outreach in counseling and service delivery.

- Increase nutrition education, highlighting the importance of iron supplementation and appropriate foods during pregnancy and lactation.
- Prevent the spread of HIV/AIDS through public education, condom promotion, and management of sexually transmitted diseases, particularly among commercial sex workers and other high-risk groups.

Information Needs

More information is urgently needed as a basis for program planning, particularly qualitative research from the perspectives of both clients and providers; epidemiological and socioeconomic data disaggregated by gender and age; and information on neglected areas, such as the extent and dimensions of maternal morbidity, reproductive tract infections, malnutrition, and gender-based violence.

Future Prospects

If action is not taken swiftly, Pakistan will fall further behind its Asian neighbors in human capital development and jeopardize future opportunities for economic growth. High fertility and women's poor health seriously limit not only family well-being and productive capacity in Pakistan today, but also the development potential of tomorrow.
1 Introduction

The status of women is considerably worse in South Asia than in most of the world. And within South Asia, Pakistan has one of the worst records in female health and education. Pakistan's fertility rate of 5.4 is considerably higher than that of any other large Asian country, and as many as 1 in every 38 women die from pregnancy-related causes—compared, for example, with 1 in 230 women in Sri Lanka.

While poverty and a weak health system underlie the poor health status of the general population, women face unique, additional risks because of their reproductive biology and low socioeconomic status. Cultural factors, including the practice of seclusion and limited decisionmaking authority, impede women's access to social services such as health care and education, as well as income producing opportunities. Poor health and nutrition reduce women's productive capacity, which is currently undervalued and poorly utilized. Improving the health and productive potential of Pakistani women will play a vital role in all aspects of the country's development, including its potential for economic growth.

The health programs most relevant for Pakistan's population will give the highest priority to improving reproductive health and reducing communicable diseases among infants and children. A recent burden of disease study for Pakistan (World Bank 1997a) indicates that pregnancy-related conditions constitute 13 percent of the total disease burden and communicable diseases an additional 38 percent. The disease burden for maternal and perinatal conditions is comparable to the combined burden of tuberculosis and respiratory infections among males and females of all ages. In addition, close to one-half of the disease burden caused by vaccine-preventable childhood diseases arises from neonatal tetanus, which is most cost-effectively prevented by immunizing the mother.

This report describes the status of reproductive health among women in Pakistan, assesses the adequacy of existing health services, and provides recommendations for directing assistance toward the improvement of women's reproductive health. It is based on an extensive review of documents and journal articles and insights from colleagues who have worked in Pakistan's health sector, in addition to lessons drawn from studies of women's health in other countries. Data are drawn primarily from the Pakistan Demographic and Health Survey (Pakistan, National Institute of Population Studies, Federal Bureau of Statistics, and IRD Macro, Inc. 1992; after here cited as PDHS), conducted in 1990–91; Pakistan Contraceptive Surveys (Pakistan, Ministry of Population Welfare and Population Council 1995a; cited as PCPS), 1984–85 and 1994–95; Pakistan Integrated Household Survey (Pakistan, Federal Bureau of Statistics 1996; cited as PIHS), 1995–96; and the National Health Survey of Pakistan (Pakistan Medical Research Council 1996; cited as NHSP), 1990–94; and the Pakistan Fertility and Family Planning Survey (Pakistan, National Institute of Population Studies and London School of Hygiene and Tropical Medicine; cited as PFFPS), conducted in 1996–97.
Female Morbidity and Mortality

The health and general welfare of women in Pakistan are among the lowest in the world. This section looks at the extent of the problem, with a particular focus on reproductive health problems, which constitute a significant cause of premature death and disability.

Mortality differences by sex and age

Pakistan is one of the few countries in the world where men outnumber women.\(^1\) While this holds true in some neighboring Asian countries where the status of women is also low, the sex ratio in Pakistan is the most unfavorable to women of the large countries of Asia. The Pakistan Demographic and Health Survey (PDHS) found that there are 108 men for every 100 women, although surveys suggest that the imbalance has been lessening since 1950, when the ratio was 117:100 (table 1).

This unfavorable ratio is mainly a consequence of excess mortality of young girls and women among childbearing age. The mortality of females is 66 percent higher for girls than for boys between the ages of 1 and 4, suggesting significantly less favorable treatment of girls than of boys (PDHS 1993). According to the Federal Bureau of Statistics, that difference was less than 15 percent in 1988, suggesting that gender discrimination at early ages may have intensified in recent years. In 1988 (more current data were not available for lifetime age- and gender-specific mortality rates) the mortality rate for women during the peak childbearing years (ages 20–29) was more than double the rate during the lowest lifetime risk period (ages 10–19), a reflection of poor maternal health services. Furthermore, mortality rates for women in their twenties were twice as high as those for men of the same age. For infant girls and for women who survive the prime childbearing years, the innate female biological advantage was evident (table 2).

Maternal mortality

Pakistan's maternal mortality ratio is most frequently reported as 340 maternal deaths for every 100,000 live

<table>
<thead>
<tr>
<th>Age group</th>
<th>Both sexes</th>
<th>Male</th>
<th>Female</th>
<th>Male/ female ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>All ages</td>
<td>9.8</td>
<td>10.4</td>
<td>9.2</td>
<td>1.13</td>
</tr>
<tr>
<td>Below age 1</td>
<td>142.3</td>
<td>144.5</td>
<td>140.0</td>
<td>1.03</td>
</tr>
<tr>
<td>1–4</td>
<td>6.9</td>
<td>6.4</td>
<td>7.3</td>
<td>.88</td>
</tr>
<tr>
<td>5–9</td>
<td>1.3</td>
<td>.9</td>
<td>1.8</td>
<td>.50</td>
</tr>
<tr>
<td>10–14</td>
<td>1.0</td>
<td>.9</td>
<td>1.2</td>
<td>.75</td>
</tr>
<tr>
<td>15–19</td>
<td>1.6</td>
<td>1.8</td>
<td>1.3</td>
<td>1.38</td>
</tr>
<tr>
<td>20–24</td>
<td>2.4</td>
<td>1.6</td>
<td>3.1</td>
<td>.52</td>
</tr>
<tr>
<td>25–29</td>
<td>2.3</td>
<td>1.8</td>
<td>2.7</td>
<td>.67</td>
</tr>
<tr>
<td>30–34</td>
<td>2.1</td>
<td>2.5</td>
<td>1.8</td>
<td>1.39</td>
</tr>
<tr>
<td>35–39</td>
<td>2.8</td>
<td>3.2</td>
<td>2.4</td>
<td>1.33</td>
</tr>
<tr>
<td>40–44</td>
<td>4.5</td>
<td>5.5</td>
<td>3.6</td>
<td>1.53</td>
</tr>
<tr>
<td>45–49</td>
<td>5.3</td>
<td>7.5</td>
<td>3.0</td>
<td>2.50</td>
</tr>
<tr>
<td>50–54</td>
<td>8.6</td>
<td>9.8</td>
<td>7.3</td>
<td>1.34</td>
</tr>
<tr>
<td>55–59</td>
<td>11.6</td>
<td>12.2</td>
<td>10.9</td>
<td>1.12</td>
</tr>
<tr>
<td>60–64</td>
<td>28.0</td>
<td>31.3</td>
<td>24.4</td>
<td>1.28</td>
</tr>
<tr>
<td>65+</td>
<td>64.0</td>
<td>68.2</td>
<td>58.9</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Table 2: Gender- and Age-Specific Mortality Rates (deaths per 1,000)

births. It is also estimated that 1 woman in every 38 dies from pregnancy-related causes (WHO and UNICEF 1996; this indicator takes into account the number of pregnancies women experience over a lifetime as well as obstetric risk).

Because national data are lacking, the maternal mortality rate was derived using a simple model based on the general fertility rate and the proportion of births assisted by trained midwives or doctors, as estimated in the PDHS. It is likely, however, that only about 20 percent of births are assisted by appropriately skilled health providers, rather than 35 percent as estimated in the PDHS. Many experts also believe the maternal mortality rate may be higher than reported.

Population-based studies among poor populations conducted by Aga Khan University report maternal mortality rates ranging from 281 for every 100,000 live births in Karachi’s urban settlements to 673 for every 100,000 live births in rural Balochistan. Almost 80 percent of maternal deaths are direct obstetric deaths resulting from postpartum hemorrhage (36 percent), antepartum hemorrhage (17 percent), infection (16 percent), and eclampsia (14 percent). Hepatitis is the most frequently cited single cause of maternal death from indirect causes (table 3). The laws concerning induced abortion are highly restrictive, and women who resort to clandestine, unsafe abortion do so at significant risk. The extent of mortality following complications of unsafe abortion is not precisely known, but on the basis of the available studies, it is assumed to be considerable. In the studies conducted by Aga Khan University, abortion accounted for more than 5 percent of maternal deaths from direct causes (Fikree, Rahbar, and Berendes 1997). In a hospital-based survey of 30 private and public hospitals in Pakistan, 11 percent of maternal deaths were attributed to induced abortion (Fikree, Khan, and Ahmed 1996). A study of maternal deaths in the Faisalabad metropolitan area found that 13 percent were caused by unsafe abortion (Bashir 1993).

**Effect of maternal health on infant mortality**

The most important determinant of a newborn’s survival and healthy start in life is the mother’s health and nutritional status and the quality of care she receives. In Pakistan, where almost one-half of women are anemic throughout their pregnancies and more than two-thirds deliver at home without trained assistance, infant mortality and morbidity associated with pregnancy-related conditions are high. And the rate of infant mortality from all causes is one of the highest in Asia.

