Pakistan

2007 Demographic and Health Survey

Key Findings

This report summarizes the findings of the 2006-07 Pakistan Demographic and Health Survey (PDHS), executed by the Ministry of Population Welfare and implemented by the National Institute of Population Studies (NIPS). Macro International Inc. provided technical assistance in the design, implementation, and analysis of the survey as part of the Demographic and Health Surveys project (MEASURE DHS). Funding for the survey was provided by the United States Agency for International Development (USAID), with logistics assistance from UNFPA and UNICEF.

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Additional information about the 2006-07 PDHS may be obtained from the National Institute of Population Studies (NIPS), Block 12-A, Capital Inn Building, G-8 Markaz, P.O. Box 2197, Isalmabad, Pakistan; Telephone: 92-51-926-0102 or 926-0380; Fax: 92-51-926-0071; Web: www.nips.org.pk

Additional information about the DHS project may be obtained from Macro International, 11785 Beltsville Drive, Calverton, MD 20705, USA; Telephone: 301-572-0200, Fax: 301-572-0999, Web: www.measuredhs.com.

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About the 2006-07 PDHS

The 2006-07 Pakistan Demographic and Health Survey (PDHS) was designed to provide data for monitoring the population and health situation in Pakistan. The 2007 PDHS is the second Demographic and Health Survey conducted in Pakistan. The objective of the survey was to provide up-to-date information on fertility, family planning, childhood mortality, infant and child feeding practices, maternal and child health, maternal mortality, and HIV/AIDS-related knowledge and behavior.

Who participated in the survey?

The 2006-07 PDHS is the largest household-based survey conducted in Pakistan. A nationally representative sample of 95,441 households and 10,023 ever-married women age 12-49 were interviewed. This represents a response rate of 98 percent for households and 95 percent for women. This sample provides estimates for Pakistan as a whole, for urban and rural areas, and for each of the four provinces. The sample did not include the Federally Administered Northern Areas (FANA), the Federally Administered Tribal Areas (FATA) and restricted military and protected areas. In addition to answering questions about their own fertility and health, interviewed women also provided information about the health and mortality of their children under five years of age.

Pakistan has a very young population—41 percent of the population is below age 15—and only 4 percent of the population is over 65. Pakistan is the sixth most populous country in the world.

Household Wealth

The wealth index is constructed by combining information on household assets like ownership of consumer items, type of dwelling, source of water, availability of electricity, etc. into a single asset index.

The survey sample is split into five equal groups (quintiles) from 1 (lowest, poorest) to 5 (highest, richest).

Forty-six percent of the population in urban areas is in the highest wealth quintile compared to only 7 percent of the population in rural areas.

Provincial variation is marked. Over 20 percent of the population in Punjab and Sindh, the most urbanized provinces, is in the highest wealth quintile in contrast to only 8 percent of the population of Balochistan.

Household Characteristics

Household Composition

Households in Pakistan consist of 7.2 persons, on average. Households in urban areas are slighter smaller than rural households (7.0 compared with 7.3 persons). Men head 92 percent of households.

Access to Electricity and Improved Source of Drinking Water

About 9 in 10 households in Pakistan have electricity. Almost all urban households, 98 percent, have electricity compared to 84 percent of rural households.

The majority of households—93 percent—also have access to an improved source of drinking water with access in urban areas slightly higher than in rural areas. Two-thirds of urban households use piped water compared to only 24 percent of rural households. The major sources of drinking water in rural areas are a tubewell, borehole, or hand pump.

Sanitation Facilities

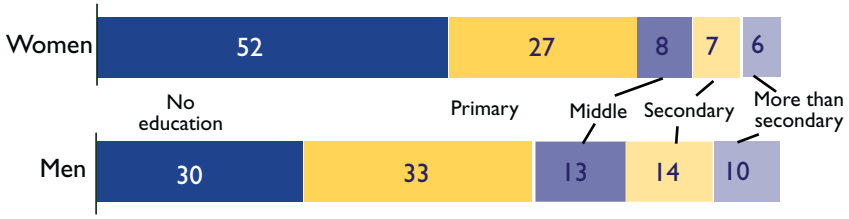
Overall, about 3 in 10 households in Pakistan do not have any toilet facilities. Urban households (78 percent) are more than twice as likely as rural households (36) to have access to improved toilet facilities. Only 28 percent of all households, mostly urban, have a toilet that flushes into a piped sewer system. Balochistan has the highest proportion of households with no toilet facility, 43 percent.

Education

Just over half of women and 30 percent of men age 5 and older in Pakistan have never attended school. Only 13 percent of women and 23 percent of men have completed secondary school or continued to a higher level of education. Access to education is improving. Over 90 percent of women 65 and older have never been to school compared to 30 percent of girls age 10-14. Among men, educational attainment is even higher with only 17 percent of boys age 10-14 having no education.