Overall, there has been a decline in infant and child mortality rates over the past two decades, in good part

<table>
<thead>
<tr>
<th>Clinical causes</th>
<th>Karachi</th>
<th>Balochistan</th>
<th>North-West Frontier</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct maternal causes</td>
<td>88.2</td>
<td>77.4</td>
<td>71.1</td>
<td>78.1</td>
</tr>
<tr>
<td>Postpartum hemorrhage</td>
<td>40.0</td>
<td>34.4</td>
<td>37.0</td>
<td>35.9</td>
</tr>
<tr>
<td>Antepartum hemorrhage</td>
<td>13.3</td>
<td>17.7</td>
<td>18.5</td>
<td>17.0</td>
</tr>
<tr>
<td>Eclampsia</td>
<td>23.3</td>
<td>12.5</td>
<td>11.1</td>
<td>14.4</td>
</tr>
<tr>
<td>Puerperal sepsis</td>
<td>13.3</td>
<td>18.8</td>
<td>11.1</td>
<td>16.3</td>
</tr>
<tr>
<td>Abortion</td>
<td>6.7</td>
<td>6.3</td>
<td>—</td>
<td>5.2</td>
</tr>
<tr>
<td>Cephalopelvic disproportion</td>
<td>3.3</td>
<td>6.3</td>
<td>11.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>4.2</td>
<td>11.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Indirect maternal causes</td>
<td>11.8</td>
<td>22.6</td>
<td>29.9</td>
<td>21.9</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>—</td>
<td>17.9</td>
<td>9.1</td>
<td>14.0</td>
</tr>
<tr>
<td>Congestive cardiac failure</td>
<td>25.0</td>
<td>7.1</td>
<td>9.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>25.0</td>
<td>7.1</td>
<td>9.1</td>
<td>9.3</td>
</tr>
<tr>
<td>Thrombosis</td>
<td>—</td>
<td>3.6</td>
<td>9.1</td>
<td>4.7</td>
</tr>
<tr>
<td>Anemia</td>
<td>—</td>
<td>3.6</td>
<td>—</td>
<td>2.3</td>
</tr>
<tr>
<td>Puerperal psychosis</td>
<td>—</td>
<td>3.6</td>
<td>—</td>
<td>2.3</td>
</tr>
<tr>
<td>Other</td>
<td>—</td>
<td>32.1</td>
<td>54.5</td>
<td>34.9</td>
</tr>
<tr>
<td>Unknown</td>
<td>50.0</td>
<td>25.0</td>
<td>9.1</td>
<td>23.3</td>
</tr>
</tbody>
</table>

*Note: Clinical causes reported are restricted to maternal deaths identified in the four-year recall period for Balochistan and the five-year recall period for other areas. Karachi data are limited to the low socioeconomic settlements. Source: Fikree and others 1997.*
due to the rapid expansion of immunization. Nevertheless, maternal, perinatal, and neonatal rates have remained relatively stagnant. According to recent statistics, more than half of infant mortality and 45 percent of under-5 mortality in Pakistan occurs during the first month of life. These deaths are primarily the result of poor maternal health and nutrition, inadequate coverage of pregnant women with tetanus toxoid immunization, and complications at delivery. Several statistics reflect the impact of maternal health care on child survival. Under-5 mortality is 70 percent higher among children born to women who did not receive antenatal and delivery care than among children whose mothers did (PDHS 1992).

Neonatal tetanus is the leading cause of infant mortality in Pakistan. Immunizing a pregnant woman against tetanus will protect her and her newborn from this infection, often caused by nonsterile delivery procedures. In 1996 at least 30,000 deaths occurred due to neonatal tetanus, which represents a rate of 7 of every 1,000 live births. This puts Pakistan third in the world for annual number of neonatal tetanus deaths and cases after Nigeria and India (Francois Gasse, World Health Organization, personal communication, 1997). Tetanus toxoid immunization of mothers as part of prenatal care could cost-effectively prevent close to half of the disease burden caused by vaccine-preventable diseases.

About one in four Pakistani infants are born with low birthweight (less than 2.5 kilograms), among the highest rates in the world. These low birthweights are primarily the result of maternal malnutrition and anemia. The effects of iodine and vitamin A deficiencies on pregnancy outcome are also of considerable concern. Most prevalent in the mountainous regions of northern Pakistan, iodine deficiency in pregnant women causes more than 7 percent of full-term babies to be stillborn or to die within the first month of life, and it can cause cretinism in those who survive (UNICEF 1996; UNICEF and Government of Pakistan 1992; Pakistan, National Institute of Health 1988). Despite strong economic growth over the past two decades, the percentage of low-birthweight babies has remained virtually constant at 27 percent since 1979 (UNICEF 1996).

While the major contributing factor to maternal death and poor infant outcome is lack of adequate nutrition and health care for mothers, the timing and frequency of childbearing is also of concern. A Pakistani child's risk of dying rises with a mother under the age of 18 or a short birth interval. The interval between births has a powerful influence on survival, regardless of the mother's age. A short birth interval (less than two years) more than doubles an infant's risk of dying when compared with birth intervals of two to three years, and more than quadruples the risk when compared with birth intervals of four years or longer (PDHS 1992). During the period of the PDHS study one out of every three births occurred within 24 months of the previous birth.

Nutritional deficiencies
Malnutrition is a major problem among the poor in Pakistan. It affects adult women more than men, and it contributes to a vicious cycle of poor growth from generation to generation. Female malnutrition in Pakistan is the result of inadequate food intake because of poverty. It is exacerbated by the low status of women, which affects their access to food within the household. There is ambiguous evidence to support the popular belief that Pakistani girls are discriminated against in nutrition practices.

Anemia prevalence is very high among children through puberty. Among adults at least 40 percent of a women and 21 percent of men are anemic (table 4). According to the 1985–87 data, adult women consume less iron than men, even though women require three times as much iron as do men to maintain their health. (Women need more iron beginning with the onset of menstruation in early adolescence, and even more during pregnancy and lactation.) During pregnancy, women consume about one-half the recommended iron intake. Factors contributing to high rates of anemia are early marriage and childbearing, short intervals between pregnancies, high parity, poor nutrition resulting from poverty, skewed intrahousehold food distribution practices, a high incidence of intestinal worms, and a lack of supplemental iron during pregnancy (College of Physicians and Surgeons 1995; Pakistan, National Institute of Health 1988).

Pregnant women receive 87 percent of the recommended calories and lactating women 74 percent
Extent and Dimensions of the Problem

Table 4 Prevalence of Anemia, by Province (percent)

<table>
<thead>
<tr>
<th>Group</th>
<th>North-West Frontier</th>
<th>Punjab</th>
<th>Sindh</th>
<th>Balochistan</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>46.5</td>
<td>58.6</td>
<td>70.8</td>
<td>87.2</td>
<td>62.9</td>
</tr>
<tr>
<td>5–14 years</td>
<td>26.8</td>
<td>36.5</td>
<td>56.9</td>
<td>65.6</td>
<td>41.8</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 years or older</td>
<td>7.5</td>
<td>21.5</td>
<td>24.3</td>
<td>41.5</td>
<td>21.2</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 years or older</td>
<td>14.7</td>
<td>36.2</td>
<td>51.7</td>
<td>60.5</td>
<td>40.3</td>
</tr>
<tr>
<td>Pregnant, 15–44 years</td>
<td>06.9</td>
<td>37.9</td>
<td>53.2</td>
<td>37.5</td>
<td>41.4</td>
</tr>
</tbody>
</table>

Source: NHSP 1996.

(Pakistan, Federal Bureau of Statistics 1995), and protein intake for these women is around 85 percent of recommended levels. In the 1985–86 survey about 34 percent of mothers were estimated to be underweight (Pakistan, National Institute of Health 1988). Nutritional deficiencies affect not only women but also their offspring, as already noted. Furthermore, malnutrition in women creates a tragic intergenerational cycle. Malnourished mothers face potential complications in childbirth and the likelihood of low birthweight babies. If those babies are girls, they will be predisposed to poor pregnancy outcomes when they reach childbearing age.

Reproductive tract infections and cancers

The extent of reproductive tract infections in Pakistan has not been documented. Studies of such infection in a comparable setting, however, suggest that women suffer a substantial but silent burden. Research in India found that most women of reproductive age suffer from reproductive tract infections and other gynecological disorders, and similar contributory factors exist in Pakistan, including inadequate menstrual hygiene, unhygienic delivery, poor water quality and sanitation, and a general lack of health and sexuality education (World Bank 1996a). Women are not only more susceptible than men to these infections, but they are also more prone to develop complications. Reproductive tract infections, including sexually transmitted diseases, can cause pelvic inflammatory disease, ectopic pregnancy, infertility, other problems of pregnancy and childbirth, and chronic pain. Reproductive tract infections also increase women’s susceptibility to HIV infection. HIV/AIDS prevalence is considered to be low in Pakistan, although there has been limited effort to collect reliable data. The World Health Organization (WHO) estimated that 40,000 people had been infected with HIV by the end of 1995 (Khawaja and others 1997). In Pakistan, where HIV/AIDS and other matters that involve sexuality are socially sensitive, innovative and culturally acceptable methods are required to promote surveillance, prevention efforts, and open discussion.

Cancers of the breast and reproductive tract constitute a significant proportion of the cancers seen in women in Pakistan. A study involving five hospitals in four provinces found that 19 percent of women with cancer had gynecological cancer; 9 percent of women with cancer had cancer of the cervix. Cancer of the breast was the most common cancer in women, accounting for 26 percent of all cases (Jafarey and Zaidi 1987).

General morbidity

Information on disease and disability in Pakistan is extremely scarce. Even the analysis of facility-based data has been limited. To provide a database on the nation’s health, the Pakistan Medical Research Council conducted the National Health Survey of Pakistan in 1990–94. According to the survey (NHSP 1996), the four leading problems that prompted females 5 years of age and older to seek medical care were respiratory difficulties (26 percent), body pain (14 percent), stomach and bowel distress (10 percent), and reproductive problems (6 percent; table 5). For males, the four main complaints that prompted requests for medical care
were respiratory difficulties (27 percent), body pain (10 percent), stomach and bowel distress (9 percent), and skin ailments (7 percent).

There appeared to be considerable variation in these rankings, both by province and within provinces. (Standard errors are forthcoming and will qualify results at the provincial level.) For example, reproductive problems were the single main complaint in the North-West Frontier Province (17 percent). Respiratory, skin, and bowel problems more frequently prompted women to seek care in urban than in rural areas, while complaints about reproductive problems and headache were more prevalent in rural areas than in urban settings. Among reproductive problems, prolapsed uterus was identified as a problem by 20 percent of reproductive-age women (NHSP 1996).

**Gender-based violence**

Domestic violence is beginning to receive attention in Pakistan as a women's rights issue and a serious public health issue. According to the Pakistan Ministry of Women's Development, violence against women is rooted in the social relationships of patriarchy, which are based on a system of male domination and female subordination. The ministry noted that wife beating is fairly common, and that about four rapes are reported in the country each day, according to official statistics (Pakistan, Ministry of Women's Development and Youth Affairs 1995).

In a household survey of more than 1,000 women in rural Punjab 35 percent of the women reported being beaten by their husbands at some time and 7 percent reported that they were beaten regularly. Reports of domestic violence were highest in the most developed peri-urban site, where more than half the women reported being beaten (Sathar and Kazi 1997).

Two small-scale studies recently conducted in Karachi also indicate that gender-based violence is common in Pakistani households (Bhatti and others 1996; Hussain and others 1996). In the first study of 176 married men, 74 percent reported that domestic violence was a common problem, and 65 percent stated that there was a need to create public awareness of the problem. Twenty-eight percent of the men reported that they had abused their wives physically in the past year and most reported inflicting bruises (93 percent) and lacerations (31 percent). The most prominent factors inciting violence were children (72 percent) and economic problems (71 percent).

In the second Karachi study surveying 150 married women, 34 percent reported some form of physical abuse. Of these 39 percent reported verbal abuse; 37 percent, sexual abuse; 64 percent, economic abuse; and 94 percent, psychological abuse during their married lives. Almost one-half of the women who had been physically abused had been hit during pregnancy, and one-third of those women reported a subsequent miscarriage (Bhatti and others 1996; Hussain and others 1996).

<table>
<thead>
<tr>
<th>Table 5 Problems That Prompted Females to Seek Medical Care in the Past 14 Days, by Province and Adjusted Rates (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Respiratory</td>
</tr>
<tr>
<td>Stomach</td>
</tr>
<tr>
<td>Body pain</td>
</tr>
<tr>
<td>Headache</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>Reproductive</td>
</tr>
<tr>
<td>Urinary</td>
</tr>
<tr>
<td>Bowel</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

*Note: Reference age = 5 years and above.*

*Source: NHSP 1996.*
Fertility

Pakistan is far behind its neighbors in the transition to lower fertility (figure 1). High fertility adversely affects maternal and infant outcomes, and rapid population growth impedes efforts to reduce poverty. With its high annual population growth rate of 2.8 percent, Pakistan is likely to become the third most populous country by 2050, behind only China and India.

**Fertility determinants and consequences**

High fertility in Pakistan is explained by the unmet need for contraception and the desire for a large family. Both are heavily influenced by the sociocultural context. Early childbearing contributes to the high levels of fertility, poses greater health risks to mothers and their newborns than childbirth during the peak reproductive years, and hastens the rate of population momentum. Although the ages of marriage and childbearing have risen in recent years, 30 percent of women age 20-24 had their first child by the age of 19. In Balochistan childbearing under the age of 20 is double that in Punjab (PDHS 1992).

Breastfeeding reduces postpartum fertility and has important nutritional benefits for children. However, breastfeeding practices in Pakistan are poor, as evidenced by the finding that only 16 percent of infants under the age of 3 months are exclusively breastfed (UNICEF 1998). On average, Pakistani women breastfeed their children for 20 months, and the median duration of amenorrhea following pregnancy is 6.3 months (PDHS 1992).

![Figure 1 Total Fertility Rate, Selected Asian Countries (percent)](image)

<table>
<thead>
<tr>
<th>Country</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-West Frontier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>16.6</td>
<td>17.4</td>
<td>17.2</td>
</tr>
<tr>
<td>Rural</td>
<td>5.0</td>
<td>6.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>22.8</td>
<td>23.8</td>
<td>23.4</td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>5.0</td>
<td>6.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Rural</td>
<td>2.3</td>
<td>3.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Total</td>
<td>7.3</td>
<td>9.7</td>
<td>8.5</td>
</tr>
</tbody>
</table>


**Unwanted fertility**

More women fail to have their contraceptive needs met in Pakistan than in other Asian countries (figure 2). Some 60 percent of married women want to stop having children or want to delay the next birth and are therefore potentially in need of family planning. More than one-third want no more children. There is considerable variation by province in the number of women who want no more children, from 49 percent in Punjab to 27 percent in Balochistan. More than one-third of married women have an unmet need for family planning services, with 13 percent wanting to space their births and 24 percent wanting no more children (PFFPS 1998).
The PDHS found that among those using family planning, only 2 percent were doing so to space their children. Most women who practice family planning did not initiate contraception until they reached 35 years of age and had three living children (PDHS 1992). The number of living sons is an important determinant of contraception and the desire to end childbearing. In Punjab, 68 percent of women with two living sons wanted no more children (Sathar and Kazi 1997). Many women resort to clandestine, unsafe abortion in the event of an unwanted pregnancy. Among women 18-40 years old queried in the most recent national survey, 30 percent reported that they have had at least one abortion (NHSP 1996). Obtaining reliable information on abortion in comparable settings has been extremely difficult, and the incidence is usually underreported (Stone and Campbell 1984).

To address the unmet need for family planning services in Pakistan, access to both information and contraceptives must be improved and the quality of care raised. Otherwise, unwanted fertility will contribute to excessive population growth, and increasing numbers of women will resort to unsafe abortion, resulting in complications that the health system is not equipped to handle.

In addition to lack of access, other factors impeding the use of family planning services include fear of side effects, lack of cooperation by the husband or mother-in-law, religion, and fatalism. According to the PIHS, the main reasons women gave for not using family planning were that they wanted children (43 percent), they did not know enough about it (25 percent), their spouse did not want it (11 percent), they had religious reasons (8 percent), and they believed there would be bad side effects (4 percent). In Balochistan, nonusers’ reasons differed statistically: 37 percent wanted children and 47 percent did not know enough about family planning (PIHS 1996).

**Desired family size and women’s status**

While desired family size has declined to 2.5 children in Bangladesh, demand for large families persists in Pakistan. According to the PDHS, Pakistani women consider an average of 4.1 children as the “ideal” family size; in Balochistan the ideal is 6.3. Fertility is viewed fatalistically, as evidenced by the finding that most women ascribe family size to “God’s will” (NHSP 1996).

The unfavorable status of women in Pakistan affects both their desire for fertility and their behavior, as well as their health status and that of their children. Physical restrictions on women’s movements severely constrain women’s ability to participate in society and their access to health care. Studies in developing countries have consistently demonstrated a strong link between a woman’s education (especially at the secondary level) and her fertility and the survival of her children. Pakistani women with primary education are twice as likely as women with no education to practice contraception, and women with secondary or higher education are three times as likely to adopt the practice (PIHS 1996). Less than one-quarter of Pakistani women are literate, and for every 38 boys who attend school, only 20 girls do (United Nations 1995). Factors responsible for the low educational attainment of girls include direct costs, the need for their labor, the low expected returns, and cultural barriers.

Other examples of female disadvantage include child marriage, marriage to older men, a strong societal preference for sons, gender disparities in childhood mortality, and inequitable allocation of resources such as health care and income. For example, parents
depend on sons for assistance in income-producing activity, including support in their old age. A strong preference for sons could be a constraint to reaching low levels of fertility as family size declines; it could also lead to sex-selective abortion, as in China, India, and the Republic of Korea.

There is evidence of progress, however, as the desired family size appears to be decreasing. Data for 1995–96 indicate that women want fewer than 3 children and that women age 20–24 desire only 2.5 (PIHS 1996). In a recent study of men, however, 38 percent set the optimal family size at more than 4 children and only 8 percent believed that a couple should have 2 children (Bhatti and Hakim 1996).