Education

Percent distribution of women and men age 15-49 by highest level of education attained

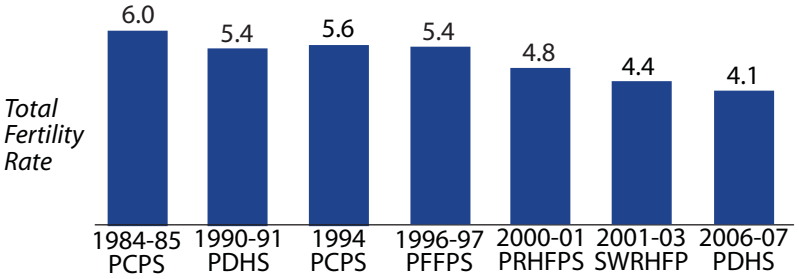


Fertility and its Determinants

Total Fertility Rate (TFR)

Fertility in Pakistan has decreased substantially since 1984 according to past surveys. Currently, women in Pakistan have an average of 4.1 children, down from 4.8 in 2000 and 6.0 in 1984.

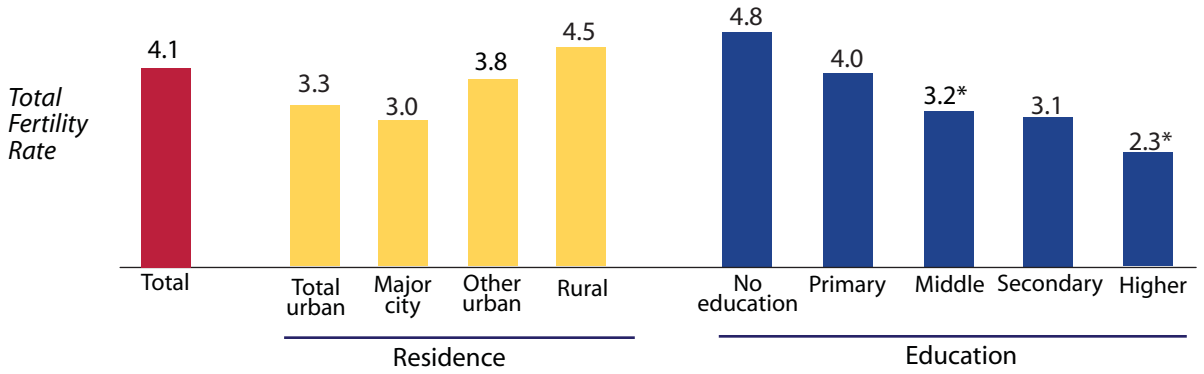
Trends in Fertility



Fertility varies by residence. Women in major cities have the lowest fertility rate at 3.0 children, while women in rural areas have 4.5 children. Fertility is fairly consistent across the provinces, ranging from 3.9 in Punjab to 4.3 in Sindh and NWFP.

Fertility also varies with mother's education and economic status. Women with no education have more than twice as many children as those who have higher than secondary education. Fertility increases as the wealth of the respondent's household decreases. The poorest women, for example, have almost six children (5.8) while women in the richest households have an average of 3.0 children.

Fertility by Residence and Education



*based on only 500-750 women

Ideal Family Size

Pakistani women report a mean ideal family size of 4.1 children. Ideal family size is higher among women in rural areas than urban areas (4.3 versus 3.7). Ideal family size decreases dramatically as women's education increases: women with no education would like 4.4 children compared to only 3.3 among those who reach secondary education.

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Age at First Marriage

Half of Pakistani women are married by the age of 19.1. Some women get married at a very early age in Pakistan—13 percent were married by age 15 and 40 percent were married by age 18. Women with higher levels of education are much more likely to delay marriage than those with no education. Women who have gone to higher education get married at a median age of 24.5—more than 6 years later than those with no education. Age at first marriage is increasing, however, as women who are currently 25-29 got married at a median age of 20.3, while the older generation, women age 45-49, married at a median age of 18.5.

Age at First Birth

In Pakistan, half of women have their first birth by age 21.8. Only 18 percent of women had had their first birth by age 18. Women in rural areas have their births almost one year earlier than women living in urban areas. Women with more education also wait longer to have their first birth. Women who have been to secondary school have their first birth at a median age of 23, while women with no education have their first birth at a median age of 21.

Teenage Fertility

Nine percent of young women age 15-19 have begun childbearing: 7 percent are mothers and an additional 3 percent are pregnant with their first child. Young motherhood is more common in rural areas than in urban areas, and young women with no education are more than ten times as likely to have started childbearing by age 19 than those who have completed secondary school (16 versus 1 percent).