**Infertility**

A survey by the National Research Institute of Fertility Control in Karachi puts the prevalence of primary infertility at 3.5 percent and that of secondary infertility at 18.4 percent. Secondary infertility was associated with stillbirth and unsafe abortion; it can also result from reproductive tract infections (particularly sexually transmitted infections) and unhygienic delivery or surgery. Primary infertility was found to be highest in rural North-West Frontier Province, at 5.4 percent, and secondary infertility was highest in urban Punjab, at 23 percent (Noorani 1995). Since a woman's status rests primarily on her success in bearing children, infertility—usually held to be the wife's problem, since the possibility that her husband may be infertile is not considered—is a major disaster for a Pakistani woman.

**Notes**

1. In all human populations, more boys are born than girls, and under normal circumstances male death rates are higher than female death rates at every age. For Pakistani children under one year of age, mortality is slightly higher for boys than girls, yet from ages one through fourteen, more girls die than boys. Early infant mortality is attributable largely to causes that are not gender specific, such as tetanus, prematurity, and congenital conditions, and breastfeeding provides some protection from the common communicable diseases. Childhood deaths after the first months, however, are by and large caused by infectious diseases. The incidence and severity of most of these diseases are affected by controllable factors such as immunization, treatment of illness, and nutrition. Where gender bias exists, these factors are not controlled equally for male and female children.

2. Primary infertility is the result of innate biological factors. Secondary infertility is the result of infection or medical intervention.
3 Reproductive Health Services

Many countries have moved toward a reproductive health approach to family planning and women’s health that is consistent with the recommendations of the 1994 International Conference on Population and Development, but Pakistan has not.¹ The two ministries that administer reproductive health services in Pakistan—the Ministry of Health and the Ministry of Population Welfare—have no reproductive health strategy or coordinated approach. Furthermore, bureaucratic problems generated by having two separate delivery mechanisms interfere with the effective planning and delivery of reproductive health services. An additional constraint is the extreme centralization of health management at the provincial level, and, for the Population Welfare Program, at the federal level.

Organization of Reproductive Health Services

Health care provided by the Ministry of Health is generally oriented toward curative services. Through provincial health departments, the Ministry of Health administers health services in freestanding maternal and child health centers for populations of 5,000–10,000; basic health units, which provide basic care, including maternal and child health services, to populations of 10,000–20,000; and rural health centers, which provide more advanced services and cover populations of 60,000–100,000. Subdistrict (tehsil/tauka) hospitals, with 30–80 beds, provide first-referral services (which should include essential and emergency obstetric care) and are supported by larger district (headquarter) hospitals. The main providers of public health services for women—such as antenatal care and family planning—are the lady health visitors, which number fewer than 9,000 (Pakistan, Ministry of Health 1996c), and other female paramedics.

Reports from 1995 suggest that only about one-third of government first-level care facilities nationwide actually provided family planning services, ranging from about 50 percent in Punjab to 19 percent in Balochistan (World Bank 1997b). The provincial Departments of Population Welfare report that a much higher proportion of facilities have a staff member trained in family planning and keep contraceptives in stock, ranging from 50 percent in the North-West Frontier Province to 82 percent in Balochistan (Siraj ul Haq, World Bank Resident Mission, Islamabad, personal communication, April 1997). Thus many facilities that are equipped to provide family planning are not doing so, whether for lack of clients, temporary absence of trained staff, or contraceptive shortages.

The Ministry of Population Welfare was upgraded in 1990, although the Population Program has been administered separately from the Health Program since the government initiated family planning services in 1965. The Population Program is under closer federal control than the Health Program and covers a smaller part of the country, with fewer than one-fifth the number of clinics. Some 1,500 family welfare centers provide family planning and maternal and child health to cover a population of 6,000–10,000 each. Family welfare centers are led by the family welfare worker, a female paramedic. One hundred reproductive health service centers, located in hospitals, provide sterilization and other family planning services. There are also 130 mobile service units designed to visit remote villages once a month to provide family planning methods, including injectables and intrauterine device (IUD) insertions, but not sterilization (Rosen and Conly 1996; World Bank 1995a, 1996c; Syeda Abida Hussain, Washington, D.C. personal communication, July 1997).
The Ministry of Health has supported upgrading the skills of traditional birth attendants, or dais, in clean delivery, referral of complications, nutrition and breastfeeding counseling, and promotion of immunization and oral rehydration therapy promotion. (They could also play a role in family planning promotion.) During 1994–96 more than 3,500 dais received training, and the government plans to continue the program until one dai from each village has been trained (Pakistan, Ministry of Health 1996c).

Two programs have been particularly effective in expanding outreach to the underserved in the needy rural areas. Since 1992 the Ministry of Population Welfare has trained and deployed 7,000 village-based family planning workers; it proposes to train a total of 30,000 by 2003 (Hussain, personal communication, 1997). The program seeks to train women who are married and live in the village, so that they will be more likely to be accepted and trusted by the villagers. Having found it difficult to recruit adequate numbers of women who met the initial education qualifications, the government has lowered the requirement. This is seen as a sensible adjustment to meet the program's needs. The second program, initiated in 1994 and implemented by the Ministry of Health, has trained and deployed lady health workers, now numbering 43,000, to provide family planning and other basic primary care services, especially in the rural areas. The health workers are required to have eight years of education, but marital status is not a selection criterion. While there was initial concern that the program might suffer from political interference, it appears to have been successful in reducing infant mortality and increasing contraceptive prevalence, apparently because it received priority attention and effective implementation (Pakistan, Ministry of Health 1996a,b; World Bank 1996d). Coordination by the two ministries appears to have prevented an overlap of the two cadres of workers at the village level (World Bank 1996c).

**Coverage and Utilization of Reproductive Health and Other Health Services**

A number of socioeconomic and cultural factors, as well as specific demand and supply issues, affect the coverage and utilization of reproductive health services in Pakistan.

**Poverty and reproductive health**
The poorer the woman, the higher the fertility rate, the less frequent the use of contraceptives, and the less knowledge about contraceptive methods. Women's use of contraception is almost three times lower in the poorest 20 percent of households than in the wealthiest 20 percent. The level of education is similarly correlated with contraceptive use. Furthermore, the poorest households spend half as much on health care as a share of total expenditure as do the richest households, and they spend less on women than on men, as described subsequently (World Bank 1995c).

**Gender differentials**
The low status of women adversely affects their health care from childhood onward. For example, among children age 12–23 months, 39 percent of boys were fully vaccinated compared with 31 percent of girls (PDHS 1992). According to the recent PIHS, coverage of children under 5 who have received any kind of immunization has increased overall during the past five years from 70 to 78 percent, and the coverage gap between boys and girls has lessened. The survey found, however, that the average expenditure on treatment of diarrhea was higher for boys than girls (205 compared to 168 rupees) and that the disparity was greatest in urban areas (PIHS 1996). This difference in treatment was particularly noticeable in Balochistan, where 73 percent of boys were given oral rehydration therapy, compared with 46 percent of girls (PIHS 1996). A UNICEF study concluded that girls' access to urban-based health facilities is about one-half that of boys (Akhtar 1990). Among adults, men are more likely than women to seek medical help for an injury or illness. The nationwide PIHS revealed that 20 percent of men and 27 percent of women reported having suffered an injury or illness within the past 30 days. Of this group, 86 percent of the men and 77 percent of the women sought care. In North-West Frontier Province and Balochistan 85–86 percent of the men sought treatment, but only 68 percent and 57 percent of women, respectively, did so (PIHS 1996).

Discrimination in health care can also be seen in differential expenditures for health service use. A recent
study of the demand for children's medical care in Pakistan concluded that families are more willing to pay for medical care for sons than for daughters, particularly in poor households. Lower-income households seek care more often and use higher quality providers (private doctors) for boys than for girls. A recent survey of health expenditures among adults indicates that households spend considerably more on men than women when they are ill. The differential in Balochistan, the region with the highest incidence of poverty, is particularly striking (table 6). The implications of these gender differentials should be taken into account where such costs as user fees or transport are considered (Alderman and Gertler 1996; World Bank 1997b).

Urban-rural differentials
While 65 percent of the population in Pakistani lives in rural areas, 80 percent of hospital beds and doctors are in the urban centers (Bhatta 1995). In 1993 the Ministry of Population Welfare estimated that public service coverage of family planning was about 54 percent in urban settings and 5 percent in rural areas (World Bank 1995b). Though rural coverage is estimated to have increased since then, it is still lower (Siraj Haq, World Bank Resident Mission, Islamabad, personal communication, 1996). Access to basic health units is best in Punjab and worst in Sindh (PIHS 1996). About 70 percent of private health facilities are located in the cities (World Bank 1996).

Family planning
Although 40–80 percent of married women in most of Asia are using contraception, only about 24 percent were estimated to be doing so in Pakistan in 1996–97. This represents a notable increase from 12 percent in 1990–91; most of the increase took place in Punjab, which is home to more than half the population (see figure 3 for Asian comparisons). The 1995–96 PIHS's lower national estimate of 13 percent appears to reflect underreporting in Punjab (table 7). Twenty percent of males reported that they were contraceptive users in 1994, compared with 15 percent in 1990–91 (Bhatti and Hakim 1996).

Less than 25 percent of the population has access to modern contraceptives; the Ministry of Population Welfare covers about 10–12 percent. Although access to family planning services has improved in recent years, it is still extremely difficult for women in rural areas, including those already practicing contraception. Travel time to the nearest family planning facility was less than one hour for nearly 90 percent of the women in urban areas who used contraceptive methods, only about 55 percent of contracepting women in rural areas lived within an hour of the nearest facility.

Table 6 Average Expenditure on Treatment of Illness, by Province (rupees)

<table>
<thead>
<tr>
<th>Province</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan overall</td>
<td>485</td>
<td>379</td>
</tr>
<tr>
<td>Punjab</td>
<td>364</td>
<td>393</td>
</tr>
<tr>
<td>Sindh</td>
<td>680</td>
<td>406</td>
</tr>
<tr>
<td>North-West Frontier</td>
<td>584</td>
<td>308</td>
</tr>
<tr>
<td>Balochistan</td>
<td>1,165</td>
<td>431</td>
</tr>
</tbody>
</table>

Source: PIHS 1996.

Table 7 Contraceptive Prevalence Rate (percent)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Province</td>
<td>PDHS</td>
<td>PCPS</td>
<td>PIHS</td>
<td>PFFPS</td>
</tr>
<tr>
<td>Pakistan overall</td>
<td>12</td>
<td>18</td>
<td>13</td>
<td>24</td>
</tr>
<tr>
<td>Punjab</td>
<td>13</td>
<td>20</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Sindh</td>
<td>12</td>
<td>15</td>
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<td>23</td>
</tr>
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<td>Balochistan</td>
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<td>4</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Provided in table.
Reproductive Health Services

Figure 4 Distribution of Contraceptive Users by Method, 1996–97

![Distribution of Contraceptive Users](image)

Periodic abstinence 8.1%
Injectables 5.9%
Withdrawal 19.2%
Female sterilization 25.3%
IUD 14.4%
Other 2.6%
Pill 6.9%


(PCPS 1995). Distance was by far the greatest problem women reported with government family planning services in both urban and rural areas (PIHS 1996). Female sterilization is the predominant contraceptive method in Pakistan, followed by withdrawal, condoms, and IUDs (figure 4). While traditional methods are usually considered less reliable than modern techniques, a study in Pakistan found a lower pregnancy rate with withdrawal than with pills because it was used more effectively (Peter Miller, Population Council, Islamabad, personal communication, 1996).

Awareness and other factors affecting demand

Maternal health services

Health services are poor in general, but they are particularly deficient for maternal health and nutrition needs, leading to adverse outcomes for both women and newborns. Less than one-third of pregnant women receive any antenatal care. Again, there is a large urban-rural differential: 17 percent of pregnant women in rural areas receive some antenatal care, while 71 percent of women in major cities are able to take advantage of the service. Education is a significant predictive factor, as it is for the use of family planning: 22 percent of mothers with no education receive antenatal care while 85 percent of mothers with at least some secondary education do so. Most deliveries occur at home (85 percent), and they are usually assisted by a relative or traditional birth attendant. Trained assistance is probably available for fewer than 20 percent of deliveries, one of the worst rates in Asia (UNICEF 1997; NHSP 1996; PDHS 1992; figure 5).

While maternal health care would substantially benefit both women and children, it receives relatively little attention. Services are directed primarily toward children rather than mothers. Consider these differences in immunization. In 1996, 80 percent of infants were fully immunized against diptheria, pertussis, tetanus, and measles whereas just 50 percent of pregnant women were immunized against tetanus (Francois Gasse, World Health Organization, personal communication, 1997).

Figure 5 Proportion of Births Attended by Health Provider Trained in Midwifery, Selected Asian Countries (percent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Trained Midwife</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td>94</td>
</tr>
<tr>
<td>China</td>
<td>84</td>
</tr>
<tr>
<td>Indonesia</td>
<td>36</td>
</tr>
<tr>
<td>India</td>
<td>34</td>
</tr>
<tr>
<td>Pakistan</td>
<td>19</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>4</td>
</tr>
</tbody>
</table>

tility. Husbands are less likely than wives to approve of family planning, and women's lack of autonomy is a serious constraint to seeking and receiving needed care. Basic knowledge of reproductive physiology is extremely limited—for example, only 5 percent of married women can correctly identify the fertile period in their cycles (PDHS 1992).

Cultural restrictions on mobility are a significant constraint to women's access to reproductive health and other services. Most women do not have permission to move about freely, and they are forbidden to visit some places alone or at all. According to a recent survey of women between the ages of 15 and 40 in rural Punjab, only 28 percent can go unescorted to the local health center and fewer than 12 percent can travel alone to the nearest village. Over two-thirds of the women interviewed require permission to leave home (Sathar and Kazi 1997). As a result, for programs to be effective, they must bring information and services to the household or as close to it as possible.

Knowledge about contraception among married couples appears fairly widespread. According to the PDHS, some 78 percent of married women know of at least one modern contraceptive method, and 45 percent know of a source for that method. A more recent study found that 94 percent of married women know about at least one method (PFFPS 1998). How family opposition affects contraceptive use is not known precisely, but according to the PDHS, for example, 62 percent of married women who know of a contraceptive method approve of family planning, while only 36 percent of their husbands approve.

A recent study in Punjab found three primary obstacles to family planning:

- Women's perceptions that their husbands disapprove of contraception
- Fear of detrimental health side effects
- Concerns about the social, cultural, and religious acceptability of contraceptive use.

The study also found that while husbands did not generally have more negative views than wives concerning contraception, their concern about the social and cultural unacceptability of contraceptive practice was a significant barrier to use. These findings suggest that communications on behavior change directed to women should focus on the health-related aspects of family planning and those aimed at men should address issues of acceptability (Population Council 1997).

According to the 1995–96 PIHS, the major sources of information about family planning, are spouses, friends, and government in order. Between 65 and 88 percent of married women surveyed had seen or heard at least one of the family planning messages disseminated by the information, education, and communication program (Hakim 1996; PCPS 1995). Such extensive coverage is impressive, given the high illiteracy rate. The primary message that these women reported hearing or seeing promoted the desirability of limiting the number of children in a family (68 percent). The small family concept may not be well understood, however. A study of male attitudes found that 48 percent of men thought that a small family meant four or more children. Respondents to this and other studies thought that a family of two boys and two girls was ideal (Bhatti and Hakim 1996).

Although qualitative research is limited, a survey in Sindh found that access, cost, and women's lack of autonomy are the major deterrents to hospital use for delivery in rural areas; poor treatment by hospital staff, cost, and inconvenience were the main reasons for home delivery in urban areas (table 8). Opinions about the perceived safety of home and hospital delivery revealed that 64 percent of urban women felt that hospital delivery was safer, but only 30 percent of rural women felt this to be true. Most women surveyed seemed to have a fatalistic attitude toward the death of the mother or child and did not hold any facility or person responsible. This article reinforces a lack of accountability on the part of the service provider and the system. Almost 70 percent of the women surveyed saw a maternal death as "God's wish," and only 3 percent placed the blame on an ineffective health facility (Kazmi 1995).

Another study examined the reasons for delay in reaching the hospital among 118 mothers who arrived dead between 1981 and 1990. Sociocultural constraints and lack of transport were particularly significant: family was hesitant to go to hospital or the husband was not at home (33 percent), transport was not available (25 percent), time was lost in transfer or because of delayed referral (21 percent), and lack of finances (11 percent; Jafarey and Korejo 1993).
Reproductive Health Services

Table 8 Reasons for Delivery at Home, Sindh Province

<table>
<thead>
<tr>
<th>Location</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural areas</td>
<td></td>
</tr>
<tr>
<td>No hospital near home</td>
<td>84</td>
</tr>
<tr>
<td>Income too low to afford the hospital</td>
<td>70</td>
</tr>
<tr>
<td>Husband/ family forbid out of home delivery</td>
<td>65</td>
</tr>
<tr>
<td>Could maintain continuity of home/child care</td>
<td>39</td>
</tr>
<tr>
<td>Urban areas</td>
<td></td>
</tr>
<tr>
<td>Dai/midwife cheaper and available for good quality care</td>
<td>92</td>
</tr>
<tr>
<td>Hospital staff generally rude and careless</td>
<td>91</td>
</tr>
<tr>
<td>No time to go to hospital</td>
<td>77</td>
</tr>
<tr>
<td>Continuity of home/child care</td>
<td>61</td>
</tr>
</tbody>
</table>

Note: Respondents were permitted to list multiple reasons. Source: Kazmi 1993.

Quality of care
Staff absenteeism, lack of supplies, weak management and supervision, insufficient numbers of female workers, and poor training all contribute to poor quality care. Health facilities, especially those that deliver primary and preventive services, are underutilized and get little attention. A study of rural basic health facilities found that about 36 percent of physicians posted in these facilities were absent during normal duty hours, only 48 percent of the positions for female medical officers were filed, and about 38 percent of the facilities did not provide any maternal and child health care because no lady health visitors had been appointed to work in the facility. Furthermore, only 23 percent of pregnant women residing in the immediate catchment area reported that they had ever visited a government facility for antenatal care (Parvez and others 1993).

A situation analysis of a sample of family welfare centers that was designed to be nationally representative found that 7 percent were not operating and 21 percent had no clients on the day the team visited. Monthly clinic records indicated an average of fewer than five clients daily. While community outreach was part of the female welfare assistant's job, only one-third conducted home visits. Most medical examinations failed to follow standard procedures, such as taking a medical history and checking blood pressure. Half of the staff members applied erroneous criteria when prescribing family planning—for example, staff generally thought that women were required to have at least two children before using the IUD and pill and between one and two children to be permitted to use condoms. Between 11 and 23 percent of the family welfare centers lacked basic supplies (Population Council 1995). A review in late 1996 reported that the contraceptive supply system has been improved, although critical shortage of family welfare workers and weak district management persist (World Bank 1996c). While there are no comparable quality of care data for Department of Health providers, similar problems appear to exist.