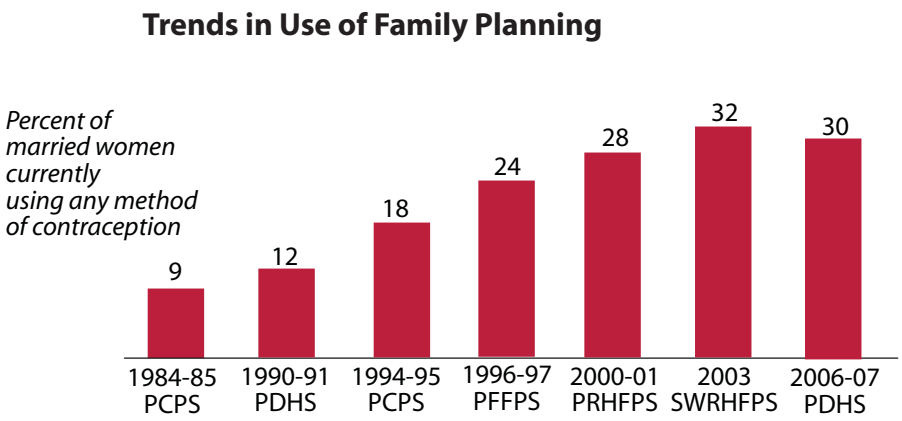
Family Planning

Knowledge of Family Planning

Knowledge of family planning methods in Pakistan is almost universal; 96 percent of currently married women know at least one modern method of family planning. The most commonly known methods are the pill (92 percent), injectables (89 percent), and female sterilization (87 percent). About two-thirds also know a traditional method of family planning, either rhythm or withdrawal.

Trends in Use of Family Planning

Use of contraception has tripled since the 1980s, but has leveled off in recent years. Since 2003, use of condoms and female sterilization have increased, while use of injectables, IUDs and pills has decreased slightly. Currently, 30 percent of married women use any contraceptive method compared to 32 percent in 2003.



Current Use of Family Planning

Thirty percent of currently married women use a method of family planning and 22 percent use a modern method. Female sterilization (8 percent), male condoms (7 percent), withdrawal and rhythm (4 percent each) are the most commonly used.

Use of family planning varies by residence and province. Contraceptive methods are used by 41 percent of married women in urban areas, compared with 24 percent in rural areas. Family planning use ranges from 14 percent in Balochistan to 33 percent in Punjab.

Family planning use increases dramatically with women's education. Women with more than secondary education are almost twice as likely to use a modern method as those with no education (43 percent versus 25 percent). Use of contraceptive methods also increases with wealth—43 percent of women in the wealthiest households use a contraceptive method compared to only 16 percent of women in the poorest households.

Source of Family Planning Methods

Public sources such as government hospitals, health centres and Lady Health Workers currently provide contraceptives to about half of current users, while private hospitals and clinics provide methods to 30 percent of users.

Need for Family Planning

Intention to Use Family Planning

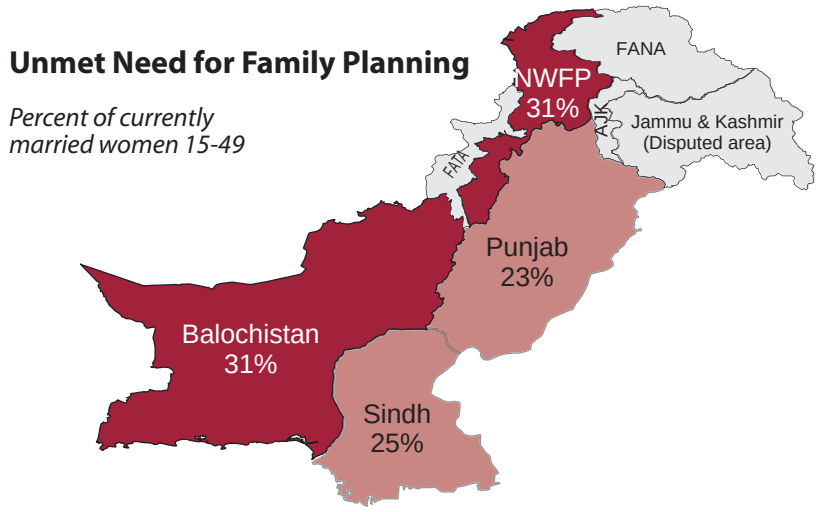
Half of non-users intend to use family planning in the future. Among those who do not plan to use family planning, the most common reason is that fertility is "up to God".

Desire to Delay or Stop Childbearing

More than half (52 percent) of married women want no more children or are already sterilized. Desire to limit childbearing is especially high among women who already have four or more children. Another 20 percent of women want to wait at least two years before having their next child.