Public awareness of where to go for family planning, even of where services are available, is surprisingly limited. A 1993 study conducted by the Ministry of Population Welfare found that only 54 percent of married women in the vicinity of a family welfare center knew it existed; of those, only two-thirds knew its location (World Bank 1995a). A 1994 study found that only about 56 percent of men knew about the location of a family welfare center (Bhatti and Hakim 1996).

Female health providers
It is usually unacceptable for Pakistani women to be examined by a male health provider, yet female health providers are scarce, especially in rural areas. Some 33 percent of government health facilities have no female staff (PIHS 1996). While almost one-third of physicians registered during 1993 were female, representing a favorable increase over the fewer than one-quarter in 1987 (Pakistan, Federal Bureau of Statistics 1995), female physicians are concentrated in the cities, and are rare in rural areas.

There are cultural constraints to women working away from their families and taking care of male patients. The recruitment and performance of female workers is also impeded by social concerns about men and women working together and male attitudes about women's roles. An additional impediment is the poor potential for career advancement in either the technical or the management stream. An analysis by category and gender of recent data on a random sample survey of health workers at different levels of the health system in four provinces suggests a striking scarcity of critical female paramedical staff and a severe imbalance between men and women in all categories. The study found that at the basic health units, women constituted 36 percent of health workers; none of the 15 medical officers was a woman. In rural health centers 19
percent of health staff and 14 percent of the medical officers were women. At subdistrict headquarter hospitals, 22 percent of the workers and 16 percent of the medical officers and specialists were female. At district hospitals, 24 percent of the staff members and 14 percent of medical officers and specialists were women (World Bank 1996b).

**Public and private mix**

The private sector accounts for at least two-thirds of the total health expenditure in Pakistan (World Bank 1993). There are about 70,000 registered medical practitioners (public and private) in the country; about one-third are private physicians. There are also 32,000 registered homeopath and 39,000 registered hakims, who provide herbal and traditional medicine. There is an acute shortage of nurses, with only one nurse for every three doctors, and of paraprofessionals (Pakistan, Ministry of Health 1996c; Bhutta 1995; Pakistan, Federal Bureau of Statistics 1995). Traditional birth attendants, who attend most births, are estimated at more than 100,000. There are about 520 private hospitals, more than 300 maternity and nursing homes (most with fewer than 50 beds), and more than 20,000 private clinics and dispensaries. About 70 percent of private health facilities are in cities (World Bank 1996d). Spending on pharmaceuticals appears to be unusually high, at 2.2 percent of average household expenditure in 1985 (World Bank 1993a).

About 21 percent of men and women report that their most recent health-related contact was with a government doctor at a public health facility, although a much higher proportion report seeing a private doctor, particularly among men (56 percent, compared with 44 percent of women). Twice as many women (27 percent) as men seek care from a dispensary or paramedic (NHSP 1996). The military is another significant source of health care for some 500,000 defense personnel and their families. It is common practice in Pakistan to use different medical systems (home, indigenous, and modern treatment) for a single illness (Hunte and Sultana 1992).

The Social Marketing of Condoms Project, initiated in 1986 by the U.S.-based Population Services International (PSI), has been notably successful. It sold some 60 million condoms in 1995, focusing on the cities. The U.S.-based Futures Group, with assistance from the British government, is launching a social marketing project for hormonal contraceptives (pills and injectables) aimed at middle-to-lower income groups. The project will train doctors and pharmacists and collaborate with an expanded PSI effort, financed by the German government, to reach this same target group with hormonal contraceptives. PSI also has initiated a marketing effort for IUDs and is training doctors in IUD insertion.

**Nongovernmental organizations**

The capacity of nongovernmental organizations (NGOs) in the health and population sector is considerably more limited in Pakistan than in other Asian countries, such as Bangladesh and India. NGOs tend to be urban-based and lack sustainable financing. The largest private sector provider of family planning services is the Family Planning Association of Pakistan, which trains family welfare workers and dais and delivers family planning and maternal and child health services through about 100 family welfare centers, mobile service units, and community-based distribution schemes. Other NGOs that offer family planning services include the All-Pakistan Women's Association, Behbud, Pathfinder, the Pakistan Voluntary Health and Nutrition Association, the Maternal and Child Welfare Association, and Marie Stopes.

The population-related work of NGOs had been facilitated by an NGO Coordinating Council, but organizational weaknesses and the erosion of support from the U.S. Agency for International Development (USAID) led to the suspension of the council. In its place, the government established the National Trust for Population Welfare in 1994. Whether it succeeds will depend on its ability to operate autonomously from the government and to establish an effective and stable organizational and financial base. The 1993 cutoff in USAID funding for Pakistan (required by the Pressler Amendment against nuclear testing) has reduced the ability of many NGOs to expand or even to continue their activities (Rosen and Conly 1995; World Bank 1995a).
Notes

1. Two major principles agreed to at the International Conference on Population and Development are one, that policy on population issues should be addressed at the level of broad social policy (including investments in education and health, improving women's status, and reducing poverty), and two, that family planning, to effectively meet both population and development goals, should be delivered as part of a broader package of reproductive health services (the "reproductive health approach").

2. It is important to note that the majority of Pakistani women using family planning have had many births and may have been referred for sterilization for medical reasons. Contraception by these women will not have any measurable impact on the rate of population increase.
4 Building on Experience

It is clear that while Pakistan’s macroeconomic indicators have been better than those of its South Asian neighbors, its indicators of reproductive health and education are extremely poor. There are lessons for Pakistan in the experience of other countries. These lessons, as well as Pakistan's own experience, can help guide some new priorities for improving health services, especially for women.

Learning from Other Countries

Several lessons emerge from the experience of other countries that have faced problems similar to those in Pakistan (see selected comparative indicators in figures 1–3 and 6–11). First is the importance of strong, consistent government commitment to greater equity in the distribution of health services. Malaysia, for example, has targeted per capita expenditures for health and education more effectively to the poor, and they are now higher in rural than in urban areas. Bangladesh restructured its health spending to shift the emphasis from urban, physician-oriented, curative care to a more rural, public health orientation.

Second is the effectiveness of a multisectoral approach, including attention to girls’ education and the broader concerns of women’s health. Such an approach has been shown to lead to fertility reduction, improved maternal health, and other benefits to women and their families, as in Sri Lanka, where fertility and maternal mortality fell dramatically and gender equity improved.

Third is decentralized planning and an integrated service approach, which achieves high coverage of reproductive health and other services through an efficient delivery system. For example, Iran devel-

Figure 6 Infant Mortality Rate, Selected Asian Countries (deaths per 1,000 live births)

<table>
<thead>
<tr>
<th>Country</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>95</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>85</td>
</tr>
<tr>
<td>India</td>
<td>76</td>
</tr>
<tr>
<td>Indonesia</td>
<td>50</td>
</tr>
<tr>
<td>China</td>
<td>38</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>15</td>
</tr>
</tbody>
</table>


Figure 7 GNP per Capita, Selected Asian Countries (U.S. dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per Capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>880</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>640</td>
</tr>
<tr>
<td>China</td>
<td>530</td>
</tr>
<tr>
<td>Pakistan</td>
<td>440</td>
</tr>
<tr>
<td>India</td>
<td>310</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>230</td>
</tr>
</tbody>
</table>

Bangladesh NGOs have played a critical role, and the national program has mobilized thousands of female workers at the community level to offer knowledge, supplies, and social support to women where they live and work, thus both increasing access and overcoming cultural constraints. India’s national program is facilitating the development of community-based women’s organizations to improve the health of women and children. Local governments such as the panchayati raj in India and the union parishads in Bangladesh also provide an entry point for initiatives to improve women’s health at the community level and support their activities.

Fifth is establishing clear objectives and effective monitoring and evaluation systems, which has been essential in focusing programs and getting results. In India the established government monitoring system focused primarily on meeting targets, especially for sterilization; it is now moving to a more client-centered approach, emphasizing indicators of quality of care. Sri Lanka examines the circumstances surrounding a maternal death to find ways to improve the quality of care and to demonstrate the priority it gives to preventing such an outcome.

Some other differences between the policies of Pakistan and its neighbors also seem to be important. For example, medical termination of pregnancy is legal during the first trimester in India, and menstrual reg-
ulation (endometrial aspiration, usually performed within the first two weeks after a missed menstrual period) is used in Bangladesh; neither practice is permitted in Pakistan. Another important difference is the substantial amount of donor support, which has contributed to the rapid expansion of the program in Bangladesh. In contrast, Pakistan receives considerably less per capita grant aid in the sector.

Priorities

The lessons from experience described above can help guide new priorities for improving health services in Pakistan, especially for women.

Financial and political commitment

Over the past decade the government has spent less than 1 percent of GNP annually on health services in Pakistan, and less than 10 percent of that total has been allocated to family planning (World Bank 1995c). Government needs to increase expenditures on reproductive health needs from their low levels and commit to such a change through sustained funding and strengthened organization and management.

Even to move into the mainstream of South Asia, Pakistan will need to give high priority to reducing the burden of disease from maternal and perinatal conditions and communicable diseases. This will require a significant and well-targeted allocation of resources, strong political leadership and effective management, and an emphasis on improving access and quality for basic reproductive and child health services through both public and private channels. Complementary efforts to improve girls' education are also needed.

At a minimum, public financing should be redirected from tertiary care, physician training, and less-effective curative care to highly cost-effective essential services aimed primarily at children and reproductive-age women and the more efficient delivery of services at the community level. Also critical to effective and sustainable change is greater involvement of civil society, particularly local communities and NGOs. Under the Social Action Program the government has started to move ahead on these issues.

It would be advisable to develop demonstration projects in a limited number of districts, tailored to their setting. The emphasis in Punjab, for example, would be on meeting existing demand, while in Balochistan it would be on increasing demand. Priority could be given to strengthening programs in Punjab, given its demographic importance and high level of unmet need.

A cost-effective approach

According to preliminary results from the National Health Survey, maternal and perinatal conditions and communicable diseases account for half the country's burden of disease (figure 11). Research on the cost-effectiveness of alternative health interventions has demonstrated that reproductive health services are among the most cost-effective, along with interventions to control childhood communicable diseases, especially in settings such as Pakistan. A World Bank cost study under way in Pakistan will provide country-specific data on the cost-effectiveness of health services, allowing comparisons with costs in other countries.¹

Integrating health and family planning

The International Conference on Population and Development emphasized that a broader, more client-
oriented approach to population and development is more acceptable, effective, and efficient than one based on vertical family planning service delivery. Many countries that established separate ministries for health and population in the 1960s, like Pakistan, are now focusing on strengthening their health and family planning programs to deliver an integrated, cost-effective program of family planning, maternal health, and other essential services.

Placing responsibility and accountability for family planning service delivery within strengthened provincial departments of health in Pakistan would yield a number of benefits. There is no doubt that access to family planning could be substantially increased by using the staff in the health sector and the large health infrastructure—provided the facilities are fully functioning. Clients’ broader health needs would also be met more effectively. There would be synergistic health benefits for the population, as well as cost savings, from the integration of basic services. Experience in health and population over the past two decades has demonstrated that health systems need to shift their emphasis from curative to preventive and promotive care and from a physician-dominated, top-down model to a decentralized, client-centered approach if they are to meet their goals. If departments of health could be refocused in this way to expand access and improve quality, Ministry of Population Welfare efforts could be redirected to policy, multisectoral coordination, research, and monitoring and evaluation.

**Family planning**

The highest priority is to expand access to family planning information and services to those who want to delay, space, or limit their children but are not currently using contraceptives. This is a substantial group in Pakistan—more than one-third of married women. Emphasis should be placed on recruiting and training female providers at the community level, making contraceptive methods available through as many health and population welfare outlets as possible, providing a sufficiently wide range of choices to meet the varying needs of clients, and improving the quality of service. Counseling programs will need to be strengthened, because they are most effective when they provide basic information on the pros and cons of the methods and the potential side effects. Contraceptive choice could be expanded by increasing the number of sites where tubal ligation is performed, increasing the availability of injectable contraceptives, facilitating the expansion of social and commercial marketing, and ensuring that adequate supplies of pills, condoms, and the like are in stock.

Recent data indicate that men are increasingly motivated to use contraception, partially because of their rising concern about the cost of raising children. Male contraceptive methods—condoms and withdrawal—account for almost half of all contraception practiced. Many men appear to be motivated, dominant in decisionmaking, and much freer in their access to services. Nevertheless, with the exception of the social marketing project, men have not been targeted by the program, and public education strategies and programs should be designed to reach them. Condoms have the important benefit of providing protection from sexually transmitted diseases, including HIV/AIDS.

**Population growth**

Population momentum will be the most important component of population growth in Pakistan, even if fertility declines. Pakistan’s population has doubled in the past 25 years, and it will double again in the next 24 years. A high birth rate continues to yield large cohorts of reproductive-age women (figures 9-10). The population momentum this creates accounts for nearly half of projected growth between 1995 and 2100. The need to address the age of childbearing, as well as the other components of population growth—unwanted fertility and the desire for a large family—is pressing.

A positive sign is that the age of marriage is rising. Successful efforts to delay the initiation of childbearing and increase the spacing between births will have a mitigating effect on the surge in population growth. Currently, most users start contraception later in their reproductive years and only after they have a number of children—32 percent or more of women age 30 or older practice family planning, compared with only 10 percent of women aged 20-24 years and 21 percent of those age 25-29 (PFFPS 1998). More emphasis needs to be placed on delaying and spacing childbirth. Achieving a reduc-
tion in desired family size and lessening the population momentum will depend strongly on increasing girls’ schooling and expanding their socioeconomic opportunities, activities which should be vigorously supported through other sectors. Improved communication programs will also be needed, including campaigns designed to influence male attitudes. For example, 36 percent of males currently approve of girls marrying before the age of 18.

**Maternal health**

Along with providing men and women with the means to regulate their fertility, the strengthening of maternal health services deserves much greater attention. Analysis of the overall disease burden affecting the population indicates that about 16 percent of the total burden is associated with pregnancy-related conditions (table 9). This constitutes almost one-third of the disease burden from communicable, maternal, and perinatal causes (NHSP 1996). Thus a substantial proportion of the disease burden (and the costs associated with neonatal care) can be prevented by providing mothers with tetanus toxoid immunization, improving their nutrition, and managing obstetric complications. These measures will prevent neonatal tetanus and low birthweight (conditions that account for most of the perinatal disease burden), as well as ensure the good health of the woman herself.

Making pregnancy healthy and safe will require:

- Expanding the coverage and quality of prenatal, delivery, and postpartum care
- Emphasizing detection and proper treatment of obstetric complications
- Ensuring quick referral and transport for life-threatening emergencies.

A fully functioning referral system—one that ensures that pregnant women who develop complications are referred to an appropriate facility for proper treatment—is essential. Facilities will need adequate equipment, supplies, and trained staff to provide emergency interventions for pregnancy complications. Hospitals will require blood banks to manage women with hemorrhage who need transfusions and the capacity (anesthesiology, surgeon, and operating theater) to perform cesarean sections. Training staff to perform some of the functions of specialists (for example, anesthesiology) and contracting with private providers for selected services are options worth considering. When complications arise, transport can make the difference between life and death. Since there is no systematic arrangement for transporting emergency cases from rural areas to referral facilities, communities will need to be involved in developing locally appropriate transport schemes.

Most rural Pakistani women now deliver at home and lack access to appropriate facilities and health personnel. In the immediate term, the training and supervision of dais can help reduce harmful practices, such as unclean delivery, in remote areas. Experience has demonstrated, however, that trained dais alone have limited effectiveness in improving pregnancy outcomes. Also needed is an educated staff trained in midwifery skills and linked to referral services. Dai training should emphasize prevention of unwanted pregnancy, appropriate counseling and services during pregnancy, hygienic childbirth, and greater attention to the detection and referral of obstetric complications.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Incidence per 100,000</th>
<th>DALYs(^a) per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal conditions</td>
<td>2,261</td>
<td>1,014</td>
</tr>
<tr>
<td>Hemorrhage-pregnancy</td>
<td>200</td>
<td>170</td>
</tr>
<tr>
<td>Sepsis-pregnancy</td>
<td>500</td>
<td>66</td>
</tr>
<tr>
<td>Abortion</td>
<td>1,000</td>
<td>117</td>
</tr>
<tr>
<td>Other complications of pregnancy</td>
<td>561</td>
<td>762</td>
</tr>
<tr>
<td>Perinatal causes</td>
<td>192</td>
<td>3,559</td>
</tr>
<tr>
<td>Sexually transmitted diseases</td>
<td>46,802</td>
<td>809</td>
</tr>
<tr>
<td>Syphilis</td>
<td>10,000</td>
<td>386</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>25,000</td>
<td>133</td>
</tr>
<tr>
<td>HIV infection</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>7,800</td>
<td>250</td>
</tr>
<tr>
<td>Pelvic inflammatory disease</td>
<td>4,000</td>
<td>214</td>
</tr>
<tr>
<td>Neonatal tetanus</td>
<td>32</td>
<td>1,021</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>49,287</strong></td>
<td><strong>6,403</strong></td>
</tr>
<tr>
<td>Percentage of all health conditions</td>
<td>9</td>
<td>18</td>
</tr>
</tbody>
</table>

\(a\). Disability-adjusted life years.

community level, a staff at medical facilities that includes midwives trained in life-saving skills, and a referral system that can provide essential obstetric functions. There should also be an increased effort to educate families about the importance of special care during pregnancy and the recognition and referral of complications.

Other morbidity
Pakistan needs to accelerate efforts to avoid a serious HIV/AIDS epidemic—an epidemic now occurring in other parts of Asia. Sexually transmitted diseases, which increase susceptibility to HIV, account for at least 3 percent of the population's disease burden.

Prevention and management of sexually transmitted diseases is cost-effective, although interventions will need to be phased, given Pakistan's weak infrastructure. Public education messages and the promotion of condoms are the most cost-effective preventive measures. Until laboratory capacity is developed, treatment based on syndromic diagnosis—diagnosis through the recognition of characteristic groups of symptoms—of sexually transmitted diseases can be used. This approach, however, will work more effectively with men, because women with sexually transmitted disease are more likely than men to be asymptomatic. Services for high-frequency transmitters, such as commercial sex workers, who contribute substantially to the spread of infection, should receive particular attention.