Unmet Need for Family Planning

Unmet need for family planning is defined as the percentage of married women who want to space their next birth or stop childbearing entirely but are not using contraception. The 2006-07 PDHS reveals that 25 percent of married women have an unmet need for family planning—11 percent for spacing and 14 percent for limiting. Unmet need ranges from 23 percent in Punjab to 31 percent in Balochistan. Unmet need is highest among those with little or no education, and among those in the poorest households. Unmet need has increased slightly since 2003.



Missed Opportunities

About 45 percent of women have been exposed to a family planning message through the radio (11 percent) or on television (41 percent) in the month prior to the survey. Urban, educated, and wealthier women are more likely to have heard a message than those in rural areas and those with less education or those in the poorer households. Among those who heard a message, the most common types of messages are about limiting family size, spacing children, and using contraception.

Among all women who are not currently using family planning, only 23 percent were visited by a fieldworker or Lady Health Worker who discussed family planning in the 12 months before the survey.

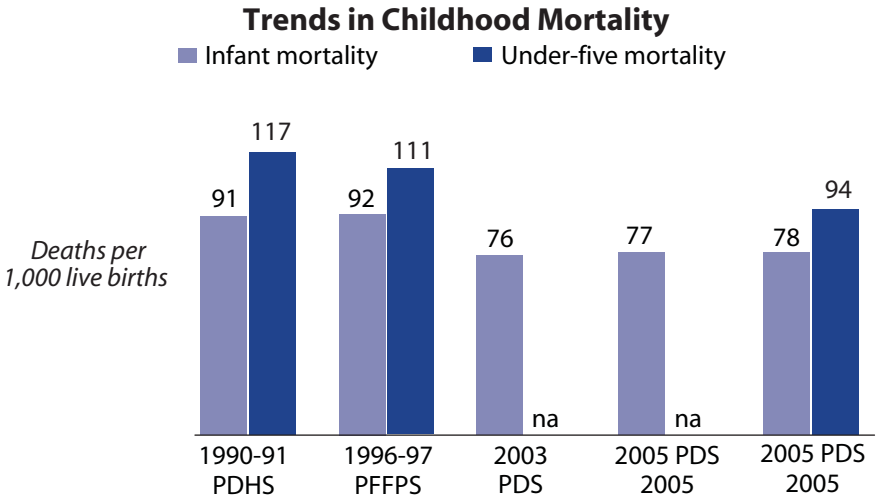
Informed Choice

Family planning clients should be informed about the side effects of the method used, what to do if they experience side effects, and told about other methods that could be used. Unfortunately, only one-third of users were informed about possible side effects of their method, and only 38 percent were informed about other methods that could be used.

INFANT AND CHILD MORTALITY

Levels and Trends

Childhood mortality has decreased in the past 20 years but has remained relatively stable since 2003. Currently, one in every 11 children in Pakistan dies before his or her fifth birthday.

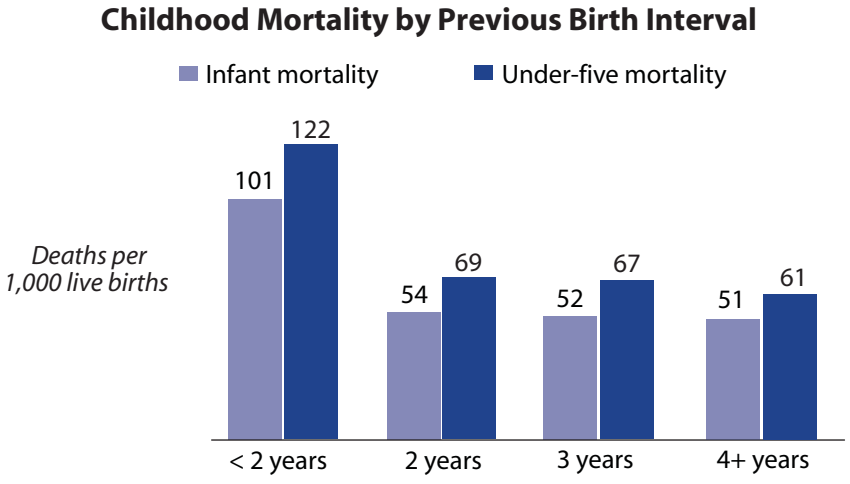


The infant mortality rate for the five years before the survey (2002-2006) is 78 deaths per 1,000 live births and the under-five mortality rate is 94 deaths per 1,000 live births.

Mortality rates are higher in rural than urban areas. Under-five mortality in the major cities, for example, is only 69 deaths per 1,000 live births compared to 100 deaths per 1,000 live births in rural areas. Child mortality is lowest among those whose mothers have more education and among those in the wealthier households.

Birth Intervals

Spacing children at least 36 months apart reduces risk of infant death. In Pakistan, the average birth interval is 29 months. Infants born less than two years after a previous birth have particularly high infant mortality rates (101 deaths per 1,000 live births compared to only 52 deaths per 1,000 live births for infants born three years after the previous birth). One-third of infants in Pakistan are born less than two years after a previous birth.