Improvement of nutritional status is another priority step for reducing women's morbidity, improving infant outcome of pregnancy, and increasing economic productivity. Nutrition status has stagnated at low levels over the past three decades. Malnutrition, especially iron-deficiency anemia, needs to be reduced during childhood as well as during adolescence, pregnancy, and lactation to lessen the burden of disease.

Training and deployment
To increase the number of female health providers, goals for medical, nursing, and paramedical school recruitment and acceptance procedures, and incentives that support those goals, need to be established. Female health staff must be trained at all levels; a particular effort is needed to recruit and deploy female health workers in rural areas. More training of health technicians, nurses, and paramedical staff is needed to redress imbalances between doctors and other health staff. Stronger efforts to recruit, train, and deploy female village health and family planning workers to provide family planning and maternal and child health services is crucial—this practice has worked well in similar countries and appears to be effective in Pakistan. Efforts will be needed to find educated village women who are respected by their communities and accountable to them, willing to stay, and linked to the dais and the referral system. An independent evaluation of the community-based female worker programs is recommended to guide future planning.

Pre-service and in-service training of medical and nursing staff should include family planning, midwifery skills, recognition and management of pregnancy complications, detection and management of reproductive tract infections (at least syndromic diagnosis), community health, and interpersonal counseling skills. It is likely that standard protocols will have to be revised accordingly and supervision strengthened.

Nurses and nurse-midwives have much more responsibility for providing reproductive health services in other countries than they do in Pakistan, and they could be called on to perform a wider range of functions. They are less expensive than doctors, and most are women, making them culturally acceptable to provide such services. The image and professional status of nursing and midwifery need to be improved. Nurses are currently low on the public service pay scale. Incentives will be necessary to attract qualified nurses and to retain them in the workforce.

Education of women is a crucial prerequisite for developing a large enough pool of women for recruitment as health providers. Only 16 percent of girls at matriculation (grades 1–6) and intermediate school ages are enrolled in school, and only 7 percent (compared with 33 percent of boys) are enrolled in rural areas (NHSP 1996). Over the short term, education criteria could be lowered. Over the long term, dramatic efforts will be needed to educate girls who live in rural areas, since it is unlikely that urban women will be willing to work in a rural environment.
Increased focus on the client and community
Adequate resources are necessary, but not sufficient in the absence of other measures, to improve reproductive health. Services must be brought as close as possible to women to overcome the constraints to their mobility. Cost should not be a barrier to use. Families need to be more aware of how to reach services, and of the importance of health care during pregnancy. Furthermore, the quality of care needs to be greatly improved through training, incentives, and supervision. This includes ensuring that health workers are willing and present to perform services, that they follow standard procedures, that equipment and supplies are available, and that clients are treated with respect.

Planning, implementation, and supervision should be decentralized from the central government and provincial capitals to the district level. Also important are initiatives to get communities more involved in supporting local health facilities and to let them have a hand in oversight and management. This will help services meet local needs and become more accountable to clients and more sustainable over the long term. It would be useful to examine the Bank's assistance to an education initiative in Balochistan that involves communities and NGOs in a collaborative effort with government. The approach might be a model for the health sector.

Communication
Mass media and direct personal communications could be better used to improve knowledge and practices related to contraception, safe sex, safe motherhood, nutrition, and intrahousehold relationships. At least 34 percent of married women in Pakistan report watching television daily—58 percent in urban settings (PFFPS 1998). Some of the problems highlighted in the preceding sections—sense of having no control over fertility and maternal mortality; lack of knowledge about services available, the reproductive cycle, and danger signs of pregnancy; gaps in men's awareness of the importance of family planning, safe sex, and safe pregnancy—need to be understood and then addressed through a public information, education, and communication campaign. Messages about family size and other reproductive health issues should be explicit. For example, the economic and health advantages of fewer children (such as land distribution, costs of raising children, and the multiple advantages of delaying and spacing births) could be described, since more general messages promoting the idea of the small family seem not to be well understood.

Research on Pakistan's programs also indicates that health providers need to improve their communication skills so that their interactions with clients are two-way exchanges. Communication could also be improved among interest groups in Pakistan, which would foster improved coordination and build a constituency for reproductive health. For example, a reproductive health task force could be established to bring together professionals, researchers, NGOs, donors, and officials to exchange information and plan future directions. There is little evidence of coordinated follow-up action to the International Conference on Population and Development. The National Committee for Maternal Health, made up of NGOs and government, has the potential to catalyze the planning and implementation of a maternal health strategy; groups such as the Medical Association and College of Physicians and Surgeons can also play an important role in strengthening reproductive health services in the medical profession.

Public-private collaboration
The public sector must continue to play the major role in financing basic services for women over the immediate term. Some of these services have positive externalities and would not be adequately provided, if at all without public financing. But not all services have to be provided by government, as the experience of the Aga Khan Health Services and Aga Khan Rural Support Program in the Northern Areas and the Family Planning Association in Azad Jammu and Kashmir have shown.

As part of its strategy, the government needs to maximize the reach and breadth of private sector services and improve their quality through incentives and regulatory arrangements. The involvement of both the nonprofit and the for-profit private sectors in preventive and promotional activities can be encouraged through training and subsidies, for example. The social marketing program for condoms has apparently been quite successful, and plans for expanding the program's
range of contraceptives and for developing commercial marketing to reach providers as well as clients sound promising.

NGOs will be important over the long term in expanding reproductive health information and services. A priority for the Bank and other donors is to strengthen the NGO support mechanism, to decentralize some authority to provinces to facilitate grants to expand activities, and to coordinate NGOs, particularly since USAID support has dwindled. Experience has shown that for an NGO support mechanism to be successful, it must have autonomy from the government. That means ensuring strong leadership and organization, establishing financial sustainability, and adopting systematic guidelines to solicit, review, support, and supervise NGO activities.

Now is an opportune time for the major donors to meet to discuss a coordinated approach to policy, program, research, and training in reproductive health. The objective would be to agree on a reproductive health approach to reduce high fertility and maternal mortality, articulate uniform issues for policy dialogue to be discussed with the government (possible topics include financial commitment, development of a task force, integrating population and health, and expanding public and private mechanisms), and jointly plan assistance.

Information needs
The information base in Pakistan is extremely weak. Biomedical, epidemiological, and socioeconomic data are needed to assess women's health status and to evaluate related interventions. Over the past five years several health and population surveys have focused on questions related to fertility. But there is virtually no information on reproductive tract infections, maternal morbidity, or gender-based violence. There is a particular need for qualitative research on women's perspectives and cultural factors, affecting use of services, in order to design information and service programs effectively. More focused research is also needed, particularly to identify the best intervention strategies for increasing access to obstetric care and encouraging women's use of government health facilities. Government and donors should support health facility data collection and population-based surveys, as well as focus group discussions and in-depth interviews to gain information for policy and program decisions. Data collected on health should always be disaggregated by gender and age.

Notes
1. For example, in comparable countries, the cost of providing family planning and maternal health care has been estimated at $2.00–4.70 per capita; World Bank 1993b, 1994.
2. Major donors providing assistance in reproductive health are the World Bank, the UN Population Fund (UNFPA), the U.K. Department for International Development (DFID), and the Asian Development Bank (ADB). USAID provided the bulk of population assistance until it withdrew in 1993.

The main lessons from the Bank's assistance include the importance of: sustained government commitment to the program; realism about institutional constraints on capacity building and program implementation (such as difficulties arising from the competing or overlapping program responsibilities of the federal and provincial authorities); need to address problems caused by gender bias on the part of both staff and beneficiaries; studies and policy dialogue; staff continuity on both the government and the World Bank side; and community involvement in planning and service provision.

The Bank has provided assistance to Pakistan in reproductive health through five health and population projects: the Family Health Project, the Second Family Health Project, the Population Welfare Program Project, and the Northern Health Program Project, as well as a population project completed in 1989. In addition, a broad-based Social Action Program was launched in 1992–93, with Bank assistance, to accelerate improvement in primary health, primary education, rural water supply and sanitation, and population welfare. Follow-on assistance to the Social Action Program has just been approved for implementation.
5 Conclusion

Of the many factors that influence women's health in Pakistan, this report focuses on ways to strengthen the health system to better meet the needs of Pakistani women. Reproductive health problems receive particular attention, since they constitute a significant cause of premature death and disability. Furthermore, reproductive health interventions are among the most cost-effective health services available. Possibly the three highest priorities for immediate action are expanding community-based family planning to meet unmet need; training and supporting female health providers, especially in rural areas; and facilitating appropriate private sector services, such as the social marketing program and outreach by NGOs. In addition, demonstration projects could be launched in several districts to improve management of pregnancy complications, control sexually transmitted diseases (particularly HIV/AIDS prevention), and improve maternal nutrition. For these programs to be effective and sustainable, women must be involved in their planning and implementation. In the medium term, appropriate approaches for reducing gender discrimination in health care and gender-based violence need to be identified, tested, and initiated. Over the longer term, progress in health and development will be linked with support of girls' education, employment opportunities for women, and improvement in their overall status.

Adoption of the actions and strategies described here could significantly reduce the burden of disease and associated costs, including productivity losses. If urgent action is not taken, Pakistan will fall further behind other countries in human capital development, jeopardizing future opportunities for economic growth. High fertility and women's poor health not only seriously reduce family well-being and productive capacity in Pakistan, but also the development potential of tomorrow.
References


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References