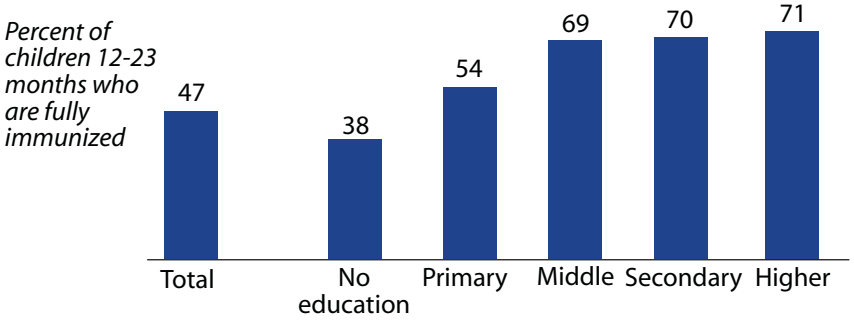
CHILD HEALTH

Vaccination Coverage

According to the 2006-07 PDHS, 47 percent of Pakistani children age 12–23 months had received all recommended vaccines— one dose of BCG, three doses each of DPT and polio, and one dose of measles. More than 80 percent of children received BCG and the three Polio vaccines, while fewer received the subsequent doses of DPT, Hepatitis B and Measles. Six percent of children had not received any of the recommended vaccines.

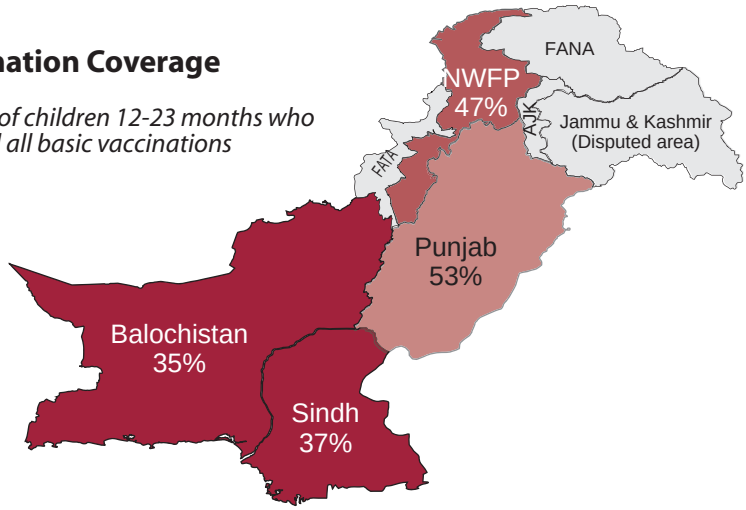
Boys are more likely to be fully vaccinated than girls—50 percent of boys have received all the recommended vaccinations compared to only 44 percent of girls. Vaccination coverage is higher in urban areas than rural areas (54 versus 44 percent). There is marked variation in vaccination coverage by province, ranging from only 35 percent fully vaccinated in Balochistan to 53 percent in Punjab. As expected, coverage increases with mother's education and household wealth.

Vaccination Coverage by Education



Vaccination Coverage

Percent of children 12-23 months who received all basic vaccinations



Childhood Illnesses

In the two weeks before the survey, 14 percent of children under five had symptoms of an acute respiratory infection (ARI) and 31 percent had a fever. Among these children, about two-thirds were taken to a health provider and half were given an antibiotic. As expected, children in urban areas, those with the most educated mothers, and those in the wealthiest households were most likely to be taken to a health provider for treatment.

During the two weeks before the survey, 22 percent of Pakistani children under five had diarrhoea. The rate was highest (20 percent) among children 6-11 months old. Fifty-five percent of children with diarrhoea were taken to a health provider. Children with diarrhoea should drink more fluids, particularly through oral rehydration salts (ORS). In the two weeks before the survey, 41 percent of children with diarrhoea were treated with ORS or pre-packaged liquids. One in five children with diarrhoea was offered increased fluids. More than half (55 percent) of children with diarrhoea were treated with some type of oral rehydration therapy or increased fluids. Many children, however, went without any treatment (21 percent).

Feeding Practices of Children

Breastfeeding and the Introduction of Complementary Foods

Breastfeeding is very common in Pakistan, with 94 percent of children ever breastfed. Although 70 percent of children start breastfeeding within one day of birth, 65 percent also receive a prelacteal feed.

WHO recommends that children receive nothing but breastmilk (exclusive breastfeeding) for the first six months of life. More than one-third (37 percent) of children under six months of age are being exclusively breastfed. On average, children breastfeed until the age of 19 months, but exclusively breastfeed for less than one month.

Complementary foods should be introduced when a child is six months old to reduce the risk of malnutrition. In Pakistan, only 36 percent of children ages 6–9 months are eating complementary foods.

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Micronutrient Intake: Vitamin A, Iron, and Calcium

Micronutrients are essential vitamins and minerals required for good health.

Vitamin A, which prevents blindness and infection, is particularly important for children and new mothers. Sixty percent of children age 6–59 months received a vitamin A supplement in the six months prior to the survey. Only 20 percent of women received a vitamin A dose postpartum.

Pregnant women should take iron tablets or syrup for at least 90 days during pregnancy to prevent anemia and other complications. Only 16 percent of women took iron tablets or syrup for at least 90 days during their last pregnancy. More than half took no iron tablets at all.

Pregnant women should also take calcium tablets during pregnancy. More than half took no calcium, while only 15 percent took calcium during on 90 or more days during their last pregnancy.

Maternal Health

Prenatal Care

Three out of five Pakistani women receive some prenatal care from a medical professional, most commonly from a doctor (56 percent). Only one-third of women had a prenatal care visit by their fourth month of pregnancy, as recommended. Even among those who receive prenatal care, many important components are often missing. According to the 2006-07 PDHS, only 25 percent of women were informed of signs of pregnancy complications during prenatal care. Only 43 percent took iron tablets or syrup. Blood pressure was measured in 80 percent of women, but less than half of women who received prenatal care were weighed, or had a urine or blood sample taken. Two-thirds, however, received an ultrasound. Sixty percent of births were protected against neonatal tetanus.

Prenatal care is highest among women with higher levels of education, those living in the wealthiest households, and those in urban areas. Seventy percent of women in Sindh receive prenatal care compared to only 41 percent in Balochistan.

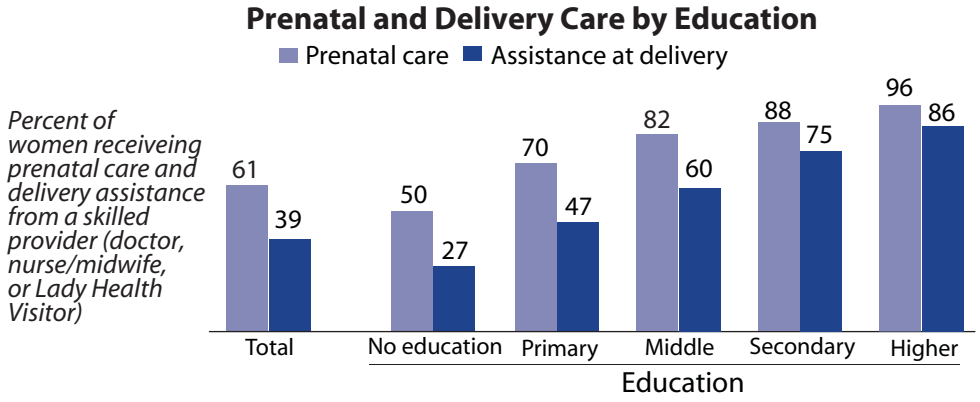
Thirty-five percent of women received no prenatal care at all. The most common reason for not getting prenatal care was because women believed it was not necessary (73 percent); 30 percent cited cost as the primary deterrent.

Delivery and Postnatal Care

One-third of Pakistan's births occur in health facilities—11 percent in the public sector and 23 percent in private sector facilities. Two-thirds of births occur at home. Home births are more common in rural areas (74 percent) than urban areas (43 percent). One third of home births used a safe delivery kit, but the majority (79 percent) used an unboiled threat to tie the cord and 28 percent used scissors to cut the cord.

Thirty-nine percent of births are assisted by a skilled provider (doctor, nurse/midwife, or Lady Health Visitor). Half are assisted by a DAI or Traditional Birth Attendant.

Postnatal care helps prevent complications after childbirth. Less than half of women (43 percent) had a postnatal checkup. Only 27 percent, however, had a check up within 4 hours of birth, as recommended.



Maternal Mortality

The 2006-07 Pakistan DHS included a verbal autopsy—a further interview of close family members to understand the causes of deaths among women age 12-49 since January 2003. Over 1,000 adult female deaths were identified during the household questionnaires.

The 2006-07 PDHS indicates that 20 percent of female deaths are attributed to maternal causes (complications of pregnancy, childbirth, and the six weeks post childbirth). More than one-third of deaths to women age 25-29 were due to maternal causes. Maternal deaths are more common in rural areas than in urban areas (22 versus 14 percent of adult women deaths). Maternal deaths vary dramatically by region. In Punjab, only 16 percent of adult women deaths were due to complications of pregnancy, childbirth and the 6 weeks postpartum compared to 35 percent in Balochistan.

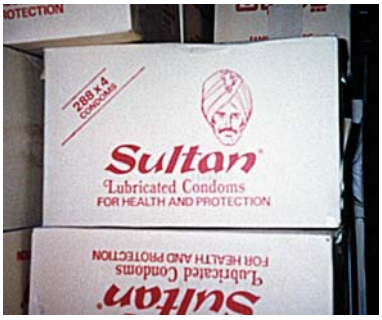
The maternal mortality ratio is 276 deaths per 100,000 live births which means that approximately one in every 89 women in Pakistan will die of maternal causes during her lifetime. The maternal mortality ratio is almost twice as high in rural than urban areas (319 versus 175), and is highest in Balochistan (785) compared to only 227 in Punjab.

The most common direct causes of maternal deaths are postpartum haemorrhage (27 percent), puerperal sepsis (14 percent), and eclampsia/toxemia of pregnancy (10 percent). An additional 13 percent of maternal deaths are due to indirect causes, such as hepatitis, cancer, and gastrointestinal disorders.

HIV/AIDS Knowledge and Attitudes

Knowledge

Less than half of ever-married women (44 percent) have heard of AIDS. Knowledge of AIDS is lowest in Balochistan, where only 24 percent have heard of AIDS. Few women know the major HIV prevention methods. Only 20 percent know that HIV can be prevented by using condoms, 31 percent know that it can be prevented by having sex with only one uninfected partner, and 24 percent know that abstaining from sexual intercourse will prevent AIDS transmission. Prevention knowledge is twice as high in urban areas as in rural areas, and increases dramatically with women's education. Half of women with higher education, for example, know that using condoms and limiting sex to one uninfected partner prevents HIV, compared to only 8 percent of women with no education. Prevention knowledge is highest in Punjab and lowest in Balochistan.



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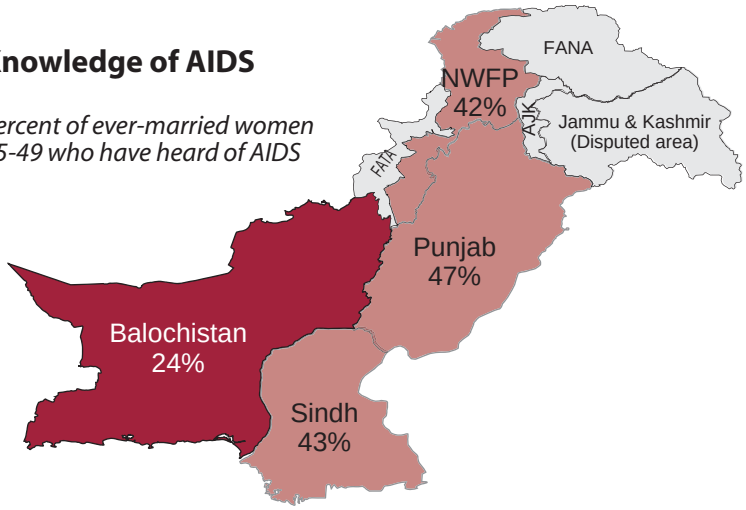
Only about one quarter of women know that HIV can be transmitted by breast-feeding.

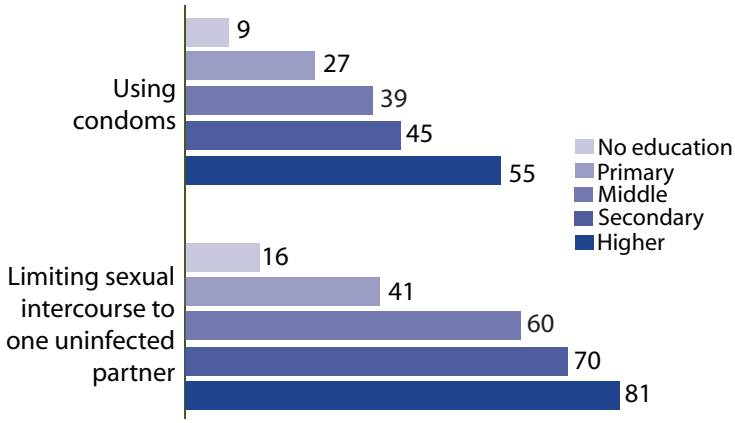
Knowledge of AIDS

Percent of ever-married women 15-49 who have heard of AIDS



HIV Prevention Knowledge

Percent of ever-married women 15-49 who know that HIV can be prevented by:



There are many myths about HIV/AIDS in Pakistan. Only 18 percent of ever-married women know that AIDS cannot be transmitted by mosquito bites, and only 28 percent know that a healthy-looking person can have the AIDS virus. Less than one in four women know that they will not get AIDS by sharing food with someone who has AIDS.

Medical Injections

More than half of ever-married women received a medical injection in the year before the survey. Women receive an average of more than five medical injections per year. Safe injection practices are essential to prevent the transmission of blood-borne diseases, like HIV. In most cases (86 percent), women reported that the syringe and needle used for their last injection were taken from a new, unopened package.

Malaria

Ownership and Use of Bednets

Overall, 6 percent of households have at least one mosquito net. Almost no households have an insecticide-treated net (ITN). Ownership of nets varies by province, 16 percent of households owning a net in Sindh and Balochistan compared to only 3 percent of households in Punjab and NWFP. Use of nets is quite low. Only 2 percent of children under five and 2 percent of pregnant women slept under a net the night before the survey.

Most households do not do anything to repel or avoid mosquitoes. Fifteen percent use mosquito coils and 23 percent use mats.

Management of Malaria in Children

In the two weeks before the survey, 31 percent of children under age five had fever, the primary symptom of malaria. Of these children, 3 percent took an antimalarial drug. SP/Fansidar was the most commonly used antimalarial drug.

Antimalarial Drug Use During Pregnancy

Malaria during pregnancy contributes to low birth weight, infant mortality and other complications. Nineteen percent of pregnant women suffered from malaria during their last pregnancy. Malaria during pregnancy was most common in Sindh (27 percent) and Balochistan (30 percent). Most of these women received treatment.

Key Indicators

	Total
Fertility	
Total fertility rate	4.1
Women age 15–19 who are mothers or now pregnant (%)	9
Median age at first marriage for women age 25-49 (years)	19.1
Median age at first birth for women age 25-49 (years)	21.8
Married women (age 15–49) wanting no more children (%)	52
Family Planning	
Current use of any method of contraception (currently married women 15-49) (%)	30
Current use of any modern method of contraception (currently married women 15-49) (%)	22
Currently married women with an unmet need for family planning[1] (%)	25
Maternal and Child Health	
Maternity care	
Women giving birth who received prenatal care from a skilled provider[2] (%)	61
Births assisted by a skilled provider[2] (%)	39
Births delivered in a health facility (%)	34
Child immunization	
Children 12–23 months fully vaccinated[3] (%)	47
Nutrition	
Median duration of any breastfeeding (months)	19
Median duration of exclusive breastfeeding (months)	0.9
Children 6-59 months who received vitamin A supplement in 6 months before the survey (%)	60
Women who received vitamin A dose postpartum (women with a child born in the 5 years before the survey) (%)	20
Women who took iron tablets or syrup for at least 90 days (women with a child born in the 5 years before the survey) (%)	16
Mortality	
Childhood Mortality: Number of deaths per 1,000 births (Figures are for the ten-year period before the survey, except for the national rate, in italics, which represents the five-year period before the survey)	
Infant mortality (between birth and first birthday)	*78*
Under-five mortality (between birth and fifth birthday)	*94*
Maternal Mortality (deaths per 100,000, based on 36 months before survey)	*276*
Malaria	
Households with at least one mosquito net (%)	6
Children <5 who slept under a mosquito net the night before the survey (%)	2
AIDS-related Knowledge	
Has heard of AIDS (ever-married women 15-49) (%)	44
Knows ways to avoid AIDS:	
-Limiting sex to one uninfected partner (ever-married women 15–49) (%)	31
-Using condoms (ever-married women 15–49) (%)	20
Knows HIV can be transmitted by breastfeeding (ever-married women 15–49) (%)	28

[1]Currently married women who do not want any more children or want to wait at least 2 years before their next birth but are not currently using a method of family planning. [2] Skilled provider includes doctor, nurse, midwife, or Lady Health Visitor. [3] Fully vaccinated includes BCG, measles, and three doses each of DPT and polio

Residence				Province			
Total urban	Major city	Other urban	Rural	Punjab	Sindh	NWFP	Balochistan
3.3	3.0	3.8	4.5	3.9	4.3	4.3	4.1
7	5	9	11	8	11	9	7
19.7	20.0	19.4	18.8	19.6	18.1	18.7	19.3
22.2	22.4	22.0	21.5	22.1	21.1	21.2	22.3
57	59	54	49	54	48	50	37
41	46	35	24	33	27	25	14
30	33	26	18	23	22	19	13
22	20	24	26	23	25	31	31
78	85	71	54	61	70	51	41
60	75	44	30	38	44	38	23
56	71	40	25	33	42	30	18
54	54	55	44	53	37	47	35
18	17	20	19	18	20	22	21
0.7	0.7	0.9	1.0	0.9	0.8	3.2	0.6
62	63	61	59	58	70	57	54
27	33	21	18	16	31	21	16
27	33	21	12	16	21	14	5
66	58	75	81	81	81	63	49
78	69	89	100	97	101	75	59
175			319	227	314	275	785
4	2	6	8	3	16	3	16
1	<1	2	2	<1	5	<1	3
69	79	56	32	47	43	42	24
50	58	39	21	33	30	29	12
32	37	24	13	22	18	16	8
41	46	35	21	31	25	25	13